

WHA CORPORATION PUBLIC COMPANY LIMITED

WHA: WE SHAPE THE FUTURE

SUSTAINABILITY REPORT 2024



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MESSAGE FROM CHAIRMAN OF THE EXECUTIVE COMMITTEE AND GROUP CHIEF EXECUTIVE OFFICER

In 2024, the world continued to face challenges stemming from geopolitical factors, economic uncertainty, global market volatility, changes in trade systems, and varied economic growth trends across different regions. At the same time, technological advancements such as Artificial Intelligence (AI) and cybersecurity have played an increasingly important role in business operations. Sustainability trends remain a key focus that organizations must prioritize, alongside increasingly stringent environmental standards. Additionally, shifting perspectives among consumers and investors towards sustainable business practices continue to influence how businesses operate.

Amid a rapidly changing global landscape filled with both challenges and opportunities, WHA Corporation Public Company Limited has continued to deliver strong performance, as reflected in a record-breaking growth in normalized profit for three consecutive years. In 2024, WHA Group reported total revenue and share of profit amounting to 14,342 million baht, and a net profit of 4,359 million baht. Normalized total revenue and share of profit stood at 14,303 million baht, with a normalized profit of 4,526 million baht, representing a 2 percent increase compared to the previous year. At the same time, total asset value rose to 101,541 million baht, reflecting the expansion across all 5 core business groups: logistics, industrial development, utilities and power, digital, and most recently, mobility. The mobility business operates under the brand "Mobilix", which offers Thailand's first Built-to-Suit EV Ecosystem of green logistics solutions. This marks a transformative step for the transport industry toward sustainability through a comprehensive Electric Vehicle (EV) ecosystem.

WHA Group remains committed to driving sustainable growth and aims to become a Tech-Driven Organization by 2025. This includes elevating all aspects of its business operations in alignment with sustainable development practices through the integration of technology and innovation. At the same time, the Group continues to operate under the principles of Environmental, Social, and Governance (ESG) to meet stakeholder expectations and create long-term value for customers, all stakeholders, and society at large. This commitment is reflected in the concept "WHA: WE SHAPE THE FUTURE", which emphasizes building a sustainable future for Thailand. It also reinforces the Group's long-standing dedication to sustainable business development, in line with its mission of being "The Ultimate Solution for Sustainable Growth" by maintaining a balance between environmental protection, social responsibility, and good corporate governance to ensure the long-term sustainable growth of the organization and its stakeholders.

WHA Group recognizes the importance of conducting business responsibly with respect to the environment and is committed to driving sustainable organizational growth by considering positive impacts on ecosystems and society as a whole. It places great emphasis on effective resource management and the continual implementation of environmental measures in alignment with international standards. Since 2021, the Group has consistently achieved its Carbon Neutrality goal and has set a target to reach Net Zero Greenhouse Gas Emissions by 2050 under the framework of the Science Based Targets initiative (SBTi). This demonstrates the Group's commitment to managing climate-related risks and building stakeholder confidence. Over the past year, the Group has been determined to reduce greenhouse gas emissions through operational efficiency improvements across the organization to maximize energy efficiency. These efforts are also being extended to its stakeholders. Beyond internal operations, the Group aspires to play a significant role in advancing national sustainability, particularly by enhancing the business ecosystem in the transport and logistics sectors through its mobility business under the Mobilix project. This project includes services such as Electric Vehicle (EV) rental, EV charging stations and related equipment, and a comprehensive digital platform for EVs. The Group aims to provide 20,000 EVs by 2029, which is expected to reduce greenhouse gas emissions among its stakeholders by up to 280,000 tons of carbon dioxide equivalent (tCO2e) annually. Additionally, the Group is focused on increasing the share of renewable energy used in its operations and continuously promoting the expansion of clean energy businesses. It has set a target to reach a total renewable power generation capacity of 1,200 megawatts by 2029, which could result in a reduction of up to 683,000 tCO2e annually. The Group also practices waste management based on the Circular Economy concept, aiming for a Zero Waste target, eliminating landfill and incinerated waste by 2029. Simultaneously, it prioritizes efficient water management and minimizing the use of natural water sources by recycling treated wastewater. The Group plans to reduce natural water consumption by 25 million cubic meters per year by 2029, equivalent to the water usage of over 685,000 people. These initiatives reflect the Group's commitment to long-term environmental stewardship and the reduction of its environmental footprint for the benefit of all stakeholders.

Moreover, WHA Group conducts its business with a strong focus on community and social impact, aiming to promote and enhance the quality of life in communities surrounding its operational areas while driving the business toward sustainable growth. The Group believes that corporate growth should go hand in hand with community development, fostering strong relationships with stakeholders and delivering tangible value to society. In line with this commitment, the Group implements social projects that aim to generate the highest possible positive impact in four key areas: (1) Education - by providing scholarships, educational equipment, and youth development programs in schools near industrial estates, as well as increasing the number of teaching personnel in schools affected by industrial expansion. (2) Health and Quality of Life - through community health development initiatives, donations of medical equipment to local hospitals, and health education for employees and community members via WHAbit application. (3) Environment – by launching Shine Brighter with WHA project, which installs solar rooftops in schools to promote clean energy; supporting recycling to reduce landfill waste through WeCYCLE project; collaborating with public and private sectors to reforest and conserve green areas; and implementing WHA Clean Water for Planet project to treat wastewater and improve community water quality. (4) Community Economic Development, through WHA E-Job Pool project that connects job seekers with businesses in industrial estates, enhancing employment opportunities and workforce capabilities to accommodate industrial expansion, and by promoting local products and community enterprises through WHA PAN GAN project. The Group remains committed to continuously advancing these initiatives, guided by the principles of participatory development and a strong emphasis on creating sustainable outcomes. This reinforces stakeholder confidence and helps establish a solid foundation for Thailand's social and economic resilience

WHA Group is committed to conducting business with honesty and fairness, while elevating operational standards to align with internationally recognized principles of good corporate governance. It places great importance on risk management and the effectiveness of the internal control system to build confidence among stakeholders

throughout the entire supply chain. The Group focuses on transparency and accountability alongside responsible business practices under sustainable development principles based on ESG. In 2024, the Group received recognition and numerous prestigious awards in sustainability, such as the Best Sustainability Excellence award in the Sustainability Excellence category from the Stock Exchange of Thailand. It also achieved the highest rating of "AAA" in the SET ESG Ratings for 2024. Furthermore, the Group was consecutively included for the third year in the S&P Global Sustainability Yearbook Member and achieved the highest ranking as the number one in sustainability according to S&P Global or the Top 1% S&P Global CSA Score 2024 in the Real Estate Management & Development industry. The Group was also awarded the 5-star "Excellent" rating for corporate governance (Excellent CG Scoring) for the seventh consecutive year by the Thai Institute of Directors Association (IOD) with support from the Stock Exchange of Thailand. In addition, the Group received many other prestigious awards, including the Eco Industrial Estate award from the Industrial Estate Authority of Thailand, the HR Asia Best Companies to Work for in Asia 2024, and the HR Asia Sustainable Workplace Awards from HR Asia, among others. These awards reaffirm the Group's leadership in driving sustainable organizational development and the trust it has earned from stakeholders across all sectors.

Finally, as Chairman of the Executive Committee and Group Chief Executive Officer of WHA Corporation Public Company Limited, and on behalf of the Board of Directors and the management team, I would like to sincerely thank all stakeholders for their continuous trust and support of WHA Group. Our growth has not solely arisen from the internal capabilities of the organization but also from the collaboration of all partners who have worked together to drive progress and create sustainable value. The Group remains committed to developing our core businesses, leveraging our expertise, and incorporating innovation and technology to maximize benefits for society. We aim to continuously improve and adapt our operations to effectively respond to changes in the business world while driving sustainable growth throughout the entire supply chain. We firmly believe that our vision, which emphasizes balanced growth alongside economic, social, and environmental sustainability, together with a steadfast commitment to good corporate governance, will be a crucial force in driving transformation. This transformation will lead our organization, Thailand, and the global community toward a sustainable future.



Ms. Jareeporn Jarukornsakul

Chairman of the Executive Committee / Group Chief Executive Officer
WHA Corporation Public Company Limited



2024 AWARDS & MEMBERSHIP

S&P Global

BSRP Global 2025

WHA Corporation Public Company Limited

Real Estate Management & Development

Corporate Sustainability Assessment (CSA) 2024 Score

85/100 Score date February 5, 2025

S&P GLOBAL SUSTAINABILITY YEARBOOK MEMBERSHIP AND TOP 1% S&P GLOBAL CSA SCORE IN 2024

WHA Corporation Public Company Limited, or WHA Group, has been a member of the S&P Global Sustainability Yearbook for the 3rd consecutive year and, for the first time, ranked 1st in the 2024 S&P Global Corporate Sustainability Assessment (CSA), achieving a Top 1% S&P Global CSA Score in the Real Estate Management & Development sector. This recognition reflects the Group's strong commitment to driving the organization toward sustainable development in accordance with Environmental, Social, and Governance (ESG) principles, and reinforces our role in advancing sustainability practices in line with international standards.

SET AWARDS 2024

SUSTAINABILITY EXCELLENCE - BEST SUSTAINABILITY AWARDS

WHA Corporation Public Company Limited (WHA Group) received the "Best Sustainability Awards" under the Sustainability Excellence category at the SET Awards 2024, organized by the Stock Exchange of Thailand. This marks the 4th consecutive year that the Group has received an award in the Sustainability Excellence category.



This award reflects the Group's success in operating within a sustainability framework and reinforces our position as a leading organization committed to business excellence through ESG practices. It underscores WHA Group's dedication to achieving sustainability targets aligned with the United Nations Sustainable Development Goals (SDGs) and international standards. This award is presented to listed companies that demonstrate outstanding performance in sustainable development, good corporate governance, consideration of all stakeholders, and the ability to drive economic growth while generating positive social and environmental impacts, serving as a model for advancing sustainable business practices





HIGHEST "AAA" RATING IN SET ESG RATING 2024

WHA Corporation Public Company Limited (WHA Group) was recognized as a Thailand Sustainability Investment (THSI) stock under the Property and Construction sector, while WHA Utilities and Power Public Company Limited (WHAUP) was selected under the Resources sector by the Stock Exchange of Thailand for the 5th consecutive year. Both companies received a "AAA" rating, the highest level in SET ESG Ratings 2024 for the 2nd consecutive year. These recognitions reaffirm the Group's strong sustainability standards and responsible business practices in the areas of environment, social, and governance. The Group continues to implement strategies that promote sustainability in all dimensions, aiming to drive both the organization and society forward in a stable and sustainable manner across all business sectors, whether in real estates or utilities and power industry, both domestically and internationally.

ESG 100 STOCK LIST IN 2024

WHA Corporation Public Company Limited (WHA Group), reaffirms its commitment to sustainability, as WHA Utilities and Power Public Company Limited (WHAUP) and the WHART and WHAIR REITs have been recognized in 2024 ESG100 Ranking by Thailand Institute of Development (Thaipat Institute). The stock list is compiled from over 920 listed companies and highlights those with a clear focus on Environmental, Social, and Governance (ESG) factors. Notably, WHAUP was included in the "ESG Emerging List" for the first time, underscoring its commitment to sustainable growth in the utilities and power sector. Meanwhile, WHART REIT has been included in the ESG100 list for the 6th consecutive year, with total assets exceeding 55 Billion Baht. WHAIR REIT also demonstrated remarkable growth and is preparing for its 5th round of investment, bringing its total asset value to over 14 Billion Baht.





BEST SUSTAINABILITY-LINKED BOND IN THAILAND AWARD

The Group was awarded "Best Sustainability-Linked Bond in Thailand" at The Asset Triple A Sustainable Finance Awards 2024, organized by The Asset, a leading financial publication in Asia. This award recognizes the successful issuance of WHA Group's sustainability-linked bond valued at 1 Billion Baht in October 2023, marking a milestone as the first of Thailand's logistics, industrial estates, utilities, and digital solution sectors. This achievement reflects investor confidence in WHA's sustainable business approach, with clear targets to reduce Scope 1 and Scope 2 greenhouse gas emissions and to increase the production of reclamation water, reusing treated wastewater to reduce reliance on raw water from natural sources. The initiative aligns with the Group's mission, WHA: WE SHAPE THE FUTURE, which aims to drive sustainable growth while preserving the environment and supporting society.

EXCELLENCE CG SCORING (5 STARS) IN CORPORATE GOVERNMENT REPORT (CGR)

WHA Corporation Public Company Limited (WHA Group) received a rating of "Excellent CG Scoring" or 5 stars 2024 Corporate Governance Report of Thai listed companies (CGR). The Group was ranked in the Top Quartile, 1st place, in the real estate sector. This recognition reflects WHA Group's strong corporate governance practices and its commitment to conducting business sustainably, with responsibility toward Environmental, Social, and Governance (ESG) principles. These efforts enhance the Group's competitiveness and management efficiency while promoting long-term sustainable growth and value creation for the Group, shareholders, and all stakeholders with transparency and accountability.



The CGR project is conducted by the Thai Institute of Directors (IOD), with support from the Stock Exchange of Thailand (SET) and the Securities and Exchange Commission (SEC).



CEO OF THE YEAR 2024 AWARD

Ms. Jareeporn Jarukornsakul, Chairman of Executive Committee and Group CEO of WHA Corporation Public Company Limited, was selected as the "CEO of the Year 2024" in Visionary Leadership by Bangkok Post. This prestigious recognition was granted in honor of her far-reaching vision in steering WHA Group to become a tech company in 2024, and her continued commitment to transforming into a fully technology-driven organization across the Group's industrial estate development, logistics, utilities and power, and digital solution businesses. Her unwavering dedication to continuously seeking new business opportunities and advancing the Group in line with the digital era has played a vital role in ensuring sustainable growth amid ongoing business challenges and geopolitical tensions.

THE BEST WOMAN LEADERSHIP - VISIONARY LEADERSHIP AWARD

Ms. Jareeporn Jarukornsakul, Chairman of Executive Committee and Group CEO of WHA Corporation Public Company Limited, has been honored with The Best Woman Leadership – Visionary Leadership Award at the prestigious "Go Thailand: Women Run the World" event, hosted by Thansettakij, together with Thai Chamber of Commerce, Board of Trade of Thailand, and Ramkhamhaeng University. The event recognizes exceptional female executives under the theme "Women Run the World".





With Ms. Jareeporn Jarukornsakul's outstanding vision as a pioneering female leader, her foresight to identify business opportunities, and the ability to leverage digital technologies to drive the organization, WHA Group, under her leadership, has successfully achieved sustainable growth across its five core businesses: Logistics, Industrial Estates, Utilities & Power, Digital Solutions, and most recently, Mobility, launched in 2024. This success is rooted in strong vision which translates into concrete achievements of the targets. It not only drives the growth of the Group but also fosters economic growth and creates employment opportunities for Thailand.

EXECUTIVE OF THE YEAR 2024 AWARD

Ms. Jareeporn Jarukornsakul, Chairman of Executive Committee and Group CEO of WHA Corporation Public Company Limited, was honored with the prestigious "Executive of the Year 2024" award by Thailand Top Vote 2024, organized by MCOT Plc. and Thailand Post Co., Ltd.





This award strongly affirms the Group's success in conducting business with environmental and social responsibility, as it reflects the voice of people nationwide. The selection process was based on a public poll conducted by National Institute of Development Administration (NIDA) in 2024, combined with the evaluation by a distinguished panel of experts. The panel selected executives with outstanding leadership and strong recognition for operating businesses in alignment with ESG principles, including environmental responsibility, anti-corruption efforts, and the promotion of corporate governance and innovation. These efforts have led to the Group's continued business growth, with the unanimous support and the highest scores in the selection process.

THE PEOPLE AWARDS 2024

Ms. Jareeporn Jarukornsakul, Chairman of Executive Committee and Group CEO of WHA Corporation Public Company Limited, was honored with The People Awards 2024 by The People, a leading online media platform. The award is presented to exemplary individuals who have transcended their own limits and serve as an inspiration to others in shaping a forward-looking future, under the theme "People Go Beyond: Role Models Who Defy Limits". The People selected Ms. Jareeporn Jarukornsakul as one of the outstanding individuals driving society forward in 2024 for her knowledge and capability in successfully conducting business, pioneering the logistics industry in Thailand, and driving the organization toward becoming a tech company. Her leadership has helped attract foreign investors to choose Thailand as a prime investment destination and contributed to building a sustainable society, environment, and economy for the country.





REAL ESTATE PERSONALITY OF THE YEAR AWARD 2024

Ms. Jareeporn Jarukornsakul, Chairman of Executive Committee and Group CEO of WHA Corporation Public Company Limited, was presented with the "Real Estate Personality of the Year Award 2024" at the 19th Property Guru Thailand Property Awards 2024. This award recognizes individuals who have achieved remarkable success in leading real estate businesses. Ms. Jareeporn Jarukornsakul was selected by the Property Report judging panel for her leadership in the industrial real estate business, which has contributed to the advancement of Thailand's real estate sector, as well as for elevating the logistics and power industries both domestically and internationally.



2024 THAILAND HEADLINES PERSON OF THE YEAR – ECONOMIC AND SOCIAL CATEGORY

Ms. Jareeporn Jarukornsakul, Chairman of Executive Committee and Group CEO of WHA Corporation Public Company Limited, received the 2024 Thailand Headlines Person of the Year Award in economic and social category by Thailand Headlines news agency. This award honors outstanding individuals whose contributions have made a significant and visible impact on society.



INTERNATIONAL AWARDS FROM HR ASIA MAGAZINE

In 2024, WHA Corporation Public Company Limited (WHA Group) won 2 international awards from HR Asia, a leading human resources magazine in Asia, which are



HRASIA: BEST COMPANIES TO WORK FOR IN ASIA AWARD

WHA Group has been awarded the "Best Companies to Work for in Asia" which recognizes outstanding organizations for their excellence in human resources practices, ranging from employee care, fostering job satisfaction, and cultivating a workplace culture that supports growth and employee engagement, making the Group a truly desirable workplace.

HR ASIA: SUSTAINABLE WORKPLACE AWARD

WHA Group has also been honored with the "Sustainable Workplace Award" which acknowledges companies that demonstrate a strong commitment to sustainability, encompassing social responsibility, environmental stewardship, and fostering a sustainable culture within the organization.

Awardees are selected through a rigorous assessment process using the Total Engagement Assessment Model (TEAM), which provides valuable insights into employee needs. Additionally, senior management and organizational representatives undergo evaluations and interviews conducted by a panel of HR Asia judges. WHA Group, as one of the Thai organizations that has received these prestigious awards, underscores our unwavering dedication to enhancing the quality of life for our employees, communities, society, and the environment, aligned with our mission "WHA: WE SHAPE THE EUTURE"

ECO-INDUSTRIAL ESTATES AWARDS



WHA Industrial Development Public Company Limited (WHAID), a subsidiary WHA Corporation Public Company Limited (WHA Group), Thailand's leading provider of comprehensive eco-industrial estates, has received seven awards at the Eco Innovation Forum 2024, hosted by the Industrial Estate Authority of Thailand (IEAT) and the Water and Environment Institute for Sustainability (WEIS) by the Federation of Thai Industries, under the concept "Now Thailand: Sustainable Future" to promote investment in Thailand.

- Level 1 "Eco-Champions" (5 Awards) for WHA Eastern Seaboard Industrial Estate 4 (WHA ESIE 4), Eastern Seaboard Industrial Estate (Rayong) (ESIE), WHA Chonburi Industrial Estate 2 (WHA CIE 2), WHA Eastern Seaboard Industrial Estate 2 (WHA ESIE 2), and WHA Eastern Seaboard Industrial Estate 1 (WHA ESIE 1)
- Level 2 "Eco-Excellence" for WHA Chonburi Industrial Estate 1 (WHA CIE1)
- Level 3 "Eco-World Class" for WHA Eastern Industrial Estate (Map Ta Phut) (WHA EIE)

This honorary recognition reflects the Group's commitment to sustainable business practices and environmental stewardship for sustainable growth, aligning with the mission "WHA: WE SHAPE THE FUTURE".



PRIME MINISTER ROAD SAFETY AWARDS

WHA Industrial Development Public Company Limited (WHAID), a subsidiary of WHA Corporation Public Company Limited (WHA Group), was honored with the "Prime Minister Road Safety Award" at the 16th National Road Safety Academic Conference under the topic "Road Safety Stronger Together". Eastern Seaboard Industrial Estate (Rayong) (ESIE) became the first industrial estate in Thailand to receive this prestigious award. This recognition stems from the development of an effective transportation safety management system, employee training programs, advanced safety technology such as GPS and the collaboration with external organizations to promote road safety, demonstrating our commitment to foster a strong and sustainable safety culture.





"GOOD PEOPLE, PROTECT THE WORLD" AWARD

WHA Corporation Public Company Limited (WHA Group) and WHA Utilities and Power Public Company Limited (WHAUP) received "Good People, Protect the World" Award from the Senate Committee on Religions, Morals, Ethics, Arts and Culture. This award recognizes and celebrates organizations with strong principles and practices in promoting and raising awareness about the importance of environmental conservation. WHA Group is committed to sustainable business practices aligned with Environmental Quality, Energy Conservation and Biodiversity Policy. This includes the expansion of renewable energy investments and the implementation of proper water management which begins with securing alternative water sources to wastewater treatment before discharged outside the industrial areas.



MEA ENERGY AWARDS 2024

WHA Corporation Public Company Limited, or WHA Group, received the MEA Energy Awards from our successful initiative of energy management in office buildings. The Group was awarded the trophy and the "Standard" seal from the Metropolitan Electricity Authority (MEA) for our management of WHA Tower and SJ Infinite One Business Complex. Our Smart Building innovations and technologies that meet the MEA Index and IAQ standards reflects our energy efficiency and good air quality, providing confidence in sustainability and quality of life for building occupants.

LEED GOLD - GREEN BUILDING CERTIFICATE STANDARD

WHA Corporation Public Company Limited, or WHA Group, has developed the WHA Mega Logistics Center Theparak KM.21 Building B, which has been awarded the LEED Gold v4.1 BD+C certification for Warehouses and Distribution Centers. The LEED (Leadership in Energy and Environmental Design) Standard Version 4.1 is the latest green building standard from the U.S. Green Building Council. This achievement reflects the Group's commitment to developing environmentally friendly and sustainable buildings.





HEALTHY ORGANIZATION AWARD 2024

WHA Digital Co., Ltd. (WHA Digital) a subsidiary of WHA Corporation Public Company Limited (WHA Group), has been honored with the Healthy Organization Awards 2024 by the Thai Health Promotion Foundation (ThaiHealth) in collaboration with the Thai NCD Alliance and the Royal College of Physicians of Thailand under the "Food Adjustment, Fitness Addition, and Good Health Achievement" Project. WHA Digital proudly achieved four awards in all four categories: Outstanding Leadership in Health Promotion, Exceptional Health Promotion Leadership Team, Excellence in Implementation Processes, Innovative Health Promotion Solutions.

These awards recognize the Group's efforts in promoting employee wellness through "WHAbit application", a comprehensive digital health care solution developed by our expertise in digital solutions and technology. This reflects our commitment to implementing employee health promotion initiatives and fostering a healthy workplace environment.





AMCHAM CORPORATE SOCIAL IMPACT AWARDS 2024

WHA Corporation Public Company Limited (WHA Group) was honored with the Platinum Level of the "AMCHAM Corporate Social Impact Awards 2024" for its outstanding social responsibility performance for the 15th consecutive year by the American Chamber of Commerce in Thailand (AMCHAM). The award was specifically recognized the "Shine Brighter with WHA" project, a collaborative initiative between the Group and Dr. Somyos Anantaprayoon Foundation. This project involved the installation of solar rooftops for schools in Rayong Province, aiming to promote clean energy adoption and significantly reduce operational expenses for schools.



Membership Membership				
1.	American Chamber of Commerce in Thailand (AMCHAM)	15. Singapore-Thai Chamber of Commerce (STCC)		
2.	Australian-Thai Chamber of Commerce (AUSTCHAM)	16. The Thai Chamber of Commerce and Board of Trade of Thailand (TCC)		
3.	British Chamber of Commerce Thailand (BCCT)	17. Thai-Chinese Chamber of Commerce (Thai CC)		
4.	Belgian-Luxembourg/Thai Chamber of Commerce (BeLuThai)	18. Thailand-Vietnam Business Council (TVBC)		
5.	Danish-Thai Chamber of Commerce (DTCC)	19. The Federation of Thai Industries (FTI)		
6.	European Association for Business and Commerce (EABC)	20. The Federation of Thai Industries, Rayong (FTI Rayong)		
7.	Franco-Thai Chamber of Commerce (FTCC)	21. The Federation of Thai Industries, Saraburi (FTI Saraburi)		
8.	German-Thai Chamber of Commerce (GTCC)	22. Thai Auto-Parts Manufacturers Association (TAPMA)		
9.	New Zealand Thai Chamber of Commerce (NZTCC)	23. Thai Industrial Estate and Strategic Partner Association (TISA)		
10	. South African-Thai Chamber of Commerce (SATCC)	24. Thai Photovoltaic Industries Association (TPVA)		
11	. Thai European Business Association (TEBA)	25. Water and Environment Institute for Sustainability (WEIS)		
12	. Thai-Italian Chamber of Commerce (TICC)	26. Thailand Carbon Neutral Network (TCNN)		
13. Japanese Chamber of Commerce, Bangkok (JCC)		27. Thailand CCUS Alliance (TCCA)		
14	. Malaysian-Thai Chamber of Commerce (MTCC)	The state of the s		



WHA Corporation Public Company Limited ("WHA Group" or "The Group") has published a sustainability report annually since 2019 to communicate the Group's management approach to stakeholders as well as to demonstrate practices of running business in a sustainable manner in terms of the governance/ economic, social and environment. This report is WHA Group's 5th sustainability report, which covers the period from 1st January to 31st December 2024, aligning with the financial disclosure in WHA Group's 2024 Form 56-1 One Report.

The report has been prepared in accordance with Global Reporting Initiative Standards 2021 (GRI 2021) since 2022. WHA Group has used a process to assess key sustainability issues that align with the Double Materiality Principle under the Global Reporting Initiative (GRI) framework and the organization's Enterprise Risk Management guidelines, which are effective and comprehensive. The assessment identified eight material sustainability issues, including Corporate Governance and Ethics, Technology and Innovation, Occupational Health and Safety, Community Development and Stakeholder Engagement, Waste Management, Climate Strategy, Energy Management, and Water Management. The report also highlights the progress and performance of WHA Group's sustainable development goals aligned with the United Nations Sustainable Development Goals (UN SDGs). The information in this report encompasses the business operations of WHA Group, including our subsidiaries in Thailand and Vietnam, where WHA Group holds a majority stake of over 50% and has managerial authority.

This report did not receive external party verification, but the contents and data were reviewed and approved by top executives from relevant functions to ensure its accuracy and completeness.

For more information, please contact:
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VISION

"Be recognized as a market leader in aligning vertical integrated logistics facilities provider,
total solution industrial estates, utilities,
power, and digital infrastructure platforms with high quality
capturing throughout value chain in Asia."

MISSION



To fulfill requirements of the key major business partners, shareholders and stakeholders



To Focus on innovative and effective strategy, business, finance, service quality, safety, environment, community, and good governance disciplines



To create a last-long relationship with strategic alliance



To provide unrivalled quality products with knowledge and expertise that leads to win-win-win solutions



To maintain financial discipline to maximize return on equity



To develop world class logistics facilities, industrial estates, utilities, power and property customer solutions



To differentiate a comprehensive platform for both infrastructure data center as well as customized service solutions for leading MNCs and Thai conglomerates



To develop, engage talent and experience team and enhance organizational core competency

CORE VALUES



Think, plan, and initiate new things to deliver values that help create sustainable growth for customers and contribute to the organization's breakthrough.



Determined to create success in everything we do, not stuck on failure or success in the past but striving to push ourselves beyond the limits to overcome new challenges and create a sense of unity together.

WHA Corporation Public Company Limited ("WHA Group" or "The Group") was established on September 25, 2007, by visionary entrepreneurs in the logistics real estate management business. Initially, the company aimed to develop and lease high-quality warehouses, distribution centers, and factory projects. With rapid and robust business growth, WHA Group was listed on the Stock Exchange of Thailand on November 8, 2012. Subsequently, in the first quarter of 2015, the Group expanded into industrial estate development and utility and power businesses by acquiring shares of WHA Industrial Development



Determined to continuously develop ourselves to gain deep and thorough knowledge in what we do, diligently working to enhance our skills and experiences to boost confidence and deliver value to others professionally



Living with honesty, integrity, firm in our commitments to earn trust and confidence from others, and collaboratively build and maintain transparency in our working culture.

Public Company Limited ("WHAID") (formerly known as Hemaraj Land and Development Public Company Limited), making WHA Group the major shareholder of WHAID. This led to another acquisition offer to delist WHAID from the stock market, resulting in WHA Group holding a 98.54% stake. WHAID was officially delisted from the Stock Exchange of Thailand on March 2, 2016. Afterward, WHA Group restructured our utility and power business under WHA Utilities and Power Public Company Limited ("WHAUP"), which was listed on the Stock Exchange of Thailand on April 10, 2017. Additionally,



in 2015, WHA Group established WHA Infonite Company Limited (now renamed WHA Connect Company Limited) to provide digital services to meet customer needs, including data center services, FTTx fiber optic network services, and telecommunications tower leasing.

In 2022, WHA Group further restructured our business by establishing WHA Digital Company Limited to develop and operate digital projects, transferring the FTTx fiber optic network services and telecommunications tower leasing businesses under WHAID.

WHA Groups is now a leading player in logistics, industrial estates, utilities and power and digital services not only in Thailand, but also in the Southeast Asia region. Committed to support Thailand's national policies to foster economic growth, WHA Group established industrial clusters in the automotive, electronics and petrochemical sectors in Eastern Seaboard which has now become a key player in the development of Eastern Economic Corridor (EEC) with the goal to create new high-tech cluster industries. WHA Group abides by the regional regulations prescribed under the Ministry of Industry, Industrial Estate Authority of Thailand (IEAT), Stock Exchange of Thailand, Ministry of Natural Resources and Environment as well as international standards such as the UN SDGs.

WHA Group has mapped out a business strategy to become the most desirable partner for companies that would like to start or expand their businesses in the country, or elsewhere in Southeast Asia. In 2022, WHA Group announced "The Ultimate Solution for Sustainable Growth" as our partnership commitment to reaffirm WHA Group's dedication to assisting our customers in driving their businesses towards sustainability.

Leveraging our capabilities and expertise, WHA Group, with our core competency in developing and delivering high-quality projects, aims to meet the diverse needs of each customer effectively. By incorporating Digital Innovation, utilizing technological advancements in each business group, WHA Group strives to enhance our ability to meet customer requirements. In the previous year, WHA Group announced our mission, "WHA: WE SHAPE THE FUTURE", a concept aimed at creating a sustainable future for Thailand through the potential of our four main business groups. And in the near future, WHA Group plans to expand our business both horizontally and vertically to fully become a Global Company, alongside our transformation into a Tech-Driven Organization by 2025. Throughout this journey, WHA Group remains committed to offering a wide range of services and comprehensive conveniences to customers through our operations in all dimensions.

In 2024, WHA Group was awarded an "AAA" rating, the highest level, in the SET ESG Ratings by the Stock Exchange of Thailand (SET). This reflects our excellence in sustainability performance and maintains our status as a sustainable stock for the fifth consecutive year since 2020. In addition, WHA Group remains a member of the global sustainability indices in the Real Estate Management & Development sector, as announced in the Sustainability Yearbook 2025 by S&P Global, and was ranked in the Top 1% of the S&P Global CSA Score within the Real Estate Management & Development sector. These achievements reflect WHA Group's strong commitment to driving our business practices towards sustainability.





Logistics Business

WHA Group is committed to be a leading company as a warehouse project developer, distribution center, and high-quality factory with Built-to-Suit concept located in a strategic location around Bangkok, Eastern Economic Corridor, and other provinces. WHA Group is able to fully meet the needs of its customers due to its project location, project design with international standards and quality of construction.

This could reduce the cost of customer operations and increase long-term competitive advantages.

#1 LOGISTIC FACILITIES
DEVELOPER OFFERING A
VARIETY OF PREMIUM
FACILITIES UNIQUELY SERVICING
OUR CLIENTS' NEEDS







37,000 sq.m.
Logistics Warehouse on prime location in Vietnam.



Successful Asset
Monetization to WHAIR with
Total Value of THB

1,065 Million.



To transform a Third-Party
Logistics Provider (3PL)
to a Fourth-Party Logistics
Provider (4PL) under
WGCL'S management.

^{/1} WHA GC Logistics Company Limited (WGCL)



Launches First EV
Ecosystem of Logistics in
Thailand, operating
under the brand name

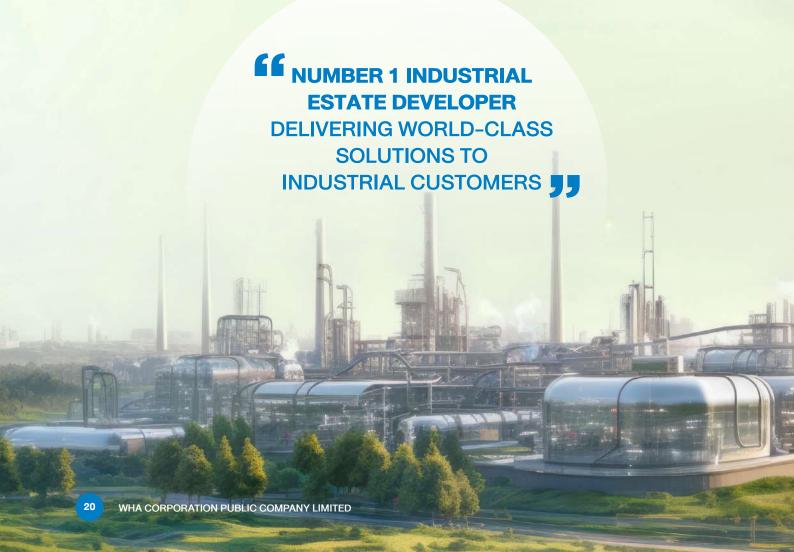
"Mobilix"





Industrial Development Business

Industrial Development Business is operated through the Group subsidiary,
WHA Industrial Development (WHAID), responsible for developing industrial estates and/ or lands
and selling of land to enterprises who demand to make their investment in WHA's industrial estates
and industrial lands. Enterprises can gain special privileges provided by Industrial Estate Authority of
Thailand and / or Thailand Board of Investment. Another crucial role of WHAID is to
act as a center for providing utilities and facilities for clients inside the industrial estates/
lands e.g. electricity, water supply, wastewater treatment, waste disposal, telephone,
internet and coordinating with the authority on environmental control.





Land Sales As well as the backlog awaiting ownership rights

transfer totaled over 1,535 rai. signing contracts with numerous global companies.

^{/1} Land Sales in Thailand and Vietnam (Excluding MOU and LOI of 716 rai)



^{/1} Information as of 31 December 2024 including operating and under development in Thailand and Vietnam



Operating Industrial Estates/ Zones and others in pipeline.

^{/1} (14 in Thailand and 1 in Vietnam)



Industrial Land Under
Development and In
Pipeline (of which 6,390
rai located in EEC) in Thailand.

projects

in Vietnam totaling

2,297_{rai}

already granted Investment Registration Certificates (IRC)





Utilities & Power Business

Utilities & Power Business is operated through the Group subsidiary,
WHA Utilities & Power (WHAUP),, the provider of utilities in the WHA's industrial estates
and industrial lands, i.e. procurement and distribution of raw water, production and
distribution of industrial water, value-added water, and providing
industrial wastewater treatment services. WHAUP Group also has investments
in power businesses, through joint ventures with both domestic
and foreign power plants, who have expertise in the power business field.

Our power plants include both Conventional Fuel and
Renewable Energy power plants.

INTEGRATED INDUSTRIAL UTILITIES & POWER PROVIDER WITH SOLID BUSINESS GROWTH







Continue to expand the Value-added Water, as well as

Capture Opportunities Outside **WHA Territory.**



Total installed capacity approximately

965_{MWeq.}





158 GWh

for Solar Energy Dispatch and the trend is expected to continue growing.





Digital Business

Digital Business is a digital solution provider operating through the Company's subsidiary,
WHA Digital Company Limited who also leads digital transformation. The aim is to become a tech
company by restructuring of its organization, new strategies, upskilled human capital, innovative
corporate culture, and business process improvement to gain competitive advantages and to thrive in
the digital era. It also incorporates various technologies to improve its capabilities in
reaching out to customers, as well as creating new value-added products to
enhance customer satisfaction

DIGITAL SOLUTION
PROVIDER
STRENGTHENING
WHA GROUP AND LEADING
DIGITAL TRANSFORMATION





Achieved its goal of becoming a **Technology**

Company in 2024



Developed **Mobilix Software Solution,**

a digital platform for managing EVs and batteries.



Officially launched

WHASApp to

enhance real-time communication between customers and the WHA team.



M 12

Al Transformation

Projects in Development pipeline.



Commercial launched

WHAbit

to customers with more than

1,800 Users



WHA 80+ STRATEGIC LOCATIONS IN THAILAND AND VIETNAM

WHA Group is a key player in the development of the Eastern Economic Corridor (EEC).

1 WHA Logistics Parks

- WHA Mega Logistics Center Bangna-Trad km.18
- WHA Mega Logistics Center Bangna-Trad km.19
- 3. WHA Mega Logistics Center
 Bangna-Trad km.23 (Project 1, 2, 3 & Inbound)
- 4. WHA Mega Logistics Center Chonlaharnpichit km.3 (Project 1 & 2)
- 5. WHA Mega Logistics Center Chonlaharnpichit km.4
- 6. WHA Mega Logistics Center Chonlahampichit km.5
- 7. WHA Mega Logistics Center Ladkrabang
- 8. WHA Mega Logistics Center Wangnoi 61
- 9. WHA Mega Logistics Center Saraburi
- WHA Mega Logistics Center Panthong, Chonburi
- WHA Mega Logistics Center
 Laemchabang (Project 1 & 2)
- 12. WHA Mega Logistics Center Rama II, km.35
- 13. WHA Mega Logistics Center Lampoon
- 14. WHA Mega Logistics Center Khon Kaen
- 15. WHA Mega Logistics Center Kabinburi
- 16. WHA Mega Logistics Center Suratthani
- 17. WHA Mega Logistics Centers Wangnoi 62
- 18. WHA CENTRAL Mega Logistics Center Wangnoi 63
- 19. WHA Mega Logistics Center Lum Luk Ka
- 20. WHA E-Commerce Park
- 21. WHA Mega Logistics Center Theparak KM. 21
- 22. WHA Logistics Park 1 (WHA LP 1)
- 23. WHA Logistics Park 2 (WHA LP 2)
- 24. WHA Logistics Park 3 (WHA LP 3)
- 25. WHA Logistics Park 4 (WHA LP 4)

2 Built-to-Suit Factories and Warehouses

- 1. Consumer Goods Distribution Center
- 2. Healthcare Air-Con Distribution Center
- 3. Hazardous Goods Distribution Center
- 4. Ladkrabang Logistics Center (2 Phases)
- 5. Manufacturers in WHA SIL
 - Diaper Manufacturing
 - Camera Part Manufacturing

2 Built-to-Suit Factories and Warehouses (continue)

- 6. Consumer Goods (D.C. Electronics)
- 7. Manufacturers in Industrial Estate
- 8. Manufacturer in WHA CIE 1
 - EV Automotive Part Manufacturing
- 9. Manufacturer in WHA ESIE 1
 - Automotive Part Manufacturing
- 10. Manufacturer in WHA ESIE 2
 - Packaging & Strapping System Manufacturing
- 11. Manufacturer in Theparak 21
 - Automotive Part Manufacturing

3 Industrial Estates

- A. WHA Chonburi Industrial Estate 1 (WHA CIE 1)
- B. WHA Chonburi Industrial Estate 2 (WHA CIE 2)
- C. Eastern Seaboard Industrial Estate (Rayong) (ESIE)
- D. WHA Eastern Seaboard Industrial Estate 1 (WHA ESIE 1)
- E. WHA Eastern Seaboard Industrial Estate 2 (WHA ESIE 2)
- F. WHA Eastern Seaboard Industrial Estate 2.1 (WHA ESIE 2.1)
- G. WHA Eastern Seaboard Industrial Estate 3 (WHA ESIE 3)
- H. WHA Eastern Seaboard Industrial Estate 3.1 (WHA ESIE 3.1)
- I. WHA Eastern Seaboard Industrial Estate 4 (WHA ESIE 4)
- J. WHA Eastern Seaboard Industrial Estate 5 (WHA ESIE 5)
- K. WHA Eastern Industrial Estate (Map Ta Phut) (WHA EIE)
- L. WHA Rayong Industrial Land (WHA RIL)
- M. WHA Rayong 36 Industrial Estate (WHA Rayong 36)
- N. WHA Rayong Industrial Estate (WHA IER)
- O. WHA Saraburi Industrial Land (WHA SIL)
- P. WHA Industrial Zone 1 Nghe An, Vietnam
- Q. WHA Smart Technology IndustrialZone 1 Than Hoa, Vietnam
- R. WHA Smart Technology Industrial Zone 2 - Than Hoa, Vietnam
- S. WHA Smart Technology Industrial Zone – Quang Nam, Vietnam

4 WHA Utilities & Power

WHAUP's water and wastewater treatment plants are positioned in all WHA's Industrial Estates and projects

- in Vietnam a. Ha Noi
- b. Nghe An

WHAUP's power projects are located in the following provinces:

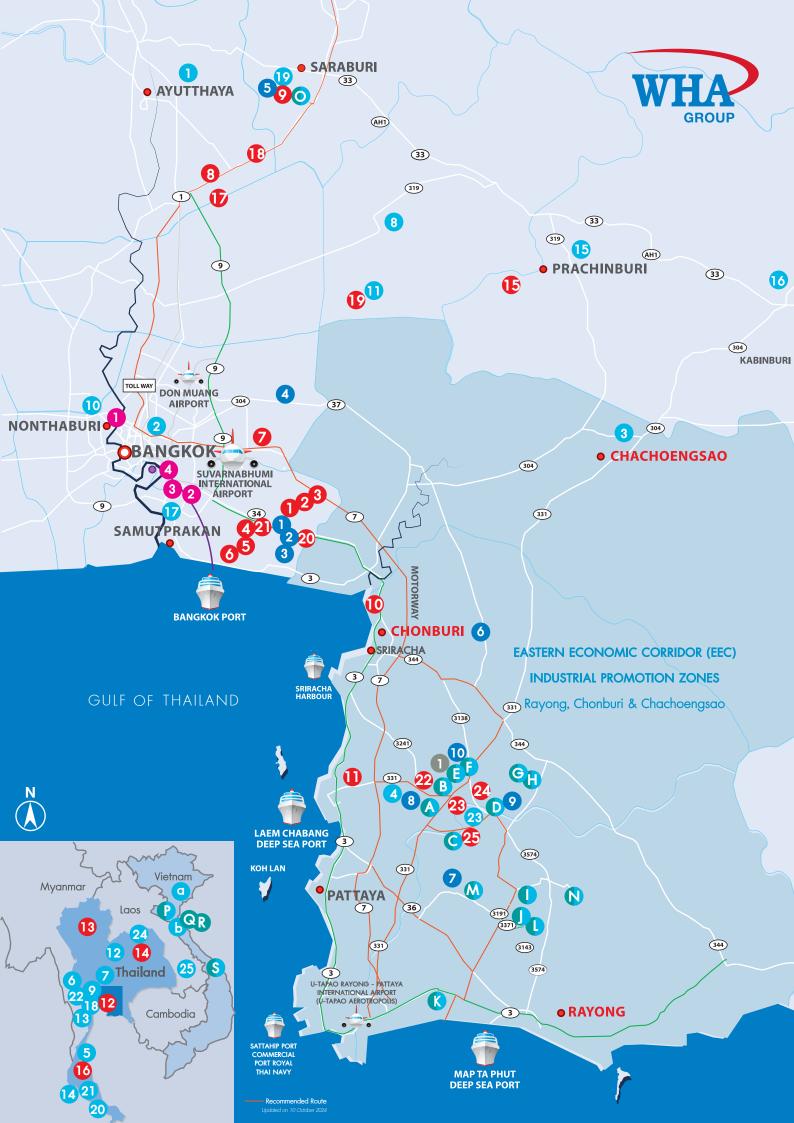
- 1. Ayudhya
- 2. Bangkok
- 3. Chachoengsao
- 4. Chonburi
- 5. Chumphon
- 6. Kanchanaburi
- 7. Lopburi
- 8. Nakhon Nayok
- 9. Nakhon Pathom
- 10. Nonthaburi
- 11. Pathum Thani
- 12. Phetchabun
- 13. Petchaburi
- 14. Phuket
- 15. Prachinburi
- 16. Sa Kaeo
- 17. Samut Prakarn
- 18. Samut Sakhon
- 19. Saraburi
- 20. Songkhla
- 21. Suratthani
- 22. Ratchaburi
- 23. Rayong
- 24. Udonthani
- 25. Attapeu, Laos

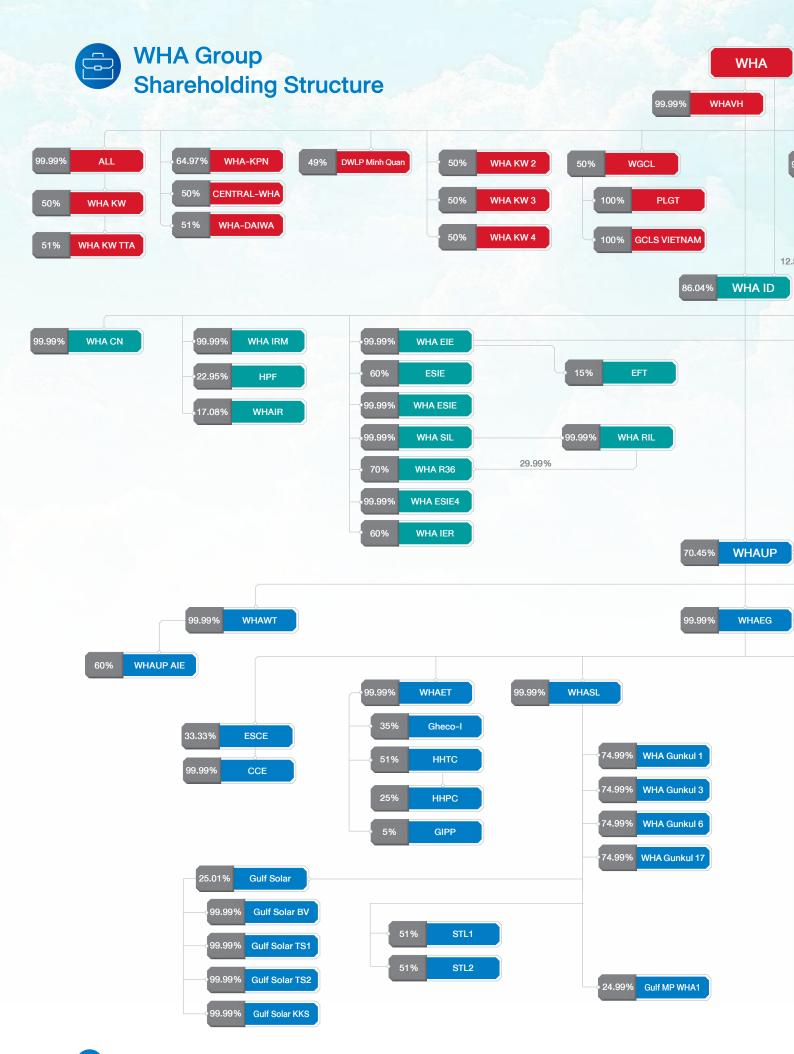
5 Digital

1. SUPERNAP (Thailand)

6 Business Complex

- 1. SI Infinite I
- WHA Tower and WHA Bangna Business Complex
- 3. @Premium
- 4. Quant Sukhumvit 25





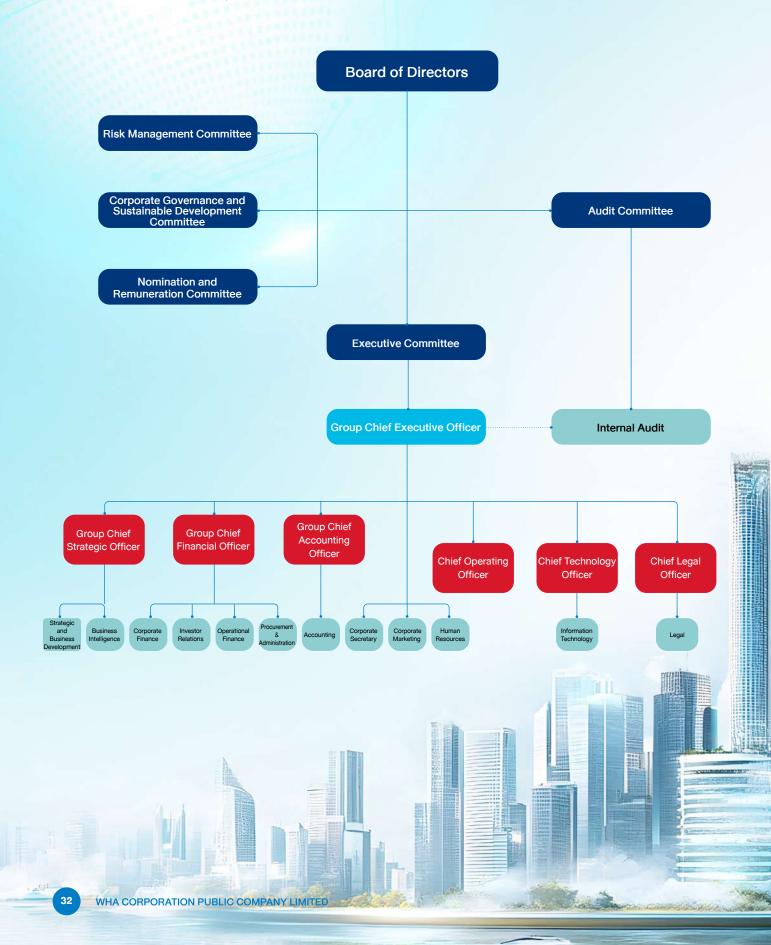


Commonwell Name a WILLA	
Company Name WHA	MMIA Comparation Dublic Comparate limited
• WHA	WHA Corporation Public Company Limited
• WHAVH • WAA	WHA Venture Holding Company Limited
• ALL	Warehouse Asia Alliance Company Limited
	WHA Alliance Company Limited
• WHA KW	WHA KW Alliance Company Limited
• WHAHK	WHA Corporation (Hong Kong) Company Limited
• WHAINDO	PT. WHA International Indonesia
• WHA-KPN	WHA KPN ALLIANCE Company Limited
CENTRAL WHA	CENTRAL-WHA ALLIANCE Company Limited
• WHA-Daiwa	WHA Daiwa Logistics Property Company Limited
• WHA KW 2	WHA KW 2 Company Limited
• WHA KW 3	WHA KW 3 Company Limited
• WHA KW 4	WHA KW 4 Company Limited
• WHA KW TTA	WHA KW TTA Company Limited Mobilix Company Limited
• MBLX	WHA Real Estate Management Company Limited
• WHARM • WHART	WHA Premium Growth Freehold and Leasehold REIT
• WHABT	WHA Business Complex Freehold and Leasehold REIT
• WGCL	
	WHA GC Logistics Company Limited
PLGT	PL Global Transport Company Limited
DWLP Minh Quan CCLS Vietnam	DH WHA Logistics Property Minh Quang Vietnam Company Limited
GCLS Vietnam	GC Logistic Solutions (Vietnam) Company Limited
• GIZTIX	Giztix Pte. Ltd.
• MUNGMEE	Mungmee Ecommerce Company Limited
• WHAFE	WHA Future Energy Company Limited
Company Name WHA DIGITAL	MALA Dicital Commenced invited
• WHA DIGITAL	WHA Digital Company Limited
WHA DIGITAL VENTURE Company Name WHA ID	WHA Digital Venture Company Limited
• WHA ID	WHA Industrial Development Public Company Limited
WHA ID WHA EIE	WHA Industrial Development Public Company Limited WHA Eastern Industrial Estate Company Limited
	WHA Eastern Industrial Estate Company Limited
• WHA EIE	
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Company Name WHAUP	
• WHAUP	WHA Utilities and Power Public Company Limited
WHAWT	WHA Water Company Limited
WHAUP AIE	WHAUP Asia Reclamation Water Company Limited
• WUPIN	WHA Energy 2 Company Limited
• WUPS1	WHAUP (SG) 1 Pte. Ltd.
• WUPS2	WHAUP (SG) 2 Pte. Ltd.
• WUPS3	WHAUP (SG) 3 Pte. Ltd.
• WUPS4	WHAUP (SG) 4 Pte. Ltd.
• WUPS5	WHAUP (SG) 5 Pte. Ltd.
WUPSD	WHAUP (SG) 2DR Pte. Ltd.
SDWTP	Cua Lo Water Supply Joint Stock Company
• CUA LO	Duong River Surface Waterplant Joint Stock Company
WUPNA	WHAUP Nghe An Joint Stock Company
WHAEG	WHA Energy Company Limited
WHASL	WHA Solar Company Limited
WHAET	WHAUP International Company Limited
• BPWHA1	B.Grimm Power (WHA) 1 Limited
• ESCE	Eastern Seaboard Clean Energy Company Limited
• CCE	Chonburi Clean Energy Company Limited
Gheco-I	Gheco-One Company Limited
• GIPP	Glow IPP Company Limited
• HHTC	Houay Ho Thai Company Limited
• HHPC	Houay Ho Power Company Limited
WHA NGD	WHA NGD Company Limited
 WHA NGD2 	WHA Eastern Seaboard NGD2 Company Limited
 WHA NGD4 	WHA Eastern Seaboard NGD4 Company Limited
Gulf Solar	Gulf Solar Company Limited
Gulf Solar BV	Gulf Solar BV Company Limited
 Gulf Solar TS 1 	Gulf Solar TS1 Company Limited
• Gulf Solar TS 2	Gulf Solar TS2 Company Limited
 Gulf Solar KKS 	Gulf Solar KKS Company Limited
• Gulf TS1	Gulf TS1 Company Limited
Gulf TS2	Gulf TS2 Company Limited
• Gulf TS3	Gulf TS3 Company Limited
• Gulf TS4	Gulf TS4 Company Limited
Gulf VTP	Gulf VTP Company Limited
• Gulf NLL 2	Gulf NLL2 Company Limited
Gulf JP NLL	Gulf JP NLL Company Limited
• WHA Gunkul 1	WHA Gunkul Green Solar Roof 1 Company Limited
WHA Gunkul 3	WHA Gunkul Green Solar Roof 3 Company Limited
WHA Gunkul 6	WHA Gunkul Green Solar Roof 6 Company Limited
WHA Gunkul 17	WHA Gunkul Green Solar Roof 17 Company Limited
• STL1	Stella Power 1 Company Limited
• STL2	Stella Power 2 Company Limited
RENEX	RENEX Technology Company Limited
• Gulf MP WHA1	Gulf MP WHA1 Company Limited
- GGG IVII VVIII/LI	out in third company difficed



As of January 1, 2025 the Company's Organization Structure is as follows:





WHA GROUP VALUE CHAIN

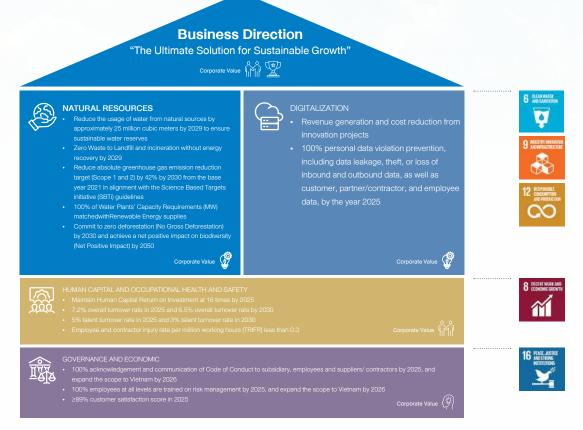
Business Group	Upstream Level	Business Transactions	Downstream Level
Logistics Business	 Land acquisition and related resource procurement Real estate development 	Real estate rental/leasing and salesAsset management	 Project maintenance Post-sales customer services Stakeholder relationship management
Industrial Estate Development Business (including ready-built factories and warehouses for lease and other services)	 Land acquisition and related resource procurement Industrial estate land development Product and service development 	 Land sales for industry business operations Leasing of ready-built warehouses and factories Asset management Fiber to the x optical cable (FTTx) 	
Utilities and Power Business	Raw water procurement Fuel and solar energy purchasing	Water productionWaste managementElectricity productionSolar rooftop installation	
Digital Business	IT product and service purchasing	Service management	





SUSTAINABILITY AT WHA GROUP

WHA Group is committed to operating the business under the 5-Year Sustainability Framework, which has been approved by the Executive Committee. This framework sets sustainability development goals for 2029 in line with the business direction of WHA Group to drive the organization towards sustainable growth under the commitment to be "The Ultimate Solution for Sustainable Growth" and also builds on the "WHA: WE SHAPE THE FUTURE" mission to create prosperity, career opportunities, and income for people and society for better quality of life, ultimately aiming a stable and sustainable growth for people, society, and the country. Our operations are driven by the strong and comprehensive capabilities of WHA Group ecosystem of all 4 main business groups. In 2025, a new mobility business will be launched, expanding the total to five business groups, supporting our leadership in developing logistics, comprehensive green logistics solutions, industrial estates, utilities and power, and digital solutions businesses. With a focus on innovation and end-to-end technology, WHA Group strives to meet the needs of both domestic and international investors which is the key driver of the efficient and sustainable growth of Thailand's economy. To achieve these goals, WHA Group has established a development framework that emphasizes good corporate governance, human resource development as a vital force to align with strategic business direction, digital transformation, and natural resource conservation. Moreover, the Group values material sustainability issues relevant to the Group and our stakeholders. We also incorporated risk and opportunity analysis based on global trends and potential future issues into its considerations, ensuring that our development approach remains effective and appropriate for the situation.



Investments in various projects may involve risks that could impact on the business operations of WHA Group. Furthermore, sustainability development in the areas of the Environment, Society and Governance (ESG) continues to gain increasing interest. Therefore, WHA Group place great importance on considering sustainability issues from the beginning of the investment planning process in each business group, as a key factor in shaping business direction and supporting investment decisions aiming at generating long-term value. In addition, expressing our intention in sustainable investments also builds confidence and trust among stakeholders, as the Group incorporates ESG into every stage of project development and business operations ensuring sustainable and socially responsible growth of the organization.

(3)

SUSTAINABILITY MATERIALITY ISSUES

WHA Group conducts annual assessments and identification of material sustainability topics to ensure that the issues presented in the report align with the organization's operations, stakeholder expectations, and the current economic, social, and environmental context. This process adheres to the Double Materiality Principle, which considers both the impact of the Group's business activities on society and the environment, as well as the influence of sustainability issues on the organization's value, in accordance with international reporting standards (Global Reporting Initiative: GRI).

In 2024, the assessment process covered three key dimensions: Environmental, Social, and Governance (ESG). The materiality of each topic was evaluated based on its impact on stakeholders and the Group's operations. This approach enables WHA Group to set directions, strategies, and risk management in response to global changes, while maintaining a balanced response to stakeholder expectations. The Board of Directors is responsible for reviewing, prioritizing, and approving the material sustainability topics and the content disclosed in this report.



MATERIALITY ASSESSMENT PROCESS

1. UNDERSTAND THE ORGANIZATION'S CONTEXT

WHA Group studies and analyzes data relevant to its operational context by considering global and industry-specific sustainability trends, as well as internationally recognized research and frameworks. In addition, the Group conducts in-depth interviews and collects input from both internal stakeholders, including employees and executives, and external stakeholders such as communities, business partners, and financial institutions. This process helps identify relevant sustainability trends and factors, both in the short and long term, across the Group's four core business units. The findings serve as a basis for screening and identifying issues that are relevant and impactful to the organization, society, the environment, and stakeholders.

2. IDENTIFY ACTUAL AND POTENTIAL IMPACTS

Based on the contextual understanding, WHA Group compiles a long-list of sustainability topics across the three ESG dimensions. The list includes only those topics that have caused or are expected to cause significant impacts on the environment, society, stakeholders, and the Group's operations. These topics are then assessed for their significance in the next step.

3. ASSESS THE SIGNIFICANCE OF THE IMPACTS

WHA Group organizes workshops with executives and relevant personnel from its four core business units to discuss and prioritize sustainability topics in accordance with the Double Materiality Principle. The assessment considers two main perspectives:

- Impact to ESG: Environmental and social impacts, including human rights and stakeholder impacts arising from WHA Group's operations.
- Impact to Business: The effect of sustainability issues on the organization's value.

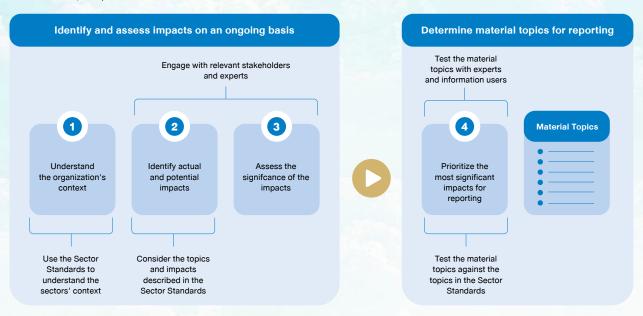
The prioritization is based on two criteria: Severity of the impact and Likelihood of occurrence, taking into account the scale of the impact and the organization's ability to address or mitigate it.

The assessment results are prioritized, with topics that have the greatest impact on the environment and society (Impact to ESG) as well as the business (Impact to Business) selected as the short-list of material topics. These topics are then submitted to the Board of Directors for review and approval in the next step.



4. PRIORITIZE THE MOST SIGNIFICANT TOPICS AND VALIDATE THE RESULTS

The short-listed sustainability topics are presented to the Board of Directors for review and approval. These approved material topics guide the Group's sustainability strategy for 2024. The outcomes are integrated into the Group's Enterprise Risk Management Process and serve as the framework for disclosures in the 2024 Sustainability Report.



2024 SUSTAINABILITY MATERIAL ISSUES

Report	Sustainability Material	Key Stakeholders and Impact Boundary		000	Dogo
Dimension	Issues	Internal	External	SDGs	Page
Governance/ Economic	Corporate Governance and Ethics	Employee	Supplier/CreditorGovernment/RegulatorFinancial InstitutionCustomerMedia	16 MAR JUSTER SECTIONS	47-58
	Technology and Innovation	Employee	Financial InstitutionShareholder/InvestorMedia	9 housest houseld Additional to the state of	116-136
Social	Occupational Health and Safety	Employee	CustomerCommunitySupplier/Creditor	3 GOOD HANTI AND WILE-BRIDG	181-203
	Community Development and Stakeholder Engagement	Employee	Community	3 GOOD REALIN AND WITH STATE 17 PARTICIPATE 17 FOR THE GALLS	204-256

Report Dimension	Sustainability Material Issues	Key S	Key Stakeholders and Impact Boundary		Down
		Internal	External	SDGs	Page
Environment	Waste Management	Employee	CustomerSupplier/CreditorGovernment/RegulatorCommunity	12 ESPONDING CONTINUE	260-279
	Climate Strategy	Employee	 Customer Supplier/Creditor Government/Regulator Community Financial Institution Shareholder/Investor 	7 distribution of the control of the	292-311
	Energy Management	Employee	 Customer Supplier/Creditor Government/Regulator Community Financial Institution Shareholder/Investor 	7 HOTOMARI AND THE STATE OF THE	312-327
	Water Management	Employee	CustomerSupplier/CreditorGovernment/RegulatorCommunity	6 and safetile 12 Estimated and safetile 17 Participant (South County) 17 Participant (South County)	339-353



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STAKEHOLDER ENGAGEMENT

Driven by the aspiration to become "The Ultimate Solution for Sustainable Growth" under the mission "WHA: WE SHAPE THE FUTURE," WHA Group places great importance on the opinions of all stakeholders to foster strong relationships and uphold transparency as a foundation for sustainable growth. Stakeholder engagement enables the Group to understand the expectations and concerns of each stakeholder group and to respond accordingly through the operations of its four core business groups, delivering comprehensive products and services in line with its business commitments.

Therefore, WHA Group has developed a comprehensive stakeholder engagement plan and approach that encompasses all areas of operation. This includes managing stakeholder expectations, analyzing and prioritizing each stakeholder group, and identifying their potential impacts on projects or operations from multiple perspectives. The stakeholder engagement process enables the Group to effectively mitigate negative impacts on the environment, well-being, health, and safety of stakeholders, while also enhancing positive contributions to maximize value creation and strengthen the trust of all stakeholders across the value chain.

MANAGEMENT APPROACH

- 1. Managing stakeholder is crucial in reducing negative impacts and generating positive outcomes for the benefit of society and the business operations of WHA Group. Therefore, WHA Group has developed a stakeholder management framework for the entire organization. The objective is to effectively manage the expectations of each stakeholder group. The framework includes establishing appropriate relationships with each stakeholder group and ensuring that operational activities rotate within each of the four business hubs comprehensively
- 2. WHA Group analyzes and prioritizes stakeholder groups to identify how each group impacts WHA Group projects or operations from various perspectives. The framework for stakeholder engagement management includes:

- Gathering both direct and indirect stakeholder groups to classify and prioritize the key stakeholders is important. WHA Group has established guidelines for stakeholder prioritization, considering two primary factors, impact and dependence. These factors are used to determine the importance and ranking of stakeholders who have significant relevance to WHA Group.
- Plan and define strategies for engaging with stakeholders that are suitable for the identity of each group. This can involve activities such as meetings, survey design, communication through letters, conducting interviews during visits, and more. After that, assign responsible individuals and determine appropriate timeframes. Additionally, provide guidance on managing other risks that may occur during stakeholder engagement activities, such as addressing protests or unfavorable environmental conditions like rain or flooding, in order to keep WHA Group informed of stakeholder expectations and concerns regarding business management.
- Analyze: Assess and analyze the issues, concerns, risks, and opportunities that stakeholders are interested in. This should be done based on risk management principles, evaluating the impacts and opportunities. This will help identify the necessity and prepare appropriate response processes.
- Manage: Monitor and implement actions according to the stakeholder engagement processes. This involves maintaining communication with all stakeholder groups, as well as responding to issues and addressing various problems following the complaint handling procedures.
- Review and Improve: Reviewing the effectiveness and efficiency of the stakeholder engagement activities, and presenting them to the Corporate Governance and Sustainable Development Committee for their continuous acknowledgment at least every quarter. This includes communicating.



In addition, WHA Group holds monthly meetings of the Corporate Social Responsibility (CSR) Committee, which comprises senior executives and working teams involved with community engagement. These meetings serve as a platform for presenting suggestions or complaints related to community issues in order to jointly determine solutions and preventive measures, aiming to ensure that the Group can coexist with surrounding communities in a sustainable manner.

WHA Group has established a grievance mechanism accessible to both internal and external stakeholders for identifying problems and implementing effective corrective actions. Employees and external stakeholders can submit issues, suggestions, and complaints to the Group. The Internal Audit Department will investigate and resolve these matters and report to the Audit Committee, which in turn reports to the Board of Directors on a quarterly basis. This process allows for assessment, corrective planning, and appropriate responses to stakeholder expectations. Furthermore, operational outcomes are reported to relevant agencies, such as the Industrial Estate Environmental Monitoring Committee, to ensure transparency and efficiency.

WHISTLEBLOWING CHANNEL

Channels for Employees:

 Website: https://www.wha-group.com/en/ corporate-governance/corporategovernance?form=whistle_blowing#contact

Email:

- Chief Executive Office: ceo_office@wha-group.com or
- The Audit Committee: auditcommittee@wha-group.com
- Suggestion Box: Human Resources Department

Channels for External Stakeholders:

 Website: https://www.wha-group.com/en/ corporate-governance/corporategovernance?form=whistle_blowing#contact

Email:

- Chief Executive Office: Ceo_office@wha-group.com or
- The Audit Committee: <u>auditcommittee@wha-group.com</u>



THE STAKEHOLDER ENGAGEMENT REVIEW PROCESS

In 2024, WHA Group determine and prioritized eight key stakeholders that are equally important including, employee, shareholder/investor, customer, supplier/ creditor, government/regulator, community, financial institution, and media.



 Obtaining opinions, expectations, and concerns of stakeholders through various engagement methods and channels provided by WHA Group.



- Reporting concerns received from stakeholder engagement channels to the heads of relevant departments within WHA Group and the sustainable development committee, which consists of managers and personnel responsible from the relevant departments, to acknowledge, assess, and develop effective and appropriate response strategies to ensure that stakeholder expectations are met.
- Reporting the results of stakeholder engagement processes to management as important information for decision-making in business expansion and developing future stakeholder engagement strategies.

RESULTS FROM STAKEHOLDER ENGAGEMENT 2024

Stakeholder **Engagement Approach** Stakeholders' Expectation **2024 Performance Summary Employee** · Various all time · WHA Group outlook · Update the performance and business · Business trends and updates communication channels outlook · Update on news and · Share business trends and updates via (email, supervisor, intranet etc.) knowledge sharing WHA's communication channels Communication channels Training and career Develop and improve training programs to through WHA Connect development program enhance the skills of employees, including Annual CEO Town Hall · Work environment both general and specific skills, for both new Quarterly Executive · Compensation, welfare, and and current employees. Sharing benefits · Develop and provide suitable training Annual employee · Management of occupational programs regularly satisfaction and health and safety · Communicate on corporate values and engagement survey · Business continuity plan Suggestion box · Progress in career path · Regularly review and improve employees' Whistle blowing channel Receiving equal treatment compensation and benefits · Monthly management without discrimination · Promote good occupational health and safety meeting · Flexible working Organizing operational · Update and communicate business continuity workshops to gather plan via various communication channels in a feedback on sustainability timely manner issues from all stakeholders. Conduct business continuity plan rehearsals to ensure practices and requirements are strictly and effectively followed Establishing a Nomination Remuneration and Compensation Committee (NRC) to oversee the appointment of executivelevel employees based on qualifications, skills, and abilities, without any restrictions or discrimination based on gender, age, skin color, race, nationality, or cultural background. · Assigning tasks to individuals who possess suitable qualifications and capabilities · Annual general meeting Shareholder/ • Business performance, such · Improve business competitiveness and investor Annual Report and as returns, benefits and profits business directions to be up-to-date Sustainability Report Business transparency · Ensure good corporate governance Roadshow • Changes in business · Establishing processes for identifying, · Analyst meeting management and risk assessing, and controlling operational risks, capital risks, and profit risks of the company, · Outlook meeting management · Investor site visit · Sustainability performance both existing and emerging risks. And Opportunity Day · Sustainable growth and developing emergency response plans and Various all time expansion of the business procedures to ensure business continuity in communication channels with safe working systems and the event of unforeseen circumstances. (e.g. telephone, email, standards in place, ensuring Take part in Thai Private Sector Collective continuous management to Action Against Corruption (CAC) website etc.) Whistleblowing channel operate the business without · Conduct enterprise risk management and interruptions. establish short and long-term plan · Effective risk management in · Provide information on flooding risk response to rapid changes in prevention Manage sustainability material topics global climate conditions. · Equal treatment and practices • Ensure environment and social compliance among shareholders · Promote innovation and sustainability initiatives Manage and meet the needs of stakeholders

equally, without any discrimination

Stakeholder

Engagement Approach

Stakeholders' Expectation

2024 Performance Summary

Customer



- · Roadshow/ marketing events/ webinar
- Quarterly business meeting/video conference
- Annual customer satisfaction survey
- · Quarterly customer clubs
- · Quarterly WHA Connect magazines
- · Various all time communication channels (i.e. telephone, email, key contact personnel, social media etc.)
- WAHSapp
- · Company visits, including · Ensuring good corporate virtual tours of industrial estates through a 360° virtual tour system
- · Whistleblowing channel

- Product and service inquiry
- · Quality of after sale services
- · Environment management, compliance and standards
- Risk and crisis management
- Efficient energy management (cost reduction)
- Effective waste management practices
- · Presenting innovative and environmentally responsive products that address environmental challenges
- Avoiding environmental issues with neighboring communities
- governance and business ethics to promote a positive image for customers.

- Provide product and service information on website and other media
- Provide prompt response to customers' inquiry
- Establish effective customer relationship management
- · Continuously improve customer relationship management from customer's comments / suggestions
- · Strictly comply with related laws and regulations and apply international environmental management standards where possible to improve customer trust
- · Conduct risk and crisis assessment and implement appropriate mitigation actions
- Inform customers of relevant risks and crisis management plans and measures
- · Utilizing new technologies and innovations for environmental management
- · Planning energy usage and implementing energy storage for future use
- · Reducing the quantity of materials used and waste generated in production processes
- ISO 14001 standard to ensure that business operations have no adverse impact on the environment and communities.
- Developing technology to enhance customer convenience, such as the 360° virtual tour system, LBMS application, and vehicle data management system.

Supplier/ creditor



- Supplier event
- Supplier site visit
- Telephone
- Fmail
- Self-evaluation and onsite
 Compliance with WHA visits
- · Whistleblowing channel
- process
- Business opportunities and collaboration
- Group's standard
- On-time payment and following the contract agreement
- Environment, social and governance management
- · Material quality and its environmental impacts
- Labor conditions (i.e. human riahts)
- Workplace's occupational health & safety

- Transparency in procurement Developed procurement policy and procedure
 - Conduct Suppliers-day
 - Communicate on WHA Group's procurement
 - Conduct supplier assessment and provide feedback/ corrective action plans to guide suppliers for improvement
 - · Follow the contract agreement
 - · Disclose information according to the agreed condition
 - · Communicate concerns related to environment, social and governance criteria
 - · Evaluate supplier criteria to ensure that environmental, social and governance concerns are in line with standards
 - Ensure environmental management compliance are strictly followed
 - · Develop screening process to ensure that it complies with the Supplier Code of Conduct
 - · Assessing human rights risks and ensuring compliance to prevent violations of labor rights or human rights issues.
 - Supporting the Building Social Impact Initiatives (BSI) task force to create a safe environment, access to health care, education, and protection for children and families living in construction worker camps

Stakeholder

Engagement Approach

Stakeholders' Expectation

2024 Performance Summary

Government/ regulator



- · Meeting on occasion
- Various all time communication channels (i.e. telephone, email, etc.)
- Conducting business in compliance with laws and regulations
- Stakeholder impact management
- Corporate governance and transparency
- Conducting business with integrity, awareness, and implementation by all employees at all levels of the organization
- Serving as a role model organization for other organizations
- Conducting business without creating negative environmental impacts

- Strictly comply with relevant laws and regulations
- Managing the needs of stakeholders, including ensuring ethical business practices, in order to instill confidence in stakeholders.
- Corporate governance and transparency Ensure good corporate governance and implementation of business code of conduct
- Environmental, Social, and Governance (ESG) risk management.
- Emphasizing long-term financial planning and organizational flexibility.

Community



- Public hearing and meeting
- Community activities
- Community engagement survey
- Local community representatives
- Site visits
- · Whistleblowing channel
- Business operations' impacts on communities' well-being (i.e. traffic, safety, water shortage, air pollution, waste water, waste, etc.)
- Environmental management performance
- Developing communities and promoting community activities (i.e. education promotion, health promotion, and community enterprise promotion)
- · Community engagement
- Ensuring that business operations do not impact the geographical conditions of communities and their way of life.

- Conduct regular community feedback survey to ensure there is no impact on local community
- Implement mitigating actions where business operation activities affect community's well-being (i.e. use of vehicle management system to improve traffic problem)
- Involve surrounding communities in crisis management and emergency drill
- Ensure compliance with environmental related laws and standards
- Regualrly implement community development project (e.g., as collaborating with educational institutions to develop youth skills aligned with labor market demands and promoting health and medical equipment support to local hospitals and healthcare facilities)
- Share WHA Group's expertise with local communities
- Provide effective and prompt response to community complaints
- Conduct community meeting to understand communities' needs and suggestions
- Conduct public consultations and report on the results of Environmental Impact Assessments (EIA) to gather feedback and develop preventive and control measures.
- Support the local economy by fostering community engagement and preserving cultural traditions and customs (e.g., promoting community products through the WHA Pan Kan project).

Stakeholder

Engagement Approach

Stakeholders' Expectation

2024 Performance Summary

Financial Institution



- Various all-time communication channels (i.e. email, phone, conference, etc.)
- Annual greetings
- Quarterly analyst meetings
- Business performance and outlook
- Compliance with the law
- · Business transparency
- Changes in business management and risk management
- · Sustainability performance
- · Green initiative
- Continuous business operations
- Improve and keep business competitiveness and business directions up-to-date
- Ensure good corporate governance
- Strictly comply with Disclosure Policy
- Notify significant updates or changes in a timely manner
- Manage sustainability material topics
- Promote innovation and sustainability initiatives
- Assess sustainability issues along with investment decision process
- Investing in environmentally friendly projects.
- Seeking funding opportunities that prioritize green issues and related aspects
- Implementing Business Continuity Planning (BCP) to ensure preparedness for crises

Media



- Various weekly or biweekly communication channels (i.e. press release, photo captions, executive interview and news article)
- Annual press conference, press tour/visits and annual greetings
- Quarterly Group interviews
- Bi-annual press briefings

- Business outlook/ Business direction
- Strengthening relationships
- Updates on products and services
- CSR initiatives and environmental management
- · Business outlook
- · Financial results
- Technological advancements

- Hold annual press conference to update business plan and directions
- Frequently update on the development of company's activities through media channels
- · Disclose accurate and real information
- Maintain good and long-term relationships with the media





GOVERNANCE/ ECONOMIC DIMENSION







1. GLOBAL TREND

In an era where businesses must navigate a wide range of challenges, including market competition, increasing societal expectations for transparency and ethics, as well as economic volatility and uncertainty, upholding business ethics is essential for achieving sustainable operations. In 2024, the landscape of business ethics has continued to evolve in response to rapidly changing environments, driven by technological advancement, the expansion of the digital economy, and the need to address social and environmental issues. Organizations are therefore placing greater emphasis on deeply integrating ethics into corporate culture to foster trust and transparency at every level. They are also focusing on environmental and social responsibility through sustainable practices, linking Environmental, Social, and Governance (ESG) principles with business strategies to create long-term stability in all aspects.

In addition, the application of technology and innovation, such as Artificial Intelligence (AI) and data analytics, in business decision-making helps strengthen ethical conduct and reduce the risk of noncompliance. Encouraging diversity and a wide range of perspectives in Board-level decisions also contribute to more thoughtful and higher-quality governance. The ability of organizations to adapt to an unpredictable economic landscape, including challenges such as inflation and supply chain disruptions, reflects the need to build economic resilience and meet the expectations of society in a sustainable way.

2. OUR POSITION

WHA Group is recognized as a leader in conducting business with a strong commitment to corporate governance and business ethics. It received the highest score from S&P Global in the Governance and Economic Dimension category among Real Estate Management & Development companies, reflecting our dedication to principles of transparency and integrity. The Group believes that transparency and honesty are fundamental to building trust with all stakeholders, including employees, customers, investors, and business partners. Accordingly, the Group has established a clear and comprehensive Business Code of Conduct to guide personnel in making decisions and performing their duties ethically and in compliance with applicable laws. At the same time, the Group promotes a culture of social and environmental responsibility to ensure long-term sustainability.

WHA Group remains committed to strictly adhering to the Business Code of Conduct to prevent risks to the reputation and stakeholder confidence that may arise from violations of ethical principles and regulatory requirements. The Business Code of Conduct serves as a foundation to assure stakeholders that the organization operates with integrity and transparency, while also acting as a vital mechanism in supporting sustainable business operations.

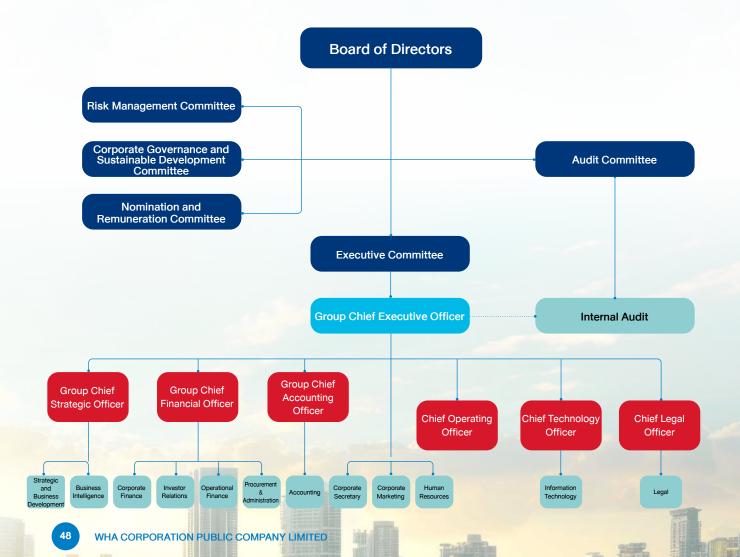
As a socially and economically responsible organization, WHA Group continues to regularly review and improve the Business Code of Conduct to ensure alignment with changing contexts and to meet the expectations of all stakeholders. This commitment reflects the Group's dedication to enhancing operational standards and achieving long-term sustainability in Environmental, Social, and Governance (ESG) aspects.

3. MANAGEMENT APPROACH

3.1 ORGANIZATION STRUCTURE ALIGNED WITH GOOD CORPORATE GOVERNANCE FRAMEWORK

Operating with transparency is a key factor that directly contributes to an organization's long-term credibility and success. Transparency helps build trust among customers, business partners, and investors, especially in an era where stakeholders place increasing importance on responsibility and ethics in business operations. Moreover, transparency plays a crucial role in mitigating governance-related risks, enabling the organization to adapt and respond effectively to changes in the business environment. It also serves as a foundation for strengthening the organization's long-term sustainability, stability, and competitiveness. For this reason, the Group emphasizes transparent and concrete corporate management practices. These practices are aligned with applicable laws, the good corporate governance principles set by the Securities and Exchange Commission (SEC) and the Stock Exchange of Thailand (SET), as well as the OECD Principles of Corporate Governance.

WHA Group also provides opportunities for all Board of Directors, executives, and employees to participate freely in the development and driving of the organization under a framework of good governance. Additionally, it places importance on practices that promotes diversity among personnel, including directors, executives, and employees. WHA Group restructured our organization by appointing an independent Chairman of the Boards separate from the Group CEO to ensure clarity in the separation of powers, duties, and responsibilities between strategy setting and governance, distinct from operational management. Furthermore, roles and responsibilities has been clearly divided between the Board of Directors and the management, with a clear balance of power. The corporate governance structure includes the following committees:



BOARD OF DIRECTORS

The Board of Directors plays a crucial role as leaders within the organization, whether it is in setting the vision, mission, strategic plans, and budgets for the management team to implement to achieve business objectives, or in overseeing the management's operations to ensure they align with the policies assigned, with fairness, transparency, and compliance with laws, regulations, and various policies, including the Code of Conduct. Therefore, the Board of Directors is appointed by the shareholders through a transparent process. Each director possesses knowledge, expertise, and diverse relevant experiences, aligned with the organization's strategies and sustainable business goals. Additionally, the Board of Directors must devote sufficient time to their duties, exhibit leadership, have a vision, be independent in decision-making, and be able to guide and instill confidence in stakeholders that the Group's business operations and activities are conducted correctly and ethically, as well as being independent from the management of the company through a clear division of responsibilities between the Board of Directors and the management team.

Aside from governing business, another key characteristic that all members of the Board possess are their carefulness and vision for sustainable business operations. This includes planning, policy-setting, and overseeing operations to align with a sustainable development framework - ESG (Environmental, Social, and Governance). The Board of Directors oversees business with consideration for its impact on society and the environment, respect rights, and hold responsibility towards shareholders and all stakeholders. They also operate the business with the overall societal benefit in mind. Performance and operations regarding ESG issues are regularly reported to the Board of Directors. For example, WHA's Net Zero Roadmap is reported to the Board of Director as part of a climate change agenda on May 10, 2024 with 100% Board members attended.

CORPORATE GOVERNANCE AND SUSTAINABLE DEVELOPMENT COMMITTEE

The Board of Directors has assigned the Corporate Governance and Sustainable Development Committee the responsibility to communicate and implement corporate governance and sustainable development activities with management team to monitor progress, review, and improve the corporate governance practices of relevant employees, including business partners, to comply with the established policies. The Corporate

Governance and Sustainable Development Committee will monitor and report the progress of high-level management and the development team on sustainable development according to the established plan. The committee will organize at least four meetings of the Corporate Governance and Sustainable Development Committee annually to monitor progress and evaluate the results (Due Diligence) in sustainable operations. Additionally, the Group has appointed an Environmental Committee consisting of senior management and relevant employees from various departments to work on environmental quality management, energy conservation, and biodiversity conservation.

The Corporate Governance and Sustainable Development Committee plays a vital role in overseeing compliance with principles and laws related to transparent business operations to ensure a proper balance of power. The committee is also responsible for reviewing and updating corporate governance policies to suit changing circumstances and the business environment, as well as setting operational guidelines for the organization. Additionally, the Corporate Governance and Sustainable Development Committee plays a key role in overseeing Environmental, Social, and Governance (ESG) matters and sustainability efforts. This ensures that all business activities of the Group are conducted in accordance with the Code of Conduct and relevant ESG-related policies, supporting sustainable operations and accountability to all stakeholders. Furthermore, the Group has assigned the Risk Management Committee to oversee ESGrelated risks. Further details are provided in the Risk Management section.

In addition, the Corporate Governance and Sustainable Development Committee acts as a representative in overseeing, communicating, and setting policies related to corporate governance and sustainability activities. This includes engagement with executives, employees, internal departments, and relevant external parties. The Committee ensures that practices related to sustainable development are established in alignment with legal requirements and international standards. These practices cover areas such as environmental management, climate change adaptation, human rights, occupational health and safety, etc. The Committee is also responsible for overseeing the management of

potential Environmental, Social, and Governance (ESG) impacts, reviewing WHA Group's sustainability material issues, and addressing other key matters that may affect the Group and stakeholders. This oversight extends to all employees and executives within the organization to ensure that the Group's business operations are conducted with true transparency and sustainability.

Executives and the Sustainable Development Working Group consistently report on the progress of sustainable development activities to the Corporate Governance and Sustainable Development Committee. The committee's feedback and suggestions are considered for enhancements and further implementation which includes improvements on sustainability material issues, anti-corruption practices, environmental and social initiatives, and responses to climate change, etc. In 2024, the Sustainable Development Working Group reported progress to the committee four times, with all committee members present at each meeting, achieving a 100% attendance rate and meeting the set target. The Corporate Governance and Sustainable Development Committee regularly updates the Board of Directors on the progress. The Corporate Governance and Sustainable Development Committee reviewed and approved the Materiality Issues in the meeting No. 1/2024 held on February 2, 2024.

NOMINATION AND REMUNERATION COMMITTEE

In nominating and selecting suitable candidates for appointment as members of the Board of Directors, the perspectives of all stakeholders regarding the nominated candidates should be considered. The selection and nomination process must remain free from interference and conflicts of interest, focusing on the candidates' abilities and qualifications. The Board of Directors has established the Nomination and Remuneration Committee (NRC) to be responsible for proposing qualified individuals based on their skills, capabilities, competencies, and relevant experiences that align with and support the business strategy. This process is conducted without discrimination based on gender, age, race, nationality, or cultural background, to serve as directors and senior executives. In addition to selecting and nominating Board members, the NRC is responsible for proposing criteria and guidelines for determining the remuneration of the Board of Directors,



senior executives, and all employees. The criteria are clear, fair, appropriate, and consistent with labour market conditions, the nature of the business, and the industry with a focus on performance. The NRC organizes the meeting at least four times a year and reports its performance to the Board for acknowledgement.

The information regarding the selection, appointment, and composition of the Board of Directors and senior executives is detailed in the "Corporate Governance" and "Corporate Governance Structure" sections in Form 56-1 One Report 2024.

AUDIT COMMITTEE

WHA Group recognizes the importance of good corporate governance as a critical factor in enhancing operational efficiency and driving sustainable growth, ultimately benefiting all stakeholders. To ensure that governance is conducted effectively and transparently, the Board of Directors has appointed the Audit Committee, which is responsible for overseeing and independently reviewing the Company's operations. All members of the Audit Committee possess the ability to exercise impartial judgment and have a sound understanding of financial statements, which is essential for fulfilling their responsibilities.

Currently, the Audit Committee comprises four independent directors. Among them, two are experts in accounting, and one has direct expertise in finance. The composition of the Audit Committee complies with the requirements of the Capital Market Supervisory Board and the Stock Exchange of Thailand to ensure that the auditing process aligns with international standards and fosters trust among shareholders and all stakeholders.

Additional information on the Audit Committee is available under the sections "Corporate Governance," "Corporate Governance Structure," "The Audit Committee Charter," and "Profile of Directors" in the Form 56-1 One Report 2024.

THE PERFORMANCE EVALUATION OF THE BOARD OF DIRECTORS

WHA Group has implemented a comprehensive process to evaluate the performance of its Board of Directors and sub-committees. This process includes both individual self-assessment and self-assessment for the board of directors as a whole", to regularly review and enhance their work, address issues, and overcome challenges. Additionally, the Board conducts an annual performance evaluation of the Group CEO, who serves as the top executive of the Group. This evaluation focuses on leadership, strategy formulation and implementation, ESG practices (environmental, social, and governance), financial planning and performance, relationships with the Board and external organizations, management and employee relations, succession planning, product and service knowledge, and personal attributes. The result of assessment is used to determine the remuneration of the Group CEO.

WHA Group has a policy to promote and support the continuous development of knowledge, skills, and experiences of the Board of Directors for sustainable development. This includes training and seminar on topics of interest both inside and outside the organization. For example, the Group supports training courses organized by Thai Institute of Directors (IOD) and encourages to visit business group both domestically and internationally.

Additional information on the evaluation of the Board's performance in 2024, the evaluation of the Group CEO's performance, and the development of knowledge through training courses can be found under the "Corporate Governance" section in the Form 56-1 One Report 2024.

WHA CODE OF CONDUCT AND PRACTICE ("CODE OF CONDUCT")

WHA Group places great importance on and adheres strictly to relevant laws and regulations governing our business operations in all countries where it operates. The Group aims to ensure that our board members, executives, and all employees respect and comply with laws, as well as local customs, traditions, and cultures. Additionally, the Group respects human rights and international standards, staunchly opposes all forms of corruption, and adheres to policies and guidelines against corruption and collusion strictly.

The Group has established risk management and auditing processes and supports the creation of a corporate culture that is committed to honesty, integrity, and fairness. This commitment is emphasized from the Board of Directors and executives to all employees through the implementation of good corporate governance practices by the Securities and Exchange Commission, the Stock Exchange of Thailand, and international standards, such as the United Nations Global Compact, of which the Group is a member. This is reflected in the establishment of the Group's corporate governance policy and Code of Conduct.

A group-wide the Code of Conduct has been reviewed by the Corporate Governance and Sustainable Development Committee and approved by the Board of Directors. The primary objective is to foster business practices, honesty, legal principles, ethics, and a sense of responsibility towards Environmental, Social, and Governance (ESG) factors. These principles apply not only to the directors, executives, employees, but also extend to suppliers, contractors, subsidiaries, and associated companies under WHA Group's authority and policy control. The Code of Conduct is available in both Thai and English to ensure that all stakeholders, both domestic and international, can study, comprehend, and effectively implement it. Furthermore, the Code of Conduct undergoes an annual review, including in 2024, to ensure its relevance and alignment with the prevailing social context. To facilitate easy access to this vital information, WHA Group has disclosed the Code of Conduct publicly available through the Company's website and intranet, ensuring convenience for employees and external stakeholders.





TH: https://www.wha-group. com/Uploads/elFinder/pdf/cg/ wha-code-of-conduct-andpractices-th.pdf



EN: https://www.wha-group. com/Uploads/elFinder/pdf/cg/ wha-code-of-conduct-andpractices-en.pdf

This Code of Conduct is applicable to all personnel, irrespective of their hierarchical level. To ensure adherence to the Code of Conduct and guidelines, WHA Group has introduced a digital acknowledgment process. Furthermore, comprehensive training programs are offered to effectively communicate these policies to employees, suppliers, contractors, subsidiaries, and joint ventures, ensuring their comprehension and acknowledgment.

Furthermore, in the evaluation of the performance of employees within WHA Group, the employee performance appraisal system also considers adherence to the Code of Conduct. This ensures that employees must strictly comply with this Code of Conduct.

REVIEW AND COMPLIANCE WITH THE CODE OF CONDUCT

WHA Group consistently undertakes reviews to ensure adherence to the organization's Code of Conduct. This process is crucial for identifying any instances of non-compliance and for the swift implementation of corrective measures. The Board of Directors, guided by recommendations from the Corporate Governance and Sustainable Development Committee, along with relevant departments such as Compliance, continuously evaluates the effectiveness of the Code of Conduct to ensure that enforcement and assessment are conducted in strict alignment with ethical standards and pertinent regulations. The review process is designed to guarantee that the organization operates with transparency and upholds accountability to all stakeholders. Notably, in 2024, there were no reported complaints or violations concerning non-compliance with the Code of Conduct.

FAIR REMUNERATION POLICY

WHA Group has a remuneration policy for the Board of Directors and senior executives that aligns with the objectives, responsibilities, and performance related to managing the organization's impact on Environmental, Social, and Governance (ESG) factors. This encourages senior executives to pay attention to and consider impacts across all three dimensions.

Additional information regarding the composition, roles, responsibilities of the Board of Directors and sub-committees, attendance rates, and remuneration for directors and senior executives can be found under

the section "Corporate Governance Structure" in the Form 56-1 One Report 2024.

The process for reviewing and determining the compensation policy is delegated by the Board of Directors to the Nomination and Remuneration Committee, which consists of independent directors. This committee plays a key role in reviewing and updating the remuneration policy and structure for the Board, sub-committees, and senior executives to ensure the alignment with current labor market conditions and comparability with other companies in the same industry. The Nomination and Remuneration Committee operates independently, conducting a thorough and appropriate review and analysis of remuneration. This process includes considering stakeholder feedback and ensuring there are no any conflicts of interest. The proposed director remuneration is then submitted by the Board of Directors for approval at the shareholders' meeting. For more detailed information, please refer to the Form 56-1 One Report 2024.

ANTI-CORRUPTION POLICY

WHA Group aims to ensure that all relevant personnel have the knowledge, understanding, and a strong emphasis on combating all forms of corruption. They are also aware of their duties and responsibilities and can effectively apply practices related to anti-corruption, and the whistleblowing process. Regular monitoring and reviews are conducted to ensure compliance with policies and guidelines. Therefore, WHA Group has established "The Anti-Corruption Policy and Practices", which undergo regular reviews to maintain relevance and effectiveness. This policy is applicable to all WHA Group personnel, including directors, executives, employees, suppliers, distributors, contractors, subsidiaries, and joint ventures. Its primary objective is to prevent the abuse of power, fraudulent activities, and bribery, ensuring that all business operations are conducted in full compliance with the law. Detailed guidelines pertaining to these principles are explicitly outlined in the Code of Conduct and Practices, Supplier Code of Conduct, and the Anti-Corruption Policy.



The Board of Directors has assigned the Audit committee the responsibility of overseeing and examining operations for compliance with the Anti-Corruption Policy. This includes reviewing the policy itself, assessing the internal control system concerning anti-corruption measures, monitoring and mitigating the risk of illicit activities and fraudulent behaviour, preventing fraud and corruption within the Group, and the handling complaints and reports of corruption from relevant parties. The Internal Audit Department conducts risk assessments related to corruption to identify and implement measures for risk reduction. This scope extends to stakeholders external to the organization, as well as business interactions with customers and significant business partners. WHA Group has established the anti-corruption policy in writing, including guidelines for acceptable and unacceptable practices, to avoid the risks of corruption. Examples include:

- Policies on giving and receiving gifts
- Policies on charitable donations, giving, and/or receiving support
- Hospitality practices
- Political contribution practices
- Procurement practices
- Guidelines for hiring government employees

As in previous years, in 2024, WHA Group continues to uphold and has announced a No Gift Policy, actively promoting awareness among all relevant stakeholders both inside and outside the organization. This includes directors, executives, employees, subsidiaries, joint ventures, suppliers, and business partners under the "No Gift Policy" program. This initiative aims to promote governance principles and establish a standard of transparency in the working culture across all business sectors. All personnel are strictly required to adhere to this policy. In 2024, no cases of employee fraud or corruption were reported.



The Anti-Corruption Policy outlines clear guidelines aimed at mitigating the risks associated with fraud and corruption. These guidelines address various areas, including the giving or receiving of gifts, charitable contributions, sponsorships, financial support, political involvement, procurement procedures, and the recruitment of government personnel. The policy extends beyond the scope of the Code of Conduct to ensure comprehensive coverage. In the event of a violation or non-compliance with this policy, the Group has established well-defined disciplinary measures that encompass offenses ranging from minor to serious. Such offenses include bribery, fraud, unauthorized disclosure of WHA Group's confidential information or intellectual property, or any actions that significantly affect the reputation of WHA Group.

3.2 RISK AND OPPORTUNITIES MANAGEMENT STRATEGY

Good corporate governance is a fundamental foundation that enables an organization to build credibility and a positive image in the eyes of our stakeholders, such as investors, customers, employees, and business partners. Operating in accordance with governance principles promotes transparency in work processes, attracts both domestic and international investments, strengthens long-term trust from stakeholders, and effectively reduces risks arising from corruption or errors in operational procedures. Furthermore, adherence to international standards and relevant regulations enhances the organization's competitiveness in the global market, allowing it to expand the customer base, increase business opportunities, and create advantages within the industry.

On the other hand, good corporate governance may present several challenges, such as the need to allocate human resources, invest in technology, and dedicate time to designing and implementing effective governance systems. Although these investments bring long-term benefits, they may increase operational costs and affect business management flexibility in the short term. Additionally, if the organization lacks clear measures or sufficient guidelines, it could lead to issues regarding transparency, stakeholder communication, or even risks related to reputation and complex legal matters. Therefore, organizations must carefully plan their operations, balancing stringent governance measures with managerial flexibility to promote sustainable positive outcomes both in business performance and in meeting stakeholders' long-term expectations.

3.3 ENTERPRISE RISK MANAGEMENT

WHA Group places great importance on defining strategies for enterprise risk management across various aspects, including analyzing and assessing potential risks or opportunities. It also considers significant future trends that may arise to help the organization prioritize and effectively develop the risk management plans. This approach enables the organization to seize new business opportunities efficiently, contributing to sustainable stability in the future. Risk management within corporate governance also builds confidence and trust among all stakeholders, including employees, customers,

investors, and business partners, etc. Accordingly, the Group has developed governance strategies, established policies, promoted corporate culture, and integrated ESG principles as part of the business operations to ensure responsible, transparent, and ethical conduct.

PROMOTING BUSINESS ETHICS AND GOOD PRACTICES WITHIN THE ORGANIZATION

WHA Group has announced and communicated the anti-corruption policy to all employees, including the penalties in case of violations. All employees have to sign an acknowledgment which is considered part of the company's work regulations. The Group also has an internal communication system to continuously convey business ethics, anti-corruption measures, and the policy of not accepting gifts to employees at all levels. Additionally, the Group organizes regular annual training sessions to review knowledge and understanding of business ethics and the anti-corruption policy. Compliance with business ethics and the anti-corruption policy, as well as participation in training, are taken into account during the annual employee performance evaluation.

For the Company's directors, WHA Group provides orientation training for new directors to communicate the anti-corruption policy and conducts regular annual knowledge refresher session. In 2024, 100 percent of the Board of Directors reviewed and received full communication of the company's anti-corruption policy.

Training Course	Detail	Result
Code of Conduct & Anti-Corruption	The training course "Business Ethics and Anti-Corruption" was held on October 16, 2024, to review knowledge for directors, executives, and all employees. The training content covered key topics such as prevention of insider trading, securities holding reporting, conflict of interest prevention, related party disclosures, and whistleblowing and complaint channels. In 2024, the training format was developed into video animation and e-learning modules to make learning more accessible and easier to understand.	In 2024, 100% of employees acknowledged and understood the business ethics policy and the anti-corruption policy. Moreover, there were no violations of business ethics or organizational practices, no cases of corruption, and no whistleblowing or complaints related to these issues.
New Director Orientation and Annual Anti-Corruption Policy Refresher	WHA Group organized orientation training for new directors to communicate the anti-corruption policy. Annual knowledge refresher session was also provided to the Board, covering operational guidelines and requirements of the anti-corruption policy to promote effective performance under good governance principles.	In 2024, 100% of the board of directors completed the anti-corruption policy refresher session and fully received relevant communications regarding the policy.

WHISTLEBLOWING

Whistleblowing is the process by which individuals within an organization or other stakeholders who have information or suspicions about legal violations, misconduct, corruption, or breach cases report such matters to the relevant parties for appropriate action or legal compliance. Whistleblowing is important for promoting transparency, honesty, and preventing corruption in various aspects of an organization and society. It is a way to help identify and address problems promptly. Additionally, there are laws that protect and support whistleblowers. In order to enhance oversight and anti-corruption efforts as well as to received breach case, WHA Group has established a dedicated whistleblowing or complaint channel. This channel enables internal and external stakeholders, such as contractors, business partners, joint ventures, communities, and other stakeholders involved with the Group, to easily report suspected cases, provide leads, or make suggestions/complaints regarding misconduct, corruption, violations of laws and regulations, corporate governance policies, the Code of Conduct, the Anti-Corruption Policy, or provide any additional suggestions relevant to business operation. To protect the whistleblower and to foster a transparent working environment including instill confidence in whistleblowers, the Group has implemented a policy that strictly prohibits any form of demotion, punishment, or retaliation against

employees who report fraud , corruption, and breach case, even if it means potentially losing business opportunities. Additionally, all parties involved in receiving whistleblowing information are obliged to maintain strict confidentiality and refrain from disclosing it to others, unless mandated by legal obligations, administrative orders, or court directives.

In the event of whistleblowing, complaints, or breach case, the Internal Audit Department will gather information and conducts a preliminary assessment. Subsequently, the findings are presented to the management for further consideration and then reported to the Audit Committee and the Board of Directors. Whenever there are any clues or complaints, the Internal Audit Department will report to the Audit Committee. The Audit Committee, in turn, provides quarterly reports to the Board of Directors, ensuring their awareness of the issues and enabling them to develop effective and appropriate strategies to address stakeholder expectations and complaints, and remediation. WHA Group has also established a review process for related workflows and implemented measures to address any violations that may occur, ensuring that such violations do not happen again. In 2024, there were no incidents of misconduct by the organization's personnel, and no whistleblowing reports, complaints or breach case were filed. This is in line with the goals that had been set.

CHANNELS FOR EMPLOYEES

Website: https://www.wha-group.com/th/corporate-governance/corporate-

governance?form=whistle_blowing#contact

Email:

Group Chief Executive Officer: ceo_office@wha-group.com or
The Audit Committee: auditcommittee@wha-group.com
Suggestion Box: Human Resources Department

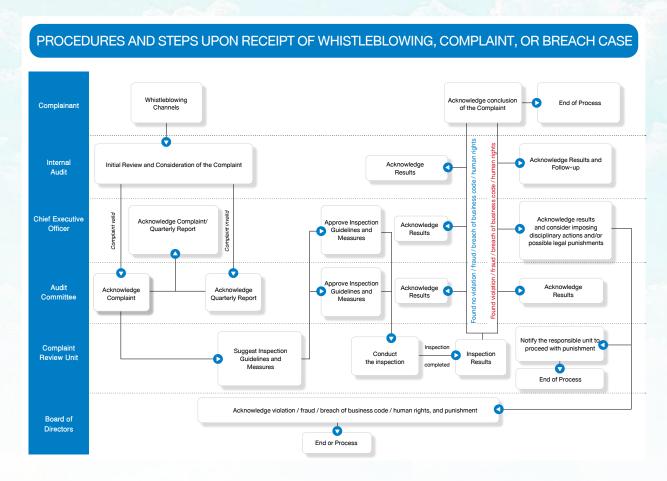
CHANNELS FOR EXTERNAL STAKEHOLDERS

Website: https://www.wha-group.com/th/corporate-governance/corporate-

governance?form=whistle_blowing#contact

Email:

Group Chief Executive Officer: ceo_office@wha-group.com or
The Audit Committee: auditcommittee@wha-group.com



More information about the process and procedures to be followed when receiving a whistleblower is stated in the "The Code of Conduct and Practices" in Form 56-1 One Report 2024.

THAI PRIVATE SECTOR COLLECTIVE ACTION AGAINST CORRUPTION (CAC)

To emphasize the commitment to combating corruption and bribery, for the benefit of all business formats, WHA Group has announced our commitment to the Thai Private Sector Collective Action Against Corruption (CAC) since 2014 and became a certified member in 2017. In 2023, the Group successfully received the second CAC re-certification for another three years. Additionally, WHA Utilities and Power Public Company Limited (WHAUP), our subsidiary, was certified in 2019 and received its CAC re-certification in 2022. WHAUP plans to submit another CAC recertification within the first guarter of 2025. More information about the Anti-Corruption policies and practices, as well as the certification as a member of the Thai Private Sector Collective Action Against Corruption, can be found in the "Corporate Governance" section in Form 56-1 One Report 2024.

ASSESSMENT OF CORRUPTION RISK IN THE OPERATIONS

Every year, WHA Group conducts a thorough assessment of corruption risks across 100% of the operational processes. This assessment covers various types of corruption, such as bribery and other unethical behaviors that could impact the organization's transparency and governance. In addition, the Group considers both internal and external factors that could pose operational risks, enabling effective management of these risks.

The 2024 risk assessment found no significant corruption risks in the operational processes throughout the Group. However, the Group remains committed to continuously monitoring and assessing corruption risks to prevent and mitigate future risks, especially in areas identified as high-risk operational zones. The Group has established clear operational procedures covering all forms of corruption, including bribery and other unethical conduct, to ensure that all operations comply with ethical standards and legal requirements. The Group will continue to review and improve these procedures to strengthen confidence in reducing corruption risks on an ongoing basis.

RESULTS OF CORRUPTION RISK ASSESSMENT IN OPERATIONS FOR 2024

Type of Corruption with High Risk	Mitigation Measures
Receiving or giving gifts and bribery	100% of business operations
Practices related to charitable donations, giving, and/or receiving support	100% of business operations
Providing political assistance	100% of business operations
Procurement	100% of business operations

DUE DILIGENCE OF NEW BUSINESS PARTNERS

WHA Group conducts thorough due diligence on transparency and anti-corruption measures for all new business partners. This due diligence covers all types of corruption, including bribery and various ethical misconducts. The process focuses on risk assessment and compliance with anti-corruption regulations to ensure that new partners strictly adhere to the Group's governance principles and anti-corruption policies. This operation is essential to guarantee that the businesses collaborating with the Group operate transparently and sustainably, without promoting corruption or illegal activities. Furthermore, the Group continuously reviews and improves the due diligence process to align with international standards and the evolving business environment.

ASSESSMENT OF CORRUPTION RISK FOR BUSINESS PARTNERS AND CONTRACTORS

WHA Group conducts corruption risk assessments and establishes operational procedures to manage potential corruption risks arising from all business partners and contractors it engages with. This is a crucial part of maintaining transparency standards in business operations. The risk assessment and management procedures cover various corrupt

behaviors such as bribery, offering inappropriate benefits, or other ethical violations that may occur during business dealings with partners and contractors.

In this process, the Group has developed criteria for selecting and assessing the risks of business partners and contractors based on their business history, transparency in operations, and compliance with relevant ethical and legal requirements. Additionally, the Group has set clear operational guidelines for managing corruption risks related to partners and contractors. These include monitoring behavior and implementing appropriate measures such as financial document audits, establishing clear and transparent agreements, and providing training to partners and contractors on anti-corruption standards and ethics. If any corruption risks are identified during the assessment process, the Group conducts thorough investigations and follows prescribed procedures to ensure operations comply with the Group's commitment to transparency and ethics. The aim is to foster sustainable and corruption-free cooperation with business partners and contractors. According to the 2024 assessment, 0% of the Group's business partners and contractors were found to have corruption risks.



3.4 METRICS AND TARGETS

WHA Group places great importance on good corporate governance as a fundamental foundation for conducting business with transparency, credibility, and building trust among all stakeholder groups. The Group believes that setting clear indicators and targets is a key tool to effectively promote adherence to the Code of Conduct both at the organizational level and throughout the value chain, supporting long-term sustainable development. To achieve corporate governance objectives, the Group has established the following key performance indicators:

Metrics & Targets	Performance against target in 2024	Long term target
Employees who have been informed and communicated about the Code of Conduct and the Anti-Corruption Policy.	100%	100% for every year
Subsidiaries / associated companies of WHA Group that have been informed and communicated about the Code of Conduct and the Anti-Corruption Policy.	100%	100% for every year
Supplier / contractors of WHA Group who have been informed and communicated about the Code of Conduct and the Anti-Corruption Policy.	100%	100% for every year
Number of cases involving violations of the Code of Conduct or corruption.	0 Case	0 Case

4. IMPACTS ON STAKEHOLDERS AND ENVIRONMENT

WHA Group is firmly committed to strict compliance with laws and adherence to good corporate governance principles. It has established the Code of Conduct for all personnel to acknowledge and follow, along with rigorous actions to combat all forms of corruption. The Group promotes whistleblowing and complaint reporting processes and continuously reviews policies and best practices. These efforts have earned the Group recognition as an organization conducting business with transparency and social responsibility.

This transparent practice not only fosters pride among employees as members of the organization but also generates positive impacts for all stakeholder groups, including customers, partners, and investors. It helps build confidence and trust in the organization, resulting in a strong corporate image and reputation in society.

Additionally, reducing risks from corruption and legal violations strengthens ethics and creates sustainable value for the organization. It also mitigates negative impacts on the environment and society as a whole, enabling the Group to grow sustainably in the long term.

5. NEXT STEP

WHA Group places great importance on, and is firmly committed to conducting business with integrity and transparency, continuously considering the interests of all stakeholders. This commitment stems from strong corporate governance practices and the absence of any corruption cases in 2024. Nevertheless, the Group remains dedicated to developing, reviewing, and improving the policies, processes, and plans related to good governance to align with the evolving business environment. The focus is on supporting policies that promote equality and fairness at all organizational levels, along with regularly monitoring performance and conducting evaluations to achieve both business goals and Environmental, Social, and Governance (ESG) objectives.

Furthermore, WHA Group continuously plans and implements new projects, emphasizing the development of a transparent and sustainable governance structure. It provides training to personnel at all levels to enhance understanding of adherence to ethical standards and improves internal audit processes to increase inspection efficiency and reduce risks related to corruption and legal violations. Additionally, the Group develops transparent and verifiable performance reporting systems to ensure that our operations are sustainable and free from corruption in the long term.





1. GLOBAL TREND

Today, businesses worldwide, including in Thailand, face a growing range of risks and uncertainties that are occurring more rapidly and becoming increasingly complex. These arise from various factors such as changes in regional and global economic conditions, shifts in social and cultural dynamics, evolving consumer expectations, climate change, and technological developments that bring new threats.

On the global stage, the development of laws and regulations related to sustainability (ESG), such as the enforcement of Net Zero targets and carbon reduction measures, have compelled businesses to adjust their operational strategies to comply with legal requirements and meet investor expectations. In Thailand, as in many countries, environmental risk management has become a major focus due to the impacts of climate change, including severe flooding in key economic areas, rising temperatures affecting agriculture, and water resource management challenges. These risks directly impact businesses, especially industrial estates that rely heavily on natural resources and stable infrastructure systems. At the same time, technological changes in the digital era present both opportunities and risks. Businesses that fail to adapt to or promptly adopt new technologies, such as Artificial Intelligence (AI) and automation systems, risk falling behind competitively in the market. Meanwhile cyber threats, including ransomware and increasingly sophisticated software attacks, continue to rise.

To maintain business resilience, leading companies globally and in Thailand have shifted toward proactive risk management, integrating risks across multiple dimensions including economic, environmental, and technological factors. This approach builds flexible mechanisms that can effectively accommodate future changes. Moreover, such management strategies not only mitigate risks but also create opportunities for added value and long-term growth.

2. OUR POSITION

In an increasingly complex and changing business environment, WHA Group recognizes the importance of developing a comprehensive and flexible risk management strategy. This is especially critical amid global trends such as climate change, sustainability regulations, and technological advancements that significantly impact business operations. To address these changes, the Group has integrated risk management into the mission and organizational strategy, focusing on developing up-to-date policies and practices. These include enhancing transparency in corporate governance, combating corruption, complying with the Personal Data Protection Act (PDPA), and managing ESG-related risks. This management also covers mitigating the impacts of climate change and responding to cyber threats.

In addition, WHA Group has established a Risk Management Committee to set policies and action plans aligned with the organization's objectives. This committee also promotes a corporate culture that prioritizes risk management at all levels, utilizing technology and innovation such as Artificial Intelligence (AI) and advanced data analytics to support effective decision-making.

This commitment to developing risk management strategies not only helps reduce critical business risks but also creates positive impacts for stakeholders. These include increasing customer confidence, enhancing transparency for investors, and providing stability for employees. Furthermore, it strengthens the Group's competitive capabilities and ensures long-term business sustainability amid continuously evolving challenges at both global and national levels.

3. MANAGEMENT APPROACH

3.1 GOVERNANCE STRUCTURE

ENTERPRISE RISK MANAGEMENT STRUCTURE AND RESPONSIBILITIES

The risk management framework of WHA Group defines the roles and responsibilities and the delegation of responsibilities for those involved in the risk management process, as well as the designation of decision-makers in managing the organization's risks. Additionally, the structure of managing risk information and reporting includes the following details:

BOARD OF DIRECTORS

The Board of Directors is responsible for establishing risk management policies and overseeing the implementation of effective risk management practices in accordance with international standards and aligned with the Group's strategic business direction. This includes consideration of Environmental, Social, and Governance (ESG) factors, the Business Code of Conduct,

and Human Rights principles. The Board also defines a clear direction and scope for the Enterprise Risk Management Framework to ensure it is appropriate and sufficient for the Group, thereby supporting sustainable operations and accountability to all stakeholders.

Furthermore, the Board assigns clear roles, duties, and responsibilities to relevant personnel at all levels to enhance the effectiveness of enterprise risk management. It also outlines comprehensive guidelines for implementing the risk management policies. To support and facilitate the execution of these responsibilities, the Board of Directors has appointed a Risk Management Committee.

RISK MANAGEMENT COMMITTEE

The Risk Management Committee consists of the Group Chief Executive Officer and members of the Board of Directors. It is responsible for overseeing the overall risk management process of the Group, including risks related to business ethics and Environmental, Social, and Governance (ESG) factors. The committee's duties include establishing a risk management framework that aligns with the Group's objectives, key goals, and strategies. This framework serves as a guideline for consistent and comprehensive risk management across the entire organization. Additionally, the committee oversees business continuity management and supervises the risk management of the Group and the subsidiaries or other significant investments to ensure compliance with the established policies. The Risk Management Committee monitors the progress of the risk management plan and key risk indicators to promote continuous improvement and development of systems and mechanisms for managing risk within the organization. This includes coordination and provision of key risk and internal control information to the audit committee to assess the adequacy of the risk management and internal control systems.



This information can also be used to support the consideration and approval of internal audit plans, ensuring confidence that WHA Group has an appropriate internal control system for risk management.

The Risk Management Committee meetings are held at least four times a year to review risk exposure of the Group based on impact and likelihood of specificrisk, and establish a risk management framework and business continuity management accordingly (Please consider key organization's risk section for full detail of the Group's key risk).

RISK MANAGEMENT WORKING GROUP

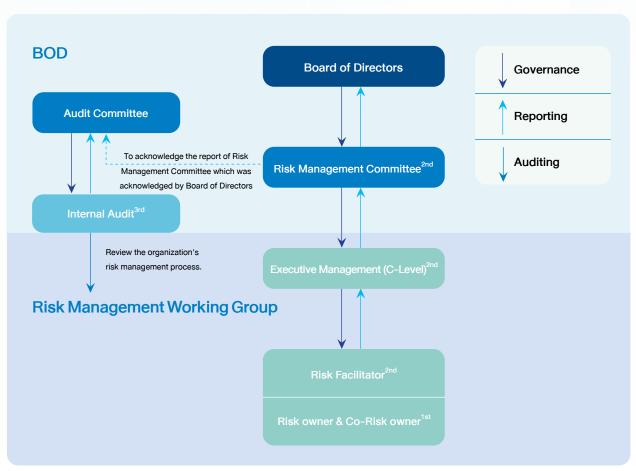
The Risk Management Working Group consists of senior executives, business unit managers, risk owners, and risk support and coordination personnel. Its responsibilities include reviewing and monitoring the Group's enterprise risk management operations regularly, particularly focusing on business performance risks. This ensures that every business unit within the Group can manage their own business risks in accordance

with the policies and risk management framework set by the Risk Management Committee. The Working Group also ensures that risk information is kept upto-date and adjusted appropriately when significant changes or critical risks occur throughout the year. The group holds regular meetings to monitor the Group's risk data, identify risks, potential impacts, and business opportunities, and prepare risk management reports for the Risk Management Committee at least four times a year. These reports are then presented to the Board of Directors on a quarterly basis. Furthermore, the Group's risk management processes are reviewed through internal audits and external audits to ensure effectiveness and compliance.

THREE LINES OF DEFENSE MODEL (3LOD)

WHA Group implemented Three Lines of Defense (3LOD) framework to enhance communication effective about risk management and control. This includes clearly defining the important roles and responsibilities of personnel involved at each level of the 3LOD framework as follows:

RISK MANAGEMENT STRUCTURE





FIRST LINE Risk owner & Co-Risk owner:

Covers all management levels, from the Group CEO, business unit heads, middle management, down to employees who are responsible for managing risks within their respective scopes of work.

Personnel on this line are responsible for following the Group's risk management policies and procedures. They must manage risks within their responsibility by identifying, analyzing, assessing, prioritizing, and controlling these risks in accordance with the Group's risk management policy. They are also required to report risks to the supervisory authorities.



SECOND LINE Committees or executive-level management:

Consists of the Board of Directors, Risk Management Committee, and senior executives responsible for risk oversight or acting as coordinators, excluding the CEO.

This line's role includes setting standards and controls, overseeing compliance with these standards, formulating policies and risk management frameworks, defining risk tolerance and risk appetite, establishing clear guidelines and objectives, and continuously monitoring and reviewing processes to ensure that risk-related activities are effective and aligned with organizational goals and regulatory requirements.



THIRD LINE Internal Audit Department:

An independent unit responsible for providing opinions on the adequacy of risk management and internal controls, as well as approving internal audit plans.

This unit also serves as an independent and impartial assurance provider by evaluating the effectiveness of the first and second lines of defense control mechanisms to ensure that the Group has appropriate internal control systems for risk management.

Each level in the Three Lines of Defense (3LOD) risk management framework has distinct roles and responsibilities within the organization's governance structure. The personnel involved are responsible for the risk management and control processes, including independent auditing. The Group expects all relevant units to have sufficient awareness and receive appropriate communication regarding the operational guidelines to ensure that the organization can manage risks effectively (More details about the policy, framework, and risk management structure can be found in the Form 56-1 One Report 2024).

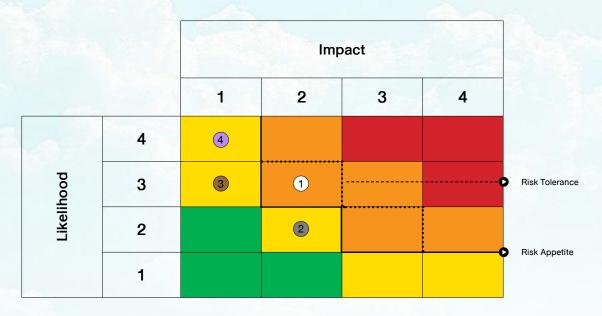
3.2 RISK AND OPPORTUNITIES MANAGEMENT STRATEGY

KEY ORGANIZATIONAL RISKS

WHA Group conducts risk analysis and assessment that considers both external and internal risk factors that may prevent the organization from achieving the established objectives. This covers strategic risks, operational risks, risks related to compliance with laws, regulations, and rules, as well as Environmental, Social, and Governance (ESG) risks, which are considered significant risks for WHA Group.



After identifying the risks and the level of impact for each, WHA Group establishes response measures and preventive actions to control the risks within an acceptable level. The risk assessment process begins with setting objectives and goals, identifying risks that may affect the achievement of those objectives and goals, assessing the risks, and prioritizing them based on the likelihood and severity of impact (Identify Risk Exposure). Additionally, WHA Group defines the acceptable risk levels (Risk Appetite) and allowable deviation levels (Risk Tolerance) to determine the acceptable risk thresholds for each type of risk. Ongoing monitoring and management are then conducted as follows;



Risk Rating Very High High Medium Low Risk Categories Strategic risk Operational risk Compliance risk ESG risk

Risk profile of WHA Group

Risk Tolerance				
Risk Categories	Risk Exposure	Impact	Mitigation plan	
1. Strategic risk	Changes in economic, political, and legal policies that may impact the company's business expansion plans and business performance in foreign countries.	WHA Group's opportunities for business expansion and business performance depend on economic, political, social, and legal policies, especially in the case of significant negative change in economic conditions, including risks related to liquidity, inflation, exchange rate volatility, and risks arising from other companies' default in the future. These changes could affect overall interest rates. In addition, changes in social and legal frameworks may negatively impacting business operations, financial status, performance, investments, and production capacity of various industries that form WHA Group's current customer base. These changes could also result in delayed investment decisions, which may adversely affect the Group's business.	WHA Group selects investment projects that yield an appropriate Equity Internal Rate of Return (Equity IRR). It conducts detailed Feasibility Studies and Sensitivity Analyses to thoroughly assess the potential impacts of various factors. For joint venture projects, WHA Group has a comprehensive policy for selecting partners based on their knowledge, capabilities, experience, expertise, financial status, and past performance. It also assesses and verifies the credibility of potential partners and the countries where investments are planned. The Group regularly reviews risks associated with foreign investment projects. Moreover, WHA Group continuously monitors project performance to mitigate potential risks. Regarding human resource risk, the Group assigns dedicated personnel in foreign countries to support business development and control operations, thereby reducing the risk of potential issues.	

Risk Appetite				
Risk Exposure	Impact	Mitigation plan		
Risk Exposure The risk of data security breaches resulting from the evolving nature of cyberattacks targeting the Group's foreign subsidiaries.	Impact WHA Group aims to enhance operational efficiency by leveraging digital technology to increase business value. Therefore, there is a growing reliance on information technology systems, from sales to data analysis, customer relationship management, accounting and finance management, and other operations. WHA Group is aware of the security risks posed by constantly evolving cyberattacks targeting various systems. These risks may lead to data leakage, data loss, or system outages, which could severely affect operations, cause financial damage, and undermine the Group's credibility and reputation.	WHA Group oversees and promotes the management of digital transformation and cyber security risks by establishing cyber security policies and information technology usage regulations for its overseas subsidiaries, in accordance with the ISO 27001 standard framework of the Group. This ensures that all employees adhere to the same practices. Additionally, WHA Group develops a comprehensive cyber security risk management plan that covers critical operations, such as implementing multi-factor authentication systems to manage access to sensitive organizational information, and establishing a Security Operation Center (SOC) to respond promptly to threats. Furthermore, it raises employees' awareness of technology usage through continuous training and activities, such as annual Cybersecurity Awareness programs, to ensure employees have the correct knowledge and understanding of safe		
		technology use. WHA Group also conducts simulated phishing email teste to evaluate employees' awareness and maintains a Disaster Recovery Plan to prepare for emergency situations.		
Changes in laws, regulations, and construction building regulations	Regulatory risks arise from changes in laws and regulations, including those currently in effect, those pending enforcement, or those likely to be enacted in the future, whether applied domestically, regionally, or internationally. These changes have the potential to create obstacles to the business operations of WHA Group and/or its customers. The reputation of WHA Group may be affected if penalties are imposed as prescribed by law, or it may lose business opportunities. Therefore, WHA Group places importance on managing risks and business opportunities arising from changes in laws and regulations, especially those directly related to the Group's strategy and business direction. According to the announcement by the Ministry of Interior, three ministerial regulations controlling building construction were issued on August 30, 2024: the Ministerial Regulation on Building Foundations and Supporting Ground B.E. 2566, the Ministerial Regulation on Controlled Use Building Materials B.E. 2566 (2023), and the Ministerial Regulation on Building Structural Design and Characteristics and Properties of Structural Materials B.E. 2566 (2023). These will come into effect 180 days after publication in the Government Gazette. The first two regulations have been effective since February 28, 2024, and the third since March 5, 2024. Additionally, the minimum wage increases for 2024, effective January 1, 2025, will cause WHA Group to incur increased costs in building design and development due to the changed	WHA Group has been actively monitoring changes in laws, regulations, and directives to analyse and plan necessary adjustments to minimize potential impacts. This includes developing and maintaining a legal compliance system to accommodate important updates to licenses or master-level legislation. This ensures that employees can act in full compliance with the law, thereby reducing the risk of non-compliance.		
	The risk of data security breaches resulting from the evolving nature of cyberattacks targeting the Group's foreign subsidiaries. Changes in laws, regulations, and construction building	The risk of data security breaches resulting from the evolving nature of cyberattacks targeting the Group's foreign subsidiaries. WHA Group aims to enhance operational efficiency by leveraging digital technology to increase business value. Therefore, there is a growing reliance on information technology systems, from sales to data analysis, customer relationship management, accounting and finance management, and other operations. WHA Group is aware of the security risks posed by constantly evolving cyberattacks targeting various systems. These risks may lead to data leakage, data loss, or system outages, which could severely affect operations, cause financial damage, and undermine the Group's credibility and reputation. Regulatory risks arise from changes in laws and regulations, including those currently in effect, those pending enforcement, or those likely to be enacted in the future, whether applied domestically, regionally, or internationally. These changes have the potential to create obstacles to the business operations of WHA Group and/or its customers. The reputation of WHA Group and/or its customers. The reputation of WHA Group particles are imposed as prescribed by law, or it may lose business opportunities arising from changes in laws and regulations, especially those directly related to the Group's strategy and business opportunities arising from changes in laws and regulations, especially those directly related to the Group's strategy and business direction. According to the announcement by the Ministry of Interior, three ministerial regulations on Tourtrolled Use Building Atterials B.E. 2566 (2023), and the Ministerial Regulation on Duilding Structural Design and Characteristics and Properties of Structural Regulation on Duilding Structural Design and Characteristics and Properties of Structural Regulation in the Government Gazette. The first two regulations have been effective since February 28, 2024, and the third since March 5, 2024, Additionally, the minimum wage increases for 2024, effectiv		

	Risk Appetite				
Risk Categories	Risk Exposure	Impact	Mitigation plan		
4. ESG Risk	Air Pollution Risk	Air pollution can impact the operations of WHA Group in various dimensions, including legal liabilities, corporate image, and operational costs. Without proper pollution management, the Group may face fines or penalties under environmental laws, along with the risk of loss of trust from customers and investors, which could affect the Group's long-term competitiveness. In addition, efforts to mitigate pollution require additional investment in pollution control technologies as well as ongoing environmental monitoring and impact assessments. The impact of air pollution also extends to various stakeholder groups. Nearby communities may experience health issues from inhaling particulate matter and toxic gases, which can cause respiratory diseases and reduce their quality of life. Employees working in areas with long-term pollution exposure may also suffer from chronic health problems, affecting work performance. At the same time, customers and business partners who prioritize environmental responsibility may question the Group's commitment if pollution issues are not effectively addressed, potentially leading to lost business opportunities and increased risk of losing clients to competitors with more robust environmental policies. Therefore, air pollution management is a	WHA Group has implemented measures to oversee and regulate air pollution emissions from industrial factories located within WHA's industrial estates to ensure compliance with emission standards stipulated by the Ministry of Industry announcements, the Industrial Estate Authority of Thailand notifications, and the emission rates specified in the environmental impact prevention and mitigation measures in the Environmental Impact Assessment (EIA) report. For instance, ambient air quality is monitored by measuring the Total Suspended Particulates (TSP) index both within the industrial estate and in surrounding community areas. In addition, WHA Group has adopted policies for designing and constructing environmentally friendly warehouses, such as buildings that meet the Leadership in Energy and Environmental Design (LEED) standards. The Group also promotes sustainable logistics through a comprehensive electric vehicle ecosystem that helps to reduce environmental impacts, including electric vehicles, charging stations, and transportation management software, offered through the Group's Mobilix business, which provides comprehensive green logistics solutions.		
		top priority for the Group in maintaining sustainable business operations. It is essential to build stakeholder confidence and preserve strong relationships through transparent and responsible environmental practices in all aspects of its business.			
	Water Pollution Risk	Water pollution is a critical issue that severely impacts the environment and human health worldwide. The main causes of water pollution include the discharge of industrial wastewater, the use of chemicals in agriculture, and the dumping of waste into water bodies. These toxic substances can destroy aquatic ecosystems and affect human health. Moreover, the legal requirements for wastewater treatment increase the burden of regulatory compliance and the costs of investing in wastewater treatment infrastructure.	WHA Group employs various technologies for treating wastewater discharged from customer factories each year, such as conventional activated sludge systems, ultrafiltration and reverse osmosis processes, modified activated sludge systems, sedimentation tank treatment systems, constructed wetlands, and aerated lagoon systems. Additionally, WHA Group operates realtime Water Quality Monitoring Stations (WQMS), which are part of the Group's Environmental Monitoring and Control Center (EMCC) to ensure that the quality of treated wastewater meets the required standards before being discharged into natural water sources.		



EMERGING RISK

WHA Group recognizes the importance of emerging risks that may impact business operations. Therefore, the Group's risk management process also covers this category of risks through continuous monitoring, evaluation, and the development of response strategies according to selected mitigation plans to help reduce potentially serious impacts. Consequently, the Group has considered emerging risks, including risks related to technological disruption and evolving business models (Risk from Digital Disruption), risks from climate policy implementation (Climate Policy), geopolitical tension and manufacturing relocation (Geopolitical Tension & Manufacturing Relocation), and pollution -related risks (Pollution Risks).

1. RISK FROM DIGITAL DISRUPTION

RISK DESCRIPTION

In an era where technology plays a crucial role in advancing businesses rapidly, various technologies such as clean technology, blockchain, remote working, and Artificial Intelligence (AI) can significantly enhance both business performance and environmental sustainability. However, these technologies can also introduce uncertainties to business operations, especially for businesses slow to adapt to technological changes. This can result in an inability to keep pace with a competitive technology-driven market. Therefore, lack of readiness and risk management in response to technological changes can potentially lead to operational delays, reduced profits, and loss of customer confidence and loyalty.

Furthermore, the changing consumer behaviors post COVID-19 crisis, with increased use of technology and the internet, have led to rapid growth in the e-commerce market and a trend towards greater reliance on online services. Therefore, businesses that fail to adapt by leveraging technology to meet customer demands may suffer financial repercussions, damage to reputation, and loss of customer trust, resulting in reduced revenue.

IMPACT ON BUSINESS FROM DIGITAL DISRUPTION AND BUSINESS MODEL

WHA Group not only consider the risks from technological changes but also recognizes numerous business opportunities.

Risks

- Failure to adapt to technological changes may affect WHA Group's competitiveness as its products and services may not meet the constantly changing consumer demands.
- Additionally, WHA Group may miss out on significant business opportunities if it cannot fully leverage the potential of rapidly growing technologies.

RISK MANAGEMENT APPROACH FOR BUSINESS DIGITAL DISRUPTION AND BUSINESS MODEL

Opportunities

• WHA Group can turn the risk of technological

changes into opportunities by leveraging various

digital technologies and innovations across its

business to respond to and benefit from new

opportunities in the digital age.



WHA Group has set a goal to manage technological changes and business model innovations, viewing the development of digital technology as both a risk and a business opportunity. This strategy aims to effectively navigate technological changes, including Digital Transformation. Aiming to become Tech Company by 2024, the Group has diversified digital innovations in all types of businesses, focusing on improving and developing products and services. The Group also focusing on adapting to new innovations and technologies, as well as improving and developing internal processes and systems to respond to and seize various opportunities from entering the digital age. To achieve these goals, the Group has implemented important risk management strategies as follows:

Establishing a strong internal management system to enhance competitiveness in the technology era through the integration of goals related to the application of digital innovations in WHA KPI and the ORACLE HCM Cloud human capital management system, among others.

WHA Group is currently encountering new challenges in meeting customer expectations. As a result, it is imperative for WHA Group to enhance its products and services, fostering innovation and digital empowerment. By doing so, WHA Group can effectively address the evolving expectations and needs of customers. This involves the crucial task of tailoring products and services to cater to a wide array of customer preferences and requirements.

At the same time, WHA Group is dedicated to developing and offering smart solutions along with cutting-edge technologies to its customers. The Group's industrial development business plans to use this opportunity to expand its customer base by offering innovative technology-driven services and modern infrastructure to customers. The utilities and power business segment has also planned and implemented the use of clean technology to meet customer demands while prioritizing environmental sustainability.



- Recruiting experts in technology as part of the organization continuously and seeking opportunities to collaborate with leading technology companies both domestically and internationally.
- Integrating digital innovation application into business operations as KPIs in evaluating the performance of all employees, as well as organizing projects that allow employees to participate in developing new innovations to enhance business competitiveness.
- Providing training on technology-related topics, such as training for innovation leaders and organizing seminars on various innovation topics for all employees.
- The Utilities and Power Business Group (WHAUP) has adopted technology and innovation to expand our energy-related products and services, particularly innovations related to clean energy such as Peerto-Peer Energy Trading systems and Energy Storage systems. In addition, WHAUP has implemented the Smart Water Solutions project to upgrade the management of industrial water production and distribution systems into a digital system. This includes establishing a geographic information database of the water distribution pipeline network to support WHAUP's asset management and future maintenance planning. Moreover, the Group has installed automatic water meter reading devices to reduce the need for manual meter readings and utilizes key data from water production and distribution systems in operational planning, such as extending the lifespan of pipeline equipment and reducing water loss.
- The Industrial Development Business Group (WHAID) aims to expand our new customer base while maintaining existing customers by promoting the development of SMART ECO Industrial Estates. This is achieved through various innovation development projects, such as Centralized Control Rooms, Supervisory Control and Data Acquisition (SCADA) technology, which allows WHAID to monitor and control various environmental indicators such as air quality, wastewater quality, rainfall, and operations both inside and outside the industrial estates. Other



innovations include the Smart Traffic system, Smart Security System, and water level monitoring systems that send flood warning alerts.

The Logistics Business Group (WHA Logistics) has introduced innovations for automation processes and improved operations within logistics buildings, such as Warehouse Management Systems and Robotics in Warehouses. The Group also integrates energy management technologies, including enhanced air conditioning efficiency (Water-Cooled Chillers), Smart LED lighting systems, and the use of AI combined with drone imaging to identify roof leakage causes and monitor roof conditions for preventive planning. Additionally, the Group offers clients options to develop warehouses in line with green building standards (LEED Certificates) to help save energy, reduce costs, and improve warehouse management efficiency. Recognizing the growing trend of clean energy usage, particularly electric vehicles (EVs) in the logistics industry, the Group has developed a green logistics solution business (Mobilix). This includes providing green logistics systems to support the adoption of EV trucks for commercial use through comprehensive EV rental services with maintenance plans, building EV charging stations for client premises, offering public EV charging services, and introducing the Mobilix Software Solution—an intelligent digital platform for managing EV driving routes by analyzing battery capacity, to serve both customers and transporters in Thailand.

2. RISK FROM CLIMATE POLICY

RISK DESCRIPTION

Thailand is facing significant challenges in achieving sustainable development due to climate change. In 2022, Thailand announced a long-term commitment to carbon neutrality by 2050 and net-zero emissions by 2065. This commitment has intensified significantly, leading the government to issue guidelines for reducing the country's greenhouse gas emissions for 2021-2030. These guidelines include 15 measures, of which 5 measures (electricity production, industrial energy consumption, energy consumption in commercial buildings, waste management, and management of other industrial wastewater) are expected to impact WHA Group's business operation. Moreover, the Excise Department is planning to introduce a carbon tax in the fiscal year 2025, or possibly as early as the end of 2024. This move will make Thailand the second country in ASEAN, after Singapore, to implement such a tax. Initially, the tax will be levied on oil and oil products linked to greenhouse gas emissions. This policy will steer Thailand towards becoming a carbonneutral society. However, the business sector must unavoidably face impacts as well. WHA Group are expected from the change in climate policy in terms of costs of carbon, materiality cost, operations, and maintaining the leadership status in industrial estate development. This presents both a challenge and an opportunity for WHA Group that must be prepared to be ready for the forthcoming changes.

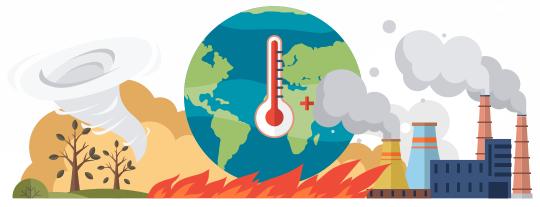
IMPACT ON BUSINESS FROM CLIMATE POLICY

Similarly, the issue of changes resulting from the development of digital technology, WHA Group does not only see the risks from climate change but also sees the business opportunities that can arise. The Group



has conducted an analysis of risk factors to identify the significant impacts of climate policy changes on business operations, including Qualitative Scenario Analysis tool to analyze the impact of greenhouse gas emission scenarios RCP 8.5 and RCP 2.6. This tool examines the results of policies addressing climate change from the year 2000 to 2100 and can have significant impacts on key business areas as follows:

- Legal and regulatory changes may increase the cost of construction materials, which may have long-term impacts on the Group's business strategies and goals, as well as increased operating costs from regulations related to climate change. The estimated financial impact of operating costs is less than 10% of development costs.
- Legal and regulatory changes may also reduce the demand for products and services of WHA Group. This is expected to impact on the financial income of the Group by reducing rental income by less than 10 Million Baht per quarter and income from REITs by less than 400 Million Baht per year.
- Potential policy changes may result in new requirements that compel WHA Group to cease the use of high-carbon assets, leading to asset impairment and early retirement of existing assets.
- If WHA Group's operations are not aligned with the evolving laws and regulations, this may result in legal penalties imposed by the government.



Based on the analysis above, if WHA Group fails to respond to the expectations and needs of stakeholders regarding environmental responsibility and increasing awareness of climate change, it is expected to impact the Group in terms of costs, operations, reputation, leadership status in industrial development, or legal penalties. Additionally, the carbon tax will significantly impact the Group's revenue if there is no serious and decisive action taken to manage carbon emissions. However, WHA Group is highly aware of the importance of climate change and understands that it comes with both risks and business opportunities. Therefore, the Group need to prepare for legal changes and regulations regarding greenhouse gas emissions. Additionally, WHA Group has developed energy-efficient building designs, uses energy produced from solar panels (Solar Rooftop), which are beneficial for both the Group and customers in reducing carbon footprints. The Group can also offer carbon credits to other companies to offset the carbon emissions. Furthermore, WHA Group has planned to continuously develop solar panel installation services to provide customers with reliable energy sources. The Group also promote the use of environmentally friendly construction materials to reduce waste and promote the reuse and recycling of construction materials.

RISK MANAGEMENT APPROACH FOR CLIMATE POLICY ENFORCEMENT

To reduce risks and create sustainable business growth opportunities from climate change policies and measures, WHA Group has implemented key risk management strategies as follows:

- Studying and monitoring mechanisms to reduce greenhouse gas emissions at both national and international levels. This includes developing carbon market mechanisms, setting carbon credit prices, and carbon taxes to analyze economic impacts on the organization and adjust business operation strategies.
- Adjusting investment strategies to achieve a balanced investment ratio in natural gas, coal-fired power plants, and renewable energy power plants.
 Also, developing greenhouse gas management strategies and reduction targets in line with the country's investment strategies and goals.
- Adjusting business operation strategies of the Group to be more suitable to current and future law and regulations. This includes focusing on developing various projects under the "Mission To The Sun" mission, such as reducing water usage in the industrial sector (e.g., projects to reuse water, smart metering projects), alternative energy projects (e.g., solar panel installations), environmentally friendly transportation (e.g., smart traffic management systems to reduce carbon dioxide emissions), and promoting the circular economy concept. These projects not only help address climate change but also reduce operational costs, enhance business flexibility, and promote sustainable business operations.
- Promoting use of construction materials that help reduce greenhouse gas emissions, using highquality materials to reduce waste, and promoting the reuse and recycling of construction materials.
- Applying Internal Carbon Pricing as one of the guidelines for reducing greenhouse gas emissions within the organization.



3. RISK FROM GEOPOLITICAL TENSION & MANUFACTURING RELOCATION

RISK DESCRIPTION

Given the situation of conflicts between countries, challenges from political factors, competition among countries, military conflicts between countries, as well as fluctuations in exchange rates and interest rates due to fragile economic conditions, all sectors are facing challenges in managing the new risks at both regional and business levels, which are complex, interconnected, and have wide-ranging international implications. WHA Group considers these events as one of the contexts for the new risks that are emerging and are likely to persist in the next 1-2 years, requiring the organization to closely monitor and supervise operations to prepare for various uncertainties that may arise.

IMPACT ON BUSINESS FROM GEOPOLITICAL TENSIONS

The world is currently facing multiple conflicts in various forms, ranging from trade, technology, and security wars between the United States and China, to the war between Ukraine and Russia, as well as confrontations between Israel and Hamas. Additionally, there are regional conflicts such as tensions on the Korean Peninsula, the trajectory of China-Taiwan relations, and unrest in Myanmar. These events have all impacted international trade, capital movement, and led to shifts in global production strategies, whether through reshoring manufacturing to home countries or relocating production to neighbouring and allied countries.

Furthermore, 2024 was a significant election year for over 60 countries worldwide. The election outcomes inevitably affect geopolitical situations, as seen in the return of Donald Trump as president in what is termed "Trump 2.0." This not only signals major changes within the United States but also brings risks and negative impacts on global stability, particularly on global economic growth, which is likely to slow due to import tariff policies and tighter financial conditions. Moreover, geopolitical tensions and trade wars between the US and China are expected to intensify, potentially causing ongoing uncertainty in global financial markets and the economy. On the environmental front, the US withdrawal from the Paris Agreement on climate



change and the rollback of environmental regulations may stall global efforts to address climate issues It is predicted that global greenhouse gas emissions could increase by up to 4 billion tons by 2030, causing the global temperature to rise beyond 1.5 degrees Celsius. This would lead to more severe natural disasters, impact economic systems, and reduce the quality of life worldwide in the long term.

The US trade protectionist policies targeting China may accelerate the relocation of production bases and supply chains to the Southeast Asia region. The Group has benefited from business opportunities arising from this shift of investment into Thailand and Vietnam across several industries, such as the automotive industry supported by Electric Vehicles (EVs), electronic component manufacturing, and the renewable energy industry, as Asia strives toward sustainable energy reliance. However, while these developments create opportunities to attract foreign direct investment (FDI) and boost export growth, they also come with challenges that need to be managed. Therefore, Thailand must implement careful policies to balance the relations between the two superpowers while preparing for changes in the global economy. Clear strategic direction, enhancing national competitiveness, and cooperation between the public and private sectors will be crucial factors to drive Thailand's economy steadily through this challenging era.

The impacts of geopolitical conflicts, war risks, and global economic factors inevitably affect trade supply chains and the global economic system. For example, rising fuel prices and raw material costs have caused operating costs for WHA Group to increase. Additionally, the management of monetary and fiscal policies under conditions of inflation control and tightening international economic circumstances has affected the Group's financial cost management, including exchange rates and interest rates. These factors impact the Group both in terms of revenue and expenses related to raw material procurement and project investments.

RISK MANAGEMENT APPROACH FOR GEOPOLITICAL TENSIONS

WHA Group considers and manages operations under the strategy of expanding the organization's growth both domestically and internationally. WHA Group manages risks and impacts starting from the selection of investment projects, which involves evaluating potential outcomes in both the short and long term. It also includes building business partnerships in the study area and closely monitoring the business environment through WHA Group's personnel in the area. Moreover, it involves considering exit strategies in suitable situations, as well as monitoring, compiling, and analysing significant global trends, including industry trends, market advancements, technological progress, and multifaceted policies. This is used to forecast commodity prices, production costs, and long-term business operations, and to devise measures that create flexibility and alternative markets and products. This enables WHA Group to adapt our business swiftly in uncertain situations. Additionally, it involves monitoring interest rates and financial costs to find suitable financial tools that provide maximum benefit to WHA Group.

4. RISK FROM AIR POLLUTION

RISK DESCRIPTION

Air pollution caused by business operations, especially in the industrial sector, remains a widespread issue affecting both the environment and the health of the public, including communities near business areas. These factors impact long-term quality of life and pose obstacles to sustainable economic development if not addressed properly and promptly.



In the current context, advanced technologies have been integrated to effectively tackle this problem, such as the installation of high-efficiency pollution control devices, the use of renewable energy to replace fossil fuels, and real-time air quality monitoring through intelligent systems. These technologies enable rapid identification and precise management of pollution issues. Moreover, promoting community and employee engagement has become a key factor in combating air pollution over the long term.

Activities such as awareness campaigns, education on pollution reduction methods, support for green space restoration projects, and collaboration in developing environmental policies with government agencies allow businesses to demonstrate higher social and environmental responsibility through these proactive approaches. At the same time, such efforts support the Sustainable Development Goals, meeting the growing expectations of stakeholders at all levels.

IMPACT ON BUSINESS FROM AIR POLLUTION

Air pollution is a critical challenge that can impact WHA Group's operations in multiple dimensions, including legal responsibilities, corporate image, and operational costs. Without proper pollution management, the Group may face fines or penalties under environmental laws, as well as risks of losing trust from customers and investors, which could affect long-term competitiveness. Additionally, mitigating pollution impacts requires extra budget for investments in pollution-reduction technologies, along with continuous monitoring and assessment of environmental effects.

The consequences of air pollution extend broadly to various stakeholders, such as communities living near operational sites who may suffer health problems from inhaling particulate matter and toxic gases, leading to respiratory diseases and reduced quality of life. Employees may also be affected if working in areas with prolonged exposure to accumulated pollution, potentially causing chronic health issues and affecting work performance. Meanwhile, customers and business partners who prioritize environmental responsibility may question the Group's accountability if pollution is not properly managed, possibly reducing business opportunities and increasing the risk of losing clients to competitors with clearer environmental policies. Therefore, managing air pollution is a priority for the Group to ensure sustainable business operations, build confidence, and maintain good relationships with all stakeholders through transparent and environmentally responsible practices in every aspect.

RISK MANAGEMENT APPROACH FOR AIR POLLUTION LOGISTICS BUSINESS

WHA Logistics (WHALG) has a policy for designing and constructing environmentally friendly warehouses, such as using the precast system (Precast) in the construction process, which reduces waste that impacts the environment, as well as noise pollution, dust, and traffic problems at construction sites, as well as designing buildings to comply with the Leadership in Energy and Environmental Design (LEED) standards, among others. Moreover, the Group also places importance

on users, such as those who work in warehouses, to have good health and occupational hygiene, as well as comfort while inside the buildings. The Group has designed and implemented various measures, including designing air circulation systems (Indoor air quality) to meet ASHRAE standards and installing MERV or HEPA Air Filters in warehouses for both new construction projects and renovation projects to meet customer demands specifically. The logistics business also controls the indoor environment (HVAC: temperature, humidity, and air systems) to improve comfort for users by using building materials with efficiency to prevent heat, such as Low-e glass to help block UV rays and changing the type of steel sheets to Color Bond to dissipate heat. There is also a fresh air supply system to reduce dust problems inside the buildings, appropriate natural lighting installation, LED lighting systems throughout the buildings to provide sufficient light according to standards, dust-trapping mats at office entrances and exits, and the use of Low-VOC paints, which have low volatile organic compounds and are non-toxic to the body, to maintain good indoor air quality. In addition, the Group considers the value of resource use by using water-saving sanitary ware, installing solar power systems (Solar), and setting up electrical systems inside buildings with energy use monitoring systems, enabling detailed evaluation of energy consumption according to globally recognized energy efficiency standards. All warehouses (100%) are designed to support energy production, especially structures that support solar power systems.





In addition, the business group has launched Mobilix, Thailand's first green logistics solution developed under the concept "Driving Sustainability in Motion" to revolutionize transportation toward sustainability with a comprehensive electric vehicle ecosystem that helps reduce environmental impact, lower logistics costs, and drive responsible growth for modern businesses. The solution is designed to cover every aspect of the commercial electric vehicle value chain with advanced innovations and sustainability-focused practices. Mobilix consists of three main services: electric vehicle rental service (EV Rental Service), electric vehicle charging stations (On Premise & Public EV Charging Solution), and the Mobilix software solution (Mobilix Software Solution).

INDUSTRIAL DEVELOPMENT BUSINESS

WHA Industrial Development (WHAID) has implemented measures to regulate air pollution emissions from industrial factories located in WHA's industrial estates in accordance with emission standards from stationary sources as prescribed by the Ministry of Industry, the Industrial Estate Authority of Thailand (IEAT), and the allocated emission rates specified in the environmental impact mitigation measures outlined in the Environmental Impact Assessment (EIA) report. These include ambient air quality monitoring of Total Suspended Particulates (TSP), Particulate Matter with diameter not more than 10 microns (PM10), Particulate Matter with diameter not more than 2.5 microns (PM2.5), Nitrogen Dioxide (NO₂), and Sulfur Dioxide (SO₂) within both the industrial estate area and surrounding communities within a 5-kilometer radius at least twice a year.

WHAID has established automatic Ambient Air Quality Monitoring Stations (AQMS) capable of continuously measuring ambient air quality and meteorological data in the industrial estate areas. The monitoring results are transmitted in real time to the Environmental Monitoring and Control Center (EMC²) and WHA Tower through the Unified Operation Center (UOC) system. Furthermore, WHAID Group also adheres to air pollution control measures during construction activities, such as managing dust emissions by minimizing land exposure, scheduling regular water spraying in construction areas to suppress airborne dust, increasing the spraying frequency based on weather conditions, and implementing measures such as truck wheel washing before vehicles leave the construction site.

In addition, WHAID oversees and monitors pollution emissions from industrial factories located within WHA's industrial estates to ensure they meet government-defined standards. The Group has also developed environmental design and management programs for our industrial estates under the ecoindustrial estate model, emphasizing resource and energy efficiency, as well as environmentally friendly production processes. The Group also compiles data and promotes greenhouse gas reduction to ensure that customers operating warehouses and industrial facilities within our industrial estates also conduct their operations with environmental responsibility.

UTILITIES AND POWERS BUSINESS

Dust particles suspended in the air can adversely affect the performance of solar cells by obstructing sunlight from reaching the photovoltaic surface, resulting in reduced electricity generation. Solar panels with larger surface areas tend to be more affected by dust than those with smaller areas. Additionally, panels installed in direct sunlight are more prone to dust accumulation compared to those oriented to receive diffused sunlight. More importantly, the accumulation of dust can increase the risk of damage, degradation, and reduced lifespan of solar cells, which may also impact related equipment such as inverters, cables, and control devices.

WHAUP has established a Unified Operation Center (UOC) at the WHA Tower to monitor operations in real time. The system integrates and gathers data from various utility systems and environmental indicators within the area, such as air quality, wind speed, and wind direction, in order to display and analyze information to assess the efficiency of services provided to operators. For the Group, the UOC enhances the capability to remotely monitor and manage all solar power plants. In the event of dust accumulation on solar panels, which may block the sunlight required for electricity generation and cause a drop in output, the system will issue an alert to the UOC. The responsible unit will then be dispatched to clean the solar panels, allowing them to resume normal electricity production. In the case of emergencies or crises that restrict travel, the UOC will serve as a secondary command center to ensure that solar power plants continue to operate effectively. This system provides assurance to customers and investors that the business can continue without interruption.

In addition, the UOC helps reduce environmental pollution by minimizing air pollutant emissions and dust generated by vehicles used in field operations. This supports the Group and WHAUP in achieving their targets for maintaining air quality within the standards specified in Environmental Impact Assessment (EIA) requirements. Moreover, it contributes to a reduction in direct greenhouse gas emissions (Scope 1) by decreasing fuel consumption from operational vehicles.

5.RISK FROM WATER POLLUTION RISK DESCRIPTION

Water pollution is a major issue that has serious impacts on the environment and human health worldwide. The main causes of water pollution include the discharge of industrial wastewater, the use of chemicals in agriculture, and the disposal of waste into water sources. These toxic substances can damage aquatic ecosystems and pose health risks to humans. Moreover, legal requirements for wastewater treatment increase the burden of regulatory compliance and the cost of investing in wastewater treatment infrastructure.

IMPACT ON BUSINESS FROM WATER POLLUTION

WHAUP recognizes the importance of natural water sources to communities, the environment, and the public, as well as the potential impacts of business operations on these water sources. Therefore, the Group ensures that wastewater is treated to meet the quality standards prescribed by the Ministry of Industry, the Industrial Estate Authority of Thailand (IEAT), and the Ministry of Natural Resources and Environment. Wastewater must be treated through the central wastewater treatment system within the industrial estates of WHA and pass water quality testing before it can be discharged into natural water sources such as rivers and canals or reused within the industrial estates. This approach helps protect and preserve the surrounding environment and nearby communities while also reducing dependence on external water sources.

RISK MANAGEMENT APPROACH FOR WATER POLLUTION

WHAUP employs a variety of technologies to treat wastewater discharged from customers' factories each year. These include the activated sludge system, ultrafiltration and reverse osmosis processes, modified activated sludge systems, clarifier systems, constructed wetlands, and aerated lagoon systems. Additionally, WHAUP monitors the quality of treated wastewater, such as COD, BOD, pH, electrical conductivity, nitrate, suspended solids, and dissolved solids, through a realtime Water Quality Monitoring Station (WQMS). This system operates as part of WHAUP's Environmental Monitoring and Control Center (EMCC) to ensure that the treated water from all wastewater treatment plants meets the required standards before being discharged into natural water sources. The WQMS is also linked to the government's real-time wastewater quality reporting system. In the event of any standard violations, the system triggers an alert to relevant operators to activate pumps and reprocess the wastewater until it complies with the required quality standards.

3.3 RISK MANAGEMENT

RISK MANAGEMENT POLICY AND FRAMEWORK

The board of directors has approved the organization's risk management policy and framework, which are reviewed and improved on a regular annual basis. The objective is to define a clear direction and scope, and to establish a clear, appropriate, and sufficient Enterprise Risk Management Framework for WHA Group. This includes assigning roles and responsibilities and defining clear accountability for those involved to effectively manage organizational risks. (The Group's risk management policy is available here).

WHA Group has established a risk management framework aligned with the Committee of Sponsoring Organizations of the Treadway Commission (COSO) guidelines, focusing on Enterprise Risk Management (ERM). This framework is integrated with good governance practices, such as the Thai Corporate Governance Code for Listed Companies - 2017. It aims to enable the board of directors, executives, and employees at all levels. This ensures the ability to assess risk appetite and analyze deviations in risk tolerance when planning and making business decisions, along with close and continuous monitoring of emerging risks.



INTEGRATION OF RISK MANAGEMENT CRITERIA INTO THE INVESTMENT DECISION-MAKING PROCESS

WHA Group places great importance on risk management at every stage of the operations, particularly in the investment decision-making process, which is a key driver of sustainable business development. To ensure that each investment project can effectively manage potential risks, the Group has integrated risk management criteria into the decisionmaking process from the initial stages of planning and product or project development. Risks are assessed across various dimensions, including development costs, percentage increase in interest costs relative to total costs, average interest expenses, net interestbearing debt to equity ratio (IBD-to-Equity ratio), net interest-bearing debt to earnings before interest, tax, depreciation, and amortization (IBD-to-EBITDA ratio), as well as revenues from rentals and asset sales (REIT).

WHA Group requires all projects to meet an acceptable risk threshold before any investment decision is made. All investment proposals must be approved by the Risk Management Committee (RMC), which is responsible for evaluating the strategic alignment of the project, identifying potential risks, and assessing the project's ability to generate returns. This process ensures that all investments are supported by sound risk management and contribute to the Group's long-term sustainable growth.

ENTERPRISE RISK MANAGEMENT PROCESS

WHA Group has linked the enterprise risk management system with materiality topics and policies, laws, regulations, and standards of WHA Group, covering Environmental, Social, and Governance (ESG) risk management and internal control systems, and compliance or GRC (Governance, Risk and Compliance) to prevent and mitigate risks and reduce the impact of risk factors throughout the organization, enabling the organization to achieve our strategic objectives and main goals in various areas. The organization's risk management process consists of 8 steps as follows:



1. OBJECTIVE SETTING

- · Business Context Analysis
- Define Objectives, Organizational Goals align with Strategic Goals
- Define the Risk Appetite



2. RISK IDENTIFICATION

- Identify Risks and Risk Factors, both Internal and External
- Identify risks to cover all types of risks, including strategic risks, operational risks, financial risks, compliance risks, sustainability risks or Environmental, Social, and Governance (ESG) risks, human rights risks, corruption risks, information technology risks, personal data risks, and emerging risks



3. RISK ASSESSMENT

- Evaluate Risks by assessing the likelihood of the risk occurring (Likelihood) and the impact of the risk (Impact)
- Apply tools to assess the severity of impacts, such as Sensitivity Analysis and Scenario Analysis



4. RISK PRIORITIZATION

- Prioritize risks by ranking their importance
- Create a Risk matrix (4x4) by categorizing the prioritized risks into 4 levels: very high, high, medium, low



5. RISK RESPONSE

- Define risk response methods, such as risk acceptance, risk reduction or control, risk avoidance, and risk transfer
- Mitigate risks to an acceptable level of risk (Risk Appetite) and deviation of the acceptable level of risk (Risk Tolerance)



6. RISK RECORDING AND REPORTING

- Risk Register through Corporate Risk Management System (RMTS) application
- Define Key Risk Indicators
- Risk Report



7. MONITORING REVIEW AND IMPROVEMENT

- Review risk and performance results
- Continuously improve Enterprise Risk Management



8. COMMUNICATION AND CONSULTATION

- Prepare risk management policy announcements
- Communicate and provide advice on risk management

CRISIS MANAGEMENT AND BUSINESS CONTINUITY MANAGEMENT

Every year, WHA Group conducts sensitivity analysis and stress testing to evaluate the outcomes and impacts of various risk events, particularly emerging risks. Following these assessments, comprehensive risk mitigation measures and action plans are developed. Based on WHA Group's sensitivity analysis and stress testing results for 2024, floods and droughts remain critical risks due to the large number of industrial plants and customer warehouses located within the Group's managed areas. These events can directly disrupt customers' business operations. Furthermore, WHA Group's utility services rely heavily on natural resources such as rainfall and natural water sources, meaning these impacts could broadly affect water supply services provided to customers.

Additionally, WHA Group has developed Business Continuity Management (BCM) and Business Continuity Plans (BCP) as part of the risk management system to ensure readiness in responding effectively to emergencies and crises. These plans help ensure that all business units can continue operations smoothly. WHA Group regularly reviews and updates these plans to cover all possible scenarios identified through risk assessments that could cause business disruption, such as floods, droughts, fires, epidemics, and information security threats, through the following key projects:

1. TESTING OF THE BUSINESS CONTINUITY PLAN

WHA Group conducts testing of the Business Continuity Plan in simulated scenarios such as chemical leaks, vehicle accidents, and flood prevention. The related processes include:

- Receiving incident alert reports
- Emergency prevention measures
- Coordination and communication
- Use of various tools and equipment
- Assessing the readiness of equipment and response time to emergencies

The test results showed that personnel and relevant departments were able to perform satisfactorily according to the plan's requirements. WHA Group continues to improve and develop procedures to better accommodate future situations.

2. NATURAL DISASTER RISK REDUCTION PROJECTS

To mitigate and reduce risks from natural disasters such as droughts and floods, WHA Group has implemented the following key projects:

- Installation of a rainwater drainage system in industrial estates to manage water during heavy rainfall, with pump operations controlled by an automated system.
- Improvement of earthen embankments in floodprone areas to prevent external water from entering the industrial estates.
- Construction of a reservoir near WHA Rayong 36
 Industrial Estate, along with water allocation from the Nong Pla Lai reservoir.
- Development of water reclamation systems to reduce reliance on natural water sources and mitigate the impact of droughts.

3. CYBERSECURITY TESTING

In response to increasing complexity in cyber threats, WHA Group conducts tests to protect data security and recover backup data as follows:

- Data security testing conducted by the Information Technology department.
- Testing of disaster recovery and backup media recovery systems, including ERP, File Sharing, and MS SQL Database.





The test results showed that data recovery for each system was complete and met the planned objectives. The most recent backup data was selected and used in the recovery process to ensure that the backup data could be read and restored within the estimated and targeted recovery time.

In addition, WHA Group has enhanced the capabilities of the Unified Operation Center (UOC) for the centralized control and management of public utility services. Currently, the Group can remotely control and manage all water and solar power plants through the UOC. As a result, in the event of an emergency or crisis that restricts physical movement, the UOC can function as a secondary command center, overseeing water and solar power plants to ensure business continuity during such situations.

RISK MANAGEMENT CULTURE

In addition to establishing a framework for risk management and good corporate governance, WHA Group also emphasizes raising awareness, attitudes, and behaviours related to risk management among at all levels of personnel, including employees, directors, and senior executives. This is considered a key mission of the organization to drive an effective risk management culture within the organization. The Group is currently in the process of transitioning to a top-down incentive system by incorporating risk management into the Key Performance Indicators (KPIs) of executives and risk

owners. Risk indicators are also included as one of the criteria in performance evaluations.

This approach will promote communication and practices that directly focus on risks and create practical methods for implementing risk management. For example, the use of a common risk language, defining acceptable risk levels, and setting standardized risk assessment criteria. The approach also defines the roles and responsibilities of those accountable for specific risks and ensures that risk management is included in the agenda of key meetings of each subsidiary company. The approach encourages sharing risk management experiences between departments and companies to continuously communicate best practices and benefits. Additionally, risk management is incorporated into the organization's training curriculum to raise awareness and develop skills among personnel in identifying, controlling, and mitigating risks related to their roles and responsibilities. This includes directors, executives, and employees, ensuring everyone can participate in effective risk management and strengthen the organization's risk management culture. Furthermore, all employees and external parties can use WHA Group's whistleblowing and complaint channels to report issues they believe pose a risk or could become a risk in the future. The reports will be investigated, addressed, and appropriate measures will be taken accordingly. (Please consider more details in Code of Conduct and Practices section of this report).

3.4 METRICS AND TARGETS

	Materiality And Sustainability Risk Analysis	2024 Target	Performance
R	Executives	100%	100%
Q	Employees	100%	80%
R	Partners/Contractors	100%	100%
Trainin	ng and Workshops on Business Continuity Management (BCM) and Business Impact Analysis (BIA)	2024 Target	Performance
	Business Continuity Management Working Team	100%	100%

To ensure an effective risk management system, WHA Group has established an external audit of risk management system, conducted by KPMG Phoomchai Business Advisory Ltd. at least annually. The external audit of risk management system in 2024 covered the following topics:

- The organization has defined its objectives clearly and adequate to be able to identify and assess risks related to achieving its objectives.
- The organization comprehensively identifies and analyzes all types of risks that may affect the achievement of objectives throughout the organization.
- The organization has assessed the importance of risks by considering both the chance of an event occurring and the impacts that may affect to achieve the objectives of the organization.
- The organization considers the potential for corruption in assessing risks to achieve the objectives of the organization.
- The organization can identify and evaluate changes that may affect the internal control system.
- The organization has implemented measures and action plans to manage risks at an acceptable level.
- The organization has communicated to all employees to understand and follow the policies and guidelines specified.

WHA Group has established clear policies and procedures to ensure that the engagement of external risk management system auditors is conducted independently and without conflicts of interest. During each engagement period, the performance and quality of the auditor's work are reviewed. Upon the expiration of each contract period, WHA Group initiates a tender process to select a new risk management system auditor with appropriate qualifications and the capability to provide efficient services. This practice helps reinforce confidence in the risk auditing process and ensures that risk management system audits are conducted with transparency and in alignment with the Company's policies and good corporate governance principles.

In addition, WHA Group conducts internal audits of the risk management system through the Internal Audit Office. These audits cover the entire risk management system of the Group in accordance with the annual risk management plan. Internal audits are carried out at least once a year, and the audit results are reported to the Audit Committee. The audit results for 2024 are as follows:

Risk Management System Audit	2024 Target	Result
Risk management system audit conducted by the Company's Internal Audit Unit with no issues found	100%	100%
Risk management system audit conducted by an external party with no issues found	100%	100%

4. HIGHLIGHT PROJECTS

WHA Group places strong emphasis on risk management and crisis response to prevent potential impacts on business operations and related stakeholders. The Group focuses on fostering a risk management culture at all levels of the organization through key activities and projects aimed at raising awareness and encouraging participation from all sectors. This approach enables the organization to manage risks effectively and remain well-prepared for any future scenarios in a careful and sustainable manner. In 2024, the Group implemented the following key projects:

TRAINING PROGRAMS AND ACTIVITIES TO PROMOTE A RISK MANAGEMENT CULTURE

WHA Group is firmly committed to operating the business with honesty, fairness, and transparency, adhering strictly to applicable laws, the Code of Conduct, and the principles of good corporate governance. This commitment ensures that all operations are carried out with integrity, ethics, and responsibility toward society, the environment, and corporate governance. The Group also places great importance on communicating the Code of Conduct and anti-corruption policies to all stakeholders

at every level. This is to ensure everyone understands their roles and responsibilities and adheres to these guidelines as part of their daily conduct. Recognizing the importance of fostering a risk management culture, the Group has continually organized training programs and activities to raise awareness and enhance employees' skills in identifying, controlling, and mitigating risks related to their respective duties and responsibilities. The key initiatives are as follows:

Training Program	Training Content	Training Result
Training on Risk Management under the topic "Materiality and Sustainability Risk Analysis"	The "Materiality and Sustainability Risk Analysis" training program, held on August 15, 2024, focused on enhancing knowledge and skills in identifying and analyzing material sustainability issues and ESG-related risks, as well as managing such issues and risks to an acceptable level. The program also covered ESG risk analysis, emerging risks, and effective monitoring. Key topics included: Overview of Risk Management Risk and Materiality Assessment ESG and Enterprise Risk ESG Risk and Sustainability Development Stakeholder Engagement in ESG ESG Risk Management	A total of 548 director, executives, and employees, representing 80%, participated in the training. All participants gained knowledge and skills in identifying and analyzing material sustainability issues and ESG risks, managing them at acceptable levels, and performing effective ESG risk analysis and monitoring. The training also enhanced awareness among executives and staff about ESG risks and fostered a risk management culture within the organization. This is considered a key foundation for driving the organization toward the long-term sustainable goals, highlighting the importance of prioritizing effective risk management practices.
Workshop on "Business Continuity Management (BCM) and Business Impact Analysis (BIA)" for On-site Operations Personnel and the Business Continuity Management Working Team	The workshop, held on January 11–12, 2024, aimed to build understanding of business continuity requirements and processes to help the organization prepare for, respond to, and recover from disruptions. It covered how to manage incidents, uncertainties, and threats, as well as the impacts of those threats on business operations. The training enabled participants to develop the organization's capability to manage crises, prevent disruptions, and strengthen resilience in protecting stakeholder interests, reputation, and value-creating activities. It also emphasized the importance of	The Business Continuity Management Working Team was able to effectively conduct the organization's Business Impact Analysis (BIA) and gained a clear understanding of BCM processes and their respective responsibilities. This will help ensure a complete, efficient, and effective business continuity management system, supporting the organization's long-term sustainability.

Risk Management Program for Corporate Leaders (RCL) This program, organized by the Thai Institute of Directors (IOD), aimed to enhance understanding of different types of risks, the role of directors in risk management, and risk management frameworks. It was designed to help non-executive directors effectively oversee risk management within the organization.

embedding a strong and sustainable risk management

culture within the organization.

The training equipped non-executive directors with knowledge and skills related to organizational risk management and how to apply risk frameworks in strategic decision-making. Further details can be found in the Form 56-1 One Report 2024.



In addition, WHA Group produces communication materials to promote knowledge and understanding, fostering a risk management culture. These materials cover topics such as organizational risk management processes and business continuity management. The aim is to ensure that all employees recognize the importance of risk management and can apply it effectively in their work. It also serves to enhance employees' knowledge and skills in handling risks in various situations. Encouraging participation from employees at all levels helps deepen understanding and readiness to respond to potential risks efficiently, which ultimately contributes to the long-term success and sustainability of the organization.





CORPORATE RISK MANAGEMENT SYSTEM (RMTS)

WHA Group is committed to leveraging the digital expertise to develop and implement various digital innovations that promote an effective risk management culture. The Group developed the Corporate Risk Management System (RMTS) and began pilot testing it in the third quarter of 2023 to facilitate risk assessment and display the status of all key risks. The system includes alerts, monitoring, and effective tracking of risk management actions. In 2024, the risk assessment system was further enhanced to improve reporting efficiency by providing customizable Risk Dashboard and Risk Register Reports tailored to user needs. It also supports fast and accurate decisionmaking by displaying the ranking of the highestpriority risks. Looking ahead to 2025, the Group plans to further develop the system by adding functions for risk trend analysis and key risk indicators (KRIs) to enable comprehensive and more efficient risk management. These additional features will enhance the transparency and traceability of risk assessment and management, enabling more data-driven and confident strategic decision-making.

RISK AND SUSTAINABILITY COMMUNICATION PROJECT OF THE BOARD OF DIRECTORS

WHA Group has integrated risk assessment results and sustainability issues into the formulation of organizational direction and strategies. In 2024, the management team presented key risk factors and sustainability-related issues to the Board of Directors as part of the strategic planning process. This information was considered during the corporate strategy meeting, covering both short-term and long-term strategies, held in the fourth quarter of 2024.

5. IMPACTS ON STAKEHOLDERS AND ENVIRONMENT

Risk management is one of the key ongoing processes conducted by the Group to prevent and mitigate potential impacts on the environment and stakeholders. This effort not only enhances operational efficiency but also helps build confidence and supports long-term sustainable development.

ENVIRONMENTAL IMPACT

WHA Group focuses on developing risk management processes to reduce environmental impacts through key projects such as the installation of automated stormwater drainage systems in industrial areas, construction of reservoirs for crisis water management, and improving the efficiency of water reclamation systems. These initiatives help reduce the use of natural water sources and mitigate drought impacts. Additionally, flood prevention measures in vulnerable areas are implemented to maintain ecosystem balance and prevent damage to surrounding communities.

IMPACT ON STAKEHOLDERS

WHA Group's risk management efforts aim to instill confidence among all stakeholder groups, including partners, investors, communities, and government agencies. Important projects such as flood prevention plans in industrial estates, business continuity management plans, and accident risk reduction in industrial zones play vital roles in enhancing the safety and quality of life for nearby communities. These efforts also strengthen good relationships with partners and customers through transparent and sustainable business practices.

WHA Group will continue to develop and improve risk management processes across all areas to support sustainable business operations while meeting stakeholder expectations and long-term environmental goals.

6. NEXT STEP

WHA Group recognizes the rapid and continuous changes occurring in the economic, social, environmental, and technological landscapes, as well as future trends that bring new opportunities and challenges for business operations in 2024 and beyond. Accordingly, the Group is committed to developing proactive risk management that can adapt to ever-changing situations by monitoring and analyzing economic, social, and environmental trends that may impact the organization in terms of both risks and opportunities.

At the same time, WHA Group also emphasizes the development of effective risk management strategies through the analysis of various internal organizational factors to enhance flexible and appropriate risk management processes suited to rapidly changing environments. Promoting a risk management culture within the organization is also vital, leveraging modern technology and innovation to improve the efficiency of risk response.

Looking ahead, the Group will continue to develop and implement new technologies, such as Big Data and Artificial Intelligence (AI), to enable faster and more accurate risk analysis and forecasting, especially in assessing risks that affect operations. This will support establishing highly effective risk and business continuity management systems across all units, while promoting seamless and efficient organizational operations.



1

CUSTOMER RELATIONSHIP MANAGEMENT



1. GLOBAL TREND

The present world, the sale of all types of goods and services happens rapidly and constantly evolves. Organizations worldwide face intense competition both in their current markets and in expanding into new markets. Therefore, organizations must remain alert and ready to adapt their operations to keep pace with changing consumer behaviors to ensure sustainable business growth. One of the most critical factors in business operations is the consumer. Hence, a key approach to driving sustainable business is to prioritize communication and relationships with people in this case customers or consumers. A highly effective strategy for managing customer relationships today is to apply technology to enhance customer relationship management strategies. This includes using automation systems and Artificial Intelligence (AI) technology to improve work efficiency speed and accuracy keeping pace with the digital transformation. Moreover, integrating technology into consumer data analysis by implementing robust data storage systems and building a data driven organization allows companies to maximize the value of existing insights. This enables businesses to better meet consumer needs appropriately while also saving time and company resources.

2. OUR POSITION

Currently, WHA Group is trusted by a diverse range of customers as a leader in various businesses, including logistics, industrial estate development, utilities and power, as well as driving various digital projects. Therefore, in 2024, the Group has incorporated various technologies and innovations to enhance operational efficiency, speed, and reliability, in line with our status as a Tech and Sustainability Company. Moreover, the Group recognizes the new demands of customers across the four business groups and aims to elevate our business through collaboration on platforms that

involve both customers and other stakeholders of the Group. As a result, the Group has introduced innovations and technologies to increase efficiency and sustainability in all businesses. This includes customer service innovations developed continuously by WHA Group to enhance the customer experience across multiple dimensions as follow:

- A 360-degree virtual tour system for Build to Suit warehouses allowing the sales team to present a realistic simulation of WHA Logistics' warehouse interiors. This helps customers clearly understand the structure and services before making investment decisions.
- A green logistics solution under the Mobilix brand which includes electric vehicle fleet rental services for transportation (EV Fleet Rental), EV charging systems and roaming station connectivity (EV Charging and Roaming), along with the Mobilix platform for efficient transport management. These solutions help reduce carbon emissions and support sustainable business operations.
- The SMART ECO Industrial Estates developed by WHA Industrial Development, which integrates digital technologies such as IoT and AI to manage energy, water resources, and environmental systems. This initiative aims to balance business operations with the conservation of natural resources.
- The IoX platform for managing and monitoring the performance of solar power systems which includes energy production forecasting through Solar Forecasting and the detection of anomalies in solar panels using Solar Anomaly Detection.
- The Al RO System Performance Forecasting which analyzes the efficiency of membrane water filtration systems by leveraging data from IoT and Al technologies to enhance predictive maintenance capabilities and improve water management efficiency.

• WHASApp or WHA Super App is an all-in-one platform that consolidates comprehensive services in one place for WHA customers. It supports maintenance requests, provides access to news and updates, and offers various privileges, aiming to deliver a seamless and highly convenient service experience with WHA.

All these initiatives reflect WHA Group's commitment to driving the organization toward becoming a Tech and Sustainability Company that places customers at the center, while creating long-term shared value in a sustainable manner.

3. MANAGEMENT APPROACH

3.1 GOVERNANCE STRUCTURE

WHA Group prioritizes systematic customer relationship management to ensure that it can effectively meet customer needs. This is supported by a clear organizational structure, with responsibilities divided between two main entities: the Customer Development Department, which handles day-to-day operations, and the Board of Directors, which oversees strategic direction and policy-making.

Roles	Responsibilities
Customer Development Department	The Customer Development Department serves as the primary unit responsible for managing customer relationships. It plays a key role in monitoring and understanding customer needs and issues, using this information to enhance services and develop products that better align with customer expectations. The department also continuously gathers customer feedback to drive improvements. Its operations are guided by strategic plans aimed at effectively responding to customer demands. These efforts include product and service development, establishing efficient communication channels, and enhancing the overall customer experience. All these initiatives are essential in building strong, lasting relationships and trust with customers reinforcing WHA Group's commitment to attentive and dedicated customer care.
Board of Directors	Board of Directors plays a key role in setting policies and overseeing customer relationship management to ensure alignment with appropriate strategic directions. Emphasis is placed or operations that reflect industry best practices, market trends, and stakeholder expectations. The Board is also responsible for ensuring that the customer relationship managemen process adheres to corporate governance principles and sustainable business practices. This oversight helps ensure that the Group can comprehensively meet customer needs while strengthening the long-term competitiveness.

3.2 RISK AND OPPORTUNITIES MANAGEMENT STRATEGY

WHA Group recognizes the importance of learning about and understanding customer needs in order to develop products and services that best meet their expectations. However, this area of operation still presents both risks and opportunities that the organization must manage in a balanced and effective manner.

RISKS	Opportunities
Although WHA Group prioritizes customer relationship management, inefficiencies in business operations or CRM systems may hinder our ability to adequately meet customer needs. Service disruptions that affect customers' business operations can also erode their trust and have negative repercussions on the Group and other stakeholders, such as the customers' employees and the public who rely on their products and services. Furthermore, current customer behavior trends indicate that buyers no longer consider only the price and quality of products and services, but also place importance on companies that demonstrate environmental and social responsibility. If the Group fails to adapt to these sustainability expectations, it may lead to the loss of business opportunities as	Effective customer relationship management enables WHA Group to understand and respond to the diverse needs of our customers, allowing for the development of targeted products and services. This not only helps retain existing customers but also attracts new ones, driving continuous business growth. Moreover, the diversity of the customer base presents opportunities for the Group to expand our product and service offerings in line with market trends and consumer demands. In today's landscape, where customers increasingly value sustainability, the Group's ability to develop environmentally and socially responsible solutions while delivering value to customers can enhance our corporate image and strengthen the long-term competitive advantage.
customers choose not to engage, thereby affecting the Group's ability to expand the market and achieve business growth.	

Therefore, WHA Group is committed to continuously monitoring business trends and adapting accordingly to ensure smooth operations, minimize potential risks, and enhance opportunities for long-term business development in collaboration with our customers.

3.3 ENTERPRISE RISK MANAGEMENT

WHA Group has continuously planned the customer relationship management operations to align with and proactively respond to changes in the business environment and future technology. It integrates technology and innovation into the business processes, especially in customer relationship management, to maintain and expand business through collaborative platforms involving both customers and all company stakeholders. This approach also enhances efficiency, speed, and reliability while reducing human errors. Investments have been made in intelligent work technologies, including automation systems, robotics, 5G technology, Artificial Intelligence (AI), and machine learning, to boost operational efficiency and reduce long-term costs. Moreover, the Group has developed a modern, world-class smart warehouse system to meet new demands and elevate the quality of products and services. WHA Digital has also integrated new technologies to improve products and management, better responding to customer needs.

Examples include solar panel monitoring systems, performance detection devices, analytics tools, automation systems, and various smart equipment.

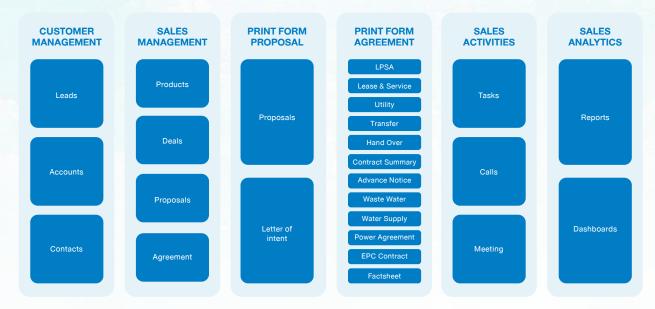
Aligned with WHA Group's commitment to being a key partner in driving customers' businesses toward sustainability through comprehensive services and positioning ourselves as The Ultimate Solution for Sustainable Growth under the mission "WHA: WE SHAPE THE FUTURE." The Group operates with a strategy focused on delivering the best to meet customer needs. It establishes businesses in strategic locations that serve as transportation and distribution hubs and offers comprehensive services tailored to customers' demands known as One Stop Service Solutions. WHA Logistics applies this concept to serve customers seeking warehouse or industrial factory leases. Each warehouse or factory is custom designed to meet the specific requirements of individual customers and built to international standards in what is known as Built to Suit projects. Additionally, the Group provides Integral Property Solutions which is a full spectrum real estate solution while supporting operations and investments through Operational Equity. These efforts collectively enhance competitive potential and drive stable and sustainable business growth.



WHA Industrial Development (WHAID) is a leading developer of industrial estates and industrial parks in Thailand, providing developed lands for factories, ready built factories and warehouses for customers. With the aspiration to provide complete services for the customers, WHA Group established WHA Utilities and Power (WHAUP) and WHA Digital to provide utilities and digital services, respectively. WHAUP represents Thailand's largest private provider for industrial water production and distribution, which includes raw water, process water, and clarified water together with conventional and renewable energy. Moreover, WHA Digital Platform is a one-stop shop for digital infrastructures that offer comprehensive information technology solutions for the customers. Altogether with the provision of the fully integrated solutions, WHAID has become Thailand's leading industrial estate developer, dominating the industrial estates' market share at a leading position. Hence, WHA Group will continue to pursue our best efforts to serve our customers through service developments and improvements, which corresponds with the Group's mission to become "The Ultimate Solution for Sustainable Growth". As a result, sustaining our leading position in the market.

CUSTOMER RELATIONSHIP MANAGEMENT SYSTEM

To respond quickly and efficiently to customer needs, WHA Group has implemented a Customer Relationship Management system (CRM System). This system uses data resources technology to centralize all customer information, enabling employees across different departments to access the Group's customer data comprehensively. This facilitates smoother collaboration between departments by reducing unnecessary communication processes. The system enhances the speed, accuracy, and efficiency of customer relationship management operations, thereby increasing customer satisfaction. The Group's CRM system consists of the following components:



CRM System

CUSTOMER COMMUNICATION

Beyond providing products and services, WHA Group places great importance on communicating with customers to strengthen good relationships. The Group communicates through electronic media such as "WHA E-Connection" and via email, Facebook, LinkedIn, and the website in Thai, English, Japanese, and Chinese. Additionally, WHA Group publishes the quarterly WHA Connect magazine in both Thai and Japanese to share news and activities of the Group, including events organized to benefit customers such as training sessions, seminars, and social activities. To enhance communication efficiency, the channels mentioned above provide easy access, accurate and complete information, and convenient usage for customers across the Group's four business groups as well as tenants of the Group's buildings and warehouses. Starting in 2024, the Group launched the WHASApp application as an additional communication channel for customers. Through this app, customers can access various information, send messages to the Group's customer service staff, and receive immediate notifications of any events or activities, enabling faster communication and information access.



In addition, WHA Group also actively listens to customer feedback through two-way communication via other channels, including regular customer visits and conversations by phone, email, and LINE groups. A designated primary contact person is assigned to manage customers in cases of concerns or requests. The Group also gathers customer opinions through communication activities such as meetings between representatives of the Group and customer company representatives via various clubs, including the WHA Investor Club, the Japanese Club, the Eastern Seaboard Industrial Estate (Rayong) Human Resources Club (ESIE HR CLUB), the Eastern Seaboard Labor Relation Club (ESLR Club), and the WHA Safety and Environmental Club within the industrial estates and industrial lands of WHA.

Feedback is also collected through customer and tenant satisfaction surveys. Moreover, the Group has established a comprehensive complaint management system. It accepts feedback and complaints through various communication channels and conducts investigations in accordance with the Group's procedures for handling complaints from customers and communities. Upon receiving a complaint, the information is forwarded to the relevant business unit manager, and qualified personnel are appointed to investigate the facts, report findings, document details, and implement corrective measures according to the Group's standards. The complaints and the progress of corrective actions are then reported to the Quality Committee during the annual management review meeting.









CUSTOMER SATISFACTION AND CONCERN ASSESSMENT

WHA Group recognizes that building customer trust is a fundamental basis for effective customer relationship management. This trust not only impacts the confidence of other stakeholder groups but also serves as a crucial factor in generating business profits and is a key strategy for long-term business growth. Accordingly, the Group conducts annual customer satisfaction surveys to evaluate the effectiveness of the customer relationship management. In 2024, WHA Group surveyed customers and tenants of buildings and warehouses, assigning the Customer Development Department to collect and analyze customer data. In cases where complaints arise, the relevant department investigates the root causes and establishes preventive measures to

avoid recurrence. Survey results are reported at management meetings to ensure that complaints are comprehensively and efficiently addressed, alongside business strategy adjustments aimed at improving products and services. Customer satisfaction, feedback, and complaints are collected through various communication channels, including telephone, Line, email, the LBMS application, and WHASApp for repair service feedback related to warehouses. Additionally, customer satisfaction surveys are conducted for WHAID and WHAUP using rating assessments. The survey covers satisfaction with service quality and infrastructure such as utilities, energy systems, internet connectivity, cleanliness, and the orderliness of common areas within the industrial estates.

Based on the results of the 2024 customer satisfaction survey, as well as complaints reported through the communication channels and processes as previously outlined, several areas for improvement have been identified to enhance overall customer satisfaction as follows:

Key Area of Concerns	Mitigation Measures Implemented
Traffic management inside and outside the industrial estates	 Inside the industrial estates Install a VMS (Vehicle Management System at the entrance and exit of the industrial estate), which is a camera that counts the number of vehicles over time in order to analyze traffic volumes and manage traffic in the industrial estate. The system has continuously developed and improved. In 2023, install 2 additional Smart Traffic Management system at high-traffic intersections, especially during rush hour, to enable the system to automatically open and close the traffic signal based on vehicle density. In 2024, the traffic problems in industrial estates were effectively improved and resolved, resulting in a substantial decrease in traffic complaints. This accomplishment can be attributed to the implementation of VMS technology and an intelligent traffic control system.
	Outside the industrial estates Cooperate with local governments to improve roads near critical industrial estates. Help improve the area outside the industrial estate, which is critical for keeping traffic flowing and safe. Follow up on and coordinate external road construction projects that affect operators, and also inform them.
Power outage at certain period times	 Inside the industrial estates There are officers of the Provincial Electricity Authority stationed at various job sites. To help coordinate and solve problems in a timely manner. Regularly develop and inspect the electrical system to proactively prevent any potential electrical problems in the future.

To facilitate both major and minor customer groups and to maintain strong relationships with clients, the Group has implemented various environmental and social initiatives, as well as projects that promote the quality of life and hygiene for tenants and users of the Group's developments or buildings. These include individuals working in warehouses, office buildings, and industrial estates developed by the Group, ensuring they can utilize the premises without being exposed to environmental pollution that may affect their health. Accordingly, the Group established measures and carried out several projects in 2024 as outlined below:

DESIGNING OFFICES, COMMERCIAL BUILDINGS, AND INDUSTRIAL ESTATES TO BE LOCATED NEAR PUBLIC TRANSPORTATION

WHA Group places great importance on the careful selection of project locations, particularly for office buildings, commercial properties, factories, warehouses, and industrial estates, to ensure that customers, tenants, and employees have convenient access via public transportation. Since 2024, the Group has prioritized

proximity to public transport systems when selecting sites for the development of office buildings, commercial properties, factories, warehouses, and industrial estates. In 2024, transportation accessibility was specifically taken into account in the development of two projects: WHA Tower, which is within a five-minute walking distance to a mass transit system, and Quant Sukhumvit 25, which is located near an entrance/exit of a skytrain station.

3.4 METRICS AND TARGETS

WHA Group has implemented various initiatives to enhance comfort and safety for our customers, including office building tenants and service users within industrial estates. These efforts also aim to support customers' business operations, contributing to the sustainable growth of all parties involved. To assess the effectiveness of the operations, the Group measures customer satisfaction across all four of WHA Group's core businesses, WHA Logistics, WHA Industrial Development, WHA Utilities and Power, and WHA Digital. For 2024, the Group has set a target customer satisfaction score of 89%.

Customer Satisfaction Measurement Results	
2021 Customer Satisfaction 90%	2022 Customer Satisfaction 86%
2023 Customer Satisfaction 88%	$2024 \\ \text{Customer Satisfaction} \\ 86\%$
Target 2025	≥89%

In 2024, WHA Group enhanced the customer satisfaction survey process to cover a broader and more diverse customer base. This improvement aimed to gather more in-depth and accurate insights that better reflect customer opinions. However, this change resulted in a slight decline in customer satisfaction scores compared to the previous year.

WHA GROUP INTERVIEWS SHOWCASE POSITIVE CUSTOMER RELATIONSHIPS

WHA Group conducted customer interviews to reflect the strong relationships between WHA Group and our clients, as well as to gather feedback for future development and improvement of our operations.

ROBERT BOSCH AUTOMOTIVE TECHNOLOGIES (THAILAND) CO., LTD.

GROWTH TOWARD A SUSTAINABLE FUTURE

Dr. Stuart Brown, Vice President of Robert Bosch Automotive Technologies (Thailand) Co., Ltd., revealed that "Bosch in Thailand is part of the global Bosch group. We have been operating in Thailand for over 100 years, especially at the WHA Industrial Estate, which serves as the company's production base focusing mainly on the automotive sector. We manufacture components for internal combustion engines, including connectors used in various applications and fuel injectors for gasoline engines. These products are produced both for the domestic market and for export. The company benefits from its strategic location in Thailand, which is close to customers. Our strength lies in our focus on innovation, covering all product types in Thailand. The company is committed to establishing a research and development center. Being here helps reduce logistics costs and we receive BOI incentives. The company has installed solar panels, a reservoir for sustainable water management, and a comprehensive



waste management system. Bosch views Thailand as a hub for the automotive industry. The country has many infrastructure development projects, such as highways, strong tax incentive measures, and a clear vision to support the automotive industry. Therefore, we see a bright future here. We chose this location because of its strategic advantages and the strong support we have received since the beginning. We are committed to building a better future together.

CONTACT INFORMATION:

ROBERT BOSCH AUTOMOTIVE TECHNOLOGIES (THAILAND) CO., LTD.

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THE GROWTH OF SPIBER IN THAILAND TOWARDS THE FUTURE OF SYNTHETIC PROTEIN MATERIALS

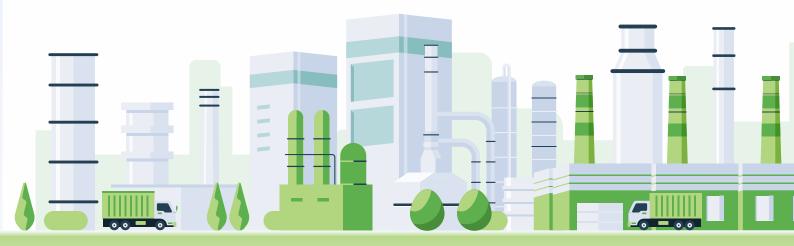
Mr. Toshimasa Asai, Executive at Spiber (Thailand) Co., Ltd., stated that "Spiber Inc. was the first startup company to emerge from Keio University in Japan. It was founded by Mr. Sekiyama and Mr. Sugahara in 2007. Our synthetic protein material called 'Brewed Protein' was first introduced in the apparel industry, which is our initial target market. It was used in winter jackets and t-shirts. In the future, we believe our products will be used not only in the apparel sector but will expand to other industries such as automotive, medical, and food. Our headquarters in Japan is currently developing in these areas. At present, some manufacturers use our materials in cosmetics and synthetic hair products such as wigs. Spiber Inc. is the only company producing synthetic protein materials at a commercial scale, giving us an advantage over other companies in production. We use biotechnology to produce protein materials through a fermentation process with specially designed DNA microorganisms. Our base in Japan focuses mainly on research and development, including DNA design for microorganisms and developing protein fibers. The manufacturing base in Thailand is a commercial scale factory and serves as the main factory of the group. It is committed to achieving zero carbon dioxide emissions. The materials we produce are sustainable and use plant-based resources instead of petroleum. We plan to use green energy in the factory to reduce greenhouse gas emissions. This initiative has been



supported by a green energy proposal from WHA Group. There are several reasons for expanding the business to Thailand. The most important reason is that Thailand is one of the world's leading sugar producers, and sugar is a raw material for microbial fermentation. Since this is our first commercial-scale production, Thailand's infrastructure that supports Japanese companies and investment incentives from the Board of Investment are important factors. We are currently considering expanding the factory in Thailand. The decision will depend on the progress of new product development at the base in Japan, including resin materials and food applications, so that the factory in Thailand can support the necessary functions and equipment in the future.

CONTACT INFORMATION:

SPIBER (THAILAND) CO., LTD.
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https://spiber.inc/en



BMW MANUFACTURING (THAILAND) CO., LTD. INSTALLATION OF 12,000 SQUARE METER SOLAR ROOFTOP

Mr. Erik Ruge, Managing Director of BMW Group Manufacturing Thailand, expressed his delight in signing the PPA for a 1.5 Megawatt solar rooftop installation on a 12,000 square meter rooftop. This project supports the company's policy to develop environmentally friendly manufacturing processes and reduce carbon emissions.

Meanwhile, BMW Group Manufacturing Thailand recognizes the importance of solar rooftop installations, which not only lower the company's energy costs over their lifespan but also reduce CO2 emissions by over 12,000 tons, aligning with global environmental policies to combat climate change and reduce greenhouse gas emissions.

Mr. Somkiat Masunthasuwun, Chief Executive Officer of WHA Utilities and Power Public Company Limited (WHAUP), revealed that the company has recently signed a PPA with BMW Group Manufacturing Thailand to install a solar rooftop system, generating 1.5 Megawatt of power across a 12,000 square meter rooftop area. The project represents an investment of 40 Million Baht. This initiative is part of WHA Group's renewable energy efforts outside its industrial estates and reinforces WHAUP's expertise in clean energy solutions, developing innovative energy technologies that align with WHA Group's mission – WHA: WE SHAPE THE FUTURE – fostering sustainable growth opportunities.



Mr. Somkiat added that WHAUP is immensely proud to have been selected by BMW, a company known for its rigorous quality and installation standards. This trust underscores WHAUP's world-class installation capabilities, which will further enhance customer and partner confidence.

This collaboration expands the clean and environmentally friendly energy business, supporting WHA Group's goal to drive sustainable, eco-friendly business practices through WHAUP's solar energy expertise. With a highly experienced team, WHAUP will elevate Thailand's automotive industry to a global level.

CONTACT INFORMATION:

BMW MANUFACTURING (THAILAND) CO., LTD. 7/201 Moo 6, Map Yang Phon Subdistrict, Pluak Daeng District, Rayong Province 21140, Thailand Tel. +66 38 640 000

https://www.bmwgroup-werke.com/rayong/en.html



SAHA FARM CO., LTD. ENTERED INTO POWER PURCHASE AGREEMENT FOR 14 SOLAR PROJECTS WITH TOTAL CAPACITY 46.36 MEGAWATT

Ms. Boonyaluk Chotitawan, Director of Saha Farm Company Limited and Golden Line Business Company Limited, said as the fully integrated manufacturer, exporter, and distributor of chicken products for 54 years in the business, we adhere the principles of transparency, purity, cleanliness, and fairness, and recognize the importance of improving environmental conditions. We aim to be a green organization that prioritizes the use of clean energy to maximize production efficiency and energy usage.

Saha Farm Group's agricultural business encompasses the entire chicken production process, from egg incubation to providing light and heating for chickens, animal feed production, and various production machinery within factories, all of which consume significant amounts of energy. Currently, energy prices tend to rise continuously, and certain power production methods still have environmental impacts. Saha Farm Group has realized these challenges and has begun to promote environmental consciousness within the organization, starting with a focus on energy conservation and maximizing energy consumption efficiency to minimize the environmental impact.

As a result, the group of companies under Saha Farm has collaborated with WHAUP to plan for energy cost reduction and environmental impact mitigation by utilizing solar power, a clean



energy source that can be produced all year-round. Covering an area of up to 300 rai at Saha Farm premises, the project encompasses 14 sub-projects with a production capacity of over 700,000 chickens per day. This initiative can potentially reduce energy consumption by about 30% when considering 24-hour operations. In the financial term, this could save over 100 Million Baht annually or approximately 1.6 Billion Baht over 14 years, in addition to reducing greenhouse gas emissions by over 870,000 tons over 25 years.

Finally, Saha Farm Group is confident that the collaboration with WHAUP will serve as a good example of incorporating clean energy technology to support the agriculture industry, reducing reliance on traditional energy sources, leading to long-term cost savings, and contributing to a better future for the planet.

CONTACT INFORMATION:

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https://www.sahafarms.com/en

BONCAFE (THAILAND) CO., LTD. EXPERIENCE IN USING THE WHABIT APPLICATION

Ms. Usapun Inteevoravong, Chief Executive Officer of Boncafe (Thailand) Co., Ltd., stated, "We want to encourage all employees to take better care of their health and exercise more. Corporate wellness is very important to the organization because good health helps improve work performance, reduce absenteeism, and foster a positive work environment. Boncafe strongly believes that investing in employee health is a worthwhile investment, as good health directly contributes to the organization's growth. Boncafe organizes various activities, such as the Step Challenge, one of the features of the WHAbit application, which has received significant attention and participation from employees, marking it as a successful health initiative. We also invite doctors and health experts to provide knowledge on health topics, and conduct annual health check-ups. Moreover, proper nutrition is also essential. The company holds activities to provide guidance to employees on healthy eating habits. We also emphasize mental health and financial well-being. We take a holistic approach and invest in our people. Our financial wellness program is a new dimension in employee care, offering financial analysis and



planning through dashboards. Having access to employee health data enables us to analyze and build on it to create personalized or customized health programs tailored to individual needs. The WHAbit application also includes a dashboard function, allowing easy access to information and providing convenience for employees across the organization.

CONTACT INFORMATION:

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Tel: +66 38 345 711

https://www.boncafe.co.th/en/home/

4. HIGHLIGHT PROJECT

In 2024, WHA Group fully transitioned into a Tech and Sustainability Company and applied technology in the development of various projects to support customers' operations with greater convenience and efficiency as follows:

LOGISTICS BUILDING MAINTENANCE SERVICE (LBMS) APPLICATION

WHA Group developed the LBMS (Logistics Building Maintenance Service) application for smartphones and computers in 2021 to expedite building and logistics maintenance, including repair work, insurance claims, and quality control and assurance. The results showed that the LBMS application reduced customer response times by up to 50 percent and saved time and costs for customers in their various operations. It also enabled customers to conveniently and systematically track the status of services 24 hours a day. Additionally, customers could communicate directly with the warehouse management team through the application so that the Group could provide immediate assistance. The Group continues to enhance the application to maximize customer satisfaction for users of both built-to-suit warehouses and ready-built factories or warehouses. In 2024, an additional 21,726 square meter of inventory was added to meet the increasing demand for rental factory buildings. During 2024, the application was used over 1,600 times, marking a significant success.

VEHICLE MANAGEMENT SYSTEM (VMS)

WHA Group has continuously developed the Vehicle Management System (VMS) to reduce traffic problems and the risk of accidents within the industrial estates. The Group installed an automatic traffic light control system combined with vehicle counting devices that can recognize license plates and control traffic lights based on real-time traffic conditions. This system not only enhances vehicle security and traffic management but also helps reduce fuel consumption, leading to decreased air pollution. This improvement benefits the health of customers using the services within the industrial estates of WHA. Additionally, the VMS system significantly reduces the fatality rate from traffic accidents.



In 2024, the VMS (Vehicle Management System) was installed at the main entrances and exits of all industrial estates of WHA, bringing the total number of VMS installations across the industrial estates to 40 locations.

VIRTUAL TOUR 360°

To connect with global investors without borders, WHA Group has implemented a 360-degree virtual tour system on our corporate website. This system utilizes drone technology to collect data, photographs, and related videos, providing investors with a clear view of WHA's industrial estates in Thailand and Vietnam, including office buildings, factories, warehouses, and the WHA Tower. It allows customers and investors to explore these areas in real time from anywhere in the world. The system has gained significant popularity and positive feedback from customers, and it has also been extended for use in sales. Customers can virtually explore industrial estates, warehouses, and various facilities as if they were physically present. This helps them better understand land details prior to an actual site visit, including land size, plot level differences, land conditions, and surrounding basic infrastructure such as location, terrain, and environment. Additionally, the virtual tour platform allows customers to view other industrial estates or those under development, giving them a clearer picture of future usage. The system also helps reduce travel time and expenses for investors and customers, especially those in remote areas, such as overseas locations or in cases with limited time, as there is no need to visit the site in person.





WHA Group has integrated various technologies into the virtual tour system, including the use of drones to capture images and videos of warehouse infrastructure, as well as the application of VR technology to create 3D model visualizations.

GREEN BUILDING

WHA Group has established a policy for the design and construction of warehouses that are environmentally friendly and user-friendly, promoting good health for building occupants and ensuring comfort in building use. This includes designing air circulation to improve indoor air quality in accordance with ASHRAE standards and utilizing a fresh air supply system to reduce dust issues inside the building. Dust-trapping carpets are installed at office entrances and exits, and Low-VOC paint, which contains low levels of volatile organic compounds and is non-toxic, is used to maintain good indoor air quality. The Group also controls the indoor environment including temperature, humidity, and ventilation (HVAC) efficiently by using heat-resistant construction materials, Low-e glass to block UV rays, and Color bond metal sheets to dissipate heat. In addition, the Group has installed appropriate natural lighting systems and LED lighting throughout the building to ensure adequate illumination in accordance with standards.

OFFICE SOLUTIONS

WHA Group has built WHA Tower as a premium office building for lease, located on Bangna-Trad Road, a strategic location close to Suvarnabhumi Airport, commercial centers, international schools, and universities. It also serves as a gateway to the Eastern Economic Corridor (EEC). WHA Tower is within a 10-minute walking distance to public transportation, making it convenient for travel by public transit as well as by the Outer Ring Road, Bangkok-Chonburi Motorway, and other major roads.



WHA Group designed WHA Tower to be environmentally friendly, combining modernity with natural elements. The landscape design includes green spaces both inside and outside the building, with accessible rooftop gardens for building users. Water features are incorporated to help occupants connect with nature (Connection to Environment). Inside the building, the workspaces have a ceiling height of 2.9 meters for openness, along with large triple-glazed windows that provide 70 percent heat insulation, reducing electricity consumption from air conditioning. The design also allows natural light to enter the offices, enhancing the working atmosphere. LED lighting is installed throughout the building, saving up to 50 percent of electricity. The building uses a chilled water air conditioning system that not only increases user comfort (Thermal Comfort) but also helps save energy. The Group has installed PM2.5 monitoring and air quality control systems to maintain safe levels inside the building, protecting the health of employees, customers, tenants, and users. The building is also equipped with comprehensive facilities.







In addition, WHA Group provides convenience to employees and building tenants by offering shuttle services to public transportation such as electric trains or nearby shopping malls, which helps reduce energy consumption and greenhouse gas emissions. WHA Tower is designed to accommodate all building users, including people with disabilities and vulnerable groups, by integrating universal design principles to meet diverse needs and create an inclusive environment. Inside the office building, facilities are designed to support all user groups. There are convenience stores and restaurants offering a variety of menus, including fruits and healthy options, allowing employees and tenants easy access to fresh and nutritious food. Using Work Life Solutions principles, the building is designed to provide a flexible working environment that promotes creativity and supports physical health and mental health of everyone who uses the building.

WHA Group considers the quality of life, health, and occupational well-being of employees and tenants by the installation of touchless access control systems, temperature detection systems for individuals entering the building, as well as state-of-the-art security measures including high-standard security devices and surveillance systems that operate 24/7. These security features encompass fire detection systems, license plate recognition systems for vehicle access, and continuous CCTV monitoring. Furthermore, WHA Tower employs quality control measures for factors such as air quality and lighting to ensure they meet continuous standard requirements. The design also focuses on maintaining acoustical comfort by ensuring that the buildings system components adhere to established noise standards, preventing sound disturbances that could affect occupants. This approach aims to provide tenants and users to influence cognitive and emotional well-being through a variety of prevention and treatment effort.

SMART ECO INDUSTRIAL ESTATES

WHA Group recognizes that many people are connected to our industrial estates, including those working inside factories within the estates, passersby, and surrounding communities. Therefore, the Group has developed ecoindustrial estates to maintain environmental sustainability alongside social growth by designing projects and establishing systematic measures to preserve and monitor environmental quality, safety, and occupational health. This is aimed at promoting the quality of life and well-being of all people to meet high standards as follows:

BIOPHILIC DESIGN OF INDUSTRIAL ESTATES

WHA Group is committed to designing and constructing eco-industrial estates by integrating natural environments into the estate areas. The Group has designated green spaces within the industrial estates, which not only benefit those working or residing inside the estates by providing usable green areas but also help control environmental quality for the benefit of surrounding communities. In 2024, WHA Group received a total of 7 Eco Industrial Estate awards at the Eco Innovation Forum 2024, including 5 "Eco-Champion" awards, 1 "Eco-Excellence" award, and 1 "Eco-World Class" award. These awards reflect the Group's commitment to sustainability through the application of innovative technologies to address environmental issues and enhance the quality of life for users and residents around the estates.

AIR QUALITY CONTROL

WHA Group conducts regular air quality monitoring in the vicinity of the industrial estates and surrounding communities at least twice a year within a radius of 5 kilometers. The measurements include Total Suspended Particulates (TSP), Particulate Matter with a diameter not exceeding 10 microns (PM10), Particulate Matter with a diameter not exceeding 2.5 microns (PM2.5), Nitrogen Oxides (NOx), and Sulfur Dioxide (SO2). In addition to the regular monitoring, WHA Group has established an automated Air Quality Monitoring Station (AQMS) that continuously monitors air quality and meteorological data in the industrial estates. The AQMS provides real-time data and sends the results to the Environmental Monitoring and Control Center (EMCC), which serves as an environmental surveillance

and control center. The collected air quality data mentioned above is reported to relevant government agencies such as the Ministry of Natural Resources and Environment, the Industrial Estate Authority of Thailand, and the Office of Natural Resources and Environmental Policy and Planning. These reports are part of the Environmental Impact Assessment (EIA) Monitoring Report, which is submitted twice a year. In 2024, WHA Group has successfully achieved the targets set in the Environmental Impact Assessment (EIA) evaluation. The air quality indicators in the general atmosphere are within the specified standards.



WATER QUALITY CONTROL WITHIN THE BUILDING AND INDUSTRIAL ESTATES

WHA Group places great importance on access to quality utilities, especially clean water, which affects the health of users. Therefore, water quality within the WHA Tower office building and industrial estates of WHA is regularly monitored and controlled. Daily analysis of raw water and produced water quality is conducted, with monthly summary reports, to ensure that all relevant stakeholders, including the Group's employees, tenants, and tenants' employees, have access to clean water resources comprehensively.

WHA CUSTOMER CLUB

With a commitment to close interaction with customers to better understand their interests and concerns, the Group has established various customer clubs as additional channels for communication. The outstanding customer clubs in 2024 are as follows:

1. WHA INVESTOR CLUB



WHA Investor Club: The open club for all customers in the industrial estates of WHA. Members receive monthly or quarterly newsletters and invitations to participate in various seminars and training sessions. In 2024, the Group organized three seminars for club members as follows:

- Cyber Risk Landscape: Understand your exposure and key consideration for Manufacturer by Marsh Thailand Marsh
- KPMG in Thailand: Accounting, Legal, and Tax Updates
- The Path to Net Zero focused on Smart Energy Strategies for Industry 5.0, emphasizing energy efficiency and the transition to renewable energy, held at Eastern Seaboard Industrial Estate (Rayong) and WHA Saraburi Industrial Land



2. THE JAPANESE EXECUTIVE CLUB (JAPANESE CLUB)

Established 25 years ago in 2000 and currently has 150 member Japanese companies operating in the industrial estates of WHA in Chonburi and Rayong Province. The club holds monthly meetings at the office at Eastern Seaboard Industrial Estate (Rayong). In 2014, the Group established the Japanese Executive Club at the WHA Saraburi Industrial Land, which now has 22 member Japanese companies. This club holds meetings every 2 months at the office at WHA Saraburi Industrial Land to exchange information on topics such as legal changes, factory management, new laws related to operations in Thailand, wages, employee benefits, waste management, and energy production from waste. The club also serves as a networking channel for Japanese executives working in the industrial estates of WHA.





3. EASTERN SEABOARD INDUSTRIAL ESTATE (RAYONG) HUMAN RESOURCES CLUB (ESIE HR CLUB)

Established in 1997 with members consisting of HR managers and personnel officers. The club was founded to serve as a central platform for exchanging information related to human resources, such as labor laws, employee benefits, and wages, as well as to build a network of alliances among members. Additionally, the club organizes social responsibility activities and internal events to encourage members to participate together. Currently, the club has members from over 200 companies in the industrial estates of WHA. Monthly meetings are held regularly at the conference room of the office at Eastern Seaboard Industrial Estate (Rayong) to exchange information about labor laws and updates beneficial to human resource management, along with training programs conducted by expert speakers specializing in human resource management.





4. EASTERN SEABOARD LABOR RELATION CLUB (ESLR CLUB)

Established in 2005, the club currently has members who are HR managers from 100 companies within the industrial estates of WHA. These members are interested in exchanging information on labor union management. The club serves as an information center on labor issues for members seeking knowledge about labor unions, regulations, and provides support or advice regarding labor dispute resolutions or other matters related to labor agreements. The club holds monthly meetings at the conference room of WHA Training Center, ESIE Plaza 1, Eastern Seaboard Industrial Estate (Rayong) to accurately and comprehensively communicate information to the members.





5. WHA SAFETY AND ENVIRONMENTAL CLUB WITHIN THE INDUSTRIAL ESTATES AND INDUSTRIAL LANDS OF WHA (WHA SAFETY AND ENVIRONMENTAL CLUB)

Collaboration between the Group and the Industrial Estate Authority of Thailand, with representatives or personnel responsible for safety and environmental matters from establishments within the 12 industrial estates and industrial lands of WHA in Chonburi, Rayong, and Saraburi Province as members of the club. The club's purpose is to provide knowledge and exchange information regarding regulations and laws, as well as to carry out Corporate Social Responsibility (CSR) activities. Each industrial estate and industrial land of WHA holds at least three meetings per year, and organizes various safety and environmental activities in the industrial factories. These efforts aim to promote effective management systems for safety and environmental standards while fostering good relationships between agencies and the communities surrounding WHA's industrial estates and lands.





SUPPORTENTREPRENEURS TO START BUSINESSES IN THAILAND

WHA Industrial Development Public Company Limited (WHAID) supported the organization of the 51st CHANGAN Sourcing Day business negotiation meeting on June 5, 2024, at Rama Gardens Hotel, Bangkok. This event was held in collaboration with the Board of Investment (BOI), Changan Auto Southeast Asia Co., Ltd., and the WHAID group of companies. The purpose of the meeting was to source automotive parts from domestic manufacturers. A total of 232 companies with 445 participants attended the event. The event featured displays of sample parts from CHANGAN planned for local procurement, including High Voltage Harness, Outside Door Handle, E-Drive, Cross Car Beam (Die Casting), Intelligent Thermal, Outside Door Mirror, and Headlining/Carpet. Changan selected 78 parts manufacturers from 67 companies to participate in business negotiations with the Changan purchasing team, divided into 6 groups as follows:



- Interior & Exterior Group
- Stamping Group
- Sealing and Sound Absorption Group
- Aluminum Die-Casting Group
- Suspension System Group
- Electrical Parts Group

This event helped to build confidence and promote investment growth in Thailand. It emphasized that Thailand not only has the potential to be a regional hub for electric vehicle production but also has the ability to advance to a global level in the future.

MOBILIX PROJECT



WHA Group recognizes that transportation activities across various businesses inevitably cause environmental pollution. Therefore, to support the Group's customers in operating their businesses on a sustainable basis while minimizing environmental impact, the Group has collaborated with business partners to develop Thailand's first Green Logistics solution under the concept of "Driving Sustainability in Motion." The Group has applied advanced innovations to cover every aspect of the electric commercial vehicle value chain to strengthen a comprehensive Electric Vehicle (EV) ecosystem. Mobilix helps customers efficiently manage transportation through electric vehicles with three main services: Electric Vehicle Rental Service, On-Premise and Public EV Charging Solutions—which provide chargers and related equipment for both personal and commercial electric vehicles—and the Mobilix Software Solution, an intelligent digital platform for managing electric vehicles and batteries via the "Mobilix" application. Equipped with advanced workflow management systems, Mobilix handles transportation system management, vehicle maintenance, and optimizes transportation routes to minimize energy consumption. This project is regarded as a revolutionary step toward sustainable transportation, effectively reducing greenhouse gas emissions, enhancing customers' transportation capabilities, lowering costs, and driving their business growth responsibly with sustainabilityfocused practices that emphasize environmental and social responsibility.

WHA Group launched Mobilix in 2024 and received very positive feedback from customers, providing electric vehicle rentals with a fleet of 318 cars and constructing 9 charging stations with a total capacity of over 13,680 kilowatts. In 2025, the Group established its fifth business unit under the name WHA Mobility, with a strategy to continuously strengthen and modernize the business to fully meet customer needs and promote long-term sustainable growth. The Group has set a target to offer 1,700 EV rentals in 2025 and aims to expand this number to 20,000 vehicles by 2029. In addition to generating revenue for the Group, this initiative is expected to reduce greenhouse gas emissions across the supply chain by up to 280,000 tons of carbon dioxide equivalent (tCO2e) per year, which is comparable to planting 280,000 rai of trees. This project plays a key role in enabling customers to operate their businesses more sustainably. As the Group implements its strategies and initiatives, it not only addresses the challenges faced by customers in the industrial sector but also enhances overall customer satisfaction and drives positive economic and environmental impacts in the long term.

DRONE INSPECTION

WHA Group has adopted drone technology capable of capturing high-resolution images and videos, as well as providing precise positioning and navigation, to enhance the efficiency of customer services. By integrating Artificial Intelligence (AI) with drone control systems, the Group can analyze environmental conditions and process indepth images to detect hard-to-reach issues such as leaks or damage on rooftops and solar panel installations on buildings and warehouses. This allows for timely repairs and proactive maintenance planning to ensure rooftops and related equipment remain in optimal condition.

Using drones to inspect warehouses is a highly efficient and accurate method. It helps prevent business interruptions for customers and reduces potential risks associated with warehouse operations, such as accidents within buildings or storage facilities.



WHASApp APPLICATION

In 2024, the Group developed the WHASApp application for customers in both Thailand and Vietnam. Through the app, customers can access various services, including contacting customer service via messages for assistance, receiving broadcast notifications for updates, events, or activities, and exploring virtual 360° tours across all the Group's premises. Customers can also access important information through the app, such as contract details, insights into utility and solar energy usage, payment status, and various billing documents.

This application enhances customer convenience in communicating with the Group, allowing timely access to information and support via their phones, enabling smooth and efficient business operations. It is another way to help improve customer experience and satisfaction in doing business with the Group. In the past year, the app had 1,257 users. The Group aims to increase the number of users to 4,000 users in 2025 and 50,000 users by 2029.



5. IMPACTS ON STAKEHOLDERS AND ENVIRONMENT

Customers are key stakeholders highly valued by WHA Group because they play a fundamental role in enabling the Group's business to operate sustainably. The Group is therefore committed to managing customer relationships efficiently to comprehensively meet customer needs. Accordingly, the Group continuously implements customer management strategies and develops projects that support customers' business operations. Moreover, the Group supports enhancing customers' environmental performance through the design and construction of buildings that promote water and energy savings, thereby reducing pollution and greenhouse gas emissions. These efforts include increasing green spaces inside and outside WHA Tower, designing eco-industrial estates, as well as implementing wastewater treatment projects before discharge into natural sources and water recycling initiatives to reduce water resource consumption. These projects help mitigate water scarcity impacts on surrounding communities. Besides generating positive environmental impacts, these initiatives effectively meet customers' needs for sustainable business growth. The Group also creates positive impacts for customers and society by promoting health and safety activities for users within WHA Tower, industrial estates, and nearby communities. This approach considers safety and health from building design and construction perspectives, including lighting, noise, pollution control, and promoting physical and mental well-being of



occupants. Additionally, the Group has implemented vehicle management systems to facilitate convenience and reduce accidents for users in these areas. The Group firmly believes that good customer relationship management is a crucial foundation for sustainable business operations for both the Group and our customers, in terms of financial performance, social responsibility, and environmental stewardship over the long term.

6. NEXT STEP

WHA Group has planned to develop the organization for sustainable growth while preserving the Group's core competency as a problem solver for customers and a reliable partner. In 2025, the Group is committed to driving customer satisfaction to reach 90 percent by utilizing technology and innovation to facilitate customers in terms of speed, accuracy, and safety, in line with the Group's goal to become a fully Tech-Driven Organization. The Group also plans to implement strategies that integrate technology with the use of data and AI, along with developing personnel capabilities to continuously provide excellent service to fully meet customer needs. The Group will maintain a customercentric organizational culture by encouraging every employee to recognize the importance of customers and strive to deliver the best service. Focusing on timely problem resolution, the Group plans to enhance the complaint management system to be more efficient and provide more diverse channels, enabling customers to submit complaints conveniently and quickly. Additionally, the Group aims to improve communication channels through the WHASApp application to be more effective and user-friendly, setting a target of 4,000 users in 2025 and a long-term goal of 50,000 users by 2029.

WHA Group not only continuously develops the operational processes to ensure customers receive the best experience in conducting business with the Group but also aims to expand into five core businesses.



The Group plans to launch a new business cluster called "Mobility" in 2025 under the Mobilix brand. The Group has set a target to rent out 1,700 electric vehicles (EVs), install 76 charging stations, and register 900 EVs on the Mobilix application in 2025. The longterm goals include registering 6,000 EVs on the app and having 20,000 EVs rented for transportation by 2029 which will help reduce greenhouse gas emissions by 280,000 tCO2e per year, equivalent to planting 280,000 rai of trees. This project will play a vital role in supporting customers to operate their businesses sustainably. By implementing these strategies and projects, the Group will help solve various customer challenges, support their business operations, and increase overall customer satisfaction across all customer groups. This will enable WHA Group to maintain our position as the number one leader in all the business sectors nationwide.

SUPPLY CHAIN MANAGEMENT



1. GLOBAL TREND

Currently, supply chains in businesses worldwide have become increasingly complex due to global economic uncertainties caused by inflation, the energy crisis, and geopolitical tension. These factors have compelled companies to develop supply chain management approaches covering raw material management, inventory control of various materials and equipment, as well as the transportation of materials, equipment, and personnel to operational sites to deliver quality goods and services on time. In this era of digital transformation, companies are increasingly adopting technology to manage supply chains more comprehensively and rapidly. Moreover, leading organizations worldwide have integrated sustainable development approaches that consider Environmental, Social, and Governance (ESG) issues into their business operations from upstream to downstream, known as "Sustainable Supply Chain Management." This approach can increase opportunities, reduce risks, and enhance business competitiveness. It also encourages other operators, who are partners in manufacturing goods or services, to recognize the importance of sustainability and conduct business responsibly.

2. OUR POSITION

WHA Group manages the supply chain in alignment with sustainability operations by integrating business ethics, environmental, health, safety, and social aspects into the procurement process. The Group has also developed the digital systems to support technological trends and changes in the global market. As WHA Group fully transitioned into a Tech and Sustainability Company in 2024, the Group adopted various technologies and operational programs in the procurement process to enhance efficiency and agility. These include the Corporate Procurement Management System (CPRS), which the Group has continuously used for sourcing partners, registering new suppliers, and evaluating suppliers through an online system. Additionally, in 2024, the Group implemented "the Procurement Yoda system" for the purchasing department. This system, developed using Generative AI technology, answers questions regarding procurement processes, assists in tracking the status of Purchase Requisitions and Purchase Orders, and generates in-depth procurement reports via Power BI (Procurement Dashboard). Conducting business sustainably not only positively impacts the environment, society, governance, economy, and human rights of stakeholders but also helps enhance the potential of suppliers, providing them with opportunities to develop sustainable business growth alongside the Company in the long term.

3. MANAGEMENT APPROACH

3.1 GOVERNANCE STRUCTURE

Supply chain management is a process that WHA Group places great importance on, focusing on transparency, fairness, and responsibility toward all stakeholder groups under the principles of sustainable development. The Group assigns the procurement department as the responsible unit for managing suppliers and the supply chain to ensure systematic operations aligned with ESG practices. The procurement department reports directly to the Group Chief Financial Officer, who manages and supervises the unit, and reports to the Board of Directors to ensure that business operations in all sectors adhere to good governance principles, while promoting the organization's stability and long-term sustainability.

Roles	Responsibilities
Group Chief Financial Officer	Responsible for managing and supervising the procurement department to ensure systematic and efficient operations in line with ESG practices, focusing on developing a supply chain that is transparent, fair, and accountable to all stakeholder groups. This includes establishing guidelines and strategies for managing risks related to the supply chain to ensure that WHA Group's operations can sustainably adapt to environmental, social, and governance challenges and changes.
Board of Directors	The Board of Directors is responsible for overseeing and setting policies for the Group's supply chain management in accordance with good governance principles. This includes monitoring and reviewing operations to ensure the organization's supply chain is transparent, ethical, and capable of managing risks appropriately. Furthermore, the Board supports the development of guidelines and measures that promote the organization's stability and long-term sustainability, as well as the continuous improvement and alignment of policies with international standards and ESG requirements.

SUPPLIER CODE OF CONDUCT

WHA Group has established a Supplier Code of Conduct, applicable across all business units, to ensure that both existing and new suppliers and contractors are aware of the Group's objectives and approach to sustainable supply chain management. The content of the Supplier Code of Conduct covers three key sustainability topics as follows:

- 1. Business Ethics
- 2. Basic Understanding of Human Rights
- Occupational Health, Safety, and Working Environment

WHA Group has distributed the Supplier Code of Conduct to all suppliers and contractors for acknowledgment and signature, requiring their compliance with the Code. In addition, the Group conducts annual training sessions for all suppliers and



contractors, as well as for procurement personnel, to raise awareness and ensure effective implementation and management of a sustainable supply chain. (The Supplier Code of Conduct can be accessed here)

3.2 RISK AND OPPORTUNITIES MANAGEMENT STRATEGY

The Group recognizes that the operations of our suppliers play a crucial role in ensuring business continuity and competitiveness. Therefore, the Group must consider the risks associated with inadequate supply chain oversight, risks that could impact to WHA Group, the environment, and other stakeholders. At the same time, there are business opportunities to be gained when suppliers operate in alignment with sustainability principles. In response, the Group continuously assesses supplier risks in the areas of Environmental, Social, and Governance (ESG) performance.

> Risks **Opportunities**

Ineffective supply chain management can adversely impact the Group's business operations, resulting in disruptions or delays, shortages of materials, goods, or services, among other challenges. Furthermore, the inability to enforce environmental and labor standards among suppliers may lead to regulatory risks, stakeholder complaints, and reputational damage, as well as increased operational costs. These issues could ultimately undermine WHA the Group's long-term competitiveness.

Effective supply chain management enhances business flexibility and adaptability, reduces procurement and transportation costs, and streamlines operational processes for greater efficiency. Moreover, selecting suppliers that uphold strong sustainability and ethical practices helps mitigate environmental and social risks, while also generating long-term business value.

WHA Group must therefore implement an effective supply chain management system, beginning with the selection of suppliers that demonstrate strong sustainability performance, risk assessment, and the identification of key suppliers, through to the evaluation of supplier performance. This ensures that operations throughout the supply chain are aligned with the Group's long-standing commitment to sustainable business practices.

3.3 RISK MANAGEMENT **NEW SUPPLIER SELECTION PROCESS**

WHA Group adopts an approach to selecting new suppliers that aligns with our sustainability development goals. In addition to selecting suppliers that comply with applicable laws and regulations. In addition to ensuring that suppliers comply with laws and regulations, WHA

Group also considers the quality of products, employee



safety, social responsibility, and environmental impact of suppliers. WHA Group sets criteria such as product and service quality, transparency and fairness in business practices, environmental considerations, and social impact as evaluation criteria for current and new suppliers. These criteria are used to assess the potential of current suppliers and in the selection of new suppliers to grow together throughout the supply chain from sourcing raw materials to delivering products to consumers. In the process of selecting new business suppliers, WHA Group requests that all new suppliers complete a Pre-Qualification Form (PQ) which includes questions to assess qualifications in quality, price, production capabilities, management systems, and sustainable potential (Environmental, Social, and Governance (ESG)).

In 2024, a total of 260 new suppliers underwent assessment through established processes. It was determined that each new supplier possessed potential and met the sustainability criteria. WHA Group sets the average Credit Term at 30-45 days, depending on the mutually agreed terms and conditions between WHA Group and the suppliers. WHA Group effectively manages our cash flow based on the historical average time taken to settle debts with suppliers. Consequently, WHA Group has no difficulties in paying our suppliers, and the Credit Term conditions are typically met without any issues.

SUPPLY CHAIN RISK MANAGEMENT

Supplier Risk Management

Supplier Registration

Supplier Efficiency

- Critical supplier identification
- Supplier risk assessments (Economic, Social, Environment)
- Pre-Qualification form
- Approved Vendor List registration: AVL
- · Annual supplier assessment
- Supplier Development Potential

CRITICAL SUPPLIER IDENTIFICATION

Fluctuations and disruptions in the procurement of products and services can pose significant risks to business operations and may potentially lead to severe interruptions. To mitigate such risks, WHA Group has established a process to regularly review and identify key suppliers, ensuring the continuity of product and service procurement and smooth business operations. Selecting the right suppliers is a critical component in enhancing long-term business stability. The Group employs specific criteria to identify key suppliers (Critical Tier 1 Supplier) using the ABC system. This categorization is based on business relevance, annual expenditure, the importance of the products or services provided by the suppliers, or the possibility of using alternative suppliers.

In 2024, the Group conducted a comprehensive review and identified all key suppliers, categorizing them into Critical Tier 1 Suppliers and Critical Non-Tier 1 Suppliers, as presented in the table below:

SUPPLIER ANALYSIS AND CRITICAL SUPPLIER IDENTIFICATION

Supplier Analysis	Number of Suppliers
Total supplier in 2024	680
Critical Tier 1 Supplier	17
Critical Non-Tier 1 Supplier	5



SUPPLIER RISK ASSESSMENT (ENVIRONMENTAL, SOCIAL, AND GOVERNANCE ASPECTS)

As part of WHA Group's efforts to govern our supply chain towards sustainable development, WHA Group conducts risk assessments of our suppliers' business operations, covering potential environmental and social impacts. The assessment utilizes a Supplier Risk Assessment Form focusing on sustainability risks (ESG risks) that could affect the Group, with particular attention to issues such as fraud, corruption, and ethical business conduct.

The assessment process incorporates ESG-related criteria and considers various risk dimensions, including Country-Specific Risk, Sector-Specific Risk, and Commodity-Specific Risk. In 2024, the Group set a target to assess 100% of our suppliers. This includes a target of 100% assessment for high-risk Non-Tier 1 suppliers. The Group successfully achieved these targets, and the results of the assessment are presented in the table below;

HIGH RISK SUPPLIER

Supplier Analysis	Number of Suppliers
Total supplier in 2024	680
High Risk Supplier	55
High Risk Non-Tier 1 Supplier	5

Note: 5 suppliers from the group of critical non-Tier 1 suppliers with WHA Group are the same as the high-risk non-Tier 1 suppliers.

Critical Suppliers and High-Risk Suppliers are classified as Significant Suppliers. In 2024, there were 72 Significant Tier-1 Suppliers who doing business directly with WHA Group and 5 Significant Non-Tier 1 Suppliers who were not doing business with WHA Group. All significant Tier 1 suppliers underwent on-site audits, which covered key ESG-related issues.

EVALUATION OF SUPPLIER PERFORMANCE

WHA Group has established a follow-up and evaluation system to assess the performance of Tier 1 suppliers and critical Non-Tier 1 suppliers. The assessment of suppliers is divided into two categories:

- The Desktop Assessment after delivery focuses on the quality of the product, service, price, on time deliver, and cooperation with relevant agencies and
- 2) The On-Site Audit to assess the qualifications and performance of critical Tier 1 suppliers, high-risk suppliers, and critical non-Tier 1 suppliers that are considered at risk in relation to business ethics, environment, health, safety, and social management. It also ensures compliance with business ethics and risk prevention processes. This assessment will referencing recognized management standards such as ISO 9001, ISO 14001, along with Thai labor standards and relevant laws.

From the results of on-site assessment of Significant Suppliers in 2024, which comprised a total of 17 Critical Tier 1 Suppliers and 55 High Risk Suppliers, totaling 100%, it was found that 4 suppliers were identified as high risk including ESG-related risks. All 4 of these suppliers have already implemented management and corrective action plans, representing 100 percent compliance. As for Significant Non-Tier 1 Suppliers, which include 5 Critical Non-Tier 1 Suppliers and 5 High Risk Non-Tier 1 Suppliers who do not conduct business directly with the Group, no suppliers were found to have deficiencies requiring corrective action plans.

Critical Supplier Identification

 Critical suppliers are identified through Spending Analysis based on criticality of provided components or services, difficulty to substitute, etc.

Supplier Sustainability Risk Assessment

 Suppliers' risks in terms of governance, environmental and social aspects are assessed and prioritized.

Risk Management Measure

Based on supplier risk profiles, appropriate mitigation measures will be carried out including implementation of corrective actions or termination of contract.

CORPORATE PROCUREMENT MANAGEMENT SYSTEM (CPRS)

WHA Group has enhanced the supply chain management capabilities by integrating technology into the operations through the Corporate Procurement Management System (CPRS), an online procurement management platform. This system facilitates convenient, fast, and agile communication between the Group and our suppliers. It also promotes transparency, reduces delays, and minimizes document errors efficiently. Additionally, it streamlines the project bidding process, allowing qualified suppliers to securely upload their quotations via the program's E-Bidding system. Authorized personnel, based on contract value, then approve these quotations. The system also includes features for evaluating supplier qualifications, assessing sustainability performance (ESG), and managing the supplier database, enabling automated project bidding.

Moreover, the system appropriately incorporates sustainable supply chain management principles into workflows, such as the online supplier Pre-qualification form (PQ) for new supplier assessments, on-site inspections, and third-party verifications. These cover business ethics, environmental impact, health, safety, and social performance. This channel not only enhances efficiency and speed but also ensures transparency in supplier selection and supports annual supplier performance evaluations. The Group also provides sustainability capability training to suppliers, along with technical support programs to improve their Environmental, Social, and Governance (ESG) performance, especially for those facing operational challenges.

In 2024, WHA Group further developed the system in Phase 2 by adding supply chain management capabilities using Power BI, aiming to enable data analysis and reporting through the Procurement Dashboard. Additionally, on October 25, 2024, the Group conducted online training for suppliers on using the CPRS system, including supplier registration procedures, ESG verification, workplace safety, and raising awareness of information security.







SUPPLIER CAPACITY BUILDING

The development of suppliers' capabilities is an integral part of sustainable supply chain management. WHA Group believes that sharing knowledge is the starting point for developing sustainable supplier relationships. Therefore, the Group has initiated projects to develop the capabilities of suppliers and contractors in sustainability to achieve sustainable development outcomes. These projects aim to raise awareness, provide in-depth technical development for target groups, and provide guidance on system adjustments to address gaps identified during the assessments.







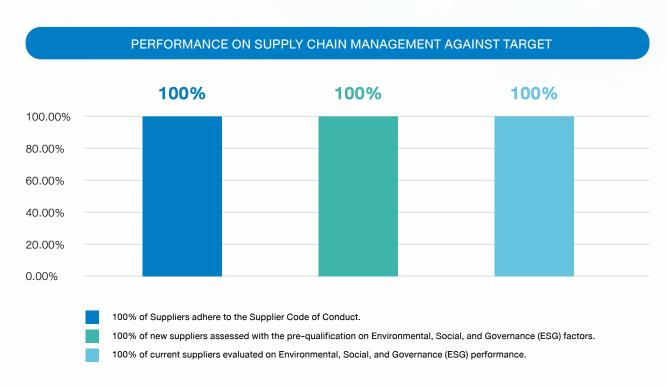


3.4 METRICS AND TARGETS

SUPPLY CHAIN TARGET

100% of Suppliers adhere to the Supplier Code of Conduct.

100% of new suppliers assessed with the pre-qualification on Environmental, Social, and Governance (ESG) factors. 100% of current suppliers evaluated on Environmental, Social, and Governance (ESG) performance.



COVERAGE AND PROGRESS OF SUPPLIER ASSESSMENT PROGRAM

	Performance 2024	Target 2024
Total number of suppliers assessed via desk assessments/ on-site assessments	77	77
% of significant suppliers assessed	100%	100%
Number of suppliers assessed with substantial actual/ potential negative impacts	4	
% of suppliers with substantial actual/potential negative impacts with agreed corrective action/improvement plan	100%	
Number of suppliers with substantial actual/potential negative impacts that were terminated	0	

COVERAGE AND PROGRESS OF SUPPLIERS WITH CORRECTIVE ACTION PLANS

	Performance 2024	Target 2024
Total number of suppliers supported in corrective action plan implementation	4	4
% of suppliers assessed with substantial actual/potential negative impacts supported in corrective action plan implementation	100%	100%

COVERAGE AND PROGRESS OF SUPPLIERS IN CAPACITY BUILDING PROGRAMS

	Performance 2024	Target 2024
Total number of suppliers in capacity building programs	77	77
% of significant suppliers in capacity building programs	100%	100%

4. PROJECT HIGHLIGHT

TRAINING ON BUSINESS OPERATIONS WITH REGARD TO ENVIRONMENTAL, SOCIAL, AND GOVERNANCE (ESG) AND WHA'S SUPPLIER CODE OF CONDUCT

WHA Group is committed to enhancing the business capabilities of our suppliers to grow sustainably together. To support and promote suppliers' operations, the Group has organized the training event titled "Business Operations with Consideration of Environmental, Social, and Governance (ESG) and the Supplier Code of Conduct of WHA Group." The event, "WHA Supplier Day 2024," is scheduled for March 11, 2025. A total of 74 suppliers were invited to attend in person, while 606 suppliers participated online. It is expected that 100% of the attendees are from the Group's significant suppliers.



Time	Schedule		
13.00 - 13.30 hrs.	Registration		
13.00 - 13.45 hrs.	Welcome Remarks by Khun Jareeporn Jarukornsakul (Chairman of the Executive Committee and Group Chief Executive Officer, WHA Corporation Public Company Limited)		
13.45 - 14.30 hrs.	Artificial Intelligence (AI) presented by Khun Patcharin Tongaree (Assistant Director, Information Technology Department)		
14.30 – 15.00 hrs.	Anti-Corruption (CAC), Code of Conduct presented by Khun Natthika Praepet		
15.00 - 15.15 hrs.	Break		
15.15 – 16.00 hrs.	Climate Change presented by Khun Boonrod Yaowapruek, Expert from Creagy		
16.00 - 17.00 hrs.	Awards Ceremony and Certificate Presentation		

In addition, WHA Group will communicate this information to other suppliers by distributing recorded training videos on conducting business with consideration for Environmental, Social, and Governance (ESG) factors, as well as the Group's Supplier Code of Conduct, to all suppliers. The Supplier Code of Conduct covers topics including conducting business in accordance with good governance principles, respecting the human rights of all stakeholders, workplace safety, environmental management, and biodiversity, among others.









SUPPLIER DAY

WHA Group organized the WHA Supplier Day 2024 event on March 11, 2025, as part of our sustainable supply chain management efforts. The event was officially opened by Ms. Jareeporn Jarukornsakul, Chairwoman of the Executive Committee and Chief Executive Officer of WHA Corporation Public Company Limited. More than 500 suppliers participated, both onsite at WHA Tower and online.

This activity reflected WHA Group's commitment to conducting business in accordance with ESG policies through the communication of strategic directions and business guidelines. The goal was to align suppliers' sustainability practices with those of the Group, focusing on responsibility in environmental, social, and governance aspects. Additionally, the event communicated the principles of the Circular Economy, encouraging suppliers to adopt more environmentally conscious operations and to jointly promote circular economic activities. The Group also shared our sustainability ambitions, including the use of electric vehicles to reduce greenhouse gas emissions and efforts to reduce construction waste.

The activities at the WHA Supplier Day focused on sustainable operations and organizational development.

Accordingly, eight outstanding supplier companies were selected to receive awards. These companies, from the Significant Vendor group, achieved ESG evaluation scores exceeding 90% based on the SMETA Standard. This recognition serves to encourage suppliers to appreciate the importance of conducting business sustainably and to continue improving their operational performance. The awarded supplier companies are as follows:

- 1. B.S.Y. CONSTRUCTION CO., LTD.
- 2. BANGSAEN MAHANAKORN CO., LTD.
- 3. KOR SANG 14 CO., LTD.
- 4. TRINA SOLAR ENERGY DEVELOPMENT PTE. LTD.
- 5. SINO-THAI ENGINEERING & CONSTRUCTION PCL.
- 6. SSN SYSTEM ENGINEERING CO., LTD.
- 7. STEP ENGINEERING AND MANAGEMENT CO., LTD.
- 8. A2 TECHNOLOGIES CO., LTD.

In addition, the Group presented certificates of recognition to more than 70 suppliers who have demonstrated a strong commitment to environmental and social responsibility, and who uphold principles of good governance for the benefit of all stakeholders. This initiative aims to support these suppliers in growing sustainably alongside the Group.





IN-HOUSE TRAINING FOR SUPPLIER

WHA Group organized a training session for suppliers on January 24, 2025, regarding safety, health, work procedures, and the registration process for suppliers in the online procurement system (CPRS).





IN-DEPTH TECHNICAL TRAINING

WHA Group organizes technical training sessions for suppliers to enhance their operational capabilities in compliance with legal requirements, various standards, and the Group's own standards. These technical trainings also help mitigate risks that may arise from suppliers' operations. In 2024, the Group conducted the following in-depth technical training:

1. Cybersecurity Training: The Information Technology Department organized this training on October 25, 2024, with a total of 136 suppliers participating. The content covered information security awareness. The results showed that 35 suppliers improved their cybersecurity knowledge by 92.57%.

2. Safety Training: This was divided into two main topics: General Safety and Process Safety for contractors working in production processes within WHA Group's premises. The Safety Department organized this training on January 16, 2024, with 150 suppliers attending. The Group issued safety training certificates to all 150 suppliers who completed the training during the year. Additionally, the Group requires verification of these certificates before suppliers enter the operational areas to ensure that all suppliers working on-site have the knowledge and capability to comply with the Group's safety operational guidelines, thereby reducing the risk of workplace accidents.

PROCUREMENT STAFF TRAINING PROGRAM

WHA Group provides monthly training sessions for procurement personnel. Most recently, a training was conducted on the topics of "Generative AI" and "ESG DNA" on December 3, 2024, with a total of 9 participants. The objective was to raise awareness and equip staff with the capability to manage and operate a sustainable supply chain.





BAAN DEK PROJECT FOR CHILDREN IN WORKER CAMPS

WHA Group and Baan Dek Foundation (BDF) have jointly signed a memorandum of understanding to support the Building Social Impact (BSI). The aim is to create a safe environment, improve access to health, education, and protection for children and families living in construction worker camps. Under this project, training courses on ESG have been organized, covering social issues and human rights. The training was conducted by expert speakers for contractors and camp residents to cultivate and promote ESG

concepts, especially in terms of occupational health and safety. WHA Group is aware of the importance of these issues, with over 20 representatives from contractors and WHA Group participating. Recently, WHA Group invited the BSI Foundation Network to participate as speakers in WHA Supplier Day for key suppliers on February 7, 2024. Currently, WHA Group, Baan Dek Foundation, and contractors are planning to improve the quality of life for residents in construction worker camps.











5. IMPACTS ON STAKEHOLDERS AND ENVIRONMENT

WHA Group manages the supply chain from upstream to downstream based on the principles of sustainable supply chain management. This approach not only enables the Group to operate its business efficiently and deliver products and services to customers effectively but also generates positive impacts on society and the environment. Communicating business ethics with suppliers fosters trust and transparency in operations, including compliance with human rights standards, workplace safety, and environmental management. Moreover, the Group's supply chain management system and various initiatives help strengthen relationships with suppliers and promote their capacity to conduct business responsibly toward all stakeholders, including employees, communities, and consumers. Providing ESG practice training to suppliers also encourages knowledge sharing and the adoption of good sustainability practices. When suppliers gain a clear understanding and commitment to sustainable practices, they are better positioned to reduce the negative impacts of their operations on society and the environment. This contributes to the development of a strong supply chain that supports balanced and sustainable business growth.

6. NEXT STEP

Effective supply chain management is a key driver in strengthening sustainability and enhancing WHA Group's competitive advantage. As such, the Group is committed to continuously improving our supply chain processes

in alignment with best practices and our sustainability goals to create long-term value for all stakeholders. The Group has implemented a waste management plan for waste generated from construction or repair activities to oversee waste management operations by suppliers or contractors and prevent negative impacts on society and the environment. In 2025, the Group also plans to improve the supplier selection criteria to incorporate circular economy practices. These requirements will be embedded in contracts, Bill of Quantities (BOQ), and Terms of Reference (TOR) before commencing business operations to ensure suppliers implement circular economy initiatives in line with the Group's practices. Additionally, WHA Group has development plans for 2025 to further enhance the efficiency of supply chain management. These include the implementation of AI Procurement Yoda Phase 2 to streamline the procurement process, and the development of Corporate Procurement Management System (CPRS) Phase 2, which will cover contract management processes and the development of a Procurement Reference Price Dashboard via Power Bl.

The Group also aims to continuously improve the performance of our suppliers by set targets to maintain a 100% performance evaluation coverage rate for all significant suppliers and 100% corrective action plan support rate for all significant suppliers annually. In 2025, the Group targets to strengthen the capabilities of 77 suppliers and reduce the number of high-risk suppliers (post-risk mitigation) to no more than 3%.



INNOVATION AND TECHNOLOGY MANAGEMENT



1. GLOBAL TREND

With the ongoing wave of digital transformation reshaping businesses across all sectors worldwide, along with rapidly changing and increasingly competitive economic conditions, organizations must adapt quickly and incorporate advanced technologies such as Artificial Intelligence (AI), Blockchain, Intelligent Automation, and Web 3.0 into their corporate strategies to gain a competitive advantage. The adoption of these technologies not only improves operational efficiency, reduces costs, and enhances stability but also meets the expectations of modern consumers, strengthens data security, and minimizes environmental impact in the long term. For long term success, businesses must focus on developing effective digital strategies, fostering continuous learning, and selecting appropriate technologies to apply in their operations. This helps sustain competitiveness, create new opportunities, reduce potential risks, and respond to customer needs. In doing so, businesses can continue to operate with confidence while minimizing negative effects on the environment and society and contributing to sustainable economic growth.

2. OUR POSITION

WHA Group places great importance on continuously developing the business through technology to prepare for the rapidly changing market landscape. This is pursued through a commitment to sustainable business practices encompassing Environmental, Social, and Governance (ESG) dimensions, aimed at preventing violations of the rights of individuals, organizations, and stakeholders across all sectors. To keep pace with major global transitions, especially in the era of Digital Transformation, the Group is determined to adopt technology and innovation as the foundation of our operations. A clear strategic plan (Roadmap) has been established to drive a full-scale organizational transformation under the mission "Mission To The Sun." This mission focuses on applying advanced technologies across four core business groups to enhance the organization's capability to respond effectively to social changes, while also maintaining environmental stewardship and delivering the highest quality services to customers in every business segment. The Group also aims to expand the business in multiple dimensions to become a Global Company and achieve our goal of becoming a Tech-Driven Organization by 2025.

In 2024, WHA Group began the full transition into a technology organization in line with the established strategic plan by adopting innovations such as computer vision technology, generative AI, and AI/ Machine Learning Data Insight as the core of our operations. These technologies enhance operational efficiency, reduce complexity and workload for staff, and increase accuracy and speed in data analysis. They also support the creation of digital systems for collecting and processing data to maximize resource utilization.

WHA Group recognizes the potential environmental impacts of technology use and therefore prioritizes

careful planning of digital operations. The focus is on reducing unnecessary resource consumption to minimize risks of negative environmental effects while promoting innovations that support sustainability.

The Group has also committed to being "The Ultimate Solution for Sustainable Growth" to emphasize the importance of creating sustainable growth together with all stakeholders. The Group will act as a "Pioneering Partner" ready to face challenges and actively participate in creating new innovations for the benefit of society, the economy, and the environment. The Group also highlights the WHA or WHA Group Core Values for everyone to acknowledge, which consist of







CHAMPION



RESOURCEFUL



INTEGRITY



3. MANAGEMENT APPROACH

WHA Group has implemented the strategy "WHA: WE SHAPE THE FUTURE" to achieve the goal of becoming a Tech-Driven Organization focused on promoting prosperity, creating jobs, and increasing income for the people and society. This aims to enhance the quality of life and well-being while laying the foundation for sustainable growth within Thailand's economy.

3.1 GOVERNANCE STRUCTURE

WHA Group places great importance on comprehensive management of technology and innovation by focusing on establishing clear governance frameworks, developing personnel skills, and investing in advanced technology to create innovations that sustainably and effectively meet

market demands. Therefore, the Group has established a technology and innovation working team to systematically oversee the integration of technology into operational processes. The Chief Technology Officer works closely with the Chief Operating Officer to manage this area, alongside applying technology in operations to maximize efficiency.

This working team operates under the supervision of the Board of Directors, which is responsible for setting policies, strategic planning, monitoring performance, and evaluating the impact of technology and innovation policies to ensure that the Group's operations comply with good practices and maintain competitive effectiveness in the market.

Roles	Responsibilities		
Chief Technology Officer	Responsible for defining the organization's vision strategy and direction in technology with a focus on researching and developing new technologies that can be applied to create business opportunities supporting technology investment for each business hub and collaborating with the Chief Operating Officer of each business to drive innovation and technological advancement.		
Chief Operating Officer	Responsible for managing and controlling the organization's operations by working closely with the chief technology officer to implement technology in business operations in order to increase efficiency reduce costs and optimize resource management.		
Board of Directors	Oversees and sets policy directions for technology and innovation within the Group, responsible for long-term strategic planning, monitoring the performance of the working team on technology, assessing the impacts of policy implementation, and defining continuous development approaches to ensure that technology and innovation operations adhere to good governance principles, transparency, and effectively drive the organization towards sustainable growth in the digital era.		

3.2 RISK AND OPPORTUNITIES MANAGEMENT STRATEGY

In an era where technology is rapidly evolving and serves as a key driving force across all sectors, organizations must adapt and adopt advanced technologies to enhance capabilities and maintain competitive advantage. However, technological advancements also expose organizations to technology risks that may impact business continuity. Effective management of these risks is therefore essential for ensuring stability and sustainable growth.

Risks	Opportunities
One of the key risks accompanying technological development is cyber threats and data breaches, which can affect the trust of customers and suppliers. If the organization's critical data is leaked or attacked, it may lead to financial losses and damage to the organization's reputation. Additionally, developing new technologies requires significant capital and resources. If research and development (R&D) projects fail, it can impact the organization's financial performance. At the same time, some technologies may become obsolete quickly, forcing the organization to continuously invest to maintain the competitive edge in the market. Failure to adapt in a timely manner may result in customers losing opportunities to access the most advanced and efficient technologies.	Digital technology also creates opportunities for organizations to enhance operational efficiency. Technologies such as the Internet of Things (IoT), Artificial Intelligence (AI), and Automation can effectively reduce errors, increase accuracy, and lower operational costs. In addition, developing products and services with sustainability in mind such as low carbon goods or the use of recycled materials helps strengthen a positive image and meet the demands of customers and all stakeholders who prioritize environmental concerns. Moreover, new innovations and technologies open opportunities for organizations to expand into renewable energy businesses and smart technologies which enhance competitiveness and broaden the customer base internationally.

Therefore, identifying and managing opportunities and risks related to technology and innovation in a balanced manner is essential. Organizations that can develop innovation and effectively apply technology while comprehensively planning for risk management will be able to build trust among stakeholders, enhance competitive capabilities, and achieve sustainable growth in a rapidly changing business environment.

WHA Group also conducts performance reviews every year or whenever there are changes, considering the feedback from all stakeholder groups in developing and improving future projects to maximize benefits for the organization's stakeholders.

3.3 ENTERPRISE RISK MANAGEMENT

Under the strategy "WHA: WE SHAPE THE FUTURE," WHA Group is committed to developing and creating added value in products and services to meet the needs of new customers and sustainably retain the existing customer base. The Group aims to become a fully Tech-Driven Organization by upholding the promise of "The Ultimate Solution for Sustainable Growth" through the following key strategies:

1. DIGITIZE & EMPOWER CORE BUSINESS

WHA Group implements new technologies and innovations within the organization to enhance business reliability and efficiency through intelligent analytics, process automation, leveraging the mobility, connectivity of digital technology. WHA Group aims to provide value that surpasses industry competitors. Additionally, WHA Group focuses on the acquisition of new businesses, new ideas, incubation, and expansion through collaboration within a platform that includes WHA's Group customers and stakeholders.

2. BUILD THE WORKFORCE OF THE FUTURE

To prepare for change, WHA Group focuses on establishing a way of working and thinking that embraces digital transformation. The Group aims to build a culture that empowers end-to-end digital processes and operations.

3. ENABLE THE SMART ENTERPRISE

WHA Group aims to build digital capabilities for our business processes in order to drive organizational efficiency, effectiveness, and to driving the organization with innovation.

4. ESTABLISH DIGITAL FOUNDATION AND PLATFORM

To build an IT foundation that supports short-term business needs and drives long-term business goals by enabling flexibility and scalability by transforming operations from core platform and governance structures.

5. LAUNCH NEW BUSINESS

Bringing new technologies and innovations to facilitate new business acquisitions, foster new ideas, incubation, and drive business expansion. This is achieved through collaboration within WHA's customer and stakeholder platform.

A key project reflecting the "Mission To The Sun," through which WHA Group has developed new products and services and enhanced capabilities with digital technology. This has been achieved via Digital Transformation Projects, with over 40 projects already implemented and plans for continuous further development in the future. These projects include developing strategies, plans, and policies for the WHA Data Platform, building data warehouses, promoting employee awareness of the effectiveness of data use in business operations, and fostering an organizational culture that supports working with innovation and data (Innovation Workplace).





WHA Group focuses on comprehensive communication of the technology operation guidelines to directly related stakeholders, such as customers and suppliers, to enhance operational capabilities toward an efficient digital system. The Group provides opportunities for all sectors to access innovation services and knowledge widely while developing new business models aligned with changes in the New Normal era in a sustainable manner. Additionally, WHA Group places importance on risk management arising from increasing challenges, including maintaining system stability and enhancing data security, to ensure operations are stable and reliable.

THE TECHNOLOGY INFRASTRUCTURE OF WHA GROUP

WHA Group has restructured the business by leveraging technology to support operations through Digital Transformation projects aimed at enhancing the business to meet the diverse and challenging needs of stakeholders. This transformation requires continuous investment in technology and information systems, which brings risks related to cybersecurity and data security. Both internal organizational assets and business data of customers and partners face risks of leakage, misuse, or damage that could cause severe impacts. To manage these risks, WHA Group complies with the Personal Data Protection Act B.E. 2562 (2019) and the Cybersecurity Act B.E. 2562 (2019), which form the essential foundation for protecting the data

of the organization and our customers. The Group also obtained ISO/IEC 27001:2022 certification for Information Security Management Systems in 2023 and plans to achieve ISO/IEC 27701:2019 certification for Privacy Information Management Systems in 2024.

WHA Group has established the Cybersecurity and Information Security Management Policy as a guideline for relevant departments to effectively control the digital transformation process. The Information Technology Department (ITD) is assigned to oversee the overall information technology security across all business centers. Additionally, cybersecurity communication and training are provided to employees as part of their performance success indicators. The Group has a process for reporting and managing security incidents, along with annual emergency plans and drills for incident response. Activities are also organized to identify and address vulnerabilities that may pose risks of data leakage or theft. In the event of a data breach, all involved parties must strictly follow the information security response mechanisms to ensure that issues are resolved promptly and effectively. (For more information, please see Data Security section)

This management approach reflects WHA Group's commitment to the comprehensive development and protection of digital systems to support sustainable growth and build confidence among all stakeholders.

3.4 METRICS AND TARGETS

WHA Group aims to become a Tech-Driven Organization by 2025, applying technology and innovation to both the creation of new products and services that will extend and strengthen the Group's business to meet the everchanging needs of our customer base, enabling sustainable revenue and growth in the future. The Group focuses on developing work processes aligned with the modern era, having planned various strategies since 2021 to support this goal. Additionally, the Group has launched the Mission To The Sun initiative, consisting of 9 projects designed to break current limitations and elevate existing capabilities. In 2024, WHA Group successfully executed the planned initiatives, including transforming work processes, adjusting organizational culture to embrace change, and establishing collaborations with various partners to enhance the organization's innovation and technology capabilities.







4. HIGHLIGHT PROJECTS

In 2024, WHA Group continued to build on the success of technology projects from the previous year while continuously initiating new projects developed by internal employees to enhance operational efficiency and create new business opportunities. This year, the Group implemented over 40 technology projects with a total investment exceeding 241 million baht. All projects focused on increasing productivity, improving operational efficiency, reducing operating costs, and developing a Real-time & Centralized Monitoring system for effective tracking and management. Additionally, artificial intelligence technologies were applied in various areas, including:

- **1. Computer Vision:** image processing technology for automatic analysis and inspection
- **2. Generative AI:** creative artificial intelligence that supports innovation development

- **3.** Al/Machine Learning Data Insight: deep data analysis using artificial intelligence and machine learning
- 4. Al Note Taker: automatic meeting note-taking
- **5. AI Cybersecurity:** strengthening cybersecurity with AI technology

Additionally, the Group utilizes AI technology to support sustainability goals, such as detecting solar anomalies (Solar Anomalies), forecasting solar energy production (Solar Forecasting), and predicting the performance of reverse osmosis systems (RO Performance Prediction). In addition, the Group has adopted Artificial Intelligence (AI) technology to support its sustainability goals. This includes detecting solar anomalies, forecasting solar energy production, and predicting the performance of Reverse Osmosis (RO) systems. In 2024, a total of 12 innovations initiated by the Group's employees were developed under the AI Transformation program.



In 2024, WHA Group was committed to developing and enhancing Smart Eco Industrial Estates to balance sustainability and innovation. Operations were based on six pillars of Smart Eco Industrial Estates, encompassing intelligent services, efficient connected communication, and advanced resource management. The Group applied advanced technologies such as Artificial Intelligence (AI) and Data Analytics to strengthen operational capabilities and create added value for stakeholders.



Key projects this year were designed and developed to align with each pillar of the Smart-Eco Industrial Estates as follows:

1. SMART TRAFFIC (TECHNOLOGY AND INNOVATION IN TRANSPORTATION) SMART TRAFFIC MANAGEMENT PROJECT

WHA Group recognizes the traffic congestion issues occurring around industrial estates, especially during peak hours when vehicle volume is high on roads with limited lanes. In addition to collaborating with local authorities to improve and expand road surfaces, the Group has developed the Smart Traffic Management project by using vehicle detection cameras and an Adaptive Signal Control (ATC) traffic light system to enhance traffic efficiency and safety within the industrial estate areas. This system has been installed in Eastern Seaboard Industrial Estate (Rayong) (ESIE), a large-scale industrial zone, focusing on managing traffic in accordance with actual usage conditions. The intelligent traffic light control system utilizes Artificial Intelligence (AI) to analyze traffic density and adjusts the traffic signals based on the current traffic volume. The goal is to minimize vehicle idling time at intersections. This smart system operates 24 hours a day and links real-time data across all intersections where the system is installed to work in coordination. From practical use, the intelligent traffic light control system has been shown to reduce traffic congestion time by up to 31.24% compared to fixed-time traffic light control systems. This improvement helps save up to 50,000 liters of fuel annually, thereby reducing air pollution and greenhouse gas emissions.

Besides the environmental benefits, the Smart Traffic Management project also enhances the quality of life for communities surrounding the industrial estates. By reducing traffic congestion, employee and local residents' commutes become more convenient, shortening travel times and lowering stress caused by traffic jams. This improvement boosts work efficiency and daily living. Furthermore, the reduction in greenhouse gas emissions and air pollution contributes to better air quality in the area, decreasing health risks associated with pollution such as respiratory diseases and cardiovascular conditions. These indirect effects

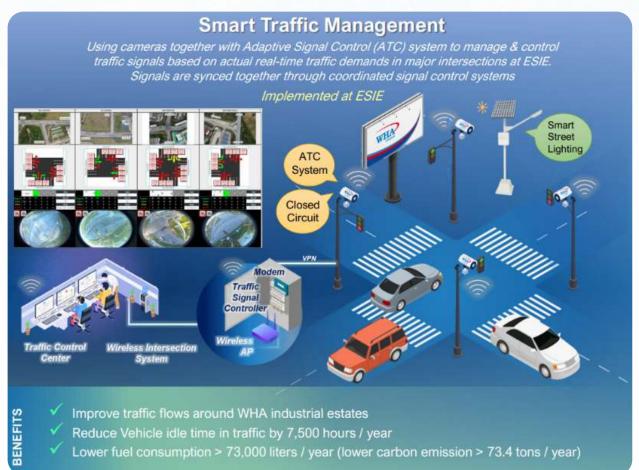
help improve the overall well-being of the community. The project also increases road safety, as the efficient traffic signal control reduces the risk of accidents caused by speeding to beat red lights. Additionally, better traffic management fosters stronger cooperation between the Group, government agencies, and local communities to develop sustainable traffic infrastructure that supports future industrial estate expansion.

In 2024, WHA Group plans to install additional supplementary systems to further enhance service quality and customer satisfaction within the industrial estates. The Group has invested over 2.6 Million Baht in 2024 to implement smart traffic management technologies aimed at continuously improving traffic efficiency and mitigating congestion issues.

2024 PERFORMANCE

- Significantly improved traffic conditions within WHA's industrial estates
- Reduced vehicle idle time in congested areas by up to 9,100 hours per year
- Decreased fuel consumption by over 50,000 liters per year
- Lowered carbon dioxide (CO₂) emissions by more than 89.7 tons per year





VEHICLE MANAGEMENT SYSTEM (VMS) PROJECT

Due to the large scale of WHA Group's industrial estates and the high volume of daily vehicle traffic, the Group recognizes the importance of enhancing safety in both road accident prevention and crime deterrence. To address this, the Group has developed the Vehicle Management System (VMS) to improve vehicle management and safety within the industrial estates. This system utilizes advanced CCTV technology installed at 40 key entry and exit points across 12 WHA's industrial estates. These cameras provide real-time data on vehicle types, license plate numbers, and traffic volume at various times throughout the day.

The VMS project strengthens safety in WHA's industrial estates by using accurate, real-time data to effectively reduce the risk of accidents and crime. In addition, it



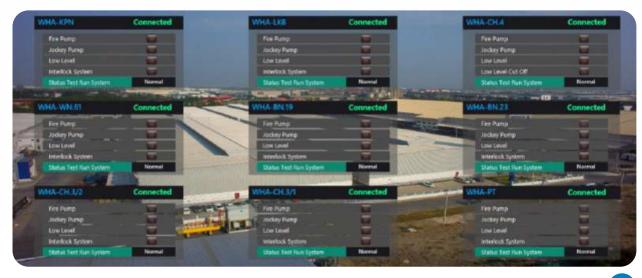
enhances traffic management and road maintenance within the estates, contributing to a smoother and safer internal transportation system.

SCADA PROJECT TO ENHANCE SAFETY

To enhance the emergency prevention capabilities of WHA Group, the Supervisory Control and Data Acquisition (SCADA) technology was adopted in 9 of WHA Logistics' warehouse farms, specifically to monitor and detect the working conditions of fire protection systems, including fire pump, jockey pump, and level alarms. This technological system enables WHA Logistics to better monitor performances and prevent damage to assets.

In 2023, the SCADA system has been used to improve operational efficiency as follows:

- WHA Mega Logistics Center Ladkrabang
- WHA Mega Logistics Center Wangnoi 61
- WHA Mega Logistics Center Chonlaharn Pichit KM.3
 Phase 1 (Unilever)
- WHA Mega Logistics Center Chonlaharn Pichit KM.3 Phase 2
- WHA Mega Logistics Center Chonlaharn Pichit KM.4
- WHA Mega Logistics Center Bangna Trad KM.19
- WHA Mega Logistics Center Bangna Trad KM.23
- WHA KPN Mega Logistics Center Bangna Trad KM.23
- WHA Mega Logistics Center Panthong



2. SMART SERVICE AND COMMUNICATION TECHNOLOGY

WHASApp CUSTOMER APPLICATION

WHA Group developed the WHASApp Customer Application, which launched in July 2024. The application focuses on meeting customer needs by enhancing convenience and providing an additional communication channel between customers and the Group. It offers various features, including customer support chat (CHAT), maps with VR360 (MAP&VR360), news notifications (BROADCAST), utility and solar power usage information (USAGE), payment status checking (BILLING), and contract access (CONTRACT). All features are designed to enable customers to communicate with the organization quickly and

conveniently, as well as to easily access important information anytime. Customers and/or authorized representatives in Thailand and Vietnam can access the WHASApp application via both mobile phones and the WHA Super App website.

The WHASApp Customer Application project enhances customer experience by providing an easy-to-use and convenient platform. It improves communication efficiency between customers and the service team, allowing customers to access critical information promptly and effectively. This meets customers' needs for contact and information requests, resulting in timely and high-quality organizational services.





LOGISTICS AND BUILDING MAINTENANCE SERVICE (LBMS) APPLICATION

WHA Group has developed and implemented the LBMS Smart Maintenance Application (Logistics Building Maintenance Service) to facilitate and better meet the needs of customers using both Built-to-Suit warehouses and Ready-built factories or warehouses. The application streamlines processes such as maintenance work requests, insurance claims, quality control, and assurance. It also enables customers to conveniently and efficiently track the status of maintenance work. The application supports use on both smartphones and computers. Users have reported that the LBMS application has reduced the Group's customer response time by over 80%, while also decreasing the overall time and costs for customers in carrying out various processes. In 2024, the application was used over 1,600 times by more than 200 customers, highlighting the Group's successful digital transformation in business operations. The Group continues to enhance the application based on ongoing customer feedback to increase satisfaction through faster support. Furthermore, there are plans to develop the application to support all software platforms, increasing accessibility and the number of users.

The LBMS project plays a crucial role in enhancing customer satisfaction with the organization by improving logistics management and operational processes to be faster and more timely. Elevating the efficiency of maintenance operations ensures that systems and equipment perform at their full capacity, minimizing downtime. It also reduces communication delays between various departments within the organization, enabling smooth and accurate coordination. As a result, both customer service and overall operations become more efficient.



DRONE INSPECTION PROJECT



WHA Group has adopted unmanned aerial vehicle technology, or drones, to inspect the roofs and rooftop equipment of warehouses. This enables early detection of damage, wear, leaks, and areas at risk of future deterioration, allowing for effective planning of preventive and predictive maintenance. The analysis of drone-captured images, combined with Artificial Intelligence (AI), provides accurate assessments of the condition of roofs and equipment. Such inspections reduce operational risks within warehouses and significantly lower repair costs. Inspection results can be accessed via an application, facilitating convenient, rapid, and efficient roof condition assessments. This technology also enhances safety during work at heights and improves inspection accuracy.

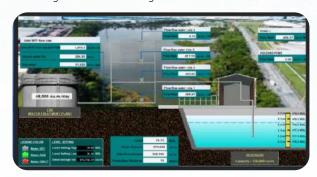
The Drone Inspection project thus enhances safety for workers operating at elevated locations by effectively and precisely inspecting hard-to-reach areas, reducing work-related risks, and increasing flexibility in inspection processes.

3. SMART WATER AND POWER MANAGEMENT TECHNOLOGY

SMART NATURAL WATER MANAGEMENT PROJECT

WHA Group has developed the Smart Natural Water Management project to manage water resources efficiently and sustainably by utilizing intelligent sensor technology to monitor the status of reservoirs, including both inflow and outflow volumes. This system enables real-time monitoring of water balance in storage sources, maximizes water usage efficiency, and supports precise water management to meet future demands sustainably.

This project also helps reduce energy consumption in the water distribution process and effectively monitors water balance in reservoirs, thereby minimizing risks associated with water management errors, such as flooding or water shortages.



GIS/HYDRAULIC MAP PROJECT

WHA Group has developed the GIS/Hydraulic Map project to enhance the management of WHAUP's water pipeline system by utilizing GIS technology and hydraulic system modeling to digitize data. This enables monitoring of water usage behavior and improves the accuracy of water data analysis within the system. The project plays a crucial role in increasing the efficiency of water resource management and reducing losses in the system, as well as supporting sustainable long-term water planning and management.



SMART RAINFALL MONITORING PROJECT

WHA Group has developed the Smart Rainfall Monitoring project using sensor technology to measure and record real-time rainfall amounts, enabling precise monitoring and assessment of rainfall intensity. The data collected is processed and displayed through the Unified Operation Center (UOC) system and a website, allowing for convenient and rapid data access. This supports effective decision-making and water resource management.



SOLAR TELECOM TOWER

WHA Group recognizes the importance of utilizing solar energy, a clean and sustainable energy source, to reduce carbon dioxide emissions while being environmentally friendly. In 2024, the Group implemented the Solar Telecom Tower project by installing solar power systems to supply electricity to three mobile telecom towers located within industrial estates, each with a capacity of 10 kW, totaling 30 kW. It is expected that by 2025, this project will reduce carbon dioxide (CO₂) emissions by more than 18.50 tons per year.

Furthermore, the Solar Telecom Tower project will expand to include new telecom towers built by WHA within industrial estates, reinforcing the Group's commitment to efficient and sustainable clean energy use in the future.



P2P ENERGY TRADING PROJECT WITH RENEX

WHA Group has developed a Peer-to-Peer Energy Trading System that facilitates the trading of solar energy among energy users within industrial estates. This initiative contributes to reducing carbon dioxide emissions, lowering operational costs, and promoting sustainability with long-term profitability. The project operates through two main platforms: Energy Trading and Carbon Credit Trading.

On the energy trading side, the RENEX platform serves as the intermediary for energy transactions between 7 prosumers (producers and consumers) and over 40 consumers, enabling a total trading capacity of 4 megawatts. This project focuses on distributing environmentally friendly energy sources such as solar power while supporting efficient energy management.

For carbon credit trading, the project has registered carbon credits with the Electricity Generating Authority of Thailand (EGAT) and the Thailand Greenhouse Gas Management Organization (TGO). Currently, the project manages carbon credits totaling 65,660 tCO₂ per year and 42,876 Renewable Energy Certificates (REC) per year, assisting buyers in achieving their Net Zero targets.



Both platforms play a crucial role in advancing sustainability by offering diverse services such as clean energy trading, carbon credit trading, and renewable energy certificate (REC) management. The developed system ensures transparency and incorporates mechanisms for trade matching, transfer, and exchange, alongside additional services such as certificate registration, double counting verification, and certification issuance. The P2P Energy Trading project helps reduce operational costs through clean energy usage, supports the organization's Net-Zero goals, and promotes renewable energy and clean energy technologies by enabling energy exchanges within the user network. This approach fosters environmentally friendly and sustainable operations.



SMART TRAFFIC LIGHT AND SOLAR STREET LIGHTING PROJECT

WHA Group has developed a lighting system for common areas, including street lighting within WHA's industrial estates, utilizing Solar Street Lighting technology. This initiative is part of the plan to increase the use of renewable energy in industrial estates, focusing on clean energy to replace conventional electricity and enhance energy efficiency in public spaces. Since 2023, the installation of Solar LED Street Lights has begun in new estate areas such as WHA Industrial Estate Rayong (WHA IER), and WHA Rayong 36 Industrial Estate (WHA Rayong 36), as well as in existing estates like WHA Chonburi Industrial Estate 1 (WHA CIE 1)

By 2025, WHA Group plans to expand the upgrade of lighting systems to Solar Street Lighting in 10 additional estates, replacing traditional LED bulbs. Furthermore, the project aims to advance to Smart Solar Street Lighting by integrating IoT systems to remotely control and monitor the operational status of each light online, enabling fast and accurate performance analysis of the equipment.

To date, the Smart Solar Street Lighting project has reduced electricity consumption from the main grid by more than 350 MWh per year, resulting in a reduction of over 180 tons of tCO2e emissions annually. This marks a significant step in developing the energy infrastructure of WHA's industrial estates toward sustainable energy in the future.







4. SMART TECHNOLOGY

In addition to operations under the 6 pillars of Smart Eco Industrial Estates, the Group has also developed other key projects to support the transition to the digital era and strengthen competitive advantages.

MOBILIX PROJECT

MOBILIX is a project developed to support the transition to a sustainable transportation system through the creation of a comprehensive Electric Vehicle (EV) Ecosystem under the concept "Driving Sustainability in Motion." This project aims to reduce greenhouse gas emissions in Thailand's logistics sector by providing comprehensive services and technologies, such as Fleet Management, Route Optimizer, Roaming Platform for connecting charging stations, Predictive Charging & Maintenance, and Battery Intelligence Management. All of these operate through the Mobilix Software Solution, which analyzes driving behavior, charging patterns, and transportation management to enhance operational efficiency and elevate customer satisfaction for corporate clients.

MOBILIX also offers a wide range of electric vehicle rentals, including four-wheel cars, trucks, buses, tractor trucks, and motorcycles, with maintenance plans specifically designed for corporate use. In addition, MOBILIX has developed charging infrastructure for both public and on-premise EV charging solutions, supporting the use of renewable energy such as solar rooftops and peer-to-peer energy trading to ensure long-term sustainability. In 2024, the project has provided rental services for over 330 electric vehicles and installed 38 charging stations, with a target to increase the number of electric vehicles to 20,000 by 2028. This reflects MOBILIX's commitment to driving the green economy and creating an environmentally friendly transportation system.



WHAbit PROJECT

In an era where digital technology plays a crucial role in many aspects of life, the Group recognizes the opportunity to develop businesses and design products and services that meet the needs of modern lifestyles by applying technology in communication systems and medical data analysis. The "WHAbit" application was developed to support telemedicine services, allowing users to consult doctors online without needing to travel to hospitals. It also enables convenient prescription and home delivery of medications. Additionally, the WHAbit application features a real-time notification system that helps users monitor and track their personal health information, effectively identifying health issues that require attention.



In 2024, WHA Group implemented a Memorandum of Understanding (MOU) with Samitivej Hospital to continuously promote and develop digital healthcare, focusing on enhancing access to health services and solutions for employees and customers within industrial estates, logistics centers, and the company's office buildings through the WHAbit platform in collaboration with Samitivej Virtual Hospital services. Additionally, both organizations jointly explored and studied necessary operational steps to develop and deliver the most efficient healthcare solutions, covering services such as telemedicine consultations, health check-ups, specialized clinics for non-communicable diseases (NCDs), smart clinics, prescription services, health data analytics, and other services. They also planned to expand services toward Healthcare Software as a Service to comprehensively meet health needs both online and offline.

META W AND DIGITAL TWIN PROJECT

In 2021, WHA Group began utilizing drone technology for property development and management by developing a 360-degree virtual tour system, allowing customers to preliminarily explore the area before visiting in person, thereby enhancing the experience and convenience in investment decision-making. Later, in 2023, the Group developed the Meta W project, Thailand's first industrial metaverse, designed to elevate customer experience, create new opportunities, and strengthen business competitiveness in the digital era. Meta W integrates Digital Twin technology, enabling customers to have immersive and realistic operational experiences, new business models, and comprehensive data verification.

VIRTUAL REALITY IN WAREHOUSES

Following the Meta W and Digital Twin projects, in 2024 WHA Group further developed these initiatives by launching the Virtual Reality project in warehouses. This project applies VR technology to create an immersive experience for warehouse exploration and management, both operationally and in business data inspection. The project aims to enhance efficiency, reduce costs, and improve the accuracy and speed of warehouse operations. In the future, WHA Digital plans to expand these products and services to offer them to customers both inside and outside the Group's ecosystem to strengthen competitiveness in the digital era and promote the use of advanced technology to drive business forward.

SOLAR ANOMALIES DETECTION PROJECT

In 2024, WHA Group developed the Solar Anomaly Detection project, an innovation powered by Artificial Intelligence (AI) technology to enhance the efficiency of real-time detection and analysis of abnormalities in solar energy systems. This project focuses on increasing the availability of power plants, reducing risks of issues, and maintaining a sustainable cost advantage.

The AI system of Solar Anomaly Detection can guickly and accurately detect abnormalities in solar panels and related equipment. It identifies issues such as solar panel degradation, inverter malfunctions, weather impacts, dust accumulation, shadows from external objects, and debris that may interfere with solar energy production. The ability to detect these problems enables system operators to promptly perform maintenance, reducing energy loss and maintenance costs. Moreover, Solar Anomaly Detection is designed to integrate with the Group's IoX platform, a comprehensive renewable energy management and monitoring system. This platform features a real-time dashboard that allows precise and rapid energy data monitoring and management 24/7. The Al system acts as an intelligent assistant that continuously updates maintenance teams. When a problem is detected, it sends an alert within 10 minutes and facilitates resolution within 72 hours.

The Solar Anomaly project not only improves solar energy management efficiency but also supports sustainable operations by reducing energy loss, increasing production efficiency, and minimizing environmental impact. It reinforces the Group's role in leveraging digital technology to develop clean energy use effectively and sustainably for the future.



SOLAR FORECASTING PROJECT



In 2024, the Group developed the Solar Forecasting project, a technology collaboratively developed within the Group using Artificial Intelligence (AI) to analyze customers' electricity demand (self-consumption) alongside the energy production capacity of solar panels. This analysis enables the identification of complex relationship patterns and efficient management of energy production.

The Solar Forecasting Model can predict energy production based on key factors such as sunlight intensity, atmospheric conditions, and consumer energy usage behavior. This improves forecast accuracy even under uncertain weather conditions, allowing producers to plan solar energy production efficiently, increase energy yield, and manage energy storage appropriately according to usage. Solar energy is becoming an important energy source today. The shift to clean solar energy not only meets energy demands but also reflects environmental responsibility by reducing fossil fuel consumption and lowering carbon footprint emissions.

Applying AI technology for effective energy management aligns with the digital era and sustainable development. Solar Forecasting is developed as an example of using technology to support business operations with social and environmental responsibility.

RO SYSTEM PERFORMANCE FORECASTING PROJECT

In 2024, WHA Group developed the RO System Performance Forecasting project, focusing on applying Machine Learning and Al innovations to improve the efficiency of the Reverse Osmosis (RO) system by enhancing data analysis accuracy and forecasting system performance at the highest level. The Group advanced the project by integrating IoT technology to collect data from various devices and process it through cloud systems, enabling convenient and rapid real-time monitoring of operational status. Advanced Machine Learning algorithms are used for deep data analysis, accurately predicting membrane lifespan, as well as recommending cleaning-in-place (CIP) schedules and membrane replacements at optimal times to reduce operating costs and prevent system downtime.

WHA Group further enhanced the project's success by developing an interactive dashboard system that allows users to monitor key parameters such as water temperature, heavy metal contamination levels, and microorganisms with precision, along with an automatic alert system for anomalies. This makes RO system management more flexible and responsive to environmental changes effectively. In the future, WHAUP plans to expand the scope of the RO System Performance Forecasting project to meet the needs of customers both inside and outside the Group's ecosystem, focusing on developing advanced and sustainable technologies to strengthen competitiveness in the digital era and support business operations with maximum efficiency.



5. IMPACTS ON STAKEHOLDERS AND ENVIRONMENT

WHA Group is committed to continuously developing our business to keep pace with changes in the digital society era by leveraging technology and innovation as the fundamental basis in the operations of the four main business groups. This aims to strengthen capabilities and enhance the ability to deliver products and services that effectively meet customer needs, while preparing the organization to respond to global changes in all dimensions. This is achieved through the mission "Mission To The Sun," which focuses on driving sustainable business operations and creating opportunities to develop new businesses in digital, utilities, and energy sectors. The goal is to become a global company and transform into a Tech-Driven Organization by 2025. Moreover, the Group places great importance on environmental conservation by applying technology to efficiently manage resources, including water management,

energy, and pollution reduction in various forms. It also adopts innovations to create convenience and value for all stakeholders, such as employees, customers, tenants, surrounding communities, and participants in activities or projects jointly developed by the Group to build a sustainable society.

However, the adoption of technology in communities may bring negative impacts that need to be carefully considered, such as limited access to technology for certain groups who may be unable to access or learn how to use it, as well as impacts on traditional lifestyles and cultures that may be altered by technological development. Therefore, the Group focuses on preventing these impacts by employing careful technology management strategies in line with the Group's mission and aligned with the Sustainable Development Goals (SDGs). This ensures that the benefits of technology can meet community needs while minimizing potential negative effects.



6. NEXT STEP

WHA Group places great importance on innovation development and the integration of technology as a core infrastructure in business operations to enhance operational sustainability. The focus is on driving the organization under the Mission To The Sun strategy. In 2024, the Group developed projects within the framework of nine programs, totaling over 40 projects, with plans to continuously expand these programs. The Group emphasizes the use of Artificial Intelligence (AI) technology and data insights, as well as the adoption of the ISO/IEC 42001:2023 standard to ensure the safe and effective management of AI. This supports the advancement of various projects with the goal of becoming a Tech-Driven Organization by 2025 and aims for long-term sustainable growth as a leading global company by 2030.









1. GLOBAL TREND

In an era of rapid digital advancement, data security has become a key priority for organizations worldwide, particularly as cyber threats continue to rise in both volume and complexity. Incidents such as data breaches, ransomware attacks, and phishing scams pose significant risks to business operations and stakeholder conf idence.

Today, digital data exchange is not only faster and easier but also an unavoidable aspect of business operations that increasingly rely on technology. From cloud-based storage systems and the use of Artificial Intelligence (AI) in data processing to the growing deployment of Internet of Things (IoT) devices, organizations are exposed to heightened cybersecurity vulnerabilities. As a result, it is critical to establish a robust and comprehensive cybersecurity infrastructure and proactively manage evolving risks.

Protecting data is no longer solely about preventing financial losses from cyberattacks; it is fundamental to building trust and maintaining strong relationships with stakeholders, including customers, investors, and suppliers. Data loss or security breaches can severely undermine confidence in an organization.

Therefore, organizations must develop flexible cyber risk management plans and continuously adapt to emerging technologies and trends to safeguard valuable information and ensure long-term success.

2. OUR POSITION

WHA Group has successfully transitioned into a full-fledged Tech Company over the past year and is progressing towards becoming a Tech-Driven Organization by placing technology at the core of its operations. The Group prioritizes data security to safeguard its internal operating systems and stakeholder information against increasingly complex and fast-evolving cyber threats.

Since 2021, WHA Group has implemented 38 digital transformation projects and over 50 data-driven initiatives, achieving notable success in 2023. Building on this foundation, in 2024, the Group has further developed its capabilities to become a Data-Driven Organization by analyzing data from multiple sources to enhance strategic decision-making, product development, pricing, and sales promotion activities, aiming to fully transform into a Tech-Driven Organization by 2025.

Through integrating technology into all aspects of its operations, WHA Group has established a modern and comprehensive Cybersecurity Framework. Proactive measures such as Al-driven threat detection systems and automated response mechanisms have been deployed to minimize the risks of cyberattacks and maximize data protection capabilities. These initiatives also aim to reinforce trust among customers, suppliers, and investors by ensuring that all data is strictly protected. Furthermore, the Group places strong emphasis on building employee competencies in technology and cybersecurity through continuous training, particularly in areas such as Data Privacy Regulations and international standards compliance, including ISO 27001. This approach helps cultivate an organizational culture that values digital security and shared responsibility in achieving transparent, secure, and sustainable business operations.

3. MANAGEMENT APPROACH
3.1 GOVERNANCE STRUCTURE

WHA Group has established the Cybersecurity and Information Security Management Policy to strengthen the protection of organizational and personal data. As information is considered a critical asset in business operations, any failure to ensure its confidentiality, integrity, and availability could negatively impact the

organization's financial performance, credibility, and reputation. The policy focuses primarily on protecting electronic data, as the majority of the Group's information is stored electronically, and this trend is expected to continue increasing in the future.

WHA Group recognizes the importance of data security management at all levels, from establishing a robust governance structure and developing employee knowledge and skills, to deploying advanced technologies for effective cyber risk monitoring and response. These efforts are aimed at ensuring that the Group's business operations are conducted securely, transparently, and in accordance with international standards. To this end, the Group has established a data security governance structure consisting of:

The Risk Management Committee serves as the central body overseeing all cybersecurity and information security risks. It is responsible for setting strategic directions and integrating cyber risks into the overall enterprise risk management framework.

The Cybersecurity and Information Security Committee reports directly to the Risk Management Committee. Its primary responsibilities are to establish policies, approve strategies, and monitor the implementation of information security initiatives across the organization.



The Cybersecurity and Information Security Committee also collaborates with 3 key departments, namely:

1. Information Technology Department (ITD):

Responsible for managing IT systems across all business units, including installation, maintenance, and troubleshooting. The department also compiles reports on information security incidents to identify root causes and propose mitigation measures.

2. Internal Entities:

All employees across the organization receive training on cybersecurity policies and practices to enhance awareness and readiness for the safe use of digital systems.

3. External Entities:

The Group collaborates with business partners and alliances to ensure that the operations of all parties comply with the established security standards.



This structure is led by Gen. Prachya Chalermwat, Chairman of the Risk Management Committee and Independent Director, and Mr. Nunsilp Janvarin, Chief Information Security Officer (CISO), who is directly responsible for establishing information security strategies and practices. The Cybersecurity and Information Security Committee submits quarterly risk summary reports to the Risk Management Committee to ensure that all aspects of risk are effectively controlled. With this comprehensive governance structure and systematic operations, the Group is able to address cybersecurity challenges in the digital era with stability and sustainability, while strengthening trust among all stakeholders.

3.2 RISK AND OPPORTUNITIES MANAGEMENT STRATEGY

In an era of rapid digital technological advancements, cybersecurity has become a critical factor influencing an organization's competitiveness and credibility. Protecting the organization's and stakeholders' critical information, along with ensuring business continuity, are key elements that enable stable operations and sustainable growth.

Therefore, balancing the management of cybersecurity opportunities and risks is essential. Organizations that can develop and strengthen cybersecurity measures in alignment with international standards, while fostering a culture of information security, will be able to build stakeholder confidence and maintain a strong competitive advantage.

Risks Opportunities

Cyberattacks in the form of data breaches pose risks that may compromise the critical information of the organization and its stakeholders, affecting the organization's credibility and competitiveness. Additionally, incidents impacting information technology systems could disrupt operational processes and potentially affect revenue, business continuity, and recovery costs. Therefore, the Group places great importance on continuously enhancing cybersecurity measures to strengthen its defense systems and effectively respond to emerging challenges, with a commitment to proactively protecting data and building long-term stakeholder confidence.

Effective cybersecurity management has created significant opportunities for the Group to strengthen stakeholder trust through robust and transparent data protection. Investments in information security infrastructure not only enhance competitiveness but also support technological adaptation and open opportunities for new technology-related businesses. This commitment also supports the Group's sustainable growth goals amid the rapidly evolving digital economy.

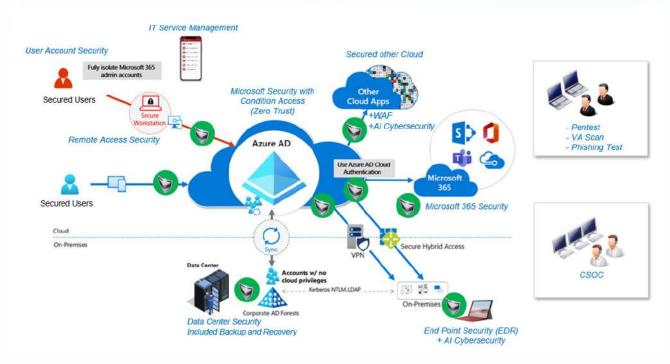
3.3 RISK MANAGEMENT

EMPLOYEE PRACTICES ON CYBERSECURITY AND INFORMATION SECURITY

The Group recognizes the importance of information security and cybersecurity in protecting the organization's critical data, maintaining business continuity, and complying with relevant laws and regulations. Therefore, the Group has integrated cybersecurity management practices into employee performance evaluations to promote awareness, responsibility, and strict adherence to the organization's security policies.

All employees are evaluated based on their compliance with security measures, reporting of potential threats, and participation in designated information security training programs. Evaluation results are incorporated into the human resource management process, and failure to comply with these practices may result in appropriate disciplinary actions in accordance with organizational regulations.

INFORMATION SECURITY RESPONSE MECHANISM



Data security is an integral part of business ethics and practices that WHA Group firmly adheres to. The group has processes and mechanisms in place to manage these issues. Information security management is a process used to address security incidents in an organization's data. This process aims to reduce risks, support continuous operations, and help recover systems in the event of unforeseen events, enabling the organization to conduct business activities securely. Furthermore, it is a process that focuses on assessing, planning, and implementing measures to ensure that the system can protect itself from unauthorized access and can recover without significant impact if unexpected events occur. To achieve its objectives, the group has plans in place for business continuity, emergency response, and incident management to mitigate potential disruptions to the business. The Group also conducts emergency response tests once a year, typically in December. The results of the 2024 test indicate that the organization can effectively respond to emergencies and are satisfactory overall.

To respond promptly to cyber emergencies, WHA Group has established processes and mechanisms for reporting and managing information and cyber security issues. If problems or suspicious incidents are detected, employees can report them for investigation. This includes cases of urgency, data breaches, or violations of business ethics guidelines, as outlined in the complaint handling process in the business ethics section of this report. This policy applies to all employees and specifies guidelines and responsible persons for managing and reporting data security issues for data leaks in each case reported. To ensure the most effective response, WHA Group provides training on cyber threats to raise awareness among employees and relevant stakeholders.

In 2024, the Group further developed initiatives related to information security systems by implementing AI Cybersecurity, bringing in AI technology to enhance cybersecurity efficiency. This includes the use of a Web Application Firewall (WAF) as well as Web Application and API Protection (WAAP), which help the Group protect API data

and cloud-native applications from increasingly sophisticated cyber threats. In addition, the Group improved its Data Loss and Data Leak Prevention (DLP) system to enhance the strength of its information security systems and to prevent any data loss or leakage. These improvements help to build greater confidence among system users and data owners, including the Group's personnel, customers, and supplier who exchange information with the Group, in conducting business with the Group.

DATA SECURITY CERTIFICATION

The Group has been certified under the ISO/IEC 27001:2022 standard, an internationally recognized framework for information security management. This certification covers 100 percent of IT operations across all four of the Group's business segments. It reflects the Group's strong commitment to developing its information security management system in alignment with international standards, emphasizing the protection of critical information, effective risk management, and building trust with customers and stakeholders.

The Group has continuously invested in advanced technologies and modern processes, while also enhancing employee knowledge and expertise to meet the challenges of the digital era. Moreover, achieving this certification demonstrates the Group's capability to manage information securely and efficiently, ensuring transparent and reliable operations. It reinforces customer, business partner, and stakeholder confidence and underscores the Group's role as an industry leader committed to sustainable information security management.

DATA SECURITY SYSTEM TESTING

WHA Group has external parties to conduct regular audits of the data security system at least two tests per year. These tests include vulnerability assessments (VA Scans), which identify and address system security weaknesses, and penetration testing, which involves simulated cyberattacks to evaluate the system's resilience against unauthorized access. These efforts not only improve security but also ensure compliance, reduce cyber risks, meet shareholder expectations, and maintain the organization's reputation.



Penetration Testing and VA Scan Scope

- Active Directory (User Login System)
- Office 365
- Oracle
- EOMS
- Low-Code System
- · WHA Web Site
- Wi-Fi
- Network
- Firewall

Standard: CVSS v3.1 (Common Vulnerability Scoring System)

Severity	CVSS Score Rating	Description
CRITICAL	9.0 - 10.0	Exploitation is straightforward and usually results in system-level compromise. It is advised to form a plan of action and patch immediately.
HIGH	7.0 - 8.9	Exploitation is more difficult but could cause elevated privileges and potentially a loss of data or downtime. It is advised to form a plan of action and patch as soon as possible.
	4.0 - 6.9	Vulnerabilities exist but are not exploitable or require extra steps such as social engineering. IT is advised to form a plan of action and patch after high-priority issues have been resolved.
LOW	0.1.3.9	Vulnerabilities are non-exploitable bud would reduce and organization's attack surface. It is advised to form a plan of action and patch during the next maintenance window.
INFORMATION	N/A	No vulnerability exists. Additional information is provided regarding items noticed during testing, strong controls, and additional documentation.

CUSTOMER DATA SECURITY

The Group places the highest priority on protecting customer data, treating it with the same level of importance as the security of its internal organizational data. To enhance its ability to address data security-related risks, the Group offers various proactive practices and solutions that customers can choose to implement, such as firewall systems, anti-virus software, data backup systems, security solutions, and access control systems. These data protection measures help ensure that customers can maintain smooth business operations while minimizing security risks across multiple dimensions. Furthermore, the Group continuously upgrades its technology services to remain aligned with evolving circumstances.



3.4 METRICS AND TARGETS DATA SECURITY PERFORMANCE

		Target 2024	Performance 2024	Long-term Target
\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Employees who have received training on data security	100%	100%	100% in every year
	Customer and employee data breach case	0	0	100% in every year
	Customer and employee complaints regarding personal data transmission	0	0	100% in every year

4. HIGHLIGHT PROJECTS

WHA Group places strong emphasis on continuously developing and driving growth in the digital era by prioritizing the use of innovation and data-driven insights as key components of our business operations. This approach strengthens our position and enhances our competitiveness in the industry through the effective application of digital technologies. In addition, we remain committed to continuously enhancing the customer experience by developing services and solutions that meet the evolving needs of the digital age, while also building trust and reinforcing confidence in the WHA brand as a leading name in the industry.

Through this approach, we are able to respond swiftly and consistently to market changes, reduce the risk of inaccurate decision-making, and improve internal management efficiency. Although there were no incidents of customer data breaches in 2024, in line with our target, we continue to develop our IT systems and enhance data security standards to keep pace with emerging technologies and safeguard customer data under all circumstances.

MOBILE DEVICE MANAGEMENT (MDM)

The Mobile Device Management (MDM) software is a crucial tool that helps control and protect devices connected to WHA Group's systems. It also helps prevent and reduce technical risks, as well as improve efficiency when working with mobile devices within the company. WHA Group uses Microsoft Enterprise Mobile Security (EMS) software to manage mobile devices in

the organization, both on-premises and cloud-based, to control the use of various devices such as mobile phones, computers, tablets, and laptops. Additionally, the Group can configure specific control settings to ensure the security and up-to-dateness of these devices.

In previous year, WHA Group further strengthened the security measures with a new antivirus software. This software includes additional features for End Point Detection and Response (EDR), enhancing security and enabling usage both at home and in the workplace. It has processes for monitoring and detecting suspicious activities or events at endpoints, providing more comprehensive coverage than previous versions that focused solely on files.

CLOUD SERVICES FOR CUSTOMERS

Digital Business Group (WHA Digital), under WHA Group, provides customers with highly secure database systems through Cloud Services. These services offer a variety of options, including Public Cloud, Private Cloud, Multi-Cloud, and Hybrid Cloud. The Group has prepared computer system resources, including hardware, software, and computer network systems under the Fiber Optic (FTTx) infrastructure service, to help customers access data quickly, securely, and with low latency. The Cloud Services team consists of experts certified by global institutions such as Dell Certification, Hitachi Data Systems Certification, VM Ware Certification, and OpenStack Certification, who provide advice and manage computer network systems for customers.

RAISING AWARENESS ON DATA SECURITY AMONG EMPLOYEES

To ensure that policies and operational procedures are effectively implemented, WHA Group has communicated and trained employees through mandatory training sessions, as well as additional training for interested employees. In each mandatory training session, there is a test to assess employees' understanding, which serves as a Key Performance Indicator (KPI) for employees to pass the mandatory training. The training includes:

- Cybersecurity and information protection awareness training through the course "Cybersecurity Season IV", which is a mandatory program for our employees. In 2024, 100% of employees participated in the training and successfully passed the assessment.
- Awareness training on Personal Data Protection Act (PDPA) compliance. In 2024, 78% of employees participated in the training and passed the assessment.
- All new employees are required to complete basic security training as part of their onboarding. The training covers policies and procedures related to various aspects of security, including cybersecurity, physical security, email, passwords, mobile devices, and wireless networks.

In addition, WHA Group conducted high-risk vulnerability assessments on various systems through external experts. The Group also implemented phishing simulation tests by sending simulated phishing emails to employees in order to assess vulnerability to phishing threats and evaluate employee awareness. The results were recorded and analyzed to support planning, knowledge development training, and the continuous improvement of cybersecurity measures. The test results showed a consistent decrease in the number of employees falling victim to phishing attempts. In the first test of 2024, 97% of employees passed, marking a significant improvement compared to the previous year. In the final test of 2024, the Information Technology Department designed a more sophisticated and harder-to-detect phishing scenario, with 95 percent of employees passing. This represented an increase of 2 percent from the previous year and a decrease of 2 percent from the first test of 2024. For those who failed the phishing test, the Information Technology Department imposed a penalty by temporarily disabling access to social media for a period of one month.



5. IMPACTS ON STAKEHOLDERS AND ENVIRONMENT

WHA Group places great importance on the effective management of information security systems to build confidence and strengthen trust among all stakeholders, including customers, suppliers, and employees. This is achieved through the use of advanced technologies and transparent and stringent data management practices, particularly concerning personal data and business information. As a result, these efforts enhance confidence in the Group's security and reliability.

Secure and high-quality data management helps mitigate the risk of data breaches that could undermine the trust of customers and suppliers. It also reduces costs associated with incident recovery and data breach management, thereby supporting long-term relationships with customers and suppliers. Furthermore, it creates opportunities to expand the customer base by reinforcing customer and supplier confidence in the Group's ability to protect their information. In addition, the Group actively promotes awareness of information security among communities and external suppliers, thereby strengthening its image as a responsible leader committed to sustainable development and contributing to society in the rapidly evolving digital era.

6. NEXT STEP

WHA Group plans to pursue ISO/IEC 42001:2023 certification, the international standard for artificial intelligence management, in 2026. This certification will support the Group in developing and utilizing Al effectively and securely. The Group remains committed to maintaining a high level of information security, setting a goal of achieving zero data breach incidents each year. Through these efforts, the Group aims to build confidence among all stakeholders by ensuring that its security systems meet high international standards and operate with maximum efficiency.





HUMAN RESOURCES MANAGEMENT



1. GLOBAL TREND

In today's fast-changing business environment and increasingly intense competition, human resources management has become a key factor in creating a competitive advantage. The capability and quality of personnel not only enhance organizational efficiency but also serve as a crucial driver of sustainability across environmental, social, and governance dimensions. Employees are regarded as the organization's most valuable asset; therefore, effective human resources management is a fundamental foundation for organizational stability and success. Investing in the development of knowledge, skills, and employee well-being can boost productivity and adaptability, supporting long-term economic growth and sustainability.

Currently, the adoption of digital technologies such as Artificial Intelligence (AI) and People Analytics (PA) has become an essential tool in advancing human resources management—from recruitment and talent development to motivation enhancement. In addition, the concepts of Diversity, Equity, and Inclusion (DEI) have become key practices that foster a sustainable and inclusive organizational culture. Reskilling and upskilling employees is another vital strategy for preparing the workforce to cope with ongoing changes in the labor market and technological advancements. At the same time, caring for mental health

and employee well-being plays an important role in maintaining a healthy work-life balance, which directly impacts employee performance and happiness.

Effective human resources management must emphasize employee satisfaction, engagement, and overall quality of life. Organizations that provide fair compensation, create equal opportunities, and promote a safe work environment can enhance employee well-being, which is a fundamental aspect of human rights protection. Therefore, human resources management is at the heart of sustainability, influencing economic prosperity, environmental and overall social well-being responsibility.

2. OUR POSITION

WHA Group recognizes the importance of our people as a key driving force behind sustainable organizational growth. As such, the Group focuses on developing and adopting new strategies in human resources management to keep pace with the evolving business landscape and effectively meet employee needs. A primary goal is to maintain leadership across all business sectors in which the Group operates and to become a Tech-Driven Organization by 2025. This ambition is guided by the "Mission To The Sun" framework, a core model for organizational development that emphasizes a balance among economic, social, and environmental performance.

To align with future trends, the Group has embraced more flexible work arrangements under the "Future of Work" concept. These approaches are designed to enhance work efficiency based on individual strengths while simultaneously supporting employees' physical and mental well-being. The Group has also developed strategies to prepare for potential changes, with a strong emphasis on human capital development and enhancing employees' capabilities to align with the skillsets required in the digital age—where expertise must go beyond traditional competencies. This includes rethinking human resources management from its foundational concepts and goals to operational processes to improve efficiency and respond effectively to a competitive environment.

Additionally, the Group has issued a Human Rights Policy to guide human resources management practices and ensure that all approaches are grounded in principles of respect and protection of human rights, offering equal opportunity and promoting equity. These strategies and approaches are crucial for creating positive work experience and job satisfaction, factors that help retain high-potential employees in the long term. Furthermore, the Group integrates organizational values and culture through various communication activities such as training and employee development programs, enabling all employees to understand and commit to moving toward shared goals.

3. MANAGEMENT APPROACH

3.1 GOVERNANCE STRUCTURE

WHA Group has established a Human Resources Department that plays a key role in managing human capital in alignment with the Group's five-year Human Resources Management Strategic Framework (2022–2026). The human resources department operates under the oversight of the Board of Directors, which is responsible for setting the direction and supervising all aspects of human resources management. This includes policy formulation, strategic planning, performance monitoring, and comprehensive impact assessment of implemented policies. The roles can be categorized as follows:

Roles	Responsibilities
Human Resources Department	The Human Resources Department plays a key role in planning and implementing human resources management strategies in alignment with the organization's long-term strategic framework. The focus is on developing human resources policies and processes that support the organization's objectives, including recruitment, selection, and management of employees with the knowledge, capabilities, and skills that meet organizational needs. Additionally, the Human Resources Department prioritizes talent development through training, coaching, and performance evaluation, as well as overseeing employee welfare, benefits, and fostering positive relationship between employees and the organization. The department also supports an organizational culture that emphasizes sustainability, diversity, and collaboration.
Board of Directors	The Board of Directors is responsible for setting policy direction and strategic framework for human resources to align with the organization's goals and vision. They continuously monitor the implementation of human resources initiatives to ensure their appropriateness and alignment with the strategic plan. Furthermore, the Board emphasizes assessing the impact of human resources policies on both the organizational and stakeholder levels. They also oversee that human resources management adheres to international standards and relevant laws and regulations. In addition, the Board supports the long-term talent development to promote human resources sustainability and ensures transparency and equity in human resources management at all levels of the organization.

With a clear and effective management and governance structure, we are confident in our ability to drive the organization toward becoming one that every employee is proud to be part of, while achieving sustainable economic, social, and environmental goals in a responsible and tangible manner.

3.2 RISK AND OPPORTUNITIES MANAGEMENT STRATEGY

In an era of rapid transformation across business and society, effective human resources management is a key driver in strengthening an organization's competitiveness. This includes the ability to attract and retain high-quality personnel, develop essential and relevant skills, and establish systems and working environments that support operational efficiency. These are all crucial components that help drive the organization forward. However, human resources management still entails risks that must be addressed, such as shortages of skilled labor, delays in employee skill development, and declining employee engagement all of which can adversely impact the organization's long-term success. Therefore, identifying and managing both risks and opportunities in human capital is essential. Organizations that can upskill their workforce in line with market demands and organizational strategic directions will be better equipped to build a strong foundation and achieve long-term sustainable growth.

The Group has identified that potential risks in human resources management, including the shortages of personnel with specialized expertise in fast-evolving industries, which may affect specific business operations and overall organizational performance. The Group faces challenges in attracting and retaining talented and high-performing employees, particularly when unable to offer appropriate career development opportunities or competitive benefits. Furthermore, employees' inability to adapt to rapidly changing technologies and market demands may diminish work efficiency and hinder the organization's long-term growth.

Conversely, the Group sees significant opportunities for growth in human capital development, including investments in skill-building and capability enhancement, which help boost employees' performance and adaptability to technological and market shifts. Fostering a positive work and strong organizational culture also promote employee engagement and motivation. Additionally, providing career development pathways and internal advancement opportunities strengthens employee commitment and loyalty. At the same time, formulating policies to attract high-potential talent enhances the organization's competitiveness and responsiveness to dynamic market needs.

3.3 RISK MANAGEMENT

RISKS AND OPPORTUNITIES MANAGEMENT

WHA Group places strong emphasis on effective human resources management and has implemented a 5-year strategic framework (2022 - 2026) with the objective of becoming one of the most desirable employers in Thailand and the region. To achieve this, the Group has continuously executed its strategic roadmap to improve and enhance its human resources systems, ranging from incentive programs and employee retention strategies to ongoing investments in human capital development and fair labor practices. These efforts aim to address labor shortages, improve overall human resources quality, and strengthen employee capabilities. At the same time, the Group is firmly committed to upholding ethical standards and strictly preventing all forms of human rights violations, including discrimination, harassment, and illegal or forced labor.

Driven by this commitment and consistent execution of strategic guidelines, WHA Group has been recognized as an outstanding employer for two consecutive years. In 2023, the Group received the "Kincentric Best Employer Thailand 2023" award from Kincentric (Thailand) Co., Ltd. In 2024, the Group was honored with the "Best Companies to Work for in Asia 2024" and the "HR Asia: Sustainable Workplace Awards" from HR Asia, a leading regional publication. These accolades reflect the Group's excellence in human resources management practices, ranging from employee care and job satisfaction to building a strong organizational culture that supports professional growth and engagement, highlighting the Group's standing as an internationally desirable workplace. These achievements reaffirms the Group's commitment to improving the quality of life for employees, communities, society, and the environment, in alignment with its mission: "WHA: WE SHAPE THE FUTURE".



To ensure the continuous effectiveness of its human resources management, WHA Group has developed fair and standardized human resources management tools and processes that enable reliable performance evaluation and strategic alignment with the Group's overall visions and objectives. This approach supports the Group in achieving its goals efficiently and fostering long-term sustainable business development. In addition, the Group ensures that human capital management is aligned with the unique needs and objectives of each business unit. The focus is placed on analyzing both current and future human resource needs and trends in line with strategic business directions, as well as preparing for various potential scenarios.

Strengthening the corporate brand to retain and attract high-potential personnel
Instilling WHA DNA to support the transition to becoming a Tech Company
Enhancing skills essential for the future world
Adjusting work models to promote flexibility, agility, and maximum efficiency
Developing high-potential employees and future leaders to be ready for change



WHA CORPORATE VALUE

WHA Group has defined four corporate values: Advanced, Champion, Resourceful, and Integrity, which are the foundations in building organizational leadership in all aspects. We also define four core competencies: Customer Solutioning, Data-Driven Entrepreneurship, Resilience, and Partnership. These competencies help enhance leadership and potential of WHA Group's personnel aligning with corporate branding. These corporate values are crucial in fostering innovation within the organization and driving the Group towards digital transformation under the "Mission To The Sun" project. This initiative promotes the development of WHA Group and our personnel. Employees across all four business groups are instilled with WHA Corporate Values to perform their roles effectively and cohesively. Furthermore, WHA Group has incorporated modern digital concepts into the organization's DNA (WHA DNA). This process plays a key role in driving the Group's growth across various businesses through strategic execution and paves the way towards achieving the goal of becoming a Tech-Driven Organization by 2025.



LABOR PRACTICES



WHA Group consistently places great importance on the equal treatment of employees and has developed labor practices aligned with our policy, which upholds clear non-discrimination principles. WHA Group is committed to zero-tolerance of any forms of harassment. We also promote diversity across the organization, from junior staff, or the foundation of the Group, to the executive level. This approach aims to foster an organizational culture that respects differences and supports sustainable inclusion.

The Group has established the Nomination and Remuneration Committee (NRC), comprised of members of the Board of Directors. The role of this committee is to nominate qualified individuals for director and senior executive positions without restriction or discrimination based on nationality, religion, language, age, gender, marital status, personal sexual attitudes, disability, union membership, employee representative status, political preferences, or other personal beliefs. Additionally, the NRC is responsible for proposing clear, fair, and appropriate remuneration criteria and guidelines aligned with

current labor market conditions. The NRC holds meetings at least four times a year and reports to the Board of Directors.

To ensure all employees are treated fairly, WHA group provides a grievance channel for employees to report experiencing unfair treatment. In cases of discrimination complaints, the Group will assess whether the complaint falls under discriminatory practices as defined by the International Labour Organization (ILO) and will implement corrective and remedial measures, including measures to protect personal information from the start of the investigation until its conclusion, as part of the Group's non-discrimination policy. Establishing the clear policy and its effective implementation can avoid discrimination as a basic expectation of responsible business conduct. Each year, the Group reviews the outcomes of various complaints and strengthens the anti-discrimination policy. In 2024, there were no reported cases of discrimination against employees or contractors within the Group's operations, aligning with the group's goal of zero complaints related to employee discrimination.



EMPLOYEE WELFARE AND BENEFITS

WHA Group provides appropriate welfare and benefits to our employees exceeding the minimum regulatory requirements, which not only promotes employee satisfaction and a sense of security of life but also enhances the Group's human resources management. All employees are informed of their rights to welfare and benefits from the start of their employment. Permanent employees receive standard benefits and welfare, including life and accident insurance, health insurance that covers registered family members, annual health check-ups, uniforms, provident funds, assistance funds, disability coverage, etc. Female employees are entitled to maternity leave and paid parental leave during and after pregnancy for 14 weeks, while male employees or nonprimary caregivers are entitled to one week of parental leave to support their spouse with childcare after birth. This leave is separated from other types of leave. Breastfeeding rooms are also provided in the workplace for employees' convenience. In addition, WHA Group allows employees who need to take care of sick family members to take personal leave for this purpose. The Group occasionally organizes childcare activities as part of the employee support program, allowing employees to bring their children to the office during working hours. In 2024, 12 employees participated in this activity. Moreover, the Group listens

to employee feedback to adjust benefits to meet their needs. Employees can propose benefit improvements through the Employee Welfare Committee and the Human Resources Department.

WHA Group is committed to fostering a positive work environment and motivating employees through various activities and projects aiming to promote employee well-being, such as WHAppy Talk. In 2024, we continue to use the results from 2023 Employee Engagement Survey as the foundation for ongoing engagement initiatives, supplemented by internal assessment "ONE WHA Sentiment" and participation in HR Asia's survey. The Group values employee satisfaction evaluation across multiple areas, with the objective of enhancing employee well-being, in alignment with our human resources management strategy. We also put effort into improving the working environment and practices to ensure employees can pursue shared goals and enjoy a meaningful career experience with a focus on occupational health and safety. Furthermore, the Group promotes a happy and healthy workplace under the Happy Workplace principle. In 2024, the Group organized "HR Tang Wong Lao", "WHAppy Talk", and other programs to strengthen employee well-being and happiness through shared experiences in the alignment with WHA DNA.

TALENT ATTRACTION AND RETENTION

WHA Group has developed and adopted technologies to transform our way of working under the concept of "Future of Work", reflecting the importance of recruiting individuals with the suitable skills and knowledge, as well as the ability to adapt to social changes, such as technological expertise and digital literacy.

WHA Group recognizes the importance of maintaining a low employee turnover rate, which not only supports efficient business operations and preserves long-term competitiveness, but also minimizes the high costs and time associated with recruitment and selection processes. To address this, the Group has made efforts to reduce the turnover rate by assigning the Human Resources Department the responsibility of managing to motivate and retain talented and experienced employees. The Group implemented Strategic Workforce Planning (SWP) and People Analytics (PA) together with our human resources management system. SWP is a long-term planning over a 3-5-year span to prepare for future scenarios. This allows the Group to effectively manage human capital in line with the specific needs of each business and the expected outcomes. It emphasizes analyzing workforce trends together with current and future strategic business objectives. These efforts result in the voluntary turnover rate at 4.05% in 2024, down from 6.03% in 2023.

STRATEGIC WORKFORCE PLANNING (SWP)

The Group is committed to managing human resources through the Strategic Workforce Planning (SWP) process, which includes the implementation of a 5-year strategic framework (2022–2026). This aims to enhance organizational agility and improve employee experience. In collaboration with the operations team, the Group identifies the necessary expertise and skills and prioritizes them through a matrix assessment that considers key factors such as impact on organizational goals, sustainability of knowledge, and competitive advantage. If employees already have expertise in certain areas, knowledge enhancement programs or targeted training sessions are arranged to address any skill gaps, aiming to achieve long-term goals and strengthen overall organizational performance.

Moreover, WHA Group has adopted People Analytics (PA) and a Human Capital Management System (HCMS) to support workforce planning and decision-making. These tools are used to collect and analyze data such as the number of job vacancies and the Human Capital Return on Investment (HCROI), allowing the Group to adjust our workforce strategies accordingly. This approach enhances the overall effectiveness of human resources management, from recruitment, performance evaluation, identification of skill gaps, to reduction of employee turnover risks. As a result, the Group is able to operate efficiently and grow sustainably, which is clearly reflected in the employee engagement score at 73%in 2024.



RECRUITING AND HIRING

WHA Group has established a clear employment policy and emphasized both internal and external recruitment to ensure the selection of candidates whose potential aligns closely with the organization's needs. The Group utilizes various recruitment channels, including direct applications through the company's website, job search platforms available in Thailand, as well as participation in multiple job fairs.

WHA Group has a process to attract high-potential talents by creating and communicating a clear and effective Employer Value Proposition (EVP) that aligns with the Group's corporate values. This aims to enhance the efficiency of employee recruitment in accordance with the workforce plan, supporting operational plans and business objectives. The Group gathers and analyzes communication content based on the real needs of potential talents from both internal and external sources to ensure that the communication process aligns with the perspectives and expectations of external individuals towards the Group. Our goal is to creatively present the value in the EVP through various promotional channels. Additionally, the Group has launched a corporate image enhancement project to attract the most talented and suitable personnel, as well as to elevate the employment image to attract targeted talent groups as follows:

Professional Network Employment Of Under-Privileged Academic Partnership Groups WHA Group strives to reach out WHA Group collaborates with professional The Group promotes employment to high-potential new generations associations, business associations, and opportunities for under-privileged through various channels and projects, communities to promote the Group through groups by supporting the hiring of individuals from deprived backgrounds, such as offering internships, allowing knowledge sharing sessions, lectures, educational institutions to visit the and social activities, aiming to develop including those facing social status relationships with experts. Group's operations, conducting training issues or lacking formal education and programs through coaching, organizing qualifications, such as people with disabilities. hackathon events, and promoting practical learning projects.

Ensuring the efficiency of the recruitment process and its alignment with business needs and current labor market behaviors, WHA Group utilizes data from the Human Capital Management System (HCMS) to analyze and develop the process. This includes evaluating labor demand-supply conditions, the efficiency of recruitment channels, as well as the effectiveness of preliminary candidate screening tools, and analyzing applicant behavior and workforce requirements. The Group continuously monitors and collects data to review and analyze success rates, while developing improvement plans to increase efficiency in meeting business demands and supporting organizational growth. Currently, the Group has integrated HCMS technology with cloud-based systems and mobile devices to improve accessibility and convenience. We remain committed to continuously advancing the recruitment process to keep pace with market conditions, emerging trends, and the ever-changing future of work, with the goal of becoming a Tech-Driven Organization by 2025.

MEASURING EMPLOYEE PERFORMANCE

WHA Group measures employee performance through annual performance reviews following the guidelines of the Performance Management System (PMS). The goal is to maximize every employee's potential. Employee performance is analyzed against Key Performance Indicators (KPIs). Performance results impact decisions on employee compensation and the development of future capacity-building programs. This also allows comparison of performance with the ratio of high-potential and high-performing employees. The process aims to strengthen the Group's talent pool and reduce gaps in relationships between supervisors and subordinates. In 2024, 100% of WHA Group's employees underwent performance evaluations in various forms. These evaluations were conducted on an ongoing basis, both formally and informally, to ensure employees are aware of their status, expectations, and receive timely feedback. The types of performance evaluations are as follows:

Type of performance assessment	Total number of employees (%)
Key Performance Indicators (KPIs) set Jointly by Supervisors and Subordinates	100
Multi-dimensional performance appraisals (e.g., 360-degree feedback)	Applied to High-Potential Personnel and Staff Participating in Leadership Development Program
Team performance evaluation	100
Agile (On-duty) conversations	100

WHA Group adopted various tools and measures to evaluate individual performance across all business groups. This helps align employee development with the organization's growth strategy. Four evaluation methods are used to determine compensation related to individual performance.

IDENTIFYING WORKFORCE SKILLS GAPS

Identifying the current workforce skills gaps, such as shortages in specific skills or knowledge, is a part of the Strategic Workforce Planning (SWP) process for WHA Group. This ensures that the Group's business operations can meet the objectives and move in the strategic direction set forth. The Group has established WHA Group Development Program as a short-term framework to identify high-demand positions that can be filled, as well as the skills or positions in demand at various times. This enables the development or preparation of necessary skills or knowledge to support the Group's current and future business operations on schedule. In this process, the Group collects data through the Human Capital Management System (HCMS), including the completion rates of training programs for each department, the completion of training programs as planned, and the number of training hours per employee. This data is then used to assess the workforce skills gaps and extend to the development of existing skills and the acquisition of new skills. Collecting and analyzing this information also helps the Group enhance employee capabilities and appropriately plan career advancement within the organization, while developing talented individuals for future succession planning across all business groups.

IDENTIFYING FLIGHT RISKS TO IMPROVE RETENTION

The Group recognizes the importance of employee retention, particularly through fostering organizational engagement, which serves as a fundamental driver of long-term performance and success. Employees who feel a sense of belonging are more likely to dedicate their full potential, collaborate effectively, and work toward shared goals.

To ensure continuity and deliver tangible outcomes, the Group continues to use the results of 2023 employee engagement survey as the basis for evaluating the effectiveness of our retention strategies, which have been continuously refined and developed. These efforts focus on 3 key factors influencing employee engagement: (1) tools, equipment, and organizational structure, (2) work-life balance, and (3) compensation, benefits, and recognition. In addition, the Group gathers employee-related data such as the attrition rate and the regrettable loss of high-potential employees through the Human Capital Management System (HCMS) to analyze root causes, identify preventive measures, and understand employee motivations. The Group also conducts annual employee engagement surveys to identify issues and better understand the factors driving employee turnover. These insights are used to enhance longterm retention strategies and uphold the Group's status as an employer of choice at both the national and regional levels.

Employee Engagement Score 83%

2020

% of Total Employee Coverage 90%



88%





Employee Engagement Score 68%

2021

% of Total Employee Coverage



72%





Employee Engagement Score 75%

2022

93%

% of Total Employee Coverage 99%



78%





Employee Engagement Score 73%

2023

% of Total Employee Coverage 99%



/_{II} 77%



2024 2025 Employee % of Total Employee **Employee Engagement Score** Coverage **Engagement Score** More than 76% 99% 2025 % of Total Employee **Coverage Target** 100%

In 2024, WHA Group conducted internal assessments through the "ONE WHA Sentiment Survey" tool and participated in the international-level HR Asia Employee Engagement Survey to measure employee engagement. The results are as follows:

- ONE WHA Sentiment Survey: Achieved a 97% response rate and an average score of 85%, reflecting employees' understanding of organizational goals, skill development, and teamwork.
- HR Asia Employee Engagement Survey: The Group received an average score of 88%.

This success in fostering employee engagement enabled the Group to achieve its goal of becoming the best employer, as evidenced by receiving the "Best Companies to Work for in Asia 2024 Award" and the "HR Asia: Sustainable Workplace Awards" from HR Asia, a leading human resources magazine in Asia.

The results of the employee engagement and satisfaction survey across all business groups are compared with past evaluations and reported to the executive committee and senior management in the relevant business groups and are shared with employees through the Group's SharePoint. These results are further analyzed to support the development of projects, policies, or procedures aimed at improving employee care, as part of the Group's SWP process. The data collected from all employees through performance evaluations and employee engagement surveys is analyzed to promote career advancement or to develop beneficial programs, including job rotation projects, retirement plans, and filling positions within the organization. In 2024, 5.63% of job positions were filled through internal hiring.

SUMMARY TABLE OF DATA ANALYSIS APPROACHES FOR HUMAN RESOURCES MANAGEMENT

	Employee Performance Appraisal	Strategic Work- force Planning (SWP)	Workforce Skills Gaps	Recruiting & Hiring	Identifying Flight Risks to Improve Retention
The types of data that companies typically collect, related to each topic (such as number of employees, job types, working hours, etc.)	 Potential employee rate (outstanding employee) Completed of work evaluation Timeline for KPIs evaluation 	 Number of employees Gender Organizational structure Location Gender ratio Country 	 Training completion rate according to plan Completion of training by department Ratio of total training hours/ number of employee 	 New employment rate Recruitment period Termination rate Recruitment channel 	 Attrition rate Loss of desirable employee
Indicators for tracking results	- Percentage of goals achieved by employees	 Number of open positions Human Capital Return on Investment (HCROI) 	- Number of training course per employee - The supervisor's satisfaction level with the employee's performance	- Percentage of recruitment success rate	 Turnover rate Turnover rate of skilled employee
Objectives of data analysis	- Verify the quality of performance evaluation and provide feedback to employee	- Monitor human resources information and workforce planning	- Provide employees with opportunities to en-hance their skills or learn new ones, to fill skill gaps and strengthen the workforce	- Enhance workforce planning effectiveness to ensure operational alignment with the established plan and business objectives	- Evaluate employee engagement with the organization
Benefits of data analysis include	- Increase the number of skilled and competent personnel - Enhance employee engagement with the organization - Reduce gaps in the relationship between supervisors/ managers and employee	- Able to compare human resources data with business performance data	 Develop employee capabilities and plan appropriate career progression within the organization Develop personnel with abilities for job succession and career advancement 	- Recruit personnel for critical positions in a timely manner to support the business needs and organizational growth	- Evaluate employee engagement with the organization



EMPLOYEE DEVELOPMENT AND PROMOTION OF ADVANCEMENT OPPORTUNITIES



WHA Group firmly believes in the philosophy that humans are the most valuable assets of the organization and that employees play a crucial role in the sustainable growth of the organization. Moreover, the Group is also aware that investing in employee training and development not only helps motivate employees but also strengthens the organization. Therefore, the Group is dedicated to developing diverse and comprehensive skill sets, to promote employee advancements in both personal skills and career paths, through skill development programs and training. Starting with identifying skill gaps, budget allocation is made for both upskilling and reskilling training, we ensure that all employees have a set of critical skills relevant to the organization's strategies and corporate vision.

The learning and development program focuses on 5 key growth areas including 1) management skills development, 2) business and digital knowledge development, 3) soft skills development, 4) technical skills development, and 5) talent management.

WHA Group has also analyzed the Human Capital Return on Investment (HCROI) to use as a metric and indicator of the appropriate level of investment in employees. In 2024, the Group achieved a return of 12.2 times and has set a target of 16.0 times by 2025.

HCROI

2021
HCROI
11.5
12.3
2022
HCROI
1 12.5
2025
Target
HCROI
1 3 3 1 1 2 9 1 16.0

To promote continuous self-development among employees and drive business results, WHA Group has adjusted its human resources strategy to accelerate people transformation through enhancing capabilities, developing existing skills, acquiring new skills, and supporting a creative work environment. In 2024, the Group has planned to revise the organization's competency requirements concerning essential skills for current and future work, aligning with the group's strategy and the requirements of each business unit as follows:

Business Hubs	BU's Specific Skill Sets	
WHA Group	The expansion of the Group's business into the global market	
Real Estate Management and Development Business (WHA Logistics)	Value added products and Smart Warehouse features	
Industrial Estate Development Business (WHAID)	Smart Warehouse	
Utilities and Power Business (WHAUP)	Value added products for WHAUP	
Digital Business (WHA Digital)	Digital-enabled solutions for WHA Group	

In addition, WHA Group emphasizes the importance of enhancing digital knowledge and skills for all employees, ranging from basic to advanced skills, such as data analysis, programming, or increasingly complex digital skills required for specialized tasks.

TRANSITION ASSISTANCE PROGRAMS

WHA Group has implemented Transition Assistance Programs, which provide guidance and directions for employees' life after the end of their employment contract or retirement. The focus is to help these employees smoothly adapt to their post-retirement environment and be effective. Additionally, in some cases, it assists employees with capabilities to continue working after retirement. The activities of the Transition Assistance Programs include Money Planning, Pre-Post Retirement seminar, general meetings on pension funds, and supporting budgets for employees to participate in external training programs.



Human rights are fundamental rights to which all individuals are entitled by birth. However, violations of human rights still occur in many parts of the world in ways that contravene laws, international standards, and human rights commitments. Such violations or incidents may result in negative consequences, such as reputational damage, complaints from human rights organizations, or protests by stakeholders. WHA Group recognizes that true business sustainability involves more than economic growth. It also requires taking responsibility for stakeholders and vulnerable groups throughout every stage of the value chain.

HUMAN RIGHTS GOVERNANCE

WHA Group has established a governance structure to ensure that its human rights practices are appropriate and transparent. Oversight responsibility at the highest level is assigned to the Corporate Governance and Sustainability Committee, which is tasked with setting policies, monitoring operations, and providing strategic guidance on human rights operations to ensure alignment with international principles, such as the United Nations Guiding Principles on Business and Human Rights (UNGPs) and other relevant global standards.

For day-to-day operations, the Group has formed a Human Rights Working Team comprising representatives from relevant departments, with clear responsibilities defined for each area. The team closely monitors human rights performance, analyzes and assesses potential risks within the Group's business activities,

and plays a key role in collecting data, preparing reports, and regularly communicating progress to management and stakeholders.

HUMAN RIGHTS DUE DILIGENCE (HRDD)

WHA Group conducts comprehensive Human Rights Due Diligence (HRDD) to assess risks and potential impacts related to human rights across the entire value chain. This process involves identifying relevant human rights issues and evaluating the potential effects on vulnerable groups requiring special attention, such as children, migrant workers and pregnant women. The Group also assesses the likelihood and severity of human rights impacts at three levels: organizational, operational, and individual. Human rights risk assessments are conducted using 2 key criteria: (1) the likelihood of occurrence, and (2) the potential impact. These assessments encompass a wide range of human rights issues and are designed to proactively manage and mitigate potential violations. The Group's HRDD process is aligned with internationally recognized standards and frameworks, including the Universal Declaration of Human Rights (UDHR), the United Nations Guiding Principles on Business and Human Rights (UNGP), the United Nations Global Compact (UNGC), and the International Labor Organization's Declaration on Fundamental Principles and Rights at Work. WHA Group regularly conducts human rights assessments and systematically reviews and updates its due diligence processes to ensure alignment with evolving standards, stakeholder expectations, and business operations.





HUMAN RIGHTS POLICY COMMITMENT

WHA Group has established the "Policy on Human Right and Labor Practice of WHA Group" as part of our comprehensive human rights due diligence process and in accordance with global standards on human rights, including local and international laws and regulations. The scope of the Group's human rights policy covers all stakeholders, including all employees involved in the Group's operations, as well as all suppliers, contractors, and business partners, including new business activities (such as mergers, acquisitions, joint ventures). Additionally, WHA Group has extended these human rights commitments to our customers, communities, and vulnerable groups, i.e., women, children, indigenous people, migrant workers, third-party contracted labor, local communities, people with disabilities, elderly and LGBTQI+. Furthermore, the Human Resources Department has communicated this policy to all employees across all business units.



HUMAN RIGHTS RISK ASSESSMENT (HRRA)

WHA Group recognizes the importance of Human Rights Risk Assessment (HRRA) as an integral part of its overall operations. This assessment is also incorporated into the Environmental Impact Assessment (EIA) process. The HRRA assess human rights risks covering 100% of the Group's operational sites and is conducted according to business segments and related activities from the construction phase through to ongoing operations across the Group's value chain.

Furthermore, the Group places strong emphasis on stakeholder engagement in identifying human rights issues that may impact its operations and surrounding communities. Human rights risks and impacts both potential and actual are assessed on a triennial basis through consultations with diverse stakeholder groups. Insights from these engagements are analyzed to comprehensively identify human rights risks and to develop concrete and sustainable measures for prevention and remediation. These efforts ensure that the Group's operations are aligned with international human rights standards.

Business Group	Upstream Level	Business Transactions	Downstream Level
Logistics Business	Land purchasing Real estate management	 Real estate rental/ leasing and sales Asset management 	 Project repairs/ maintenance Post-sales customer services Stakeholder relationship management
Industrial Development Business		 Land sales for industry business operations Rental of ready-built warehouses and factories Asset management Fiber to the x optical cable (FTTx) 	
Utilities and Power Business	Raw water procurement Fuel and solar energy	Water productionWaste managementElectricity productionSolar rooftop installation	
Digital Business	IT product and service purchasing	Service management	

Furthermore, WHA Group has extended its identification of human rights risks to cover emerging business activities such as mergers, acquisitions, joint ventures, etc. Human rights criteria have been incorporated into the due diligence checklist for mergers and acquisitions, as these activities may impact the Group's human rights performance. The Group also mandates an annual, systematic review of risk assessments to ensure that all potential risks are comprehensively identified and that the information remains current and relevant.



HUMAN RIGHTS ISSUE IDENTIFICATION

WHA Group has identified and assessed human rights issues, both actual and potential, including related risks and impacts, as part of the business review process. The human rights issues considered by the Group are as follows:

Employee Rights

- Illegal forms of labor (i.e., forced labor, child labor, human trafficking)
- · Freedom of association
- Right to collective bargaining
- · Equal remuneration
- · Segregation and discrimination
- All forms of harassment, including sexual and non-sexual harassment (e.g., verbal threats)
- Foreign human capital, and migrant workers
- Health and safety of employees (including the pandemics)
- · Work environment and workers' quality of life
- Working hours
- · Living wage

Customer Rights

- Data privacy
- · Health and safety of customers
- Waste, hazardous waste and contagious waste management

Supplier & Business Partner Rights

- Health and safety in the supply chain
- · Fair hiring conditions for suppliers
- Working conditions and environment for contractors and suppliers
- Joint venture partnership's unsafety or unhealthy working conditions

Community Rights

- Resettlement
- · Socio-economic impacts
- Environmental impacts
- · Livelihood and standard of living
- Community health and safety
- · Foreign human capital

LAW

Vulnerable Groups

The vulnerable groups covered by the risk assessment include:

- Own employees
- Women
- Children
- Indigenous people
- · Migrant workers
- Third-party contracted labor
- Local communities
- · People with disabilities
- Elderly
- LGBTQI+ communities

In addition, WHA Group promotes workforce diversity and equal opportunities, as well as reducing discrimination on every aspect, especially with race, religion, gender, age, sexual orientation, disabilities, and nationality. We established the policy and practices that foster an inclusive and equitable work environment for all. Various initiatives have been implemented, such as the employment of people with disabilities, open recruitment practices, training, guidelines to promote equality, etc.

HUMAN RIGHTS RISK ASSESSMENT PROCESS



HUMAN RIGHTS CRITERIA

The assessment of human rights risk is based on the Group's human rights risk assessment criteria, which are aligned with international standards and best practices. These criteria are used to determine the materiality of each human rights issue and take into account both the likelihood and potential impact of each issue.

HUMAN RIGHTS RIGHT ASSESSMENT (HRRA) RESULTS

- 100% of WHA Group's operation sites and associated activities were assessed for human rights risks and impacts.
- Following the assessment, 100% of WHA Group's operation sites and associated activities identified as having medium-level human rights risks have had preventive and/or remedial measures implemented.
- All of WHA Group's operation sites and associated activities (100%) identified as having medium-level human rights risks have implemented appropriate preventive and/or remedial measures.
- The human rights risk assessment identified the following salient human rights issues with medium-level risk:
 - Health and safety of employees
 - Health and safety of customers
 - Health and safety within the supply chain
 - Community well-being and standard of living communities

100%



The Group conducted human rights risk and impact assessments across 100% of its operation sites and associated activities.

100%

100% of the Group's operation sites and associated activities identified as having medium-level human rights risks have implemented preventive and/or remedial measures.

100%

Following the assessment, 100% of the Group's operational sites and associated activities were identified as having medium-level human rights risks (salient issues), as follows:

- · Health And Safety Of Employees
- Health And Safety Of Customers
- Health And Safety Within The Supply Chain
- Community Well-Being And Standard Of Living

HUMAN RIGHTS IMPACT ASSESSMENT (HRIA)

Apart from conducting human rights risk assessments, WHA Group has integrated the Human Rights Impact Assessment (HRIA) process into its core business operations to examine whether stakeholders are affected by the Group's business activities in terms of human rights.

WHA Group manages human rights impact assessments through continuous stakeholder engagement to oversee its business operations throughout the entire value chain and to prevent any negative human rights impact on all relevant stakeholder groups. The Group is committed to continuously developing human rights measures based on stakeholder concerns. In the event of any human rights impacts, WHA Group promptly takes corrective and remedial actions to prevent recurrence.

The Group engages with various stakeholders, including employees, suppliers, communities, and customers, to collect data on human rights impacts. Satisfaction surveys are distributed to employees, sup-pliers, and customers to gather their feedback, concerns, and opinions regarding WHA Group's operations, including human rights practices. Additionally, the Group holds tripartite meetings with representatives of local communities near its operational sites to listen to feedback on impacts related to living standards, water quali-ty, and air quality. The Group also conducts supplier audits to ensure compliance with human rights standards.

THE RESULTS OF HUMAN RIGHTS IMPACT ASSESSMENT OF WHA GROUP'S OPERATIONS ON STAKEHOLDERS ARE AS FOLLOWS:

 Noise, pollution, dust, light, vibrations and accidents that may arise from construction of warehouses, factories or buildings impact the health and safety of surrounding communities and customers.

- Traffic congestion or road accidents in warehouse areas affect the right to adequate standards of living and quality of life of nearby community members and customers.
- Accidents resulting from sub-standard construction of factories, warehouses or buildings impact on customer health and safety.
- Low quality or sub-standard products and services.
- Work-related accidents caused by unsafe work environment (e.g., broken equipment, electric shock, and short circuit) affect employees' right to safe and healthy working conditions.
- Inadequate occupational health and safety measures during the pandemic affect employees' right to safe and healthy working environments.
- Suppliers/ contractors, or service providers may violate the labor rights (e.g., migrant workers, forced labor, and child labor, etc.) concerning labor practices and safe and healthy working conditions, potentially damaging WHA Group's reputation.
- Unsafe or unhealthy working conditions at joint venture companies.

INTEGRATION OF FINDINGS INTO HUMAN RIGHTS RISK ASSESSMENT AND POLICY

Once the risks and potential impacts have been identified, the findings are then used to guide the review and update of the Human Rights Policy. This ensures that WHA Group's Human Rights Policy and commitments align with current global trends, international standards and comply with the latest laws and regulations.

Furthermore, the results of the human rights risk assessment are integrated into WHA Group's management systems, approaches, procedures, and work processes. They are also used to inform and shape the Group's future business direction and strategy.

IDENTIFYING AND IMPLEMENTING MITIGATION MEASURES FOR HUMAN RIGHTS IMPACTS

Given the nature of WHA Group's activities as a logistics and industrial estate developer, it is assessed that the Group faces comparatively lower human rights risks than other industries. This is due to the Group's strict compliance with applicable laws and regulations, such as urban planning laws governing land use zoning and the requirements stipulated in Environmental Impact Assessments (EIA). In addition, the Group has no significant involvement with migrant labor. Nevertheless, WHA Group has implemented a range of preventive and mitigation measures, along with continuous monitoring and follow-up processes for identified human rights issues. These efforts are summarized as follows:

Human Rights Issue	Affected Rights Holders and Vulnerable Groups	Tracking and monitoring, mitigation measures, and remediation actions
Accidents that may occur within the industrial estate as a result of the operations of the industrial factories belonging to the client group include incidents such as gas pipeline explosions, chemical leaks, as well as fire incidents and/or accidents at the workplaces of WHA group, such as water production plants and wastewater treatment facilities.	Community, Customer, Employee	 Conduct risk assessment to identify various potential hazards that may occur during business operations and to implement control measures to eliminate or reduce those risks. The risk assessment is reviewed annually or whenever there are changes in operational activities. Install the Emergency Control Center (ECC) in 9 of WHA's industrial estates and 2 industrial lands. The control centers are used to assess and prevent emergency incidents. ECC systems are managed by OHS specialists that can immediately respond to the incidents that have occurred in real-time. Implement emergency plans and conduct the emergency drills, annually. Have communication channels that can be easily accessed by all stakeholders regarding health and safety issues. Gather Safety Data Sheet (SDS) on hazardous chemical uses within the industrial estates in order to prevent any further risks from occurring.
Health safety from the effects of noise pollution, air pollution, dust, smoke, light and vibration from project development and operation within the industrial estate.	Community, Customer, Employee	 Develop measures and preventive plans specified in the Environmental Impact Assessment (EIA) report and fully comply with all measures. Various innovations are developed and utilized to reduce the risk of creating an environmental impact on the community through the operation of industrial estates and customer groups. Operators employ measures such as a central control center (Unified Operation Center: UOC) to effectively control and monitor various safety-related indicators. Resolve complaints from communities and tripartite committees in every case with concrete conclusions.
Unsafe working conditions that can lead to accidents during work, such as accidents arising from the use of equipment. or various tools, electric shock, leak-age	Employee	 Organize training for employees on safety, updated laws related to safety for employees Provide safety equipment such as glasses, safety shoes.
Unsafe workplaces during the global pandemic	Employee	 Provide vaccines for employees and their families to prevent the spread Announce preventive measures of WHA Group in the event of a pandemic Implement Business Continuity Plan (BCP) measures by specifying roles, duties, responsibilities when an incident occurs

Human Rights Issue	Affected Rights Holders and Vulnerable Groups	Tracking and monitoring, mitigation measures, and remediation actions
Health, Safety, and Working Cor	nditions in the Supply Chain	
Accidents from construction activities which could lead to work-related injuries or loss of life (for example, falling off height, cuts from sharp objects, burn wounds)	Contractor, Supplier	 Human rights initiatives for contractors/subcontractors to promote the well-being of workers in construction worker camps, especially children residing in the camp (Baan Dek project). Develop safety manual for contractors which they must strictly follow. Assess safety risks and develop safety procedures for each work task/type. Implement an approval process for all suppliers and contractors before entering work premises. Continuously assess and monitor the safety systems within the industrial estates and industrial lands
Standard of Living and Quality o	f Life	
Water management, competition for water with local communities and wastewater releases into natural sources	Community	 Committed to managing water efficiently and effectively. Set target to reduce water uses from natural sources through Recycled Water/ Reclamation Water. Strictly follow waste management requirements and procedures for industrial estates. Control and monitor water management parameters in accordance with EIA requirements. Develop and continuously improve the efficiency and effectiveness of the Group's water production and water treatment systems.

TRACKING AND MONITORING OF HUMAN RIGHTS PERFORMANCE

WHA Group has assigned the relevant departments of each issue to regularly monitor and review WHA Group's human rights measures. Findings are reported to responsible executives for acknowledgment and follow-up, to ensure that identified issues have been addressed and resolved. In addition, human rights criteria have been integrated into the Group's performance indicators. We have also implemented the following procedures to ensure that our operations do not violate human rights while complying with labor practices.

- Regularly monitor employees' working hours, including the management of working overtime, to ensure compliance with relevant regulations and that employees are fairly compensated for their overtime hours.
- Monitor employees wage levels to ensure that wages are sufficient and not lower than the estimated cost of living or applicable standards.
- Continuously monitor the gender pay gap and compensation between male and female employees.
- Hold regular consultations with employee representatives regarding working conditions.
- Provide employees benefits beyond those mandated by the government's social security scheme.
- Encourage employees to take their paid annual leaves as entitled without obstruction.

Additionally, WHA Group has established a whistleblowing channel that stakeholders can easily access to report any actions that may be considered violations of human rights or contrary to the human rights policy. The grievance mechanism is detailed in the Code of Conduct section of this report.

CORRECTIVE ACTION AND REMEDIATION

WHA Group acknowledges that our business activities and operations may impact on the human rights of stakeholders, including vulnerable groups. Therefore, the Group prioritizes the prevention and mitigation of human rights risks at every stage of our value chain. In the event of a human rights violation, WHA Group has established mechanisms to provide appropriate remedies and restore affected individuals to the best possible condition. The Group offers accessible grievance channels, including telephone, email, website, and reporting to responsible personnel. All complaints are treated confidentially and are subject to thorough root cause investigation. (For further details, please refer to "Whistleblowing Channel" section.)

If an investigation confirms that a human rights violation has occurred, whether intentional or not, WHA Group will provide remedies appropriate to each case to ensure fairness for affected parties. Remedies may include financial compensation, restoration of damaged property or quality of life, formal apologies, negotiation for suitable solutions, reinstatement or restoration of work opportunities, and disciplinary actions against involved personnel. Moreover, WHA Group verifies our human rights results, reviews the assessment and due diligence process every year to ensure that our human rights practices remain effective and up to date. In 2024, there were no human rights violations or any human rights-related complaints; therefore, there were no remediation actions.

HUMAN RIGHTS AWARENESS

WHA Group fosters awareness and understanding of human rights among all employees to align with the principles and commitments regarding human rights within the Group. Human rights policies have been communicated as part of the continuous orientation of new employees since 2020, led by the Human Resources Department. Moreover, in 2024, 127 new employees from all business groups (100%) participated in the employee orientation program. In summary, 100% of the Group's employees completed a total of 127 training hours in human rights policy and procedures. Additionally, the Human Resources

Department has promoted the importance of various topics such as nationality, religion, language, age, gender, marital status, personal attitudes towards gender, disabilities, union membership, political affiliation, or other personal beliefs. Various documents have been prepared and attached to the Human Rights Policy through the internal document management system, SharePoint, to enhance awareness of human rights and encourage employees to revisit the policies.

FREEDOM OF ASSOCIATION AND RIGHTS TO COLLECTIVE BARGAINING

WHA Group prioritizes upholding the human rights of all stakeholders affected by its business operations, including issues such as human trafficking, forced labor, freedom of association, the right to collective bargaining, equal compensation, and non-discrimination. These concerns are addressed through WHA Group's comprehensive human rights policies and measures, which extend to stakeholders both within Thailand and abroad, encompassing all countries where the Group operates. To ensure that all stakeholders receive their full and equal rights, WHA Group has implemented a Human Rights Due Diligence (HRDD) process. This process includes a Human Rights Risk Assessment (HRRA) that evaluates compliance with the 35 human rights clauses outlined in the Universal Declaration of Human Rights (UDHR). Through this assessment, WHA Group identifies and addresses any potential risks or violations, taking appropriate measures to rectify the situation and restore affected groups to a state free from the adverse effects of business activities.

In relation to issues concerning restrictions on freedom of association and the right to collective bargaining, WHA Group grants all personnel the right to lodge complaints or unite to address injustices, such as excessive working hours, inadequate compensation relative to workload, workplace insecurity, and more, through various complaint channels. Additionally, WHA Group will establish a committee to evaluate these complaints. The review process will adhere to the rules and regulations specified by the International Labour Organization (ILO).

WHA GROUP'S LABOR PRACTICES

WHA Group is committed to conducting its business in alignment with international human rights and labor principles to create fairness, safety, and a positive working environment for all employees. We have taken actions on the following key issues:

Operation	Approach
Child Labor Prevention	WHA Group is committed to preventing and elimi-nating all forms of child labor. The Group has es-tablished a clear policy to hire employees who meet the minimum age required by law and audit-ed to prevent any employment practices that may violate this right.
Forced Labor Prevention	WHA Group has an anti-forced labor policy throughout its operations and across its supply chain. Employment must be voluntary and fair, supported by monitoring and inspection systems to ensure no violations.
Building Engagement of Employee Representatives	WHA Group encourages strong relationships be-tween employee representatives and manage-ment. Mechanisms and communication channels have been established to allow employee repre-sentatives to express their opinions or discuss work-related matters with transparency and secu-rity.
Reduction of Excessive Working Hours	WHA Group sets up working hours management guidelines in accordance with labor laws and supports employees in having adequate rest and a healthy work-life balance.
Support for Fair Wages	WHA Group is committed to providing fair com-pensation that aligns with local living standards, based on equity and value creation. The Group ensures fair remuneration for employees at all lev-els without discrimination, considering differences such as gender, age, race, and abilities. This supports employee well-being and promotes sus-tainable, efficient work performance. The Group also regularly reviews its wage policies and audit processes to ensure that all employees are fairly compensated in strict accordance with applicable laws.

WHA GROUP'S COMMITMENT TO FRAMEWORKS ON LABOR STANDARDS

WHA Group is clearly committed to promoting and complying with international labor standards. The Group continuously engages in multiple programs, partnerships, and activities to raise awareness and enhance sustainable labor practices. Representatives from the Group have participated in workshops and activities related to labor standards organized by government agencies, private sector organizations, and international bodies. These include workshops on labor rights and human rights, and labor rights knowledge sharing events for migrant workers to improve the Group's understandings for further development of operational processes.

3.4 METRICS AND TARGETS WHA GROUP HAS SET TARGETS FOR HUMAN RESOURCES MANAGEMENT AS FOLLOWS:

Topic	2024 Performance	2024 Target
Internal Hire	5.63%	2.00%
Employee Engagement Level	73.00%	76.00%
Voluntary Turnover Rate	4.05%	6.00%

In 2024, the performance was evaluated based on the average training hours per employee per year, as detailed in the table below.

Category	Average training hour per year (Hour)	Average training hours per year per FTE (Hour)	Average investment in training and development per FTE (Baht)
Gender			
Male	36.44	36.44	13,980.98
Female	38.27	38.27	19,484.44
Age			
Below 30	29.29	29.29	8,815.04
30-50 years	39.09	39.09	17,544.78
More than 50 years	38.06	38.06	17,469.09
Level			
Staff	35.23	35.23	11,464.78
Middle management	41.39	41.39	17,313.63
Top management	48.15	48.15	74,813.96
Race, ethnicity, nationality	, place of origin, cultural backgr	ound	
Thai	37.22	37.22	16,034.41
Type of Training			
In-house training	34.48	34.48	13,663.51
External training	2.34	2.34	2,370.90

2021



Total number of new hires

44

% of Open positions filled by internal candidates (internal hires)

7%



Total number of new hires

34

% of Open positions filled by internal candidates (internal hires)

18%

Average hiring index per FTE

9,300

2022



Total number of new hires

73

% of Open positions filled by internal candidates (internal hires)

0%



Total number of new hires

54

% of Open positions filled by internal candidates (internal hires) 2.36%

Average hiring index per FTE

19,000

2023



Total number of new hires

84

% of Open positions filled by internal candidates (internal hires)

0%



Total number of new hires

45

% of Open positions filled by internal candidates (internal hires)

1.55%

Average hiring index per FTE (THB)

21,524

2024



Total number of new hires

92

% of Open positions filled by internal candidates (internal hires)

1.88%



Total number of new hires

68

% of Open positions filled by internal candidates (internal hires)

3.75%

20,025.63

Target 2025



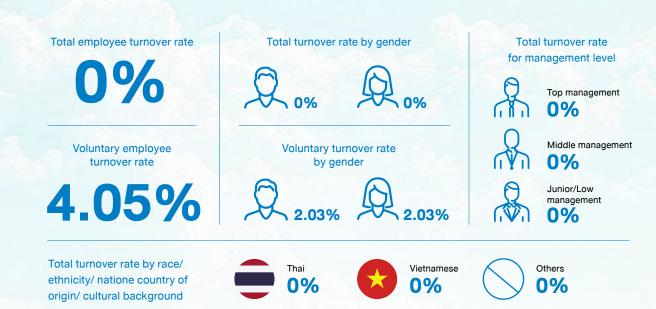


Total number of new hires

% of Open positions filled by internal candidates (internal hires)

5.6%

Average hiring index per FTE (THB)



4. HIGHLIGHT PROJECTS

In addition, WHA Group has developed various projects to promote human resources management and enhance a positive working experience for employees within the Group in various aspects, as follows:

PROJECT TO STRENGTHEN COMMITMENT AND SATISFACTION THAT EMPLOYEES HAVE TOWARDS THE ORGANIZATION:

- In 2024, WHA Group held consecutive Townhall Meetings, which served as a continuation of 2023 Townhall Meetings, with Ms. Jareeporn Jarukornsakul, the Group Chief Executive Officer, as the speaker. The objective was to encourage employee participation and awareness of the business strategies of each business unit for the following year, aiming to strengthen the employees' commitment to the organization
- The group also held the Mid-Year Townhall in August 2024 to communicate the business overview and the success of the group in the first half of the year including business strategies and directions for the rest of the year.
- The Group continues to consistently elevate digital technology capabilities to enhance the efficiency of Human Resources operations. As part of this effort, an Intranet called "WHA Space" has been developed for internal use within the Group. WHA Space serves as a communication channel between the Human Resources department and employees across all business units. It allows employees to access various announcements from the Group. Additionally, the Human Capital Management System (HCMS) has been developed to enable employees to independently manage certain human resources-related tasks, aiming to provide convenience, reduce coordination efforts, and increase employee satisfaction with the organization





EMPLOYEE TRAINING AND DEVELOPMENT

WHA Group prioritizes employee skills to elevate the business to keep pace with the rapid changes in the economic landscape. Therefore, the Group conducts both mandatory and voluntary training programs to develop various skills for employees, including





MANAGEMENT SKILLS DEVELOPMENT

WHA Group organized training programs focusing on developing capabilities and skills in management and administration. These programs included:

- WHA Group organized a mandatory training course titled "Risk Management: Materiality and Sustainability Risk Analysis" for all executives and employees. The course aimed to equip participants with the knowledge to identify and analyze material sustainability issues and ESG-related risks. The session was conducted by Ms. Ratthaporn Malayaphan from KPMG, with a total of 548 participants attending the 2-hour training session.
- WHA Group organized a 6-hour training course "Business Continuity Management (BCM) and Business Impact Analysis (BIA)" for 39 executives and employee across all 4 business units. The training aimed to enhance understanding of the business continuity management process, business impact analysis, risk assessment and management, development of business continuity strategies and recovery measures, as well as the formulation of business continuity plans and exercise programs.



The Empathetic Leadership Program was designed to develop leaders who can guide their teams with purpose and inspiration through a deep understanding of themselves and their team members. The program targeted C-Level and N-1 executives, with a total of 19 participants, and was conducted from April to October 2024. Participants learned to lead with empathy, ask thought-provoking questions, and develop practical leadership skills. Additionally, the program incorporated the "Wheel of Being" survey completed by close colleagues, enabling indepth self-reflection and behavioral assessment. The program emphasized the application of learned skills, with progress tracked during each coaching session to ensure participants effectively integrated these competencies into their leadership practices.





- "1-on-1 Meeting" training program for executives and employees at all levels to promote understanding and practical application, aiming to embed it as part of the company's long-term culture. In 2024, 2 training sessions were held for new employees and those who had not yet participated in the program, with a total of 102 participants. Including those previously trained, 84.59% of all employees have now completed the course. The organization plans to continue this initiative annually to ensure the approach becomes an integral part of the company's work culture. The training covers 4 key components:
 - Providing a platform (both formal and informal)
 for managers and employees to discuss Work &
 Life matters. "Work" encompasses motivation
 & inspiration at work, work goals, personal
 development plans, communication of work
 progress and limitations, job performance
 feedback, and coaching. "Life" includes
 conversations to understand personal life
 progress, current challenges, life goals, etc.

- 2. Elevating the relationship between managers and subordinates by facilitating discussions between each manager and their team members.
- Increasing the effectiveness of communication between managers and subordinates, both in terms of quantity (frequency) and quality (communication outcomes)
- 4. Understanding and preventing potential issues that may arise in the future.

TECHNICAL AND FUNCTIONAL SKILLS DEVELOPMENT

In 2024, WHA Group organized training programs focusing on various abilities and development areas for employees to enhance technical and functional skills and reinforce necessary knowledge. For instance, occupational health and safety training was conducted as a mandatory program, aiming to elevate technical and functional skills and provide essential knowledge as follows





The safety training program was conducted to cover workplace safety issues, including working at heights, reviewing safety in crane operations, working in confined spaces, basic fire extinguishing, advanced fire extinguishing, fire drill and hazardous chemical handling, basic first aid, etc. This training program was provided to employees involved in the Group, ranging from managerial to operational levels.









The Operational Excellence project aimed to develop the knowledge and skills of employees and foster a culture of operational excellence within WHA Group, striving to deliver the highest satisfaction of products and services to customers. This project covered five dimensions: SSHE (Safety, Security, Health, and Environment), Performance & Reliability, Work Process, Sustainability, and Organization & People. It focused on reviewing knowledge and enhancing deep technical expertise for engineering, operational, and maintenance groups to cultivate expertise within the organization. In 2024, training was conducted to develop personnel's knowledge and skills according to the Technical Skill Matrix, comprising four courses: "Hydraulic Model: Basic EPANET" (6 hours), "Basic GIS" (18 hours), "Advanced GIS" (12 hours), and "Drainage System & Warehouse Floor Standard" (3 hours). With a total of 50 participants took part in these programs, which collectively amounted to 585 training hours. These initiatives are scheduled to be carried out through the end of 2024.

The Short-Term Rotation Program was initiated by WHA Group in 2024 to promote development and knowledge exchange between the Thai and Vietnamese teams through training and hands-on experience. The program focused on upskilling, career advancement opportunities, and building internal networks. It welcomed 3 executives from Vietnam—a Site Manager, a Safety Department Team Lead, and a Maintenance Department Team Lead. The training was from 16-20 December 2024 under the supervision of Thai executives and specialists. The program received a satisfaction score of 93.3%, reflecting its value in enhancing personnel capabilities and strengthening the organization at the international level. The Group plans to follow up on the outcomes through a comprehensive evaluation process to assess the skill development of participants and the operational impact, using appropriate tools to ensure that the program delivers sustainable value to the organization.

• Return of Experience Activity: REX Day aimed to exchange valuable information among operational units following the completion of the Operational Excellence project, helping to enhance knowledge and understanding in collaborative work practices. It involved exchanging knowledge from direct experiences through representatives from each main business group: WHAID, WHAUP, WHALG, and WHADG. This activity had a total of 122 participants, accumulating 672 training hours.



In 2024, the Group organized training programs to develop digital knowledge covering business, digital, and IT aspects. These programs aimed to enhance employees' knowledge and understanding in business, digital, and IT fields, including

DIGITAL AND DATA LITERACY DEVELOPMENT PROJECT

WHA Group has provided training programs to develop digital literacy and data management skills, which play a crucial role in enhancing employee capabilities. These skills empower employees to efficiently utilize digital tools in their work and respond to business challenges with through technology. This competency has been a key driver of our success, contributing to the highest net profit in 2024, reflecting an impressive growth of over 50% compared to the previous year. In 2024, we organized the training into various programs and courses as follows:







- The "Digital Day" Activity was organized to highlight the importance of adapting to the digital era, exploring both opportunities and challenges it presents, while inspiring employees to fully leverage digital technologies. Participants engage in group activities designed to encourage knowledge sharing and collaboration. In addition, the activity introduced employees to "Everyday Apps," internally developed application designed to enhance convenience and efficiency at work. These digital tools and concepts can be practically applied to daily tasks, helping to cultivate an organizational culture that embraces technological change. Each session lasted approximately 3 hours, with a total of 7 sessions conducted and 341 participants in this initiative.
- The Incident Report Function on the EAMS System Course (2 sessions) and The Management of Change (MOC) Function on the EAMS System Course (2 sessions) were organized to ensure that all employees can effectively and accurately use the new system. Previously, the Group managed MOC and Incident Report processes through paper forms and Excel files, which posed limitations in tracking, approvals, and systematic data storage. These challenges often resulted in delays and inefficiencies. To improve data management efficiency, WHA Group developed the MOC and Incident Report modules within the EAMS system. This upgrade transitions the processes from file-based systems to a centralized online platform, enabling more streamlined management, better tracking, easier auditing, and reduced reliance on paper documents and Excel files. As a result, operations have become more agile and digitally driven. Each course lasted approximately 1 hour, with a total of 4 sessions conducted. Altogether, 265 employees participated in the training.

- Management System (CDMS) Course was designed to enhance employees understanding of the importance of CDMS, a centralized digital platform for organizational document management. The course also introduced the E-Memo function, enabling supervisors and related personnel to efficiently approve and manage documents. The training emphasized reducing paper usage and supporting the organization's transition toward a fully digital work environment. The course lasted approximately one hour, with one session conducted, and a total of 149 employees participated in the training.
- to employees at all levels who were interested in enhancing their data management skills. This course enabled participants to transform complex information into easily understandable content and to professionally design and present with data visualization techniques, thereby improving clarity and engagement in communication. The course was conducted by internal experts and





held across 3 sessions 6 hours per session, with a total of 95 participants. Upon completion of the course, all participants were required to submit a presentation based on a given assignment.

The aforementioned training program has enabled WHA Group to achieve the main strategy of transforming the organization into the digital era (Digital Transformation). This training serves as a foundation for knowledge and understanding for employees to be prepared for upcoming changes. Furthermore, this training plan is considered a successful accomplishment of the organization's Data Driven Organization strategy.

CHARACTER AND COMPETENCY DEVELOPMENT PROGRAM

WHA Group provides an outsourced online learning platform to enable employees to pursue self-learning through e-Learning formats that could be accessed anytime and anywhere. The primary objective is to enhance employees' skills and capabilities in alignment with organizational needs and individual career paths. The Group also prescribes mandatory courses specifically designed to align with its Core Values (WHA DNA) and Core Competency. These





courses aim to build essential soft skills and mindsets critical for workplace performance and career advancement, such as collaboration, leadership, effective problem-solving, adaptability, and an innovation mindset.

In addition, there are over 1,000 additional courses available on the platform that employees could enroll covering a wide range of topics aligned with individual interests and Individual Development Plan (IDP). This would lead to a personalized learning experience that matches personal specific needs. The courses span across various domains, including technical and professional skills, business and management, creativity and innovation, and digital skills.

Currently "The Explorer" program have been launched for 2 sessions, attracting 323 applicants ranging from operational staff to senior executives.

The program continues to offer employees with diverse needs and interests for more opportunities and development. This online learning platform serves as a key approach to strengthening the organization's DNA, alongside other activities that promote corporate culture. These programs are designed to allow employees to integrate the company's core values into their daily work, contributing to organizational strength. Moreover, the program supports continuous learning and growth, enabling employees to advance both personally and professionally while driving the organization forward.

WORK-LIFE SOLUTIONS

WHA Office Solutions, a premium office building project, serves as the location for WHA Tower, @Premium project, and SJ Infinite I project, among others. The spaces are designed to be flexible and cater to diverse work patterns, fostering an environment conducive to creative thinking, innovation, and collaborative work supported by modern technology. This initiative aims to enhance employee satisfaction and build confidence among capable personnel.







WHA Group promotes Work-Life Solutions for employees by relocating the main office to WHA Tower, located in the central business district of Bangna. This project has received the prestigious award for "Commercial High Rise Architecture Thailand." The working environment is easily adaptable and equipped with various amenities such as co-working spaces, coffee shops, and beautiful landscapes including gardens and water features. Additionally, there are recreational areas for various activities, allowing employees to experience efficient work practices and a balanced work-life lifestyle, promoting good health and enjoyment of comprehensive entertainment facilities.



This also includes cutting-edge technology for safety and agility, integrating internal technology innovations controlled by digital systems, which excel in security management. It features facial recognition systems for access control, body temperature screening to maintain good health standards, and parking spaces accommodating up to 500 vehicles. Additionally, environmentally friendly technology innovations are implemented.

HAPPY WORKPLACE PROGRAM FOR EMPLOYEES (WHAppy)

WHA Group has developed WHAppy project in 2021, resulting from the fusion of the words "WHA" and "Happy" to reflect the project's objective of promoting employee happiness at work and strengthening their bond with the organization. Through developing employees' capabilities and engaging in activities together, this project serves as a communication channel and activities related to change management to promote a positive "Can-do attitude" within the Group's community. These activities also enhance knowledge, skills, and foster diverse perspectives by involving both internal colleagues and external individuals, while also offering employees a space to relieve stress. In 2024, the Group continued WHAppy project and improved and developed activities based on employee feedback to align with their needs.

Under WHAppy project, various activities are conducted to develop employees' skills and align with the Group's change strategy toward becoming a Tech-Driven Organization. At the same time, the project aim to encourage a positive atmosphere within the group community and organize activities that promote happiness for all WHA employees. In the past year, the activities were categorized into 3 groups as follows:

Activity Description

WHAppy Talk

In 2024, WHA Group organized a knowledge-sharing and inspirational talk event called "WHAppy Talk" under the theme "Kra-Hai-Lao" (Knowledge Sharing), featuring guest speakers from both within and outside the organization. This initiative provided a platform for various departments to present their work processes and share how they have integrated different technologies into their operations. The goal was to enhance employees' understanding of the roles and workflows of other departments, promoting cross-functional learning. The event also showcased success stories of various projects that have contributed to the organization's journey toward Digital Transformation, inspiring employees to embrace innovation and change in their own work.



Activity Description

WHAppy Activities

These are relaxing yet meaningful activities. The activities cover a variety of topics. In 2024, WHAppy Activities offers "One WHA Run 2024", "WellGene Challenge", and "Employee Health Massage". These initiatives not only promote better employee health within the organization but also encourage new ergonomic work styles that support well-being in the workplace. Additionally, the group also continued the "Shine Brighter with WHA" project from 2023 by installing solar rooftops on school buildings. This year, solar rooftops were provided to Nikhom Sang Ton Eng Rayong 3 School and Ban Nong Lalok School in Rayong.



WHAppy Festival

Events that held throughout the year to strengthen relationships and unity among employees during important festivals, such as the Songkran Festival, annual merit-making ceremonies, and New Year's celebrations organized by WHA Group.



Since the launch of WHAppy project in March 2021, over 80 activities have been organized, covering both online and on-site formats. These activities focus on creating opportunities for employees to meet, interact, and participate in joint activities to promote good relationships among employees. The results achieved from the project have been satisfactory, with all activities receiving positive feedback from employees, who are considered as the core of the project. In addition to participating in the activities, employees have played an important role in shaping the program's future development by sharing opinions, providing feedback, and offering useful suggestions.

The working team has compiled insights from the feedback from those all inputs to used in planning activities for 2025, with an emphasis on enhancing employee potential in both work performance and organizational relationship development, while ensuring the continuity of WHAppy project to foster a friendly work atmosphere and long-term engagement.

5. IMPACTS ON STAKEHOLDERS AND ENVIRONMENT

WHA Group places great importance on effective human resources management alongside a strong commitment to respecting human rights, strictly upholding the rights of employees and all stakeholders throughout the business value chain. This approach aims to enhance the employee experience, promote well-being, and foster the development of various employee capabilities. The Group also strives to maximize employee satisfaction and engagement, recognizing that employees are a vital force driving the organization toward sustainable success. For WHA Group, success means achieving a balance between economic, social, and environmental outcomes—an achievement made possible through the contributions of its people.

A key factor in the Group's excellence in human resources management is its continuous improvement of the working environment to ensure convenience and a positive atmosphere. The Group also enhances employee welfare to better align with employees' needs, helping them feel secure and satisfied in their personal and professional lives. In addition, the Group develops its human resources systems and refines employee treatment practices to align with ethical standards and human rights principles, such as non-discrimination and lawful labor practices—both fundamental aspects of good corporate governance. Furthermore, WHA Group responds to the highly competitive business environment by implementing strategies to recruit talented individuals, initiating programs to enhance and diversify employee skill sets, and promoting existing competencies. These efforts benefit both the employees and the organization by preparing the workforce to meet current and future business challenges. The Group also adopts strategies to attract and retain high-potential employees, supporting long-term organizational growth.

In terms of human rights, WHA Group carries out human rights risk assessments and enforces policies to prevent and remediate any violations. These actions ensure that the Group's operations are grounded in social responsibility and do not negatively impact any stakeholder group, whether directly or indirectly.

6. NEXT STEP

WHA Group firmly believes that "people" are the most valuable resource and the core driver of the organization's growth and success. Therefore, the Group places great importance on human resources management, focusing on developing and enhancing employees' capabilities to adapt and grow alongside ongoing changes in all areas of business. To this end, the Group has established clear objectives in its human resources management practices to recruit talent with the skills and knowledge aligned with organizational needs, particularly in an era of rapid technological and business transformation. Emphasis is also placed on developing employees' skills through upskilling and reskilling to ensure preparedness for both current and future business developments. The Group aims to build an effective recruitment system, as well as robust training and development programs, to attract and retain high-potential employees in a sustainable manner. Strategies have been put in place to enhance employee capabilities and support career advancement through various training and skill development programs. The success of these efforts is measured by the Human Capital Return on Investment (HCROI), with a target of 16.0 times by 2025. Moreover, WHA Group is committed to strengthening employee engagement through various initiatives, targeting an engagement level of 76% in 2025 and a long-term goal of 80% in 2026. The Group will continue to implement its existing human resources management strategies while developing new approaches and programs to stay ahead of business changes and meet employees' evolving needs. These efforts aim to uphold WHA Group's reputation as a Best Employer both in Thailand and across the region.







1. GLOBAL TREND

In the industrial estate business, the direction of Occupational Health and Safety (OHS) operations is continuously adapting to respond to the evolving risks within the industry. Currently, technologies such as IoT and AI are being utilized for real-time monitoring and control of safety risks, aiding in data analysis to predict risks and plan preventive measures in advance. This proactive approach also emphasizes promoting employee health and safety within the estates, including safety training programs aligned with international standards, fostering a strong safety culture in the organization, and increasing attention to employees' mental health.

Moreover, laws and standards related to occupational health and safety have been updated to accommodate new risks and changing work patterns. Examples include epidemic prevention measures in workplaces and adapting to new technologies focused on automation, such as using robots to transport hazardous materials to reduce risks to employees. Therefore, long-term strategic planning in occupational health and safety is essential to building sustainability and confidence in the business both nationally and internationally.

2. OUR POSITION

WHA Group recognizes the importance of occupational health and safety, firmly committed to the goal of zero accidents. The Group manages the work environment based on core principles of safety and occupational health, covering and aligning with evolving trends and challenges in the industrial estate business. This includes applying Internet of Things (IoT) and Artificial Intelligence (AI) technologies to enhance real-time monitoring and management of safety risks, such as installing sensors to measure air quality, chemical exposure, and noise levels. The collected data is analyzed to predict risks and effectively plan preventive measures in advance. Additionally, WHA Group emphasizes the analysis of accidents and traffic within operational areas by using real-time traffic control and management systems to improve safety and reduce traffic congestion in the industrial estates. Data from CCTV systems and sensors is used to detect accidents and risky behaviors, such as ignoring traffic signs or identifying locations prone to frequent accidents. This information is then utilized to plan infrastructure improvements, including adding traffic signals, creating safer parking areas, and installing warning signs at risk points, aiming to reduce accident rates over the long term.

WHA Group is also committed to fostering a safety culture within the organization by organizing training programs aligned with international standards, promoting the reporting of risk situations, and providing counseling services alongside employee wellness programs that go beyond typical health benefits. The Group facilitates convenient and rapid access to healthcare services through the WHAbit program, which enables employees to consult on occupational health issues and access specialist medical treatment via Telemedicine and digital medical support tools immediately in emergencies. Moreover, the concept of promoting employee well-being is integrated into the design of WHA Group's buildings, encouraging movement within the premises. This includes designing staircases to encourage walking between floors as an alternative to elevator use, enabling occupants to engage in physical activity while also saving energy. Additionally, the Group promotes various wellness activities, such as yoga classes, which contribute to both physical and mental health development.

In addition, WHA Group has incorporated epidemic prevention measures into workplace operations and adopted new technologies, such as robots for handling hazardous materials, to reduce risks to employees in operational areas. This commitment is reflected in the integration of safety into the Operational Excellence Framework by establishing policies on Security, Safety, Occupational Health, and Environment (SSHE). The Group also employs leading and lagging performance indicators to continuously evaluate and improve operational processes in line with stakeholder expectations and evolving circumstances.

Through these developments, WHA Group has demonstrated the ability to respond effectively to emerging challenges and manage occupational health and safety efficiently, reinforcing sustainability and building confidence in the industrial estate business both nationally and internationally.

3. MANAGEMENT APPROACH

3.1 GOVERNANCE STRUCTURE

OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT STRUCTURE

WHA Group places great importance on comprehensive management of occupational health and safety by focusing on establishing clear governance frameworks, developing personnel skills, and investing in safety measures. These efforts aim to create a safe working environment and reduce risks of accidents or workplace hazards. WHA Group has established a dedicated working team occupational health and safety management, comprising personnel from all departments. The Chief Operating Officer plays a key role in managing safety projects and promoting safety standards at every stage of operations.

The occupational health and safety working team operates under the supervision of the Board of Directors, which is responsible for setting the direction and overseeing occupational health and safety operations. This includes policy formulation, strategic planning, performance monitoring, and comprehensive assessment of the impacts of implemented policies. Systematic safety measures help reduce workplace risks, prevent accidents, enhance employee wellbeing, and build confidence among all stakeholders.





Roles	Responsibilities
Chief Operating Officer	The Chief Operating Officer (COO) plays a key role in managing occupational health and safety projects across all departments, including overseeing the implementation of safety measures at every stage to ensure compliance with established standards. The COO is also responsible for reporting performance results and presenting recommendations to the Corporate Governance and Sustainability Committee at least once a year, to enable continuous monitoring and review of safety performance.
Board of Directors	The Board of Directors is responsible for setting the direction and overseeing operations at the policy level. Their duties include establishing the framework for occupational health and safety policies, strategic planning, monitoring performance, and comprehensively evaluat-ing the impacts of policy implementation.

Additionally, WHA Group holds quarterly meetings of the Safety, Occupational Health, and Work Environment Management Committee to review and recommend improvement measures, ensuring that risk management is appropriate and effective.

3.2 RISK AND OPPORTUNITIES MANAGEMENT STRATEGY

OCCUPATIONAL HEALTH AND SAFETY RISKS AND OPPORTUNITIES IN THE CONTEXT OF INDUSTRIAL ESTATES

Occupational Health and Safety (OHS) operations in the context of industrial estates are of particular importance because WHA Group's operational areas serve as hubs for a diverse range of industrial activities, including manufacturing, resource management, and transportation. All of these activities potentially pose complex risks, such as risks to employee health and safety, impacts on surrounding communities,

and long-term environmental effects if not properly managed. At the same time, this context presents significant opportunities for sustainable development, such as the adoption of safety technologies and innovations, elevating standards to international levels, and building trust among investors and local communities. These efforts can enhance the image of the industrial estates as safe environments that play a key role in supporting sustainable economic and social development in the long term. To ensure the highest effectiveness in safety management, WHA Group implements risk management according to the internationally recognized occupational health and safety standard, ISO 45001. This standard supports the establishment of a systematic management approach and rigorously reduces workplace risks. WHA Group is expected to receive official ISO 45001 certification by August 2025, covering the three main business sectors: logistics, industrial estates, and utilities and energy.

RISK ASSESSMENT AND RISK PREVENTION MEASURES

To focus on the prevention and control of risks that may lead to accidents or losses, the Group has planned and implemented a systematic occupational health and safety risk assessment process. This process aligns with the international standard ISO 45001 and covers all activities and areas where employees and contractors are involved. The hazards that may arise from various activities are carefully considered to establish appropriate and comprehensive prevention and control measures. The Risk Assessment Process is an important step that helps ensure effective and comprehensive occupational health and safety management. It begins with classifying all operational activities, whether routine or non-routine, to identify

activities with potential risks or hazards, including causes that may lead to dangers in the workplace. This starts with defining the scope of work to create a clear framework regarding duties and activities to be analyzed. Next is identifying risks and hazards, which helps discover risk factors that may affect the safety and health of workers and related parties. After that, the risk assessment step analyzes and reviews the severity and likelihood of those risks. The next step is prioritizing risks by focusing on managing risks with the highest impact first. Finally, risk management control measures are implemented to establish effective prevention or mitigation guidelines. This entire process is a continuous cycle to improve and maintain safety standards at every stage of operations.



RISK MANAGEMENT CONTROL



1. OCCUPATIONAL HEALTH AND SAFETY RISK

Based on the assessment of all operational activities conducted by WHAUP in 2024, activities identified as having occupational health and safety risks include:

OCCUPATIONAL HEALTH & SAFETY RISK AND HAZARD ASSESSMENT IN OPERATIONS

Occupational Health & Safety Risk	Affected stakeholders	Description	Mitigation/ Remediation Measure
Exposure to hazardous chemicals at the industrial water production plant	Employees	Chemicals such as chlorine and sodium hy-pochlorite are used in wastewater treatment processes. Therefore, employees who handle these chemicals are at risk of exposure in the workplace.	Provided appropriate personal protective equipment to employees who perform these tasks. Additionally, chlorine detection equipment should be installed, and regular monitoring and control measures should be implemented. Furthermore, employees at risk should undergo annual health check-ups.
Accidents in construction work	Employees/ Suppliers/ Contractors	Accidents at construction sites can result in injuries or fatalities for construction workers or employees of WHA Group. Examples include falls from heights, severe injuries leading to organ loss, and burns.	Developed handbook for contractors outlining strict safety standards that must be followed. Additionally, a Job Safety Analysis (JSA) has been conducted to assess and establish safety procedures for contractors. Furthermore, the licenses of contractors are verified to ensure they can perform high-risk tasks according to standards.
Road Safety	Employees/ Suppliers/ Contractors/ Tenants	Traveling on the roads within the industrial estates of WHA, whether for general commut-ing, employee work-related travel, customer visits, or general commuting, poses a risk of road accidents for employees, customers, and external individuals.	WHA Group inspects, monitors, and improves road conditions by developing traffic control systems to ensure road safety for employees, customers, and commuters within WHA's industrial estates. The Group also promotes safe driving practices and provides driver training for employees through the Safety and Environment Association in all industrial estates.

OCCUPATIONAL HEALTH & SAFETY RISK AND HAZARD ASSESSMENT IN DEVELOPMENT PROJECTS

mployees and Suppliers/	Due to the increasing use of electric vehicles, the Group has established electric vehicle charging stations, which may cause accidents during use, such as electrical short circuits.	WHA Group conducts inspections, monitoring, and maintenance of charging stations to comply with relevant safety standards and develops personnel to respond to emergencies.
Employees, Suppliers/ ustomers, and tenants	The development of new projects with high expectations and tight schedules, driven by customer or tenant demands, requires workers to accelerate tasks, adjust project plans, and deliver on time, potentially impacting workers' mental health and well-being.	WHA Group has established project management rules and regulations to ensure safety. Since this risk arises from project acceleration, the Group considers appropriate recruitment, resource alloca-tion, and welfare management for employees during project implementation, as well as project man-agement to maximize stakeholder
	Suppliers/ Employees, Suppliers/ estomers, and	Suppliers/ vehicles, the Group has established electric vehicle charging stations, which may cause accidents during use, such as electrical short circuits. Employees, Suppliers/ high expectations and tight schedules, driven by customer or tenant demands, requires workers to accelerate tasks, adjust project plans, and deliver on time, potentially impacting workers'

Therefore, WHA Group has implemented measures to prevent and reduce occupational health and safety risks in the working environment according to the Hierarchy of Controls principle. This includes preparing operational manuals, hazard warning signs, and providing adequate personal protective equipment. Furthermore, training sessions are conducted for worker, tenant, and related personnel to ensure they comply with safety policies and measures. Incident investigations are conducted whenever any hazard occurs, and measures are established to prevent recurrence. Additionally, safety officers conduct daily operational inspections to ensure safe and proper practices, with the results reported in Safety Committee meetings.

On the contrary, WHA Group views effective occupational health and safety management as an opportunity for the organization in several aspects. This includes enhancing confidence in the industrial estate area, where stringent safety measures increase trust from investors, partners, and surrounding communities. Additionally, a safe working environment helps improve employee satisfaction and engagement with the organization, which positively impacts the retention of quality personnel in the long term. Furthermore, it fosters positive relationships with the community by prioritizing safety and the environment, which serves as a crucial foundation for sustainable cooperation in the future.

3.3 RISK MANAGEMENT

In setting occupational health and safety policies, the Group places great importance on strict compliance with the Occupational Safety, Health, and Environment Act B.E. 2554 (2011) and all related laws. The Group develops occupational health and safety management systems and measures that comply with legal requirements. A Quality, Safety, Occupational Health, and Environmental Policy has been established, covering all employees, as well as suppliers, contractors, visitors, and all stakeholders under the Group's responsibility. Occupational health and safety criteria are stipulated as purchasing conditions and are incorporated as part of contractual agreements.



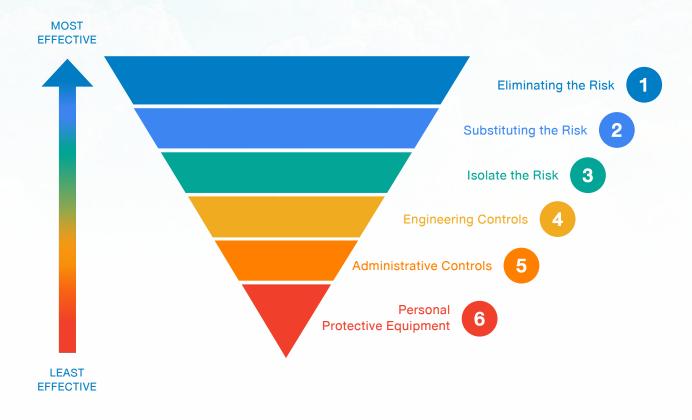
Due to the nature of the Group's business, which involves diverse stakeholders and primarily operates in the service sector, prioritizing occupational health and workplace environment issues is essential to prevent impacts on the health, life, and property of employees, partners, contractors, and other relevant parties. This also includes protecting related human rights, such as the right to health care and the right to live safely and with quality. Therefore, the Group proactively implements measures to ensure the safety and well-being of employees and all relevant stakeholders through occupational health and safety management systems, preventive measures, promoting a safety culture, and enhancing the wellbeing of workers. These efforts aim to build trust and morale for working with the Group, enabling them to work safely and effectively.

To control and manage risks that may arise from operational activities to meet the Group's goal of reducing the number of accidents, injuries, and work-related illnesses, the Group has applied the principles of the Hierarchy of Controls in our operations. This involves implementing risk control measures from basic safety controls to advanced safety controls that can eliminate risks, as follows:

- Elimination: Removing the risk entirely or not introducing the risk into the work area. The group uses the results of risk assessments to determine controls that correspond to the assessed level of risk.
- 2) Substitution: Replacing hazardous materials or processes with less hazardous ones.

- 3) Isolation: Separating or minimizing workers' exposure to risks as much as possible. For example, using barriers to separate workers from hazards, such as leveraging remote technology to control machinery so that personnel do not need to be close to the risk. This also includes handling hazardous chemicals by correctly segregating compatible hazardous chemicals or storing chemicals away from activities that may cause danger, such as flammable materials that could ignite or cause fires.
- 4) Engineering Controls: Designing or modifying machinery and equipment to reduce hazards at the source. This includes isolating hazards from

- workers, installing emergency stop buttons, and implementing Lockout/Tagout procedures to disconnect energy sources before maintenance to prevent hazards from residual energy in equipment or machinery, such as electrical, mechanical, pneumatic, gas, or hydraulic energy.
- 5) Administration: Managing work safety through administrative measures such as setting qualifications for workers and providing training.
- 6) Personal Protective Equipment (PPE): Providing workers with PPE to protect any part of the body from risks associated with their work or the working environment.



Internal risk assessments are conducted annually or when there are changes in operational processes, as well as relevant rules, regulations, and safety standards, e.g., NFPA, OSHA, NIOSH. This ensures that all risk and hazard assessments are systematic and compliant with standards, and that the established control measures are comprehensive and appropriate. The results of the assessments and reviews are compared with set targets, such as Safety KPIs, and the reduction of accident and illness rates, to evaluate the effectiveness of the measures. These results are used to improve WHA Group's occupational health and safety management system and related measures, making them more effective and encompassing all events and risks. The information is communicated to stakeholders through the annual sustainability report.

WHA Group aims to prevent and reduce the occurrence of accidents, injuries, and occupational illnesses to the greatest extent possible by lowering the Total Recordable Injury Frequency Rate (TRIFR) per million working hours in 2024, as shown in the table.

		Man Hours Per Year	Target TRIFR Group	Target TRIFR LG	Target TRIFR ID	Target TRIFR UP	Actual TRIFR LG	Actual TRIFR ID	Actual TRIFR UP	Actual TRIFR Group
NO	TRIFR		Target Accumu. Man hr. Group	Target Accumu. Man hr. LG	Target Accumu. Man hr. ID	Target Accumu. Man hr. UP	Actual Accumu. Man hr. LG	Actual Accumu. Man hr. ID	Actual Accumu. Man hr.UP	Actual Accumu. Man hr. Group
	TRIFR 2022		≤0.75	Di	dn't set a go	oal	0.21	1.08	0.88	0.58
1	 The best Man hours Record 1Jan 22-31 July 22: 5,844,365 Man hours without lost time accident 1 Aug 22 - 31 Dec 22: 4,499,287 	10,343,652	>15,000,000	Di	dn't set a go	oal	1.76 M.	1.77 M.	1.14 M.	4.4 M.
	TRIFR 2023	_	≤0.5	Di	dn't set a go	oal	0.28	0.54	1.43	0.48
2	 The best Man hours Record 1 Aug 22-29 July 23: 9,422,665 1 Aug 23-16 Oct 23: 2,392,665 Man hours without lost time accident 17 Oct 23-31 Dec 23: 2,108,076 	10,501,501	>10,000,000	Didn't set a goal		oal	0.66 M.	0.59 M.	1.39 M.	2.1 M.
	TRIFR 2024		≤0.3	0.60	0.45	1.8	0.21	0.56	2.05	0.43
3	 The best Man hours Record 17 Oct 23 - 30 Nov 24 : 12,740,715 Man hours without lost time accident 2 Dec 24 - 31 Dec 24 : 891,492 	11,572,932	>10,000,000	4 M.	5 M.	6 M.	5.31 M.	0.30 M.	4.33 M.	0.89 M.



in **2023**, TRIFR dropped to **0.48**,



in **2024**, TRIFR further decreased to **0.48**,



Risk assessment and risk prevention measures are clearly divided into two parts: existing projects and projects likely to arise. This process includes reviewing and assessing potential risks in each project across economic, social, and environmental aspects, as well as evaluating possible impacts from operations. This ensures that these projects align with sustainable development guidelines and effectively reduce potential risks. The Group uses analysis and various prevention measures to create stable and sustainable operations, whether for existing projects or new projects under development.

ESTABLISHMENT OF THE OCCUPATIONAL HEALTH, SAFETY AND ENVIRONMENT DEPARTMENT

WHA Group has established mechanisms for managing occupational health and safety that promote participation and feedback from personnel at all levels. This is achieved through the formation of a Safety Committee, which includes executives and employees from all business units, as well as the Human Resources department. The committee is responsible for managing safety by gathering feedback, providing advice, and regularly reviewing occupational health and safety-related risks. Decision-making authority within the committee is shared among all members, from operational staff to executives, and the results of committee meetings are reported to the Chief Executive Officer every quarter.

Additionally, the group has established a Safety Department under the supervision of the Chief Operating Officer to oversee safety-related matters and to achieve the goal of zero accidents, enhancing workplace safety throughout the organization. The Group has also appointed certified occupational health and safety professionals and has emergency response vehicles on standby to prevent and mitigate hazards in all areas. Furthermore, the Human Resources department is tasked with supporting the provision of appropriate and sufficient personal protective equipment (PPE) for employees.

ENHANCING OCCUPATIONAL HEALTH AND SAFETY

WHA Group continues to develop the occupational health and safety management systems and processes, focusing on the concept of 'SMART Safety,' which covers 3 main areas: 1) emergency response, 2) road safety, and 3) asset protection. This concept is designed to strengthen the safety culture within the organization while enhancing surveillance and safety management across all operational areas, both within WHA's industrial estates and the surrounding areas, effectively. The 'SMART Safety' concept also emphasizes integrating various projects and measures to build a robust management system that addresses risks in each context. Examples include developing modern emergency response plans, promoting measures to reduce road accidents, and implementing systematic operations to minimize the risk of asset loss. All of these efforts contribute to driving safety and security for employees, contractors, and communities around the operational areas.



In 2024, WHA Group's occupational health and safety enhancement projects aligned with the 'Smart Safety' concept were comprehensively developed, focusing on effectiveness in all dimensions. The initiatives were carried out with in-depth attention to each area to promote safety both at workplaces and surrounding areas. Key projects include:

PREPAR ATION FOR EMERGENCY RESPONSE AND THE REPORTING OF ACCIDENTS AND INCIDENTS

WHA Group has established a comprehensive plan to address emergencies, including fire incidents and chemical spills. This plan covers actions to be taken before, during, and after an incident, as follows:

Before Incident	During Incident	After Incident
Install an efficient and reliable alarm system and prepare protective and initial emergency response equipment in high-risk areas. Regular inspections and maintenance are conducted to ensure all equipment is always ready for use. Personnel are trained to increase knowledge and understanding of disaster prevention and proper actions during inci-dents.	WHA Group has established comprehensive procedures covering all steps, including initial emergency response, notifying relevant agen-cies, clear communication plans to inform em-ployees and stakeholders, and evacuation plans to ensure safety. Regular emergency drills are conducted to ensure personnel are well-prepared to handle real incidents effectively.	Conduct thorough site inspections and damage assessments. Investigate the root causes of the incident to improve future prevention measures. Develop plans to miti-gate impacts on personnel, assets, and the environment. These steps aim to restore the environment and rebuild long-term trust with stakeholders.

All employees and contractors working within WHA Group's premises are required to undergo training and drills to prepare for emergency responses. This ensures they understand the situations and their roles and responsibilities and can evacuate themselves quickly and safely.

In the event of an emergency, employees are required to follow the procedures and measures they have been trained on and to evacuate themselves from the situation as quickly as possible. After the emergency, employees must report the incident truthfully to the Safety Committee, which will investigate the root cause of the accident and establish preventive measures to avoid recurrence.

Additionally, WHA Group provides channels for employees to report unsafe incidents or working conditions that could endanger life, health, or property. Reports can be made through incident report forms, complaint forms, or directly to supervisors. Whistleblowers are protected, and their information will not be disclosed to unrelated parties, in accordance with the Group's whistleblower protection policy. Moreover, employees have the right to assess risks and refuse to work if they identify unsafe conditions until those hazards are resolved. Safety officers are assigned to investigate such cases to determine corrective actions and preventive measures to eliminate the risks.

OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT IN CONSTRUCTION WORK

Work-related accidents in construction are considered a major safety risk for contractors and employees of the Group, who may suffer injuries or fatalities from construction activities. Examples include falls from heights, injuries caused by sharp objects, burns, and more. Therefore, the Group has developed and implemented the following prevention plan:

- Developed a contractor handbook in which contractors are required to follow safety standards
- Performed a job safety analysis and developed safety procedures.
- Implemented a work permit system
- Surveyed orderliness within the industrial estates.



From these guidelines and measures, the Group was able to reduce the injury and fatality rate from work-related accidents per million working hours from 0.75 in 2022 to 0.50 in 2023 and 2024, representing a 33 percent decrease, which meets the set target.

HAZARDOUS CHEMICAL SAFETY MANAGEMENT

From the occupational health and safety risk assessment of WHA Group's operational activities, exposure to hazardous chemicals at the industrial water production plant has been identified as a significant risk. The Group has recognized that employees at the industrial water production plant may be exposed to chlorine and sodium hydroxide. To manage these risks, the following mitigation measures have been implemented:

- Ensuring that all employees have access to suitable PPE.
- Installation and Regular Inspection of Chlorine Gas Detectors: To promptly detect any chlorine leaks From these guidelines and measures, the Group was able to reduce the injury and fatality rate from workrelated accidents involving hazardous chemicals per million working hours from 0.75 in 2022 to 0.50 in 2023 and 2024, representing a 33 percent decrease, which meets the set target.



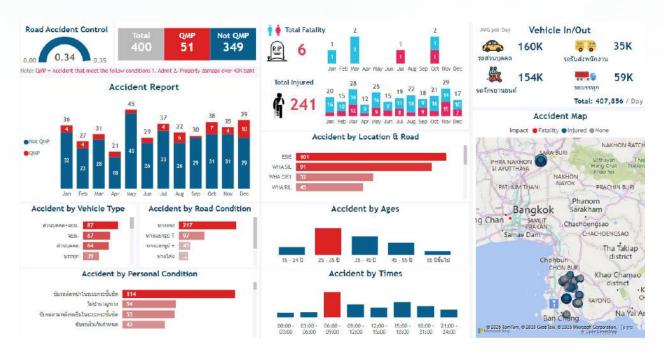
ENHANCING ROAD SAFETY

Due to the high volume of vehicular traffic in the industrial estate areas of WHA Group, traffic congestion and accidents are potential risks. Consequently, the Group identifies road safety as a significant safety risk in our risk assessment process, as employees, customers, and passersby may encounter accidents while traveling within the industrial estate. To manage this risk, the Group has implemented the following mitigation measures:

- The installation of speed bumps on the main roads and at traffic risk points
- Constructing concrete barriers at U-turn points for vehicles entering from local roads to reduce traffic congestion.
- Continuously inspecting, monitoring, and improving road conditions
- Developing a traffic control system

To monitor the quality of road safety risk management measures, WHA Group set a target to reduce road accidents within WHA's industrial estates to no more than 0.35 cases per one million vehicles in 2024. The Group successfully exceeded this target, recording only 0.34 cases of road accidents.

Topic	Performance 2023	Performance 2024	Target 2024		
Work-related accidents (construction and chemicals)	0.48 cases per million working hours	0.43 cases per million working hours	0.50 cases per million working hours		
Accidents related to hazardous chemicals	1.43 cases per million working hours	2.05 cases per million working hours	1.8 cases per million working hours		
Road accidents	0.31 cases per million vehicles	0.34 cases per million vehicles	0.35 cases per million vehicles		



HEALTH AND SAFETY OF EMPLOYEES IN VARIOUS PANDEMIC SITUATIONS

Although the COVID-19 pandemic has passed, the Group continues to maintain strict preventive measures to safeguard the health and safety of employees and all relevant stakeholders. The Group remains prepared to respond to any future outbreaks by implementing procedures aligned with the Ministry of Public Health's regulations and requirements. Communication and dissemination of the latest updates on infectious diseases are regularly conducted through training sessions held both in-person and online via the organization's SharePoint platform, as well as through emails sent to all employees. In addition, the Group enforces disease prevention and control measures in designated areas (Bubble and Seal), in line with government objectives to protect factory workers and surrounding communities from infectious diseases. Furthermore, the Group has developed a long-term Business Continuity Plan (BCP) for disease control, ensuring preparedness to effectively respond to emergencies and crises. This plan supports the seamless continuation of all business operations throughout the Group.



WHA Group emphasizes implementing safety values among all stakeholders, both internal and external, by effectively communicating the organization's safety culture to employees, contractors, customers, visitors, and surrounding communities. This aims to foster a strong understanding and awareness of occupational health and safety practices. The communication efforts include various methods, such as Conducting annual supplier evaluations (Supplier Day and Safety Club events), Raising awareness through the Operational Excellence Framework, and Providing targeted training specific to employee groups based on their exposure to different risks, such as emergency management and handling chemical spills. The training programs are designed to be comprehensible and practical, addressing all potential risks from operational activities. The trainers are experts in occupational health and safety, and they conduct evaluations after each training session. Additionally, all training programs are reviewed







and assessed annually to ensure they remain current and highly effective. Feedback from participating employees is also incorporated to continuously improve and develop the training content.

WHA Group places great importance on promoting the well-being of our employees by providing various benefits such as health insurance, accident insurance, and annual health check-ups. These benefits are aligned with the risk profiles of the work and cover employees across all four business units. Additionally, the Group supports recreational activities to enhance employee happiness by continuously supporting employee clubs such as the Sepak Takraw Club, Fitness Club, Boxing Club, Yoga Club, and Badminton Club. These activities aim to promote the health and well-being of employees. The Group also welcomes and encourages employees to provide suggestions for improving the work environment through their supervisors, representatives from Human

Resources, the Safety Department, and occupational health and safety specialists. Furthermore, employees and business partners have access to initial consultations and can share their opinions on occupational health and safety via various communication channels, including email, LINE, direct discussions with supervisors, or direct communication with safety officers. Moreover, the Group has developed a communication application for customers called WHASApp or WHA Super Application. After receiving complaints through this channel, the Company will bring them to the Safety, Occupational Health, and Work Environment Committee (SH&E Committee) meetings to discuss and respond accordingly in the next steps.

In addition, WHA Group places importance on the safety of contractors working on site by specifying occupational health and safety requirements in contracts. Contractors working on site are required to strictly comply with the Group's safety requirements. Before starting work, the Group provides training for contractors covering 3 areas: environmental policies; related rules and regulations such as Contractor Management Work Procedure (WHA-SSHE-P-012), Safety Inspection Work Procedure (WHA-SSHE-P-013), Crane Operation Work Procedure (WHA-SSHE-P-014), Forklift Operation Work Procedure (WHA-SSHE-P-015), Scaffolding Operation Work Procedure (WHA-SSHE-P-017), Construction Safety Management Work Procedure (WHA-SSHE-P-018), Working at Heights Work Procedure (WHA-SSHE-P-01), Lockout-Tagout Work Procedure (WHA-SSHE-P-024), Electrical Work Procedure (WHA-SSHE-P-025), and safety standards. Contractors must complete the training to receive a contractor ID card and be allowed to start work on site. All contractors who wish to do business with the Group must meet the occupational health and safety criteria set by the Group.

DISCLOSURE OF PAST ACCIDENTS, CAUSES, AND **CORRECTIVE ACTIONS**

Although no work-related accidents causing injury or death were found in 2024, WHA Group continues to place importance on the management of occupational health and safety. Clear and systematic measures have been established for investigating and concluding cases that may result in accidents or incidents affecting employees' health and safety. This process covers data collection, cause analysis, transparent investigation reporting, and presentation to management for appropriate action consideration.

Moreover, WHA Group has implemented corrective actions and continuously improved preventive measures, including reviewing operational guidelines in various areas to reduce risks that could lead to future incidents and to ensure that all employees can work in the safest environment possible. The Group also emphasizes communication and promotes employee participation at all levels to jointly prevent accidents, reaffirming our commitment to maintaining safety and health standards for employees and stakeholders in all aspects of operations.

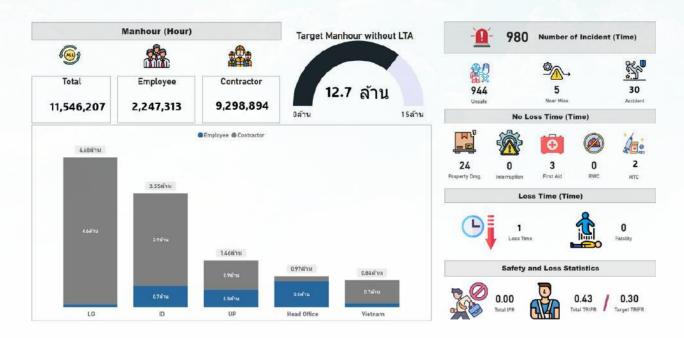
If an accident occurs in the future, WHA Group will fully report the information. The Group has developed an Incident Management Report Application covering cause analysis, investigation summary, and corrective actions implemented, allowing for inspection and study of accident data. Emphasis is placed on transparency, understanding, and improvement of related measures, along with continuous reporting of operational and audit results to ensure the effectiveness of the measures and prevent recurrence of similar incidents in the future.

3.4 METRICS AND TARGETS

WHA Group has set short-term and long-term goals for occupational health and safety operations based on the implementation of the aforementioned management system. The Group's occupational health performance in 2024 successfully prevented accidents and illnesses in accordance with the established targets as follows:

ACCIDENTS INVOLVING EMPLOYEES AND CONTRACTORS

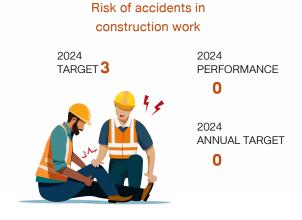
	Performance 2024	Target 2024	5 Year Long-Term Tar-get
Fatal accidents involving both employees and suppliers	0	0	0
Work-stopping accidents involving employees and supplies	1	3	0
TRIFR	0.43	<0.50	0



PERFORMANCE IN REDUCING OR PREVENTING THE RISK OF ACCIDENTS OR ILLNESSES FROM WORK

SAFETY AND OCCUPATIONAL HEALTH RISK ISSUES IN 2024





4. HIGHLIGHT PROJECTS

To meet the goal of preventing and minimizing the number of accidents, injuries, and occupational illnesses as much as possible in 2024, WHA Group has expanded proactive measures in occupational health and safety management. The focus is on risk reduction and continuously raising awareness among employees and stakeholders. The key activities in 2024 are as follows:

FIRE AND EVACUATION PERFORMANCE

WHA Group established an Emergency Control Center (ECC) at 11 WHA's industrial estates to monitor and suppress emergency situations. The ECC is managed by occupational health and safety experts and is equipped with fire control systems that are ready to go at any time. In 2024, the ECC stopped 11 emergency cases and assisted the local authorities in addressing 6 emergency cases in the surrounding communities outside WHA's industrial estates/lands.



However, WHA Group recognizes the importance of enhancing the capabilities of all stakeholders in responding to emergencies. Therefore, emergency drills are conducted 4 times a year. The drill covered advanced level firefighting training. The evaluation of drill performance, which assessed employees' readiness for all processes, including Personal Protective Equipment (PPE), responding, and reporting processes and time, received full score from the emergency drill in 2024.



EMERGENCY RESPONSE DRILL FOR CHEMICAL SPILL INCIDENTS TO ENHANCE SAFETY IN INDUSTRIAL ESTATES

In the past year, WHA Group conducted an emergency response drill for chemical spill incidents. The drill involved participants from the Industrial Estate Authority of Thailand (IEAT), the Department of Disaster Prevention and Mitigation (DDPM), the Department of Labour Protection and Welfare (DLPW), local authorities, local communities, local hospitals, customers, WHA Group employees, and others. The drill covered key response mechanisms such as emergency reporting, first aid, PPE selection, command, and control. This exercise was conducted at WHA Eastern Seaboard Industrial Estate 1 (WHA ESIE 1) on July 10, 2024.









SMART EMERGENCY ALARM BOX

WHA Group has developed a new emergency notification system by integrating IoT and AI technologies within WHA's industrial estates to ensure the emergency notification system is used effectively, conveniently, quickly, accurately, and with enhanced safety. Currently, this system has been tested and installed for operators within the industrial estates to trial, receiving very positive feedback from those operators.

Smart Emergency Alarm system



ROAD SAFETY PERFORMANCE

WHA Group has also continuously improved infrastructure and developed technology to enhance road safety and alleviate traffic congestion within WHA's industrial estates. A vehicle management system has been implemented, enabling accurate data collection on the number of vehicles and license plate numbers, as well as categorization by color and vehicle type. The system also detects traffic violations, such as driving in the wrong lane. These efforts aim to manage traffic congestion more effectively and address hit-and-run incidents.

According to traffic survey data in 2024, Eastern Seaboard Industrial Estate (Rayong) (ESIE) recorded approximately 148,770 vehicle entries and exits per day, totaling about 54,301,050 vehicles annually. Additionally, the Group has integrated digital systems

to study data related to automated traffic light control systems, which monitor congestion levels and automatically adjust signals to ease traffic flow. A total of four systems have been installed, and these systems have reduced traffic light crossing time by 28%, decreasing from 5 minutes to 3 minutes, thereby also lowering the risk of road accidents.

Furthermore, WHA Group has employed drone technology to monitor road conditions and traffic during peak hours. Drones can inspect road accidents and detect potential risks, with the data collected being used to analyze and develop preventive measures to reduce future accidents. As the number of accidents decreases, road usage also diminishes. Additionally, in the event of an accident, drones facilitate quicker and more efficient emergency responses.









ADAPTIVE TRAFFIC MANAGEMENT

The Adaptive Traffic Project is a technology-driven initiative aimed at improving traffic management efficiency by utilizing a real-time traffic light control system. This system collects data from CCTV cameras and calculates the optimal timing for traffic light signals. In addition to easing traffic congestion, the system also helps reduce traffic-related accidents, travel time, energy consumption, and greenhouse gas emissions. In 2024, WHA Group further enhanced traffic management technologies within WHA's industrial estates by upgrading the automatic traffic light control system to enable more accurate real-time traffic data analysis. A new function was also added to forecast future traffic trends, supporting more effective route planning and traffic management. With these continuous developments, the technology not only shortens congestion time but also enhances road safety and significantly improves user satisfaction within WHA's industrial estate areas.





EMPLOYEE SAFETY CULTURE ENHANCEMENT PROGRAM

WHA Group places great importance on cultivating a safety culture within the organization. To this end, the Group has implemented training programs for employees in accordance with regulations to instill a solid understanding and awareness of occupational health and safety practices. These efforts include conducting drills for both office-based and field employees. In 2024, a total of 419 employees participated in safety procedure training, while 391 employees attended basic fire-fighting training. In addition, the Group continues to promote access to medical services for employees through various health benefits such as health insurance, accident insurance, and annual health check-ups. Employees are also encouraged to submit suggestions for improving the work environment to their supervisors, the Human Resources Department, the Safety Department, or occupational health and safety specialists.

CONTRACTOR SAFETY CULTURE ENHANCEMENT PROGRAM

WHA Group also emphasizes communicating the safety culture to contractors, requiring them to adhere to the safety requirements of WHA Group and perform their duties to the best of their abilities. Therefore, before commencing work, contractors undergo comprehensive

training covering 3 aspects, i.e., environmental policies, relevant regulations, and safety standards. Contractors who have completed the training receive an identification card that is valid for one year from the date of issuance. In 2024, training sessions were conducted for 1,166 new contractors, comprising 213 new contractors under WHA Logistics (WHALG), 248 new contractors under WHA Industrial Development (WHAID), and 705 new contractors under WHA Utilities and Power (WHAUP). In addition, the Group required that short-term contractors undergo training in order to obtain a temporary work permit valid for the specific duration of their assignment.





ESTABLISHMENT OF SAFETY CLUB

WHA Group has also established a Safety Club to engage stakeholders in jointly enhancing safety measures. The Club comprises employees, contractors, and customers of WHAID and WHAUP. The objective of the Safety Club is to provide a platform for members to share opinions and perspectives on safety practices. In 2024, 3 meetings were held: the first meeting was held on 29 March 2024 with 116 participants from 90 companies; the second meeting was held on 18 July 2024 with 129 participants from 100 companies; and the third meeting was held on 27 September 2024 with 99 participants from 80 companies. These meetings covered various safety-related topics, including community and environmental issues, as well as coordination of relevant information for Club members.





UTILIZING THE WHABIT APPLICATION TO PROMOTE OCCUPATIONAL HEALTH AND SAFETY

As the world transitions into a digital society, access to a wide range of services, including healthcare, has become increasingly convenient. In response to this transformation, the Group identified an opportunity to foster innovation by developing the "WHAbit" application, designed to enhance access to health and well-being information for customers and tenants in our industrial areas. This application offers a variety of medical services, such as telemedicine, health reporting, and data analytics, enabling individuals to manage their health anytime, anywhere, at a lower cost.

The WHAbit application integrates advanced technology with communication systems and data analysis for disease diagnostics. Customers of the Group can input employee health data, allowing for the assessment and identification of health risks among users. This initiative enables the Group to determine each company's health risk level and develop appropriate health management strategies to improve the well-being of our tenants.

In 2024, the Group officially launched the WHAbit application for public use, providing users with online access to healthcare services. Key features of the application include:



Telemedicine Services	Provides consultation, recommendations, treatment, and follow-up via video calls and chat, functioning as a virtual hospital that enables real-time interaction between patients and physicians. Patients can access healthcare services anytime and anywhere, reduc-ing travel time, hospital wait times, and overall healthcare expenses. The service also supports direct insurance claims through partner hospitals without requiring upfront payments.
Health Report Service	Delivers health reports through the WHAbit application by compiling and analyzing data from annual physical examinations and various health metrics. Results are presented in easy-to-read graphical formats. The system also issues automatic alerts when abnormal health values are detected, along with personalized health care advice or treatment plans.
Fit & Fun Service	Promotes health and physical activity to enhance employee engagement within organiza-tions through "Engagement Challenges" that encourage users to participate in fun and effective wellness activities.
Health Content Service	Provides comprehensive and reliable health information through the WHAbit application.
Health Advice Service	Offers expert health advice in the form of personalized content. Employees and tenants within the Group's industrial estates can access a wide range of healthcare services via WHAbit. This leads directly to reduced healthcare-related costs for industrial operators, such as lower health insurance claims, reduced costs for employee replacement, and lower compensation expenses in the event of workplace accidents.

In addition, WHAbit enhances healthcare accessibility for the broader community, particularly for the over 250,000 individuals working in industrial factories located within WHA's industrial estates. The application reduces the financial burden of traveling to medical facilities and prevents income loss from taking leave for medical appointments. It is estimated to save approximately 300 to 1,800 Baht per visit in travel-related costs.

This innovation also addresses the shortage of medical personnel in remote rural areas. The telemedicine system helps minimize travel costs for medical professionals and reduces the need for a high number of healthcare personnel in each location. As a result, both public and private hospitals and healthcare providers benefit from lower treatment costs and reduced operational burdens, saving both time and resources.

Currently, WHAbit has 2,274 active users from 7 companies. The Group has set a target to expand the user base to 20,000 individuals across 40 companies by 2025, aiming to broaden access to healthcare services for a wider range of customers. Through WHAbit, users can conveniently seek medical consultations and receive timely care, helping prevent the escalation of health issues. Moreover, the increasing volume of data will enhance the accuracy of health data analysis, enabling the continuous development of effective health management strategies to promote long-term health and well-being for our customers.



TRANSPORT SAFETY MANAGEMENT SYSTEM AND SAFE DRIVING





In 2024, WHA Group participated in the 16th National Road Safety Seminar under the theme "Joining Forces to Build Strong Mechanisms for Safe Roads in Thailand," held at IMPACT Forum, Muang Thong Thani, from 20 to 21 November 2024. During the event, the Group was honored to receive the Prime Minister Road Safety Award from Mr. Anutin Charnvirakul, Deputy Prime Minister and Minister of the Interior, who also serves as the Director and Chairman of the Road Safety Operations Center. Eastern Seaboard Industrial Estate (Rayong) became the first WHA's industrial estate to receive this prestigious award. The Group remains committed to developing a comprehensive road safety management system for vehicles and implementing technologies aimed at both

accident prevention (Active Safety) and injury mitigation (Passive Safety). These efforts are guided by international safety standards and focus on enhancing road safety and preventing accidents and injuries, particularly for vulnerable road users such as pedestrians, cyclists, motorcyclists, the elderly, and persons with disabilities. Furthermore, the Group conducts employee training on road safety and safe driving to foster a safety-oriented culture. The Group has also implemented the Adaptive Traffic Control Signal (ATCs) system to monitor and manage road safety and has collaborated with external organizations to carry out road safety initiatives. These include accident prevention campaigns and educational activities for local communities.

BUILDING SOCIAL IMPACT INITIATIVE (BSI)





WHA Group recognizes the importance of enhancing the quality of life and ensuring the safety of all stakeholder groups, especially laborers working for the Group's construction partners and contractors involved in the development projects. The Group is committed to collaborating with these partners and contractors to improve workers' living conditions and support their access to a good quality of life and essential basic needs, including those of families residing in construction worker camps. This collaboration marks a crucial starting point in building a sustainable future for all sectors. A key challenge in addressing this issue lies in ensuring that children living in these camps have access to basic welfare services, including utilities, healthcare, and education.

In 2023, the Group partnered with the Foundation for Child Development Network and signed a Memorandum of Understanding to support the Building Social Impact Initiative (BSI). This initiative aims to create safe environments and improve access to healthcare, education, and protection services for children and families residing in construction camps. From 2023 to the present, the Group and the Foundation for Child Development Network have conducted surveys and implemented improvements across four key areas in worker camps: infrastructure, welfare and services, health, and education. These efforts are used to inform planning and drive collaborative development that promotes safety, well-being, access to quality education, and better living conditions for laborers and their families.

Moreover, the adoption of the BSI framework aligns with the Groups's sustainability development strategy and social responsibility practices. It also reflects the core values of WHA Group in 3 main areas: W – Wellbeing: Promoting the sustainable well-being of all lives and the environment, H – Human Progress: Supporting human development across all sectors of society, A – Accessibility: Creating opportunities for access to essential needs and a better quality of life.

USEOFDRONES FOR INSPECTING ABNORMALITIES IN SOLAR PANELS ON ROOFS

WHA Group has implemented drone technology to inspect abnormalities in solar panels on roofs to reduce the risk of accidents from working at heights and to increase inspection efficiency. Previously, the inspection process required personnel to climb onto the roof to check the condition of the solar panels,

which had safety limitations and was quite timeconsuming.

The use of drones allows for quick and accurate detection of abnormalities, such as damaged panels, through high-resolution photography and thermoscan imaging to analyze solar panel abnormalities. This reduces the number of personnel and time required to perform direct inspections and lowers the chance of accidents during operations, enabling timely identification and resolution of detected issues. In 2024, the Group was able to reduce accidents related to solar panel repairs on roofs, including the use of technology to assist operations through the WHA Platform system to control and monitor the solar panel systems installed for customers.

5. IMPACTS ON STAKEHOLDERS AND ENVIRONMENT

WHA Group places great importance on Occupational Health and Safety (OHS) as a key part of sustainable business operations by implementing effective OHS measures to ensure the well-being of employees, contractors, and stakeholders, while also reducing environmental impacts from the Group's activities.

ENVIRONMENTAL IMPACT

WHA Group's OHS measures help reduce environmental risks related to industrial operations, such as hazardous materials management and monitoring air and water quality to comply with environmental standards. These efforts help minimize potential damage to ecosystems and reduce environmental impacts from accidents, including road accidents and construction activities.



STAKEHOLDER IMPACT

WHA Group's OHS operations promote a safe and healthy environment with the following main impacts:

- Employees and Contractors: The Group emphasizes safety training, hazard prevention, and regular workplace inspections to foster a zero-accident culture. This not only protects employees but also boosts morale and increases work efficiency.
- **Customers:** Strict adherence to safety standards ensures reliable services and products, thereby building customer trust and satisfaction.
- Communities: By reducing risks from industrial accidents or pollution, the Group's OHS measures protect community members from potential harm. Community engagement programs further promote understanding and cooperation on health and safety matters.

Through effective management of OHS risks and opportunities, the Group enhances operational resilience, protects the environment, and strengthens positive relationships with stakeholders. This commitment aligns with the Group's long-term goals to promote sustainable growth while ensuring the health and safety of all parties involved.

6. NEXT STEP

Occupational health and a good working environment have always been key issues that WHA Group places great importance on in conducting the business. In the future, the Group will continue to commit to developing the occupational health and safety management system to achieve the goal of zero work-related accidents. Although in 2024 the Group was able to achieve the accident reduction target, the Group has set a long-term goal to reduce the number of fatal accidents involving contractors to zero and to reduce the number of accidents causing contractors to stop work or lose working hours by 50 percent in 2025, as well as to reduce the Total Recordable Injury Frequency Rate (TRIFR) to below 0.40 in 2025.



To achieve these goals, WHA Group focuses on comprehensive reviews of risk assessment results from operational activities and studies investigations of incidents that occurred in the previous year, to improve and enhance the effectiveness of existing measures. In addition, the Group plans to implement an online accident reporting and work permit system, as well as an Emergency Alarm System, and to apply Artificial Intelligence (AI) technology for data processing and analysis to continuously enhance organizational safety.

For further development, WHA Group also plans to use an environmental monitoring system through IoT (Internet of Things) sensors to detect hazards such as temperature, humidity, and noise levels that may pose threats, in order to immediately alert workers and staff. Additionally, there are plans to develop online training systems using Virtual Reality (VR) and Augmented Reality (AR) technologies to make safety training more realistic and effective, focusing on training that helps employees and contractors become aware of hazards and proper prevention methods in real situations.

COMMUNITY DEVELOPMENT AND STAKEHOLDER ENGAGEMENT



1. GLOBAL TREND

Communities are considered one of the most important stakeholder groups, as they are directly impacted by business activities in both positive and negative ways—whether environmental, economic, or social. The relationship between businesses and communities is therefore of critical importance. While businesses rely on community support in the form of labor, resources, and operational areas, communities in turn expect businesses to demonstrate responsibility and contribute to improving quality of life in various aspects. Community development has become a core focus for organizations worldwide, with an emphasis on balancing business growth and long-term community well-being.

Today, community development approaches prioritize genuine participation. Listening to the voices of communities and all stakeholder groups is a vital step in building trust and fostering collaboration. At the same time, the application of digital technologies and innovations helps enhance the efficiency of communication and operations, making community participation more transparent, modern, and inclusive.

Moreover, the concepts of circular economy and sustainable development play an increasingly important role in community development. Businesses are working in partnership with communities to manage resources efficiently and reduce environmental impacts, while also promoting community self-reliance and resilience to social, economic, and environmental changes.

2. OUR POSITION

WHA Group recognizes that the country's economy must progress alongside both the national economy and the community economy. As a result, the Group acknowledges the importance of developing and fostering good relationships with communities to generate mutual benefits between the community and business operations, while also reducing the potential for conflicts between the organization and local communities surrounding industrial estates. Therefore, WHA Group has planned business operations that take into account both direct and indirect impacts on the community, such as environmental pollution (e.g., noise, air, wastewater, waste) and social issues (e.g., population growth and safety risks in industrial zones). These efforts are intended to prevent

conflicts between the organization and community stakeholders, which could damage trust and lead to persistent issues that are difficult to resolve. The Group is committed to creating a balance between economic growth, environmental responsibility, and social development through the application of the Bio-Circular-Green Economy (BCG Model) alongside the United Nations' Sustainable Development Goals (SDGs). This approach is aligned with sustainable social initiatives. At the same time, WHA Group focuses on developing and creating opportunities for surrounding communities to grow alongside the Group's business. The emphasis is on creating mutual benefits through various projects, such as a scholarship program to develop the potential of the local workforce, which supports both community quality of life and the creation of skilled labor for future business needs. In terms of environmental management, WHA Group successfully achieved carbon neutrality in 2021 and continues to work towards its goal of net-zero CO2 emissions by 2050. Therefore, the Group has developed long-term social and environmental activities aimed at conserving natural resources, developing clean renewable energy, and reducing CO2 emissions. These include the WHA Clean Water for Planet project, which works to improve and enhance the quality of local water sources, providing

reserve water for communities. Additionally, the Group has expanded tree planting initiatives with local communities to increase oxygen levels in the air and reduce CO2 emissions.

WHA Group also promotes the well-being of employees and surrounding communities while conducting business ethically and responsibly for the benefit of all stakeholders. The Group ensures risk management to ensure that the rights of communities in business areas to live safely—a basic right that the Group is committed to upholding for all stakeholders—are not violated. This commitment is reflected in the pledge "The Ultimate Solution for Sustainable Growth", where the Group promises not to neglect stakeholders but to drive mutual growth for the organization, society, and the environment. The Group also supports various community development projects under the mission "WHA: WE SHAPE THE FUTURE", which aims to create prosperity, employment, and income for people and society to improve quality of life. These efforts lead to the ultimate goal of promoting sustainable economic growth for Thailand. Over the 17 years of the Group's success, it has demonstrated the ability to integrate business operations with local communities harmoniously, which is a key factor in gaining trust and continuous support from the community.





3. MANAGEMENT APPROACH

3.1 GOVERNANCE STRUCTURE

WHA Group operates under the framework of its Corporate Social Responsibility (CSR) policy, focusing on ensuring that business operations can coexist sustainably with communities and the environment. Therefore, the Group has assigned the Corporate Social Responsibility and Environmental Committee, whose main role is to serve as the working group for community development. This committee consists of members from various relevant departments across different business sectors, such as Human Resources, Marketing, and Sustainability, to ensure a comprehensive understanding and response to the community's needs. The committee works closely with different units to establish policies focused on sustainable community development and drive projects that have tangible positive impacts on both the economy and society. The committee has the following important roles

ROLES AND RESPONSIBILITIES OF THE CORPORATE SOCIAL RESPONSIBILITY AND ENVIRONMENTAL COMMITTEE

Define strategies and goals	The committee is responsible for formulating policies and strategies for community development and fostering good relations between the organization and the community. The focus is on sustainable devel-opment in all dimensions, such as creating economic opportunities, promoting education, and improving the quality of life for the people.
Promote community participation	The committee emphasizes the importance of community involvement in collaboration and decision-making for various projects by organiz-ing regular meetings, needs assessments, and exchanges of opin-ions. This approach ensures that the projects genuinely address the community's needs.
Monitor performance and evaluate impacts	The committee monitors and evaluates the implementation of commu-nity-related projects to ensure that they deliver maximum benefits to the community. In addition, the committee reports the project out-comes to the Board of Directors at least once a year.

The Corporate Social Responsibility and Environmental Committee operates under the Corporate Governance and Sustainable Development Committee and is overseen by the Chief Operating Officer (COO), who is responsible for ensuring that community and social development efforts align with the established goals. The focus is on promoting sustainable growth for all communities within WHA Group's operational areas.

3.2 RISK AND OPPORTUNITIES MANAGEMENT STRATEGY

WHA Group adopts a business approach that emphasizes the sustainable development of all areas in which it operates, ensuring they grow in parallel with the Group's own expansion. As such, managing risks that affect communities and the environment is a key priority. The Group is committed to implementing Corporate Social Responsibility (CSR) projects and activities that effectively and continuously address the needs of local communities. This approach helps mitigate any negative impacts from its operations and

strengthens positive relationships between the Group and surrounding communities.

WHA Group's risk management strategy goes beyond mere compliance with legal and regulatory requirements. It also emphasizes collaboration with communities to ensure smooth and sustainable operations. This includes being mindful of potential impacts arising from the Group's activities and proactively managing those impacts in a timely manner.



RISKS AND OPPORTUNITIES FROM OPERATIONS AFFECTING COMMUNITIES

Community development within the context of WHA Group involves both risks and opportunities associated with its operations in the areas where the Group conducts business. To address this, WHA Group has implemented stakeholder engagement programs across all its operational areas to ensure consistent community management and fairness for communities impacted by its activities. The Group organizes tripartite meetings, which involve representatives from WHA Group, the Industrial Estate Authority of Thailand (IEAT), community groups, and local government agencies. These meetings are held regularly to foster communication and gather feedback from communities and local authorities. Additionally, WHA Group holds meetings of the

Collaborative Committee for Industrial Estate Eco-Town Development ECO-Industrial Town Development every 6 months in each WHA-managed industrial estate. These meetings bring together representatives from companies operating in WHA's industrial estates, the IEAT, community representatives, local government agencies, and WHA Group staffs to engage in dialogue and collaboration. To further understand and respond to community concerns, WHA Group also conducts annual community perception surveys on WHA projects. Moreover, the Group is actively developing the "WHASApp" application, allowing residents in WHAmanaged areas to receive updates, report incidents, and communicate directly with the Group.

THESE PROGRAMS ALLOW FOR THE ASSESSMENT OF IMPACTS, INCLUDING RISKS AND OPPORTUNITIES, ACROSS ENVIRONMENTAL, SOCIAL, AND GOVERNANCE (ESG) DIMENSIONS, AS FOLLOWS:

Risks Opportunities

If WHA Group is unable to effectively carry out community development efforts, it may have long-term impacts on the relationship between the Group and the local communities. A lack of effec-tive communication and community engagement may result in misunderstandings and dissatisfac-tion because the Group's operations may not ad-equately address the needs of the communities, potentially leading to conflict. Additionally, the development of industrial estates or other projects by WHA Group that affect community livelihoods, such as relocation, income loss, or cultural chang-es, as well as environmental impacts, such as expanding industrial areas into ecologically signif-icant zones, may damage ecosystems and nega-tively affect the quality of life in surrounding com-munities.

Effective community development operations can create significant opportunities for both WHA Group and the communities. It fosters increased confidence in the Group's operations from other stakeholders. Community development that focus-es on cooperation and involvement with the community strengthens the relationship with the community, making them more committed and sup-portive of the Group's activities, thereby prevent-ing conflicts. Furthermore, if WHA Group can help the community grow sustainably by supporting the quality of life and generating income for the local area, it will create positive economic and social impacts in the broader context.

Assessing both the risks and opportunities related to community development will enable WHA Group to formulate strategies for community development that are effective and sustainable. It will also foster efficient collaboration with the community and other stakeholders to maximize benefits in Environmental, Social, and Governance aspects.



3.3 RISK MANAGEMENT

WHA Group establishes policies and guidelines for stakeholder engagement, which apply both internally within the Group and with partners. It also develops comprehensive risk management strategies covering Environmental, Social, and Governance aspects to ensure that all involved parties benefit maximally from sustainable operations. This includes various activities to promote meaningful participation, create transparency, and address stakeholder concerns in the area.

THEASSESSMENT OF THE IMPACT ON STAKEHOLDERS OR COMMUNITIES IN THE AREA

WHA Group conducts assessments of the social, economic, and environmental impacts caused by its operations in local communities. This assessment serves as a foundation for identifying key issues, reducing risks, and enhancing the positive outcomes of the company's operations on the community. The Group conducts field surveys to gather the opinions of residents living near the industrial estates to study the social and economic conditions, including employment, hygiene, public utilities, and living conditions. Additionally, the surveys assess environmental issues that affect the daily lives of residents, their awareness of project-related information, their need for information, and their satisfaction with the project's operations. Feedback and suggestions are collected to improve the implementation of future activities in collaboration with the community. Furthermore, WHA Group prepares Environmental Impact Assessments (EIA) prior to the construction and operation of projects by WHA Industrial Development Public Company Limited (WHAID) and WHA Utilities and Power Public Company Limited (WHAUP). These

assessments cover a 5-kilometer radius around the project to evaluate potential environmental and social impacts on surrounding communities. The Group also uses a public participation process to ensure that impacts are examined, mitigated, and managed appropriately. Additionally, WHA Group closely monitors and manages environmental risks, such as chemical spills, wastewater discharge, noise pollution, and air pollution from factories, to prevent any adverse effects on neighboring communities.

CLEAR COMMUNICATION CHANNELS

WHA Group has established accessible and transparent communication channels for stakeholders in the area, allowing them to easily express opinions, raise concerns, or request information quickly. The Group has developed a social engagement framework and various communication platforms, including phone, email, Facebook, website, YouTube, participatory activities, surveys, community representative appointments, and a whistleblower platform (for further details, refer to the Business Code of Conduct). These channels are designed to communicate community development project initiatives and mitigate the impacts of the Group's operations, ensuring stakeholders are informed and can voice their opinions and complaints. Additionally, the Group utilizes a Unified Operation Center (UOC) system to collect and display data from environmental monitoring systems in the project and operational areas in real-time. This ensures transparency and builds trust with the community, as well as complies with government regulations requiring public dissemination of monitoring results.



EMPOWERING STAKEHOLDERS IN THE AREA

WHA Group organizes training activities and knowledge-enhancing events for stakeholders in the area as appropriate, ensuring they have the necessary skills and knowledge to communicate effectively with the Group. For example, training sessions are held to educate stakeholders about the communication channels related to the Group's operations and business activities. These include meetings for various groups such as Japanese executives, HR managers, safety team members, community leaders, and local stakeholders, with updates and contact information shared accordingly for each group.

Additionally, WHA Group uses the LBMS application for logistics clients to communicate with Group staff and the WHASApp application, developed in 2024, for communication with stakeholders in the Group's operational areas. Users of the applications receive direct updates from the Group and can inquire about or report incidents within the Group's operational areas. These tools enhance the communication capabilities of stakeholders, and the Group organized activities in 2024 to educate the local population about using the WHASApp application. This new communication channel helps foster mutual understanding and cooperation between the Group and the community.







REGULAR OPINION SURVEY AND REVIEW OF ENGAGEMENT STRATEGY

WHA Group conducts periodic opinion surveys and reviews to gather insights and suggestions from stakeholders in the area. The results of these surveys are used to continuously improve and develop the engagement strategy. The surveys are conducted through survey research methods and use questionnaires as tools for data collection. The data collection process is designed to meet the objectives of the research, using field surveys and collecting feedback via questionnaires. The steps in the study include:

- Target Group for the Opinion Survey and Sampling Methods: This includes government agencies, community leaders, and household representatives.
- Survey Tool for Social-Economic Conditions:
 Questionnaires are used to collect data from
 each target group. A structured survey tool was
 designed, consisting of both closed-ended and
 open-ended questions.
- Preparation for Field Survey: Ensuring the accuracy
 of the questionnaires for each target group and
 coordinating before conducting the survey in the
 field.
- Field Data Collection Method: Training field interview staff to ensure they have the necessary knowledge and understanding to provide information and answer questions from respondents. Questionnaires and sampling methods for households in the study area are also reviewed.
- Data Analysis: The data collected from interviews via the questionnaires are analyzed and processed using statistical software for descriptive statistics.
- Interpretation of Data: Descriptive statistics, such as frequency, percentage, and average values, are used to describe various aspects, including opinions about the project, awareness of project information, and satisfaction with the project's social care efforts. Additionally, the results are interpreted using a rating scale to evaluate satisfaction, with a maximum score of 5 for the highest level of satisfaction and a minimum score of 1 for the lowest.









MEETING WITH STAKEHOLDERS TO DISCUSS CONCERNS

WHA Group organizes tripartite meetings, which involve joint discussions between WHA Group staff, the Industrial Estate Authority of Thailand, community representatives, and local government agencies. These meetings provide a platform for engaging with communities and local agencies regularly to discuss emerging issues and jointly find solutions. The meetings help build trust and foster positive relationships and are held at various WHA's industrial estates as follows:

- Environmental Quality Inspection Committee
 Meetings at WHA Chonburi Industrial Estate 1
 are held every 6 months or twice a year.
- Environmental and Health Impact Monitoring Committee Meetings and Public Relations and Community Relations Committee Meetings at WHA Chonburi Industrial Estate 2 are held every 6 months or twice a year.
- Environmental Impact Monitoring Committee
 Meetings at Eastern Seaboard Industrial Estate
 (Rayong) and WHA Eastern Seaboard Industrial
 Estate 1 are held every 6 months or twice a year.
- Environmental Monitoring and Community Relations Committee Meetings to oversee the implementation of environmental mitigation measures and monitor the impact at WHA Eastern Seaboard Industrial Estate 2, WHA Eastern Seaboard Industrial Estate 3, and WHA Eastern Seaboard Industrial Estate 4 are held every 6 months or twice a year.
- Tripartite Committee Meetings to oversee and follow up on the implementation of measures to reduce environmental and health impacts at WHA Eastern Industrial Estate (Map Ta Phut) are held every month or 12 times a year.
- Environmental Impact Monitoring Meetings at WHA Rayong Industrial Land are held every 2 months or 6 times a year.
- Environmental Impact Monitoring Meetings at WHA Rayong 36 Industrial Estate are held quarterly or 4 times a year.





In addition, a Cooperation Committee Meeting for Engagement is held to elevate industrial estates into Eco-Industrial Town. These meetings are organized at industrial estates managed by WHA Group, with each industrial estate holding meetings every 6 months. During these meetings, WHA Group provides an opportunity for representatives of companies located within WHA's industrial estates to join, alongside the Industrial Estate Authority of Thailand, community representatives, local government agencies, and WHA Group representatives.







COMPLAINT MONITORING AND MANAGEMENT

WHA Group has established an effective complaint handling system to monitor, inspect, and resolve issues or concerns raised by stakeholders in the area. This system helps enhance accountability and continuous improvement. The Group has created channels for submitting complaints and regularly promotes these channels through various media, such as websites, digital media, Facebook, and public announcements for all stakeholders. Additionally, the LBMS application allows logistics warehouse clients to report issues directly to WHA Group staff, while the WHASApp application enables stakeholders to receive updates, submit complaints or concerns, and track and verify WHA Group's actions. Furthermore, during meetings or opportunities to meet with communities and stakeholders, WHA Group representatives consistently inform them about the available communication channels and complaint submission processes. All suggestions and complaints are reviewed by the committee and the corporate social responsibility and environmental task force, which meets monthly to determine suitable community development strategies and report to the WHA Group Board.

PHIL ANTHROPIC ACTIVITIES EVALUATION

WHA Group continuously reviews and evaluates the involvement of local stakeholders to assess the success of various activities and ensure that each activity generates effective results that benefit the community. The process includes a transparent evaluation of social initiatives and the gathering of lessons learned from these activities to inform the ongoing development of the Group's Corporate Social Responsibility (CSR) strategy. Stakeholder engagement is reviewed annually. The Group measures its performance in engaging with stakeholders as follows:

- Community Satisfaction Survey (Units: as operation unit/%), conducted at the end of the engagement projects and activities.
- Operating strictly within the Environmental Impact Assessment (EIA) framework, which includes site visits for gathering community feedback both before and after project implementation.
- Complaints Channels, e.g., complaints received through whistleblowing channels, and other communication channels, from local stakeholders, e.g., communities, authorities, media, associations and NGOs.
- Social Return on Investment (SROI)

3.4 METRICS AND TARGETS

WHA Group has established both short-term and long-term goals for its community development operations, focusing on creating positive impacts in the economic, social, and environmental aspects through Corporate Social Responsibility (CSR) initiatives that align with the needs of the community. The results from the 2024 fiscal year demonstrate success in achieving the set goals

In 2024, WHA Group conducted various Corporate Social Responsibility (CSR) activities for communities within a radius of 5 kilometers from the industrial

estates. We allocated a budget of 50.93 Million Baht for the social activities listed in the table below. Employees of the Group contributed a total of 82,080 working hours to CSR activities, benefiting a total of 213,448 community members. Additionally, in 2024, the Group engaged with communities by working with 175 out of 177 villages in Rayong, Chonburi, and Saraburi Province, achieving a participation rate of 99%. To continuously engage with surrounding communities, WHA Group aims for a 99% community participation rate for company-related activities in 2025.

GOALS AND PERFORMANCE OF COMMUNITY ENGAGEMENT

Year	2022	2023	2024	Target 2024
Goals and Performance of Community Engagement (%)	98	98	99	99

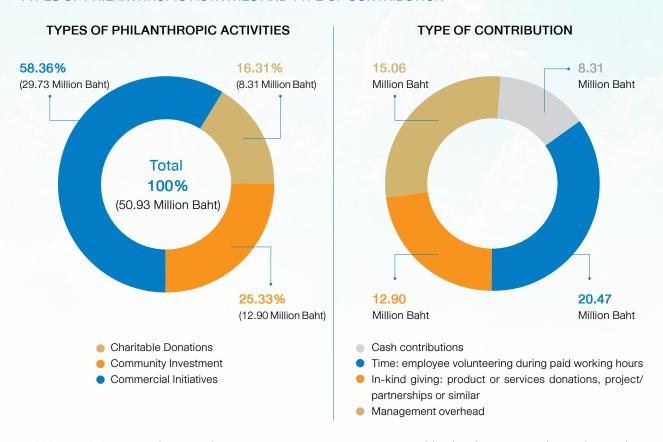
STAKEHOLDER ENGAGEMENT COVERAGE PERFORMANCE

Торіс	Coverage (%)
Social Impact Assessments, including Gender Impact Assessments	100%
Environmental Impact Assessments and Ongoing Monitoring	100%
Public Disclosure of Results of Environmental and Social Impact Assessments	100%
Stakeholder Engagement Plans based on Stakeholder Mapping	100%
Broad based Local Community Consultation Committees and processes that include Vulnerable Groups	100%
Works Councils, Occupational Health and Safety Commit-tees and Other Worker Representation Bodies to deal with Impacts	100%
Formal Local Community Grievance Processes	100%

4. HIGHLIGHT PROJECTS

WHA Group recognizes that merely controlling operations to prevent negative impacts and engaging with communities may not be sufficient to achieve the goal of improving quality of life and well-being, in line with the mission "WHA: WE SHAPE THE FUTURE." Therefore, the Group has implemented long-term projects focusing on community development in three key areas: education, well-being, and the environment. These initiatives are designed to reach all stakeholder groups, including vulnerable populations, to strengthen community well-being and address community concerns.

TYPES OF PHILANTHROPIC ACTIVITIES AND TYPE OF CONTRIBUTION



In 2024, WHA Group implemented various projects to promote sustainable development and growth together with surrounding communities, divided into six categories as follows: Educational Promotion Projects, BCG Economy Model Promotion Projects, Community Development Projects, Health Promotion Projects, Environmental Conservation Projects, Industrial Estate Design Projects by WHA to include social areas, and Community Revitalization or New Town Development Projects, as follows.



4.1 EDUCATION DEVELOPMENT PROJECTS WHA ANNUAL SCHOOL CONTRIBUTION PROJECT







In the 2024 academic year, WHA Group, in collaboration with business partners and operators in WHA's industrial estates, organized an educational supplies donation annual school contribution activity for schools surrounding WHA's industrial estates for the 26th consecutive year. This year, school bags and educational supplies were provided to 75 schools and child development centers, benefiting over 26,000 students. The project reflects WHA Group's commitment to supporting surrounding communities in improving their quality of life while promoting sustainable environmental stewardship. It also aligns with the company's mission, "WHA: WE SHAPE THE FUTURE" which focuses on sustainable growth under the concept of "The Ultimate Solution for Sustainable Growth".



The 2024 satisfaction survey on the "WHA Annual School Contribution Project" conducted among school principals and teacher representatives who participated in the activity, revealed that 99% of respondents believed the project supported students' education, 97% agreed that it helped reduce parents' financial burden, and 97% all participants were satisfied with the project.

All respondents expressed satisfaction with the 2024 WHA Annual School Contribution Project. WHA Group remains committed to continuously supporting education for young people, the future of the nation, under the concept "WHA: WE SHAPE THE FUTURE", laying the foundation for sustainable development.



WECYCLE PROJECT: UPCYCLING SCHOOL BAGS FROM PLASTIC BOTTLES

WHA Group, together with customers and entrepreneurs from the WeCYCLE project, organized an Upcycling Schoolbag Donation Project for students who donated plastic bottles through the WeCYCLE initiative. In 2024, 5 schools participated in the WeCYCLE activities: Ban Klong Kram School, Ban Nong Suea Chang School, Ban Mab Lambid School, Wat Chak Phak Kood School, and Wat Nong Bon Child Development Center. These schools collaborated to sort waste and donate used plastic bottles to the WeCYCLE project, which are then upcycled and woven together with water hyacinth fibers from the constructed wetland wastewater treatment system of WHA's Industrial Estate. This process is carried out by the Ban Chak Mahat Community Enterprise Group, producing schoolbags that are donated to the students involved in the WeCYCLE project. The initiative aims to instill





environmental awareness among youth and promote the learning of the 3Rs concept: Reduce, Reuse, and Recycle.

SHINE BRIGHTER WITH WHA PROJECT

WHA Group, in collaboration with the Dr. Somyos Anantaprayoon Foundation, delivered a solar panel installation project on the roofs of school buildings in Rayong Province under the "Shine Brighter with WHA" initiative. The project included 2 schools: Nikom Sang Ton Eng Rayong 3 School, with a maximum power generation capacity of 18.75 kilowatts peak (kWp) and a total of 838 students, which helps the school save up to 120,000 Baht per year in electricity costs, equivalent to 40% annually; and Ban Nong Lalok School, with a maximum power generation capacity of 11.25 kilowatts peak (kWp) and 160 students, which helps the school save up to 60,000 Baht per year in electricity costs, equivalent to 56% annually. This project aims to promote the use of clean energy, reduce utility expenses for schools, and foster a sharing community aligned with the concept of sustainable organizational development.









School	Nikom Sang Ton Eng Rayong 3 School	Ban Nong Lalok School 11.25 kWp 44 625 18 10 kW 1 9,000		
Power Generation Capacity	18.75 kWp			
Installation Area (sq.m.)	85			
Solar Panel (Watt)	625			
Number of Panels	30			
Inverter Capacity	30 kW			
Number of Inverters	1			
Average Monthly Electricity Cost (Baht)	25,000			
Average Annual Electricity Cost (Baht)	300,000	108,000		
Monthly Electricity Cost Reduction (Baht)	10,000	6,000 60,000		
Annual Electricity Cost Reduction (Baht)	120,000			
Electricity Cost Savings (%)	40%	56%		

The Shine Brighter with WHA Project received funding support from the Dr. Somyos Anantaprayoon Foundation in collaboration with WHAppy. In this initiative, WHA Group employees took part in a charity auction featuring personal items donated by the Group's executives to help raise funds for installing rooftop solar systems at two schools, with a total value of 715,900 Baht in 2024.

WHAUP was responsible for the installation of the rooftop solar systems, with expert engineers designing the systems and preparing the necessary equipment. A team of solar installation specialists was assembled to ensure successful implementation. WHAUP also provided training to the schools on how to use and maintain the systems, and arranged for ongoing maintenance visits to ensure the solar systems continue to operate efficiently.

ENHANCING ENVIRONMENT YOUTH NETWORK CAPACITY PROJECT FOR EASTERN ECONOMIC CORRIDOR

WHA Group signed a cooperation agreement with Eastern Economic Corridor (EEC) Policy Committee Office to organize the Environmental Youth Network Capacity Enhancement Project for Eastern Economic Corridor Development in 2024. This project provides students the opportunity to learn new things and explore future career paths. WHA Group supported the project on designing and developing a household grease trap from Saint Louis School, Chachoengsao Province, which innovated a product to solve wastewater problems in the community

and expand its application to wastewater treatment systems in industrial estates. Another project supported was the Rice Straw Pot from Mon Thong Wittaya School, addressing the issue of rice straw burning by farmers in Chachoengsao Province.

Through the collaboration between WHA Group and the EEC, this project serves as an important network to foster cooperation in supporting the new generation of youth in the EEC area to showcase their creativity, inventiveness, and develop innovations in the Environmental Youth Network Capacity Enhancement Project for Eastern Economic Corridor Development.







WHA SCHOLARSHIP PROJECTS

WHA Group believes that youth are a crucial driving force for the country's future, and education is a fundamental foundation for community development and improving the quality of life of community members. WHA Group recognizes that some talented and highly skilled students still lack full access to education due to financial constraints. Therefore, WHA Group has established a scholarship program for students at various levels to increase educational opportunities for underprivileged students and help develop them into capable youth. The objective is to support young people in developing skills and achieving a better quality of life.

1. Scholarship Program For Kindergarten, Primary, and Secondary School Students

In 2024, WHA Group awarded scholarships totalling 1,227,760 Baht to students in schools surrounding WHA's industrial estates. Additionally, the Group supported Children's Day activities with funding of 185,000 Baht, demonstrating a strong commitment to supporting children and youth, the future of the nation, under the concept WHA: WE SHAPE THE FUTURE.

WHA Group granted scholarships through the "Sharing Seniors Seniors Sharing, Shaping Juniors" program in 2024, in collaboration with WHA Saraburi Industrial Land and the Community Relations Committee of companies within WHA Saraburi Industrial Land. Scholarships totaling 120,000 Baht were awarded to underprivileged students. The program also distributed 48 school bags made from recycled plastic bottles under WeCYCLE Project to youth in schools near WHA Saraburi Industrial Land. Furthermore, an Environmental Conservation and Anti-Drug Youth Camp was organized, providing students with opportunities to learn outside the classroom while fostering awareness of environmental conservation and drug prevention.

Moreover, in 2024, WHA Rayong Industrial Land, together with the Community Relations Committee of companies in WHA Rayong Industrial Land, organized Children's Day activities for schools in Nong Lalok Subdistrict. The event included the distribution of polo shirts for wearing on religious days and scholarships totaling 30,000 Baht for underprivileged students.









2. Scholarship Program For Students Under The Dual Vocational Education System Project

Currently, the labor market in Thailand, including factories within industrial estates, has a high demand for skilled and well-trained workers. In response, the Office of the Vocational Education Commission initiated the Dual Vocational Education (DVE) program, a collaboration between the education sector and industry. This program enables students to simultaneously gain theoretical knowledge and practical work experience, allowing companies and factories to train workers that meet their specific needs. However, many capable students face financial challenges that prevent them from completing the program. Recognizing this issue, the Group has partnered with Ban Khai Technical College in Rayong Province to provide scholarships to academically outstanding but financially disadvantaged students under the Dual Vocational Education program, which has been ongoing for 15 years.

In addition, the Group has facilitated coordination with customers within WHA's industrial estates to provide opportunities for students to undertake work-based training during their studies. Ban Khai Technical College is the only institution fully qualified to participate in the Dual Vocational Education (DVE) program within the Eastern Economic Corridor (EEC). Since the program's inception in 2003 until 2024, a total of 124 students have participated. In 2024, the Group awarded full scholarships to 9 students, and over 100% of graduates from this program have been able to secure employment with the Group's customers. Furthermore, in 2024, the Group granted one bachelor's degree scholarship with the condition that the recipient returns to serve as an instructor at Ban Khai Technical College for a specified period. This initiative supports the college in maintaining qualified educational staff and continuing to produce highly skilled and capable students.

This project not only promotes educational opportunities for youth but also helps develop a skilled workforce to serve as a key driving force supporting the growth of Eastern Economic Corridor (EEC) development projects. The EEC covers strategic areas in Rayong, Chonburi, and Chachoengsao Province, where major projects are underway, such as the motorway project, double-track railway system, as well as the expansion of U-Tapao International Airport and port facilities, along with various infrastructure developments as core components. This special development zone is expected to attract significant private sector investment. WHA Group recognizes the importance of supporting the development of a highly skilled workforce ready to become a crucial driving force for business growth, especially in factories located in WHA's industrial estates, which are part of Eastern Economic Corridor (EEC) area.





ชื่อ: บาบรวิชญ์ ซึ่งขง ชื่อเพ่น: เทมส์ ประวัติการศึกษา: ระดับ (ปวช),วิทยาลัยเกคนิคบ้านค่าข เละ ระดับ (ปวส), ที่วิทยาลัยเทกนิกบ้านค่วย

ประวัติการฝึกงาน : บริษัท แคนาเดียนโชคาร์ แมนูแฟคเจอซึ่ง จำกัด



อนาคตที่วางแผนไว้: สิ่งที่ผู้งหวิงในอนาคต คือได้ตำงานใน อาสินหรือต่ายหม่งที่ดีและนั้นคงหรือ ใต้ประกอบกิจการอะไรศึกอย่างเป็น



ความรัศิกที่ได้รับทุนการศึกษา :

ผมต้องจอชอบทุณ บริษัท WHA ผมรู้ดีใจและทราบซึ้งที่ได้ เป็นส่วนหนึ่งของผู้ที่ได้ได้รับทุนนี้ คุมที่ผมได้รับ ช่วยคดค่าใช้ง่าย ในครอบครัว และแบ่งเบาการะต่าง ๆ คง กระผมขอขอบเมระส เป็นอย่างสง ผมระพิฒนาตนเองให้มี ประสิทธิภาพยิ่งสิ้น ทิ้งการ เรียน การฝึกอาฮีพเละด้านอื่น ๆ ในอนาคดต่อไปครับ

สิ่งที่อยากบอกถึงน้องทุน WHA

WHA

รุ่นต่อไป : ำกำให้สินทุนก็จะใช้ทุนให้เกิด ประโยชน์กับด้วของน้อง ๆ เอง ก็มาก ที่คุด และก็อยากให้น้องดั้งใจเรียนทำ

WHA

ชื่อ: นายชากบกเรงค์ คิธีเบงก์ ชื่อเค่น: เปิด์น ประวัติการศึกษา: ระดับ (ปวช).วิทยาคินเทคนิคน้ามศาย ศาชาช่อนนำลุง และ ระดับ (ปวศ), ที่วิทยาลัยเทคนิคน้ำน

ประวัติกายฝึกงาน : บริษัท อเมริกัน แอ็กเซิก แอนด์ แมนบูแฟก เจอริ่ง (ประเทศไทย) จำกัด



ก่าย สารกเทคปิกการผลิต

ความรู้ศึกที่ใช้รับทุนการศึกษา

รู้ศึกขอบคุณเมื่าดับบลิวเอซเอครับ ที่ได้ให้ทุนการศึกษา กับแวก แตกนั้งกับและเนาสนับได้สามารถแบบแบบและเนาสนับกุกส ทุนการศึกษามาใช้ง่ายด้าน อุปกรณ์การเรียน คำเทอบ คำนำนันรถ ก่าอาหาร และคำใช้ง่ายท่างๆ ส่วนเหลือจะนำมาเก็บเป็นเงินลอน



อนาคตที่วางแผนไว้: เมื่อเรียนงบแล้ว อยากต่อปริญญาตรีสาขาข่อมปารุง ท่าอากาศนานครับ อยากเป็นส่างช่อม น้ายงเครื่องบิน กลิน



สิ่งที่อยากบอกถึงน้องทุน WHA

WHA

รุ่นต่อใน่ : "ก็ชอแสดงความขินดีกัน น้องๆที่ได้ทุนนึกรับเป็นทุนที่แบ่งเบาการ คลิวได้นากๆ เคิวก็ขอให้น้อ เรียนให้งบและใช้ชีวิตที่ด้วยองอยากใช้ ตั้งใจเรียนนะครับ เพราะมาทำงานแล้วจะ

ประวัติการศึกษา: ระดับบัธยบศึกษาตอนต้น - ตอนปลายที่ วัทยากับเทกนิกบ้านก่าย

ประวัติการฝึกงาน: บริษัทแลาสติก ออมเนียน ออโต อีเนอร์ชี (ประเทศไทย) จำกัด



อนาคตที่วางแผนไว้: อนาคตอยากจะทำงานไปด้วยและ ศึกษาต่อมหาวิทยาลัย คณะวิศ กรรมกาตร์ ไม่ด้วยค่ะ หลัวก็จะเปิด ร้านคาเฟ้านวเล็กๆ ท่านไวร์บไกใช เปาร์นค่านคาธายได้เสริมเข้าบ้าน แค้ว ก็ฝงเงินให้ครอบครัวทุกเดีย



ความรู้ศึกที่ได้รับทุนการศึกษา

ด้จับ ขอขอบภูณฑาง WHA ที่ได้ให้โอกาศดิจับได้เป็นส่วนหนึ่ง ของนักเรียนกุม WHA ทุนที่ได้รับมา สามารถแน่งเมาการ: กรอบครัวได้เยอะเคยค่ะ ไม้ว่าจะเรื่องทำเทอบ ค่าใช้จ่ายในการ เดินทาง คำกัน และเม่นเนาการ

สิ่งที่อยากบอกถึงน้องทุน WHA

รุ่นต่อไป : โอยากนอกกับน้องๆว่า ตั้งใจทำหน้าที่ของตัวเองให้ดีที่คดค่ะ ไป ต้องกตตินมากเกินในวางเผนใน ดบากกาแลาะบับจะส่งผลดีต่อก เองในวันข้างเหม้าค่ะ

WHA

ชื่อ:นางสาวบบัสเวินท์ ซึนมั่น ชื่อเล่น:ฝีฟ้า ประวัติการศึกษา ระดิบประกาศขียนีกรวิชาสีแต้นสง" (ปวศ) ที่วิทยาลัยเทคนิคบ้านค่าย

ปัจจุบันกำลังศึกษาต่อระดับปริญญาตรี : คณะกรุศาสตร์ เดสาหารรม วิศวกรรมการผลิต

เทคโนโลยีเมระจอมเกล้า เมระนคระหนือ กรุงเกเมนหานคร

อนาคตที่วางแผนไว้:

อยากเป็นครูส่างค่ะ เมลาะว่าหมูได้ลิน Tomannmailinnu ข้อง ปวช, หมูลิสิก อยากกระจายกวามรู้ที่หมูมีให้กับผู้อื่น อยากรับล้าธาสาวอะรูค่ะ เมธาะมีชายใต้ ที่นั่นคง เป็นที่เคาอเมเคะป็นแบบอย่างที่มี



ความรู้ศึกที่ได้รับทุนการศึกษา :

ของอนกุณปริวัท WHA ผู้ใหญ่ใจดีที่ขอบกุมการศึกษาช่วย สมับสมุนผู้ที่สาดค่าใช้จ่ายในการศึกษาได้เรียนต่อ ขอบคุณ สำหรับโอกาส ดีๆก็บอนให้ค่ะ หมูรู้สึกเป็นเกียรติที่ได้รับทุนนี้และ ปี แรงขันดาลใจกว่าเดิมในการศึกษาต่อและบรรลุเป้าเ



โรงงานระยองประสิทธิ์ผลจำกัด สิ่งที่อยากบอกถึงน้องทน WHA

รุ่นต่อไป : "อยากให้ข้องๆเร็งใหญียนหา ใต้รับโดกาศ เคาะซันหนึ่นเข็มระในการ จักงาน และาในใช้ทุกคนทั้งใต้รับโอกาส สาขาบ และ สมเตาทาน หลับสมเตา หลั ดีๆแบบนี้ อาจจะเซียน หนักบ้างมีกงาน หนักบ้าง แต่นั้นคือผลดีในอนาคอจะทำให้ ประกบผลกำเร็จอย่างแบ่นอนคัะ



3. The Dual Vocational Education (Dve) Project To Setting A Good Example In The Community





WHA Group collaborates with Bankhai Technical College to select students for the Dual Vocational Education program, considering their knowledge, skills, and eagerness to learn. Selected students have the opportunity to work as apprentice employees in factories and establishments within WHA's industrial estates. The Production Technology Department of Bankhai Technical College has approximately 600 students at the Higher Vocational Certificate (Diploma) level, most of whom undertake internships at worldclass factories located in industrial estates within Eastern Economic Corridor (EEC) area. With the support from the Group in providing scholarships and acting as a coordinator between factories and the college, the EEC Model Type A teaching model enables students to further develop their knowledge with leading global factories and has been very well received.



In addition, some students have had the opportunity to work in the United States and Australia, such as at Crosstek CoorsTek Advanced Materials (Thailand) Co.,Ltd. and CNC manufacturing factories, gaining experience in technology across the entire supply chain, with salaries ranging from 60,000 to 80,000 Baht. Additionally, some students have had the chance to intern in China, specifically at Primax Electronics Co., Ltd. in Guangxi, China, before returning to continue their internship at Primax Electronics (Thailand) Co., Ltd., with no expenses incurred by their parents. Upon graduation, these students secure employment immediately, with starting salaries between 20,000 to 30,000 Baht, reflecting the college's capability in producing quality skilled labor for the future.







WHA TEACHER FELLOWSHIP PROGRAM

Currently, many primary schools in the areas surrounding WHA's industrial estates still face a shortage of teaching staff. Therefore, WHA Group recognizes the importance of basic education for youth in the areas under its care and has supported contract teachers in various subjects for schools within the industrial estates in Rayong and Chonburi provinces. In 2024, the Group provided support amounting to 1,260,000 Baht to teachers from 7 schools in Rayong and Chonburi Province. According to the evaluation of the financial support provided to these teachers, approximately 2,000 students from the seven schools receive training from the Group's teachers annually.









WHA TEACHER FELLOWSHIP PROGRAM

Does the project help to improve the quality 100% of education for students? Students assessment are conducted after 43% 57% the teaching is completed. Students assessment are conducted after 71% 29% the teaching is completed. To communicate and create atmosphere 57% the class appropriately. To prepare the teaching plan appropriately 57% 43% according to subject. 71% 29% Punctuality in teaching Very Good Good

THAI-CHINESE LANGUAGE EXCHANGE PROGRAM: TEACHING THAI TO CHINESE SPEAKERS AND CHINESE TO THAI SPEAKERS





In 2024, WHA Group collaborated with Chonburi Technical College under the International Chinese Language Exchange and Cooperation Promotion Center (CLEC) project to organize Thai and Chinese communication courses. The objective was to transmit and exchange Thai and Chinese cultures, as well as to teach Thai and Chinese languages for work purposes, enabling both Thai and Chinese executives to work together smoothly. The courses had 34 students in the Chinese language program and 16 students in the Thai language program, totaling 50 participants.

SATISFACTION WITH THE THAI-CHINESE LANGUAGE LEARNING

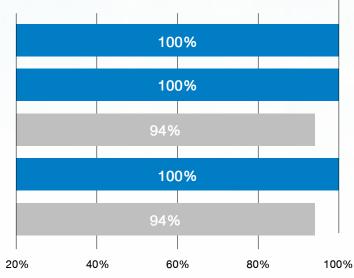
There is a high to very high satisfaction with the overall results of the training

Participants are able to apply what they have learned from the training to their work effectively to very effectively.

The training helps develop communication skills in Chinese or Thai, rated from good to very good.

The training content is easy to understand and practical to apply, rated from good to very good.

Learners expressed that the training content is appropriate and comprehensive, rated from good to very good.



After completing the training, it was found that 94% of the learners felt the training content was appropriate and comprehensive, ranging from good to very good. 100% of the participants found the training content easy to understand and practical to apply, rated from good to very good. The training helped develop communication skills in Chinese or Thai to a good to very good level for 94% of the learners. Additionally, 100% were able to apply what they learned from the training to their work effectively to very effectively. Overall satisfaction with the training results was rated good to very good by 100% of the participants. These outcomes are considered highly satisfactory.



THE BUILDING RENOVATION AND REPAIR PROJECT FOR SCHOOLS SURROUNDING WHA'S INDUSTRIAL ESTATES

WHA Group organizes activities to promote employee participation in contributing to local schools. WHA's volunteer employees have joined efforts to repaint school buildings to improve cleanliness, aesthetics, and create a conducive learning environment for youth. In addition, the Group has implemented projects to renovate and repair infrastructure in schools surrounding the industrial estates, including classrooms, cafeterias, and school fences, as well as landscaping improvements in Rayong, Chonburi, and Saraburi Province. These efforts aim to develop educational resources and facilities to enhance educational quality in schools within the industrial estate areas, supporting sustainable economic growth. Moreover, WHA Group supports projects to improve the quality and sufficiency of school drinking water systems. Specific projects include renovating the roof of the children's play area at Ban Mab Pa Wai School, Nong Bua Subdistrict,

Ban Khai District, Rayong Province; refurbishing the cafeteria at Ban Khlong Yai Mueang School, Bang But Subdistrict, Ban Khai District, Rayong Province; and providing waste sorting sheds to Ban Hin Khong School in Rayong Province. The Group also renovated and painted playgrounds at Chak Mahad School and Ban Hin Khong School, painted sports fields at the Eastern Sugar Community School Chumchonborisatnamtantawanook School, refurbished buildings at Hua Chuat School, repaired roofs at Ban Pa Wai School, supported the construction of covered walkways connecting buildings at Ban Nong Krab School, and improved restroom facilities at Nikom Sang Ton Eng Rayong 3 School. These efforts aim to create safe, hygienic, and attractive learning environments. Additionally, WHA Group organizes the WeCYCLE campaign to promote the sorting of used plastic bottles in schools around WHA's Industrial Estates. This initiative focuses on raising environmental awareness through the 3Rs principles (Reduce, Reuse, and Recycle), helping to reduce waste volume and increase the effective reuse of plastic materials.







ORGANIC VEGETABLE GARDEN PROJECT FOR SCHOOL LUNCHES

WHA Group has implemented an Organic Vegetable Garden Project to support the cultivation of kitchen gardens in schools. The project aims to provide safe ingredients for school lunch preparation and promote experiential learning for students outside the classroom. The project has been established at Ban Mae Nam Khu School, Mae Nam Khu Subdistrict, Pluak Daeng District, Rayong Province; Ban Map Yang Phon School, Map Yang Phon Subdistrict, Pluak Daeng District, Rayong Province; Ban Phayun School, Ban Chang Subdistrict, Ban Chang District, Rayong Province; Map Ta Phut Municipal School, Huai Pong Subdistrict, Mueang Rayong District, Rayong Province; and Ban Map Lam Bit School, Ban Bueng Subdistrict, Si Racha District, Chonburi Province. The organic vegetable gardens provide schools with safe raw materials for preparing school lunches and help reduce procurement costs. Additionally, the project encourages children to









learn and practice agricultural skills independently. Any surplus produced beyond consumption needs can be sold, generating extra income and offering students valuable experience in management and entrepreneurship.

4.2 BCG ECONOMY MODEL SUPPORT ACTIVITIES WECYCLE PROJECT

WeCYCLE project combines two words: "We" + "Recycle/Upcycle". It represents a collaborative effort between WHA Group and various operators within the WHA's industrial estates. Thus, the WeCYCLE project serves as a prime example of cooperation among the public sector, private sector, and communities to transform environmental challenges into sustainable creative opportunities, making our world a better place for future generations.

From 2022 to the present, WeCYCLE project has welcomed participation from 116 companies and organizations. In 2024, WHA Group collaborated with the Industrial Estate Authority of Thailand (IEAT) and leading organizations such as PTT Global Chemical Public Company Limited (GC), SCG Packaging Public Company Limited (SCGP), and BSGF Company Limited (BSGF) to implement the project under WeCYCLE concept as follows:





1. WeCYCLE PROJECT: Used Plastic Bottles

WeCYCLE: Used Plastic Bottles is a pilot initiative under the broader WeCYCLE program. It originated from a collaboration among WHA Group companies, PTT Global Chemical Public Company Limited (GC), and partners. This project invites participating operators to collectively donate used plastic bottles to be upcycled via GC's logistics system under the YOUTURN project. The recycled plastics are then woven together with water hyacinth fibers sourced from the WHA Clean Water for Planet project. The water hyacinth fibers are produced by Ban Chak Mahad community in Rayong Province, which creates additional income and sustainable livelihoods for the community, allowing them to coexist sustainably with WHA's industrial estates. The project aims to foster environmental awareness, reduce plastic waste sent to landfills, and help mitigate carbon dioxide emissions and global warming.





WeCYCLE Project accepts donations of used plastic bottles from employees, customers, industrial estate operators within WHA's industrial estates, local authorities, and schools. Collection bins under the YOUTURN initiative are placed at the WHA Tower and key locations across WHA's industrial estates. Additionally, WHA's WeCYCLE team schedules collections using electric pickup trucks (EVs) to gather donated plastic bottles from project members and transport them to the WeCYCLE Center located within the Group's premises. The donated bottles are then delivered to a waste sorting center operated by a local community enterprise. From there, the YOUTURN logistics system ensures proper delivery to a world-class recycling facility managed by PTT Global Chemical Public Company Limited (GC). After collection, donated used PET plastic bottles are upcycled together with water hyacinths harvested from the wastewater treatment ponds. These ponds require regular monthly dredging, which presents an opportunity for Ban Chak Mahad community to collect water hyacinths, thereby helping to reduce the Group's monthly disposal costs. In addition, the Group can sell the hyacinth fibers to textile weaving companies for the production of upcycled fabric, generating over 70,000 Baht in revenue. The upcycled fabric is then used to produce school bags for donation to participating schools, laptop and iPad sleeves as souvenirs, and pillowcases infused with antiviral agents for donation to hospitals and bedridden patients in need of special care.

Between 2022 and 2024, WeCYCLE project collected 58 tons of used plastic bottles, equivalent to approximately 3,391,751.18 bottles of 600 milliliters. This translates into a reduction of 59.45 tons of carbon dioxide emissions based on the carbon emission factor for landfill waste - equivalent to planting 6,605 trees to absorb carbon dioxide over the course of one year.







2. WeCYCLE Project: Used Paper

WeCYCLE: Used Paper project is a continuation of the concept of giving new value to used materials in order to create benefits and raise environmental awareness among members of the WHA Eco System. The project invites donations of used paper to be recycled into products that support learning and skill development for students in communities surrounding WHA's industrial estates. These products include bookshelves and study desks. The project has received support from a key partner, SCG Packaging Public Company Limited (SCGP), which recycles the donated paper and manufactures learning-support products for school libraries. Since the project's inception in 2023, a total of 68 tons of used paper have been donated. Based on the Carbon Emission Factor of landfill waste, this has contributed to a Greenhouse Gas (GHG) reduction of 198.15 tons of carbon dioxide equivalent. This reduction is equivalent to planting 2,216 trees to absorb carbon dioxide over the course of one year.







3. WeCYCLE: Used Cooking Oil

WeCYCLE: Used Cooking Oil project is a new initiative under the WeCYCLE framework launched in 2024. It is a collaboration between the Group and its partner BSGF, a joint venture company formed by Bangchak Corporation Public Company Limited, BBGI Public Company Limited, and Thanachok Oil Light Company Limited. The project involves purchasing used cooking oil from members of the WeCYCLE project to be converted into Sustainable Aviation Fuel (SAF). This initiative supports sustainable resource management through the production of clean energy, helping to reduce environmental impacts, decrease reliance on fossil fuels, and lower greenhouse gas emissions,

ultimately mitigating global warming. It also aligns with the goals of the Bio-Circular-Green (BCG) Economy Model.

In 2024, the Group successfully collected 1.1 tons of used cooking oil. Based on the Carbon Emission Factor for landfill waste, this translates to a reduction of 0.36 tons of carbon dioxide equivalent (tCO2e) in greenhouse gas (GHG) emissions. This is equivalent to planting 40 trees to absorb carbon dioxide over the course of one year. This project reflects the Group's strong commitment to advancing the circular economy while creating shared value for society and the environment in a sustainable manner.









4. WeCYCLE DAY 2024





WHA Group, in collaboration with the Industrial Estate Authority of Thailand (IEAT), joined forces with leading organizations including PTT Global Chemical Public Company Limited (PTTGC), SCG Packaging Public Company Limited (SCGP), and BSGF Company Limited (BSGF) to organize the "WeCYCLE Day 2024" event on 12 December 2024 at the Convention Hall, Pattana Golf & Sports Resort, Chonburi Province. This marked the 3rd consecutive year of the event, held annually since 2022 through to 2024. The objective of the event is to raise awareness and promote a sustainable future. Used materials donated by members of WeCYCLE project were also collected as part of the event.

At WeCYCLE Day 2024 event, upcycled product displays were showcased to inspire attendees. As a gesture of appreciation to members participating in the initiative, the Group and WHA Group presented awards to outstanding WeCYCLE partners. Certificates of recognition made from recycled materials were

presented to 94 companies and organizations, and plaques of honor—also made from recycled materials—were awarded to the top five partners with the highest contributions of used plastic bottles, used paper, and used cooking oil. The ranking was based on the equivalent reduction in carbon dioxide emissions.

WeCYCLE project is considered a key initiative that improves the quality of life for communities surrounding WHA's warehouses and industrial estates—the Group's main operational areas. With a strong commitment to turning environmental challenges into opportunities, the project aims to build a sustainable future for both communities and the economy through the management and value creation of waste materials, such as plastic bottles, paper, and used cooking oil. These materials are transformed through recycling and upcycling processes to minimize environmental impacts and support the organization's roadmap to Net Zero and the reduction of global warming by 2050.

THE TOP 5 OUTSTANDING CONTRIBUTORS AMONG WECYCLE PROJECT MEMBERS

No.	Company Name	Total CO ₂ Reduction	GSINGE DCE GE AIDADAM		WeCYCIE กระดาษเก่า เรา ซอ		WeCYCLE เธอทอด เราเทิร์น	
			Used Plastic bottles (kg)	CO ₂ Reduction (kgCO ₂ e)*	Used Paper (kg)	CO ₂ Reduction (kgCO ₂ e)**	oil (ka)	CO ₂ Reduction (kgCO2e)****
1	NRB BEARINGS (THAILAND) LTD.	27,483.24	1,038.20	1,070.38	9,005.10	26,384.94	85.00	27.91
2	STARS TECHNOLOGIES INDUSTRIAL LTD	22,132.13	1,804.01	1,859.93	6,909.31	20,244.28	85.00	27.91
3	BRIDGESTONE METALPHA (THAILAND) CO., LTD.	14,045.64	1,149.93	1,185.58	4,389.10	12,860.06	0.00	0.00
4	MAZDA POWERTRAIN MANUFACTURING (THAILAND) CO., LTD.	8,940.27	1,432.00	1,476.39	2,547.40	7,463.88	0.00	0.00
5	DAIKYONISHIKAWA (THAILAND) CO., LTD.	7,631.30	169.20	174.45	2,545.00	7,456.85	0.00	0.00
	WHA GROUP**	8,413.76	110.60	114.03	2,827.00	8,283.11	50.60	16.62



The Group has received strong cooperation from WeCYCLE project members throughout the three years of project implementation. In 2022, the inaugural year of the initiative, the project received 10 tons of used plastic bottles donated through the "WeCYCLE: Used Plastic Bottles" campaign, which contributed to a reduction of 11 tons of carbon dioxide equivalent (tCO2e) in greenhouse gas emissions based on the Carbon Emission Factor for landfill waste. In the second year, 2023, the number of project members increased, and the "WeCYCLE: Used Paper" campaign was launched. That year, 25 tons of used paper and 26 tons of used plastic bottles were donated, resulting in a significant reduction of 102 tCO2e in greenhouse gas emissions from landfill waste. In the third year, 2024, the project expanded to include the "WeCYCLE: Used Cooking Oil" campaign, which received 1.1 tons of used cooking oil, equivalent to a reduction of 0.36 tCO2e in greenhouse gas emissions from landfill waste. When combined with the contributions from the "WeCYCLE: Used Plastic Bottles" and "WeCYCLE: Used Paper" campaigns, the WeCYCLE project achieved a total reduction of up to 146 tCO2e in 2024.



According to the satisfaction survey on the WeCYCLE project, 96% of members reported feeling happy after participating in the project, as they were able to contribute to long-term environmental conservation. Additionally, 94% of participants expressed satisfaction after attending the "WeCYCLE Day – Shaping the Future with Sustainability" event. The WeCYCLE project has also helped enhance the sustainability-related CSR activities of participating companies, with 95% of members stating that the project supported their CSR initiatives. Moreover, 97% of participants indicated their intention to continue joining WeCYCLE activities in 2025. The project also conducted an additional survey to identify materials members would like to see included in future recycling or นกระทาษเก่า เราขอ" (used paper collection), ลกd "เธอทอด เราเทิร์น" (used cooking oil collection) WeCYCLE: Used Plastic Bottles, WeCYCLE: Used Paper and WeCYCLE: Used Cooking Oil. Members suggested various types of waste materials such as plastic scraps from production, PU film wrap, milk cartons, hospital medicine bags, glass bottles, cups, foam, aluminum cans, wood, big bags, steel, and wire scraps.

5. WeCYCLE Learn & Share

In 2024, WHA Group organized waste separation knowledge-sharing activities in collaboration with WeCYCLE project members, including SAIC Motor-CP Co., Ltd., Daikyo Nishikawa (Thailand) Co., Ltd., Fabrinet Co., Ltd., and Stars Technology Industrial Co., Ltd. The





purpose was to equip employees with proper knowledge of waste sorting, raise awareness about the benefits of waste separation, and foster a mindset aligned with the 3Rs concept: Reduce, Reuse, and Recycle.

4.3 COMMUNITY DEVELOPMENT PROJECTS BAAN DEK PROJECT FOR CHILDREN IN WORKER CAMPS



WHA Group and the Child Development Network Foundation jointly signed a Memorandum of Understanding to support the Building Social Impact Initiative (BSI) which aims to create a safe environment while promoting access to health care education and protection welfare for children and families living in construction worker camps. The Group is committed to improving the living conditions and access to basic services for children residing in these camps and surrounding areas. This project focuses on laying a foundation for a sustainable future for all stakeholders by ensuring children's rights to basic welfare including adequate utilities healthcare services and education which are key elements for enhancing quality of life and creating better opportunities for their future.





In 2024, the Group undertook activities to improve living conditions in various aspects as follows,

1. Infrastructure

The Group has improved infrastructure-related risks within construction worker camps, focusing primarily on

physical safety measures, such as ensuring access to safety information, organizing camp spaces to reduce hazards, and managing sanitation and environmental hygiene. Key activities include:

- Posting emergency contact numbers inside the camp in workers' native languages
- Providing separate shower and toilet facilities by gender
- Installing lighting throughout the camp
- Improving landscaping and organizing joint cleaning efforts within the camp
- Providing fire extinguishers inside the camp
- Managing waste collection and segregation
- Defining clear boundaries of the camp area with signage
- Designating specific smoking areas away from living quarters
- Creating communal spaces within the camp, including green safe spaces for rest and sports areas for migrant workers, which are vital for enhancing worker wellbeing and align with the Group's Green Policy

2. Welfare and Services

WHA Group has collaborated with the BSI team to develop educational boards and communication materials related to violence prevention and to engage with contractors in the projects to support labor document management and activities. The main activities carried out include:

- Installing informational boards about domestic violence and child protection at the worker camps to educate residents living there.
- Establishing a mechanism to report issues related to identity documents and provide assistance in case of lost documents.

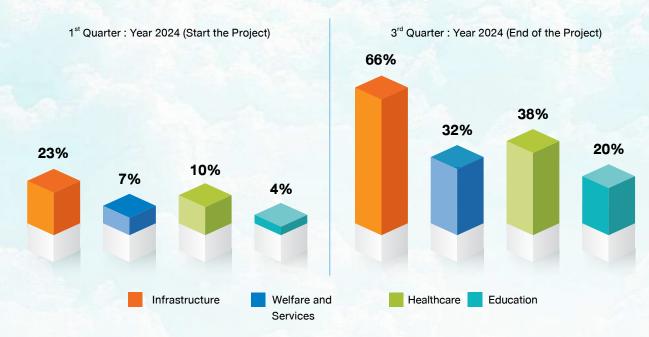
3. Health

- Arranging shuttle transportation from the camps to facilitate emergency medical situations
- Installing BSI informational materials within the camps and providing information about social security applications and workers' rights

4. Education

 Providing information about schools located near the camps to contractors and the families of children living in the camps, so that the children can have easier access to education

SURVEY RESULTS OF THEPHARAK CAMP, KM. 21 BY BSI WORKING TEAM



A post-project survey found that 66% of workers in the camps felt that infrastructure had improved, 32% acknowledged better welfare and services, 38% received healthcare, and 20% received support for education — all higher than before the project began.

According to the Stock Exchange of Thailand's criteria, workers and their families living in construction camps are considered a particularly vulnerable group. Therefore, the Group is committed to improving the living environment within worker camps and recognizes the importance of disclosing business practices with respect for human rights. This forms part of the social dimension (Social) and represents sustainability efforts under the Environment Social Governance (ESG) framework.

VULNERABLE GROUPS SUPPORT PROGRAM

WHA Group places great importance on improving the quality of life for vulnerable groups such as the elderly, people with disabilities, and bedridden patients. WHA Group has organized health promotion activities in Pluak Daeng District and Ban Khai District of Rayong Province, as well as in various areas of Chonburi Province, including Ban Surasak, Ban Raweng, and Ban Khao Kan Song. Additionally, the Group has distributed survival kits to these groups in communities surrounding the industrial estates, with a budget exceeding 140,000 Baht.

In 2024, WHA Group organized support activities for elderly clubs in communities within the industrial estate areas under WHA's care. These included supporting traditional Thai music training for the elderly club in Nong Bua Subdistrict, Ban Khai District, Rayong Province, as well as supporting pétanque club activities and sports competitions for the elderly. These activities aimed to provide the elderly with shared leisure opportunities, resulting in improved mental health and physical strength.







Additionally, WHA Group supported the drug user and addict rehabilitation project by the Rayong Provincial Social Rehabilitation Center. The Group collaborated with government agencies such as Pluak Daeng District Hospital and Subdistrict Health Promoting Hospitals through activities focused on physical and mental recovery as well as attitude adjustment, aiming to restore a good quality of life for patients in Pluak Daeng District, Rayong Province.



COLLABORATING PROJECT WITH ENTREPRENEURS

WHA Group's Saraburi Industrial Estate, together with its customer group, established a Community Relations Committee. The committee members jointly raise funds to support community development projects aimed at improving the quality of life for the surrounding residents. Currently, there are 65 member factories participating, with a combined budget allocation of 1,900,000 Baht per year. In 2024, WHA Saraburi Industrial Land and the Community Relations Committee organized the "Seniors Sharing, Shaping Juniors" project to provide scholarships to underprivileged students and distributed school bags from WeCYCLE: Used Plastic Bottle project at the multipurpose building of Nong Pla Mo Subdistrict Administrative Organization, Saraburi Province. Additionally, WHA Rayong Industrial Land, together with its customer group, established a Community Relations Committee with 22 member factories. A total budget of 720,000 Baht was allocated in 2024. The budget was used for various activities such as providing scholarships, promoting religious activities, and other initiatives in collaboration with the Corporate





Social Responsibility Committee of WHA Rayong Industrial Land, supporting sustainable community development in all dimensions.

COMMUNITY CAREER PROMOTION PROJECT

WHA Group places great importance on sustainable coexistence by supporting community livelihoods to enhance income and quality of life through vocational promotion activities. These include inviting expert speakers for knowledge exchange and supporting vocational training for communities. In 2024, WHA Group supported the development of products and community activities as follows:

- Suan Phueng Pluak Daeng Enterprise by providing honey storage equipment to the enterprise in Tasit Subdistrict, Pluak Daeng District, Rayong Province, and continuously purchasing honey products from the community.
- Planting of sunn hemp, marigold, and sunflower flowers in Nong Lalok and Ban Chak Mahad Subdistricts, Ban Khai District, Rayong Province, to generate additional income and foster community activities.
- Development of local fabric products through organizing training projects on natural dye fabric printing arts and supplying equipment to the tie-dye fabric enterprise group in Nong Bua Subdistrict, Ban Khai District, Rayong Province.
- Providing materials and equipment for stingless bee farming to members of the Makham Khu Stingless Bee Community Enterprise in Makham Khu Subdistrict, Nikom Phatthana District, Rayong Province.
- Raising frogs and growing chemical-free vegetables in baskets by the Nong Bua Women's Development Group in Ban Khai District, Rayong Province.
- Developing local food to improve quality, appearance, and market appeal to create additional income for the community going forward.





Additionally, the Group organized training seminars and study visits to develop and enhance the capabilities of 90 members of the volunteer women's group and community leaders in Bang But Subdistrict, Ban Khai District, Rayong Province. These activities took place at the Sufficiency Economy Learning Center in Ban Taklong, Ratchaburi Province, aiming to improve the knowledge and skills of group members. The program also facilitated the development and exchange of local wisdom from other communities to be adapted and applied effectively for sustainable community development. This initiative helped increase the efficiency of volunteer women and community leaders in transferring knowledge related to vocational development, while also promoting income generation for local residents.

WHA E-JOB POOL PROJECT

The "WHA E-Job Market Online Labor Fair" project is an ongoing initiative organized by WHA Group as part of its social responsibility efforts. The Group leverages its expertise in technology to support companies and entrepreneurs within industrial estates in Rayong and Chonburi provinces by providing an online platform to announce job vacancies. This platform helps match the employment needs or human resource requirements of clients with the expectations and qualifications of job seekers. It is easily accessible nationwide, including graduates from various educational institutions. The website offers a convenient way to search for job openings and can be accessed at https://www.wha-industrialestate.com/en/job-pool or via the provided QR code.







Click https://www.wha-industrialestate.com/en/job-pool หรือคิวอาร์โค้ด

WHA E-Job Market project aims to promote employment in communities surrounding WHA's industrial estates through collaboration with local agencies. The project collects job applicants' data and forwards it to the Group's clients for their consideration, who then post job vacancies. This creates positive outcomes for all parties involved: WHA Group, its clients, and the communities. For WHA Group, the project helps secure skilled and capable employees to meet workforce needs, especially in production roles, enabling the Group to fill vacancies quickly and efficiently. For the communities, it provides members with accessible and transparent opportunities to find new jobs and participate in fair application processes. Moreover, it opens doors for new skilled personnel to join organizations and fill available positions. To date, many global corporations have established themselves within WHA's industrial estates, creating tens of thousands of jobs for local residents.

WHA PAN GAN PROJECT

WHA PAN GAN is a project supporting local community products and specialties made by local people who live in communities around the Group's industrial estates in Chonburi and Rayong Province. There are promotion channels through social media such as Facebook, YouTube, and website pangan.whaindustrialestate.com/en/home, to connect sellers and buyers and act as a showcase of various products ranging from handmade crafts and traditional medicines to local food items and homemade delicacies. This project helps create opportunities for community products to reach consumers worldwide and promotes sustainable sales growth.

WHA PAN GAN Project also welcomes new vendors and supports sales channels for small entrepreneurs, food producers, small-scale industries, and homemaker groups, aiming to widely promote community products. This project is part of the

Group's social responsibility initiatives, targeting job creation, increasing household incomes, and fostering sustainable economic growth within communities. It serves as a foundation for building a better future for the next generations. Additionally, it helps preserve community heritage and sustain unique local handicrafts and food products passed down through generations. The project emphasizes the use of natural raw materials and agricultural products and has consistently received positive feedback.

In 2024, the Group invited community enterprises to participate in the WHA PAN GAN Traveling Marketplace event held at Auto Alliance (Thailand) Co., Ltd., located in Eastern Seaboard Industrial Estate (Rayong) on 31 July 2024 and 31 October 2024. 9 community shops participated, selling various products such as food, snacks, beverages, woven crafts, and naturally dyed clothing, generating total community income of more than 70,600 Baht.













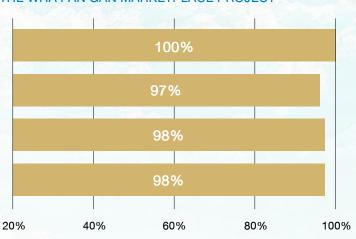
VENDOR SATISFACTION WITH THE WHA PAN GAN MARKETPLACE PROJECT

Willingness to participate WHA PAN GAN Marketplace is organized in the next time.

Sales performance was very good.

Participation in the WHA PAN GAN Marketplace helped increase income.

Overall satisfaction with participating in the WHA PAN GAN Marketplace project.



From a survey of 9 community vendors who participated in the WHA PAN GAN Traveling Marketplace project, it was found that vendor satisfaction with the event was 98%. Additionally, 98% of vendors agreed that participation in the project helped increase their income, 97% reported very good sales performance, and 100% expressed willingness to participate WHA PAN GAN Traveling Marketplace events in the next time.

The Group also supported Ban Chak Mahad Community Enterprise by promoting their local products, including woven handicrafts made from water hyacinth sourced from WHA's water treatment system. These products were entered into the EEC Select Model Community Products competition and received the Model Community Product Award from the Eastern Economic

Corridor Policy Committee (EEC Office). Additionally, the Group facilitated the community's participation in the 35th Nai Lert Flower & Garden Art Fair 2024, held under the theme "Blossoming Culinary Art" on 28 - 31 March 2024, at Nai Lert Park, Witthayu Road, Bangkok. This event helped raise the profile of the community products and enhanced their recognition. The sales from this event generated over 30,000 Baht in additional income for the community.

Furthermore, the Group supported the purchase of products from this project to assemble gift baskets for New Year's presents distributed to various agencies, clients, and stakeholders. The Group also organized booths for these community products at company meetings and seminars, creating additional income for the community valued at over 1 Million Baht.











4.4 HEALTH PROMOTION PROJECTS

SPORT SUPPORT PROJECT

WHA Group places great importance on promoting health and sports, focusing on encouraging youth and local residents to pay attention to their well-being while fostering community unity. This includes campaigns to keep youth and local people away from drugs through sports activities aimed at developing football skills among young people and the community, enabling them to compete at the national level. In 2024, the Group organized football courses for youth in the community to inspire and enhance their sports skills. Additionally, the Group supported football activities for local teams and community clubs, while also promoting other sports such as pétanque for seniors and running events to encourage health in the

community. Moreover, the Group provided financial support of over 11 Million Baht to football teams including Rayong FC, Chonburi FC, and other football teams in Rayong and Chonburi Province. The Group also participated in supporting football tournaments by sponsoring events held at WHA Rayong Stadium in Rayong Province, reflecting their commitment to encouraging youth and the public to focus on health and engage in sports. Furthermore, the Group donated 90,000 Baht to support rugby sports, aiming to create opportunities for youth and local people to develop their athletic skills and physical fitness. This initiative promotes overall community health and fosters social bonds through sports activities.





PROMOTE PUBLIC HEALTH WITH DIGITAL HEALTH TECHNOLOGY

WHA Group has developed and promoted the use of digital healthcare through the WHAbit platform to enhance access to healthcare services and medical treatment for employees of the Group as well as employees of all operators in WHA's Industrial Estates, WHA Logistics Centers, and WHA office buildings. The objective is to promote better health and improve convenience in accessing quality healthcare services. WHAbit is a highly efficient online healthcare service application integrated with offline channels. In 2024, a new version of WHAbit was developed to enhance a modern and more personalized health experience, covering diagnosis, treatment, rehabilitation, and preventive care. The platform features Telemedicine, allowing users to consult doctors online, receive tailored



notifications and health advice specific to individual health conditions. It also includes health challenge activities (Fit & Fun), a Digital Clinic, and a dashboard that enables organizations to analyze employee health results. This dashboard provides detailed health data covering multiple dimensions, such as blood pressure, cholesterol levels, and blood sugar levels. Users can also review past health checkup results to monitor

health changes and plan future health management. Health data is stored securely in a centralized system, allowing health reports to be generated and enabling access to health information anytime and anywhere. Currently, WHAbit has 2,274 users from 7 companies. The Group aims to increase the number of WHAbit users to 20,000 from 40 companies by 2025 to expand access to medical services for a broader customer base. Through WHAbit, users can request timely medical consultations and care, helping to prevent severe health problems in the future. The increased volume of data also improves the accuracy of health data analysis, creating opportunities to develop health management strategies that continuously promote the health and well-being of our customers.

Telemedicine คืออะไร ดียังใง?

Telemedicine คืออะไร ดียังใง?

Telemedicine คือการเข้ารับการรักษาโดยการบรักษาแพทย์ออนไลน์
ส่วนระบบ Telemedicine ที่จะส่วยให้การรักษานั้นช่ายและสะดวกมากขึ้น
เพียงผ่าน Video Coll หรือผ่านการแขก เพทย์ก็สามารถดรวจ
หรือ 5บิจฉัยถึงอาการเบื้องดับของคุณได้ เสบือนไปที่โรงพยาบาล

ไม่ต้องเดินทาง
ไปเร็จพยาบาล

ได้รับการตรวจจากแพทย์
ผู้เขียวชาญเฉพาะโรก

เคลมคำใช้จ่าย
กับประกับกลุ้ม

เระส่วนระแห่งทุกแป้!

เระส่วนระแห่งทุกแป้!

เระส่วนระแห่งทุกแป้!



WHAbit platform reaffirms WHA Group's goal to not only create a good working environment in industrial estates but also to promote health and well-being of employees within industrial estates through an efficient and comprehensive access to medical care 24/7. Additionally, it helps elevate the capabilities of medical and public health services. These efforts raise awareness, provide societal benefits, reduce overcrowded medical facilities, and enable users to access quality public health services. Ultimately, it contributes to the well-being of employees, making the workplace a happy place to work and resulting in improved work quality.



WHA Group recognizes the importance of health and is committed to supporting local communities within its operational areas to access healthcare services and improve their quality of life. Accordingly, the WHAbit team has organized various health activities for employees and companies within WHA's industrial estates. For example, they have hosted seminars for WHA customers under the theme Wellness@ Work, featuring doctors and health experts sharing knowledge on building corporate wellness programs. These initiatives encourage organizations to prioritize employee health, thereby reducing costs, improving efficiency, and promoting long-term sustainability. Additionally, the Group has conducted training sessions on first aid and basic life support, enhancing skills in emergency patient care, Cardiopulmonary Resuscitation (CPR), Automated External Defibrillator (AED) usage, and basic accident management. The Group also organized the seminar and workshop titled WHAbit: Adjust Food, Increase Fit, Achieve Good Health, providing guidance on proper nutrition. This event also offered participants the opportunity to use the WHAbit application to receive health information free of charge.

INFLUENZA VACCINATION PROGRAM

WHA Group places great importance on the quality of life of the elderly and vulnerable groups at risk of complications from influenza, as well as those who lack access to vaccines. Therefore, the Group has implemented a project to support influenza vaccination with a total of 1,100 doses distributed as follows: 250 doses in Pluak Daeng Subdistrict, Pluak Daeng District, Rayong Province; 350 doses in Khao Khansong Subdistrict, Chonburi Province; and 500 doses in Bo Win Subdistrict, Si Racha District, Chonburi Province. This project aims to protect the elderly and vulnerable groups from influenza while promoting good health within the community. It aligns with the Group's social activity policy focused on enhancing





the quality of life and well-being of communities surrounding WHA's Industrial Estates.

MEDICAL EQUIPMENT SUPPORT PROJECT

WHA Group recognizes the importance of access to public health services and healthcare for residents living in the areas under its responsibility. Accordingly, the Group has provided financial support and donated essential medical equipment to public health offices, subdistrict health-promoting hospitals, and hospitals surrounding WHA's industrial estates in Rayong, Chonburi, and Saraburi Province. This initiative aims to ensure that healthcare facilities in these areas are sufficiently equipped to provide local residents with accessible public health services and quality medical care.





THE COLLABORATION WITH SIRIRAJ HOSPITAL AND THAI RED CROSS SOCIETY TO HOST BLOOD





DONATION ACTIVITIES

In 2024, the Group organized blood donation activities at least twice a year. At the WHA Tower (headquarters), the Group collaborated with Siriraj Hospital to host blood donation drives, with participation from employees, customers, and nearby communities. A total of 110 people donated blood, amounting to 49,500 milliliters (cc). Additionally, WHA's industrial estate offices in Rayong, Chonburi, and Saraburi Province partnered with the Thai Red Cross Society to conduct blood donation drives, with 1,437 participants donating a total of 598,650 milliliters (cc) of blood.

ONE WHA RUN PROGRAM

WHA Group recognizes the importance of health and exercise and therefore organized the "One WHA Run – United for One Goal" mini marathon walk-run event. The purpose was to promote strong health and foster sustainable relationships among customers, government agencies, and communities. The event was held on Sunday, February 4, 2024, from 5:30 a.m. to 9:00 a.m. at WHA Eastern Seaboard Industrial Estate 2 in Chonburi Province, with more than 2,000 participants showing interest and joining the activity.



4.5 ENVIRONMENTAL CARE PROJECT

WHA Group is committed to conducting business in alignment with ESG principles by maintaining a balance between the environment, society, and business. It also focuses on developing sustainable and efficient services that meet customer needs. Therefore, the Group has organized various activities to support environmental conservation initiatives as follows,

WHA CLEAN WATER FOR PLANET PROGRAM

WHA Clean Water for Planet Project was initiated in 2016 with the aim of treating and managing wastewater while simultaneously raising awareness about the value of water resources. The project also focuses on sharing knowledge to promote proper understanding within communities and instilling a sense of natural resource conservation across society. The Company has constructed and handed over wastewater treatment systems to various communities to improve the quality of canal water. These systems use environmentally friendly constructed wetland technology inspired by His Majesty King Bhumibol Adulyadej The Great (King Rama IX). To date, the Group has implemented the project as follows:



1. Training Courses for Students and Knowledge Sharing with Local Organizations

WHA Group has collaborated with various academic institutions to develop curricula focused on water resource conservation and wastewater management. University students are given the opportunity to participate in internship programs each year to





enhance their knowledge and skills in water and wastewater management through guidance from field experts. In 2024, a total of 5 students joined the internship program: 2 students from Suranaree University of Technology, 2 students from King Mongkut's University of Technology North Bangkok, and 1 student from Mahasarakham Rajabhat University.

In addition, WHA Group has supported knowledge transfer to various organizations, particularly government agencies. This includes hosting study visits for groups such as executives from the Metropolitan Waterworks Authority, officials from the Department of East Asian Affairs, and community leaders, to learn about water treatment and water management systems within WHA's industrial estates. These visits aim to enhance understanding of sustainable water and wastewater management and enable participants to apply the knowledge gained for the benefit of their respective organizations in the future.

The Group has also welcomed students and representatives from various organizations to observe and learn about SMART ECO Industrial Estates, Smart Office Solutions, and Smart Logistics systems. These are integrated with the Unified Operation Center (UOC) at WHA Tower (headquarters), which monitors environmental conditions such as air quality, water, wastewater, rainfall levels, and provides real-time traffic management. In 2024, approximately 1,900 individuals from government agencies, universities, and interested parties visited to gain a deeper understanding of environmental operations and sustainable water management, as well as the application of technology and education to effectively address long-term environmental risks.









2. Wha Clean Water For Planet For Communities

The key objective of the WHA Clean Water for Planet project for communities is to develop a modern and environmentally friendly wastewater treatment system that treats wastewater before it is discharged back into natural water sources. The project also aims to create recreational areas to sustainably enhance the quality of life in the communities. Implementation areas include the following:

Pluak Daeng Constructed Wetland Project



Pluak Daeng Constructed Wetland Project, implemented under WHA Clean Water for Planet initiative, is one of the Group's proud achievements delivered to Pluak Daeng Subdistrict Administrative Organization in Rayong Province, near Eastern Seaboard Industrial Estate (Rayong). This project utilizes natural technologies to treat wastewater through vegetation and microorganisms. In 2024, the project successfully diverted a total of 102,190 cubic meters of wastewater from community water sources and returned over 100,000 cubic meters of treated water (equivalent to the amount of incoming wastewater) back to the community. The project benefited more than 480 households, or over 1,200 residents.

Nong Khla Constructed Wetland Project

WHA Group has expanded WHA Clean Water for Planet initiative to Nong Khla Subdistrict Municipality in Chanthaburi Province, in collaboration with project partners. Covering an area of 15 rai, the constructed wetland system can currently treat up to 400 cubic meters of wastewater per day, with future capacity expansion planned to 800 cubic meters per day. The project utilizes natural plants such as cattails and heliconias, along with solar energy to operate the system. In 2024, the project successfully treated approximately



142,400 cubic meters of community wastewater, benefiting over 2,000 households by improving both health and quality of life through enhanced water management and environmental conservation.

COMMUNITY WATER SHORTAGE ALLEVIATION PROJECT

1. Support For Community Water Management

WHA Group has implemented projects to support water management in various communities, emphasizing the development of sustainable wastewater treatment systems and the use of constructed wetland technology for wastewater treatment. The Group has also extended assistance by supporting water supply projects, providing over 50,000 liters of water for consumption in drought-affected areas. These include communities in Moo 4, Khao Khansong Subdistrict, Si Racha District, Chonburi Province, and Bo Win Police Station, Si Racha District, Chonburi Province. Water trucks have been deployed to distribute water to communities facing shortages of tap water.









2. Support and Improvement of Village Water Supply Systems

In 2024, WHA Group supported the improvement of the village water supply system for the community in Village No. 11, Nong Bua Subdistrict, Ban Khai District, Rayong Province. The Group's staff carried out upgrades to the water pumping system at Khlong Yai Muang School, which serves as a source of clean water for the villagers. This effort aimed to alleviate drought problems and enhance access to clean water in various areas, particularly in Village No. 8, Bang But Subdistrict, and Village No. 11, Nong Bua Subdistrict, Ban Khai District, Rayong Province.





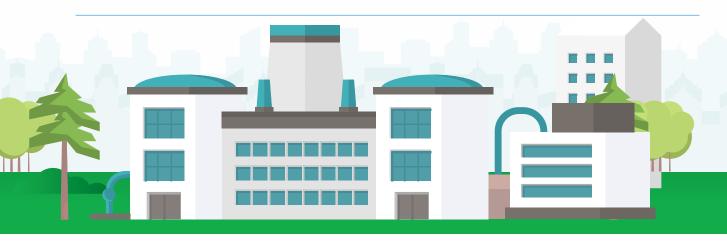


3. Water Reclamation Project

WHA Group has also introduced innovation in producing high-quality water for industrial use through the Reclamation Water Project. This project involves reusing treated wastewater to produce high-quality water for customers within WHA's industrial estates. In 2024, the project achieved a production target of 20,919 cubic meters per day, which helped reduce water withdrawal from natural sources and decreased wastewater discharge into public canals by 7.635 million cubic meters per year. Additionally, the water can be further treated into demineralized reclaimed water or high-quality water suitable for industrial customers within WHA's industrial estates. The project aims to ensure long-term water resource security and reduce competition for natural water sources between communities and industrial customers, enabling sustainable access to clean and high-quality water for both communities and industrial clients.







WATER HYACINTH PRODUCTS

WHA has collaborated with PTT Global Chemical Public Company Limited (GC) since 2021 to develop a new type of fabric by upcycling water hyacinth fibers combined with plastic (PET) fibers and cotton fibers. This process helps reduce waste volume and adds value to unused materials. The resulting products include environmentally friendly high-quality clothing and goods.

In addition, WHA Group has continuously supported the production of water hyacinth-based products in Ban Khai Subdistrict, Rayong Province, as a means to generate income and increase employment opportunities within the community. This initiative responds to local economic needs through the Group's business processes by utilizing water hyacinth sourced from wastewater treatment ponds in Eastern Seaboard Industrial Estate (Rayong). The Community members are able to use the water hyacinth to craft baskets and woven products free of charge, which



helps reduce raw material costs by approximately 100 Baht per bundle and ensures a stable monthly supply of raw materials. In 2024, WHA Group purchased 300 woven baskets from the project, valued at 141,000 Baht, to be used as gift hampers for customers and stakeholders each year. This initiative generated a total income of 590,000 Baht for the community, averaging 3,000 Baht per person per month.

Additionally, the Group was able to earn revenue from selling water hyacinth fibers harvested from ponds within the industrial estate to buyers who upcycle the material into new products. This not only generated income but also helped reduce disposal costs by approximately 70,000 Baht per year.

BIODIVERSITY PROMOTION PROJECT

The Group has collaborated with various agencies, both governmental and private, to support activities that promote biodiversity and ecosystem conservation within communities. The Group's involvement in 2024 included the following activities:

- The "Revive and Restore Life to the Rivers in Rayong Province" event held at Ban Mab Kla community, Khlong Kiw Subdistrict, Ban Bueng District, Chonburi Province, in cooperation with the Rayong Provincial Office of Natural Resources and Environment and other government agencies in Rayong Province.
- Volunteer activity to develop canals along the Rayong River area (Wat Lahan Rai), in collaboration with Nong Bua Subdistrict Administrative Organization, Ban Khai District, Rayong Province.







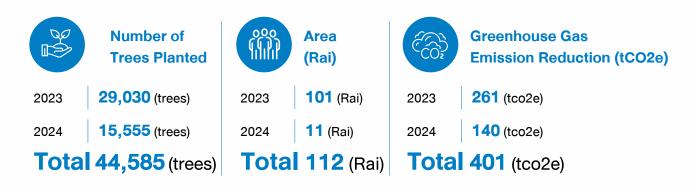
 Elephant food plant cultivation and artificial salt lick creation to serve as an elephant feeding ground, in cooperation with East Water Public Company Limited at Khao Ang Rue Nai Wildlife Sanctuary, with participation from community leaders and local residents.

TREE PLANTING PROJECT UNDER THE CONCEPT "LET'S ZERO TOGETHER"

WHA Group, in collaboration with the Industrial Estate Authority of Thailand and more than 500 operators from 70 companies within WHA's industrial estates, organized a tree-planting initiative to sustainably reduce greenhouse gas emissions and global warming. The activities took place at WHA Eastern Seaboard Industrial Estate 2 and WHA Eastern Industrial Estate (Map Ta Phut) using the ecological forestation concept, which involves planting 2–3 local tree species per square meter in a mixed pattern that mimics natural forests. This method increases carbon dioxide absorption by up to 15.20 tCO2e per rai per year. The species planted include Takab, Mahogany, Neem, Kana, Yangna, Tepha Acacia, Mulberry, Mak Mao, and Fig trees, totaling 15,755 trees over an 8-rai area. This tree-planting effort is part of the Group's commitment to mitigating climate change impacts and promoting the creation of a healthier environment within industrial estates.



A survey of participants in the tree-planting activity found that over 94% felt happy taking part in the event. Additionally, 92% of participants felt proud to be part of the project, 96% believed it was a collaborative effort to create a greener world for future generations, and 95% felt that the tree planting effectively contributed to reducing carbon dioxide emissions in line with the Let's Zero Together goal. Furthermore, 89% of participants agreed that the event was well-organized, with suitable venues and timing, and 94% expressed their willingness to join future tree-planting activities to continue promoting environmental conservation and reducing greenhouse gas emissions.





In addition, WHA Group has participated in planting native trees at Ban Khao Hin School, Bo Win Subdistrict, Chonburi Province, as part of promoting environmental education. The initiative provided students with knowledge about the importance of trees in the ecosystem and the impact of climate change on our daily lives. Trees not only provide shade for the area but also help produce oxygen, reduce carbon dioxide levels in the air, serve as habitats and food sources for wildlife, and help maintain fertile soil and water conditions.



ENVIRONMENTAL MONITORING NETWORK (ENVIRONMENTAL DETECTIVE) PROJECT"

WHA Group organized "the Environmental Monitoring Network (Environmental Detective) Project" to raise environmental awareness among youth living around the industrial estates. The main objectives are to foster a sense of environmental conservation, waste separation, and the ability to observe clean and polluted water in public water sources. This activity also promotes active environmental knowledge and understanding among the youth, enabling them to share what they have learned with their families and communities.

The schools around WHA's industrial estates that participated in the activities are as follows:

- Ban Khao Hin School (Nikornrat Bamrung), Bo Win Subdistrict, Si Racha District, Chonburi Province with 100 participated students
- 2. Ban Bo Win School, Bo Win Subdistrict, Si Racha District, Chonburi Province with 100 participated students
- 3. Ban Phan Sadet Nai School, Bo Win Subdistrict, Si Racha District, Chonburi Province with 100 participated students
- Ban Phan Sadet Nok School, Khao Kan Song Subdistrict, Si Racha District, Chonburi Province with 100 participated students
- 5. Chumchonborisatnamtantawanaok School, Ta Sit Subdistrict, Si Racha District, Chonburi Province with 100 participated students



- 6. Ban Pluak Daeng School, Pluak Daeng Subdistrict, Pluak Daeng District, Rayong Province with 100 participated students
- 7. Ban Mae Nam Khu School, Mae Nam Khu Subdistrict, Pluak Daeng District, Rayong Province with 100 participated students
- 8. Ban Map Lam Bid School, Khlong Kiu Subdistrict, Ban Bueng District, Chonburi Province with 182 participated students

In addition, the Group also taught the students about waste separation, efficient resource use, recycling, and living in an environmentally friendly way. Color-coded waste bins were provided to all eight participating schools, along with explanations of the concepts of waste segregation and recycling. This aimed to encourage the students to work together to keep the world clean. The students showed keen interest in separating recyclable materials and learned tips on reducing waste and reusing items, as well as caring for the environment around them. This is considered an important step in raising environmental awareness among youth from an early age.











4.6 DESIGNING WHA'S INDUSTRIAL ESTATE TO HAVE SOCIAL SPACES

WHA Group is committed to conducting business responsibly under the Bio-Circular-Green Economy Model (BCG), emphasizing the balance between economic, social, and environmental aspects. In 2024, the Group applied social integration criteria to the construction of new buildings and the renovation of existing ones. This included incorporating social criteria into the Due Diligence Checklist from the planning stage, using it as a guideline throughout the development phase, as well as establishing advisory committees with participation from persons with disabilities, and collaborating with disability associations.

Moreover, the Group adapted social criteria in designing industrial estates by developing spaces that align with the needs of the community and those requiring assistance. This approach was integrated into business review processes to promote sustainable development and genuinely support social participation through the following projects.

DESIGNING ELECTRIC VEHICLE CHARGING STATION WITHIN WHA'S INDUSTRIAL ESTATE AREAS

WHA Group has successfully achieved carbon neutrality and is committed to reaching the goal of net-zero CO2 emissions by 2050. To support this, the Group has installed Electric Vehicle (EV) charging stations within WHA's industrial estates to promote greater use of environmentally friendly electric cars and reduce CO2 emissions from fuel combustion vehicles. The Group also encourages the use of EVs within the organization for monitoring, inspection, and



document delivery purposes. All EV charging stations are designed for easy access and are conveniently located within WHA's industrial estates in Chonburi, Rayong, and Saraburi Province. They operate 24 hours a day. Additionally, there are plans to install more EV charging stations in 2025 to further support the future use of electric vehicles within WHA's industrial estates.

DESIGNING HEALTHCARE FACILITIES WITHIN WHA'S INDUSTRIAL ESTATE AREAS





WHA Group places great importance on the health and safety of those within and around the industrial estates. Therefore, it has designed and established a Samitivej Hospital Clinic within the WHA's industrial estates to provide quick and convenient healthcare services to workers in the estates and local communities. In 2024, the Samitivej Hospital Clinic opened a dedicated clinic for the large number of Chinese investors working in the area, staffed with specialist doctors able to treat Chinese patients. Additionally, a new emergency ambulance service was introduced to stand by for emergency patients within the WHA's industrial estates. Moreover, the clinic has upgraded its medical equipment to a highquality standard, capable of accommodating patients with minor illnesses up to emergency cases (from green to red triage levels). This ensures the provision of high-quality services to comprehensively meet the healthcare needs of the area.

DESIGNING OFFICES, COMMERCIAL BUILDINGS, AND INDUSTRIAL ESTATES TO BE LOCATED NEAR PUBLIC TRANSPORTATION

WHA Group places great importance on carefully selecting locations for its projects, especially for office buildings, commercial buildings, factories, warehouses, and industrial estates. This is to ensure that customers, tenants, and employees have convenient access to public transportation systems. For example, the office building completed by the Group in August 2023 is located in a prime city center area, less than 300 meters from Asoke BTS Station. A commercial project recently completed in November 2024 is situated adjacent to the staircase entrance of Surasak BTS Station. Another commercial project scheduled for completion in October 2025 is being constructed next to the staircase entrance of Saint Louis BTS Station. In the future, expansion plans for office and commercial buildings in the city center will focus on easy access via the BTS Skytrain. Additionally, the industrial estates developed by the Group in Vietnam are designed so that employees can conveniently use public mass transit, with bus stops located close to the industrial estates to facilitate smooth and comfortable commuting for workers.













DESIGNING FIRE STATIONS IN EVERY WHA'S INDUSTRIAL ESTATE

WHA Group places great importance on the safety of individuals within the industrial estates and the surrounding communities. To this end, fire stations have been established in all 12 WHA's industrial estates and industrial lands, staffed with properly trained and highly skilled safety officers. These stations are equipped with comprehensive and modern firefighting equipment to effectively respond to any emergencies that may arise. Additionally, safety inspections are conducted 24 hours a day, every day, within the industrial estates to ensure the confidence of workers and nearby communities.

WHA Group also implements clear and comprehensive emergency evacuation plans covering all possible scenarios. Fire evacuation drills are conducted annually, with the participation of all relevant stakeholders, including employees, customers, tenants, and community representatives. This is to ensure that all parties are well-prepared to respond in emergencies and



to reassure the surrounding communities that the Group's operations will not negatively impact them. Furthermore, the Group utilizes an Emergency Control Center (ECC) system as part of its emergency management efforts. The ECC collaborates closely with local authorities to contain and control situations within the communities around WHA's industrial estates and industrial zones. This initiative reflects the Group's strong commitment to preventing and managing safety risks while fostering confidence in safety among all stakeholders involved.

LOW RENT FOR COMMUNITY

WHA Group places great importance on supporting communities across multiple dimensions, both socially and environmentally. It promotes local communities' income generation and quality of life improvement through a project that offers low-cost land lease rates for community use. The Group leases vacant land for agricultural cultivation at a low rental fee of only 250 to 500 Baht per rai per year, enabling local residents to use the land to grow economic crops such as cassava and pineapple to generate income for the community.

This project not only helps generate income for the community but also maximizes the use of idle land while preventing potential issues such as field fires, illegal dumping, and land encroachment. Moreover, it helps maintain a safe and sustainable environment in the area. In 2024, the Group supported a total area of over 1,210 rai in Chonburi and Rayong Province for community agricultural use. This achievement exemplifies the Group's commitment to creating shared value between the organization and the community, reflecting its dedication to promoting community development alongside sustainable environmental stewardship.





DESIGNING HEALTH PARK AREAS FOR COMMUNITY

WHA Group designed WHA Industrial Estate Rayong, a new industrial estate, to include community spaces accessible to residents and organizations such as schools and independent groups. These spaces are available for use in non-commercial activities or projects. The Group has allocated over 45 rai of land for community use by developing a health park where community members can exercise free of charge. The creation of this health park aims to promote the health and well-being of local residents. The park is comprehensively designed for everyday use and includes various exercise stations suitable for diverse workouts, a running track for running enthusiasts, a variety of trees that provide shade and a relaxing atmosphere, restrooms, and parking facilities for the convenience of visitors. This project reflects the Group's commitment to creating spaces that support the quality of life for community members while promoting physical and mental health, reinforcing the organization's role as an integral part of sustainable social development.

In addition, there are football fields within Eastern Seaboard Industrial Estate (Rayong), pétanque courts, and golf practice areas within the office areas of WHA





Rayong Industrial Land and WHA Saraburi Industrial Land. These facilities provide opportunities for the Group's employees, people working within the area, and nearby residents to use the spaces for exercise free of charge.



4.7 COMMUNITY REHABILITATION OR NEW URBAN DEVELOPMENT PROJECTS

WHA Group places great importance on promoting and supporting the well-being of local communities to enable their sustainable growth. This social contribution reflects the Group's commitment and determination to create a positive impact on society in Thanh Hoa province and all areas where the Group operates. Therefore, in 2024, the Group has implemented various projects aimed at developing and rehabilitating communities to grow alongside the Group while ensuring a good quality of life in a sustainable manner, as follows:

CREATING LIVELIHOOD OPPORTUNITIES FOR COMMUNITY MEMBERS AROUND INDUSTRIAL ESTATES IN THAILAND AND VIETNAM

Since the establishment of WHA Group, investments have been made in 13 industrial estates and industrial lands/zones, including 12 industrial estates and industrial lands in Thailand and 1 industrial zones in Vietnam, with 2 additional industrial estates currently under construction. A large number of operators have invested in these industrial estates. The growth of factories and businesses within WHA's industrial estates has created increased employment opportunities and stable livelihoods for community members living nearby, leading to improved quality of life. The Gross Domestic Product (GDP) of both Thailand and Vietnam has significantly increased following the Group's investments in Nghe An and Thanh Hoa provinces in Vietnam. This reflects the Group's strategic role in Vietnam in attracting over 1,000 Foreign Direct Investment (FDI) projects worldwide to date. The Group shares a common vision for sustainable development, aiming to drive industrial growth, generate employment, and attract global investors, while strengthening the region's economic position through initiatives in renewable energy to support sustainable industrial growth in Vietnam.

The development of WHA's industrial estate projects, which have attracted over 1,000 Foreign Direct Investment (FDI) projects worldwide, has contributed to Thanh Hoa province's economic growth. In 2024, Thanh Hoa ranked second in Vietnam for Gross Domestic Product (GDP) growth and seventh in the country for government revenue. These figures have established Thanh Hoa as a leading industrial destination in Vietnam.





COMMUNITY SUPPORT PROJECTS FOR DISADVANTAGED COMMUNITITES

As part of its corporate social responsibility, the Group is committed to supporting local populations by addressing housing issues for disadvantaged families. The Group donated 250 Million Vietnamese Dong to the Huong Hoa and Tieu Hoa District to support the construction of homes for 10 disadvantaged families. Additionally, it collaborated with the Dong Nam Economic Zone authority to donate 300 Million Vietnamese Dong to support the building of 6 houses for disadvantaged families in the Nghi Loc District.

This project aims to provide stable and safe housing and improve living conditions, offering a safer environment and promoting security for the most vulnerable residents in the region. It reflects the Group's commitment to social responsibility through tangible contributions toward building strong, sustainable communities. Moreover, the Group donated 400 gift sets containing essential items valued at 200 Million Vietnamese Dong to disadvantaged families. These gifts helped support families and bring joy during the Lunar New Year festival, highlighting the Group's dedication to fostering good relations with the community. Through these efforts, the Group not only enhances the quality of life in these areas but also lays the foundation for sustainable community development.

COLLABORATION FOR A BETTER FUTURE

WHA Group's social projects in Vietnam reflect its commitment to developing the area while simultaneously improving the quality of life for local residents, promoting sustainable growth together. The Group collaborates closely with local authorities to support long-term regional development goals, while also strengthening its role as a trusted partner in Vietnam's economic and social development. These efforts demonstrate the Group's holistic approach to sustainable development by balancing economic objectives with social responsibilities to create shared value for all stakeholders.

Le Hong Vinh, Chairman of the Provincial People's Committee and Deputy Secretary of the Provincial Party Committee, acknowledged the significant role of WHA Group in shaping the industrial landscape of Nghe An. He stated, "WHA Group's investments have greatly contributed to the economic and social development of Nghe An Province. We hope these investments will continue to succeed and bring positive impacts to our province. WHA Group not only demonstrates strong leadership in industrial development but also shows a deep commitment to the local community. These social responsibility projects are proof of WHA Group's dedication and care for the people of Nghe An."





5. IMPACTS ON STAKEHOLDERS AND ENVIRONMENT

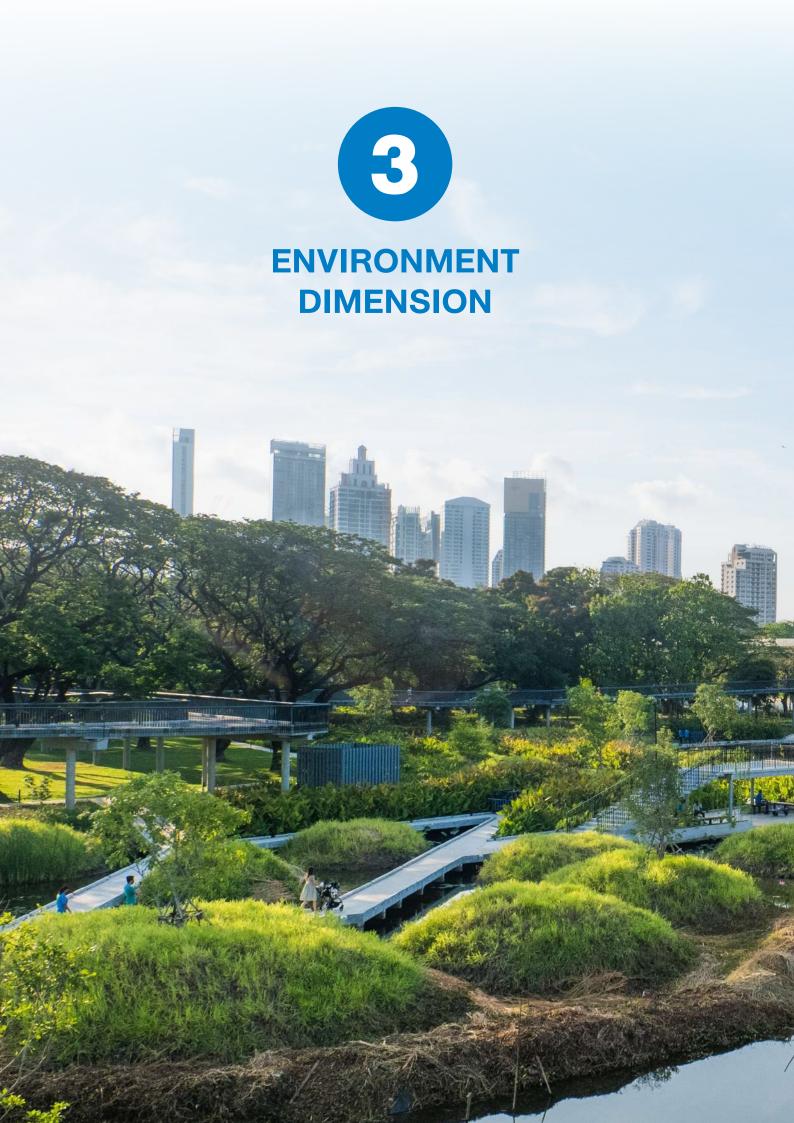
In 2024, WHA Group refined its corporate strategy under the mission "WHA: WE SHAPE THE FUTURE," aiming to build a sustainable future for Thailand by developing the industrial economy alongside strengthening the community economy. Believing that a stable economy relies on a balanced "two-legged" approach between industry and community economies, the Group is committed to conducting business responsibly toward all stakeholders, especially local communities living near its operational areas who may be affected directly or indirectly by business activities such as air pollution, wastewater, noise, waste, or risks from industrial zone accidents. Accordingly, the Group has established policies and designed projects aimed at minimizing negative impacts while generating positive benefits across various dimensions for the sustainable advantage of communities. These projects cover education, vocational skills development, environmental conservation, and social infrastructure development—such as allocating space for health parks, establishing medical service centers, and building safety infrastructure. Moreover, the Group places great importance on fostering good relationships with communities by organizing activities that encourage stakeholder participation to build trust and prevent conflicts that could affect business operations. All these initiatives reflect the Group's commitment to being a responsible business organization that drives sustainable growth for society, communities, and the environment, firmly adhering to its pledge, "The Ultimate Solution for Sustainable Growth," to jointly create long-term sustainability for the organization and Thailand.

6. NEXT STEP

WHA Group recognizes the importance of managing risks and opportunities related to community development, which impact the economic, social, and environmental aspects of its operational areas. It has established comprehensive frameworks and strategies covering community impact assessments, development planning to enhance quality of life, as well as continuous monitoring and evaluation to ensure that its operations contribute to strengthening and sustaining communities in the long term.

WHA Group continues to advance projects aimed at improving the quality of life for all sectors by creating opportunities to access essential basic needs. In 2024, the Group achieved its community development targets and has set a goal for 2025 to engage 99% of local communities, while aiming to increase community satisfaction with social and environmental projects to over 90% across all initiatives.

As a leader in four main business sectors, the Group is committed to building a comprehensive and resilient business ecosystem that drives prosperity into communities for sustainable growth—both at the organizational and national levels. The Group remains steadfast in its mission, "WHA: WE SHAPE THE FUTURE", balancing business development with social and environmental responsibilities to achieve shared long-term prosperity.





ENVIRONMENTAL POLICY AND MANAGEMENT SYSTEM

ENVIRONMENTAL POLICY AND MANAGEMENT SYSTEM

Current Environmental and Climate Trends and Their Impact on Business Operations. The ongoing environmental changes and the increasingly critical climate crisis, along with the global shift toward natural resource conservation, are significantly impacting business operations worldwide. The escalating severity of global warming has led to greater public awareness of environmental issues, prompting changes in behavior and growing expectations for environmentally friendly products and services. This shift is especially evident among investors and customers, who now factor a company's environmental performance into their business decisions. Stakeholders increasingly expect companies to demonstrate robust environmental management strategies and outcomes—ranging from the transition to renewable energy, implementation of circular economy principles, and conservation of biodiversity, to the integration of Artificial Intelligence (AI) technologies that enhance environmental management. These efforts are essential to ensuring that business growth aligns with sustainability goals and minimizes negative environmental impacts.

The Group recognizes the importance of environmental stewardship in creating positive impacts for both the organization and society, while driving sustainable business growth. It has consistently implemented proactive environmental and resource conservation initiatives, adopting effective environmental management

systems. These include regular monitoring and control of key environmental indicators such as biodiversity, wastewater quality, waste disposal, emissions, and resource conservation. These variables align with the Group's business nature, which is closely tied to its customers, partners, and surrounding communities, and play a critical role in supporting long-term business growth.

ENVIRONMENTAL QUALITY, ENERGY CONSERVATION AND BIODIVERSITY POLICY

The Group is committed to conducting its business with environmental responsibility by promoting energy conservation, the use of renewable energy, water resource management, and biodiversity initiatives. These efforts aim to ensure that the Group's operations are sustainable and do not negatively impact the environment or surrounding communities. To support this commitment, the Group has established a comprehensive policy on environmental quality management, energy conservation, and biodiversity. This policy serves as a strategic framework guiding the Group's sustainable business practices and long-term environmental stewardship.





Click Environmental Quality, Energy Conservation and Biodiversity Policy



The Policy has been approved by the Group's Board of Directors, reflecting WHA Group's commitment to preventing and reducing environmental impacts alongside quality enhancement. It also demonstrates the Group's intention to ensure that its operations comply with relevant regulations and follow international standards, including the ISO 14001 Environmental Management System and the ISO 9001 Quality Management System, as established by the International Organization for Standardization (ISO). These standards serve as a unified framework for environmental management across all business units within the Group.



ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

WHA Group requires that all of its projects undergo an Environmental Impact Assessment (EIA) study in strict accordance with the requirements and conditions stipulated in the Promotion and Conservation of National Environmental Quality Act, B.E. 2535 (1992). The EIA process evaluates environmental and social impacts within a 5-kilometer radius of the project site to ensure that potential risks are properly assessed, mitigated, and managed. The EIA report must be reviewed and approved by the Office of Natural Resources and Environmental Policy and Planning (ONEP) before any construction or operational activities commence.



WHA Group ensures that all environmental mitigation measures outlined in the Environmental Impact Assessment (EIA) are strictly implemented. Each project's environmental performance is monitored and reported biannually during January to June and July to December to relevant authorities, including the Industrial Estate Authority of Thailand (IEAT), the Office of Natural Resources and Environmental Policy and Planning (ONEP), the Provincial Offices of Natural Resources and Environment, Provincial Industry Offices, and other relevant local government agencies. In 2024, no monitored environmental indicators exceeded the legal or EIA thresholds. Additionally, WHA Group oversees the overall environmental management practices of all operators within its industrial estates to ensure alignment with applicable regulations and recommended practices. In cases of non-compliance, WHA Group coordinates with IEAT to implement appropriate corrective actions. Further details on collaborative environmental practices with customers can be found in the relevant sections of this report.



TARGET

Achieve a 100% rate in implementing the measures for monitoring and assessing environmental impacts in according with the EIA As a leading developer of industrial estates and a provider of utilities and energy services, WHA Group recognizes that its business operations are inherently linked to the environment. The Group has continuously implemented environmental management and resource conservation measures as part of its commitment to sustainable business practices. This enables the delivery of high-quality services to customers through internationally standardized solutions. WHA Group leverages a range of technologies in its environmental management efforts from the use of Artificial Intelligence (AI) in environmental operations to the adoption of Electric Vehicle (EV) technology demonstrating a direct approach to minimizing environmental impacts.

WHA Group has also developed corporate environmental requirements, guidelines, and management plans to support responsible investment practices, covering the following key areas:

- Conducting environmental due diligence prior to any investment to ensure legal compliance.
- Developing projects in line with environmental regulations and promoting resource efficiency.
- Maintaining investment properties with a focus on optimizing environmental performance and resource use.

 Establishing practical guidelines and providing training and communication to WHA's property managers and tenants to ensure all parties are well-informed and aligned with up-to-date environmental standards and regulations.

ENVIRONMENTAL STANDARDS AND PERFORMANCE

WHA Industrial Development (WHAID) and WHA Utilities and Power (WHAUP) have achieved certification under the ISO 14001:2015 Environmental Management System and ISO 9001:2015 Quality Management System, granted by the International Organization for Standardization (ISO). This reflects the Group's strong commitment to environmentally responsible business practices. The Group continuously monitors the performance of its environmental management systems through regular internal and external audits and actively pursues international certifications to ensure compliance with global standards and alignment with emerging global trends.



ENVIRONMENTAL COMPLAINT HANDLING PROCESS

WHA Group has established accessible channels for stakeholders to submit environmental complaints or concerns. This reflects the Group's commitment to listening to stakeholders and continuously improving its environmental management system. All complaint-handling procedures are aligned with ISO 14001:2015 standards and include root cause analysis as well as the implementation of appropriate preventive and mitigation measures to avoid recurrence.



With a rigorous environmental management approach, WHA Group had no environmental complaints and incurred zero costs related to environmental fines or penalties in the fiscal year 2024. This reflects the effectiveness of the Group's governance system and strict compliance with environmental laws and regulations.



1. GLOBAL TREND

Currently, there is a growing public awareness regarding waste management, with behavioral shifts toward improved waste handling at the household, community, and organizational levels. However, effective waste management remains a global challenge due to rapid population growth, urbanization, and increasing consumption, which collectively drive a significant rise in waste generation worldwide. According to the Global Waste Management Outlook 2024 report by the United Nations Environment Programme (UNEP), global municipal solid waste reached 2.1 billion tonnes in 2023 and is projected to escalate to 3.8 billion tonnes by 2050 if urgent management interventions are not implemented.

Presently, waste disposal methods worldwide predominantly rely on uncontrolled landfill and open dumping or burning, which far exceed the proportions of waste being converted into energy or recycled. This trend is expected to continue increasing in the future. In Thailand, data from the Pollution Control Department in 2024 indicates that municipal solid waste amounted to 26.95 million tonnes, of which only 9.31 million tonnes were recovered for reuse. Meanwhile, 17.64 million tonnes of waste could not be recycled, with nearly half disposed of improperly. Improper waste disposal contributes to environmental pollution, climate impacts, and adverse effects on public health and community living standards.

Therefore, organizations globally should adopt proactive waste prevention and management strategies. This includes reintegrating waste components as resources within the value chain and promoting concepts such as Zero Waste and the Circular Economy. Many companies worldwide, particularly in the industrial sector, have already begun implementing these approaches to avoid waste generation and pursue sustainable business practices. Such strategies can also help reduce long-term waste management costs.

2. OUR POSITION

The WHA Group places great importance on the strict management of waste generated from its business operations by continuously applying new technological strategies to reduce waste generation, conserve resources, and enhance resource efficiency. Currently, the Group adopts a Circular Value Chain approach in its operations and ensures the implementation of appropriate waste management practices across all business units.

The Group also adheres to the principles of the Circular Economy, focusing on zero waste generation from the outset from selecting suitable materials and equipment to maximizing the reuse of surplus materials throughout their lifecycle. This approach aims to minimize the volume of waste sent to landfill or incineration (without energy recovery), reduce the energy consumption associated with waste disposal, and create added value by developing new products. In the past year, the Group has successfully maintained zero waste sent to landfill or incineration (without energy recovery) for the second consecutive year and remains committed to sustaining this high level of performance. Additionally, the Group has continuously collaborated with various business partners to implement effective waste management projects.



3. GOVERNANCE STRUCTURE

3.1 RISK AND OPPORTUNITIES MANAGEMENT



STRATEGY

The Group is committed to developing waste management processes across its four business groups in line with Environmental Quality, Energy Conservation, and Biodiversity Policy. These processes also comply with waste management procedures outlined in the Environmental Impact Assessment (EIA) reports. A Working Group has been established to manage and oversee waste management, ensuring compliance with legal requirements. The Working Group will assess and categorize each type of waste generated by the Group's business operations and promote efficient waste management policies. Moreover, the Group has tasked our Environmental Committee with promoting the participation of all executives and employees in waste management through various initiatives to control and minimize the impact of waste management.

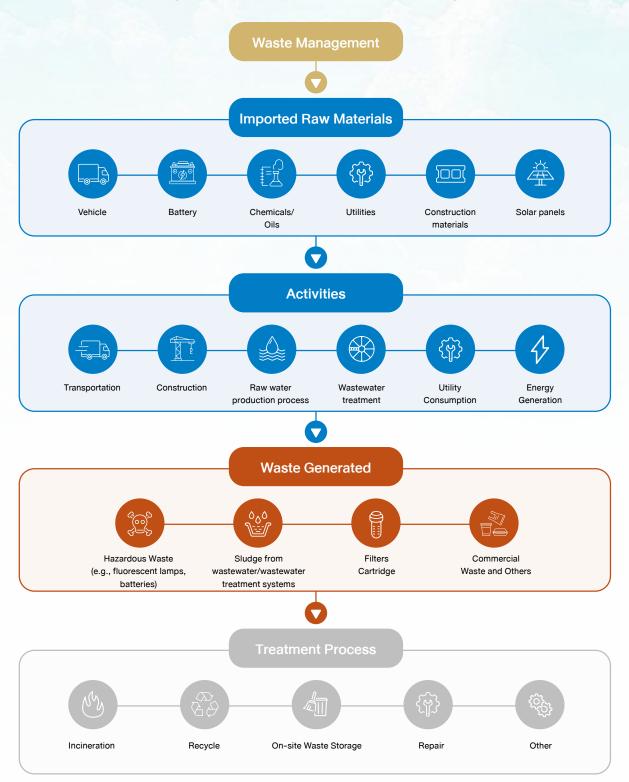
Furthermore, to strengthen oversight of waste and refuse management within its industrial operations, WHA Group has assigned the Working Group to supervise waste management activities at industrial plants located within the Group's industrial estates. The Working Group ensures that all facilities comply with relevant waste management regulations. It is also responsible for implementing preventive measures, including conducting assessments of factories and waste treatment facilities, and executing other waste management policies as resolved by the executive management.

Working Group operates under the supervision of the Chief Operating Officer, who reports directly to the Board of Directors. The Board plays a key role in formulating policies, setting strategic directions, monitoring operational performance, and evaluating the effectiveness and impacts of waste management initiatives to ensure that the Group's operations are aligned with recognized best practices.

Roles	Responsibilities
Chief Operating Officer	Responsible for overseeing the Group's waste management, including planning and developing strategies to enhance waste management efficiency, reduce waste generation, and promote the efficient use of resources. This role also involves supervising the operations of the Waste Management Working Group to ensure alignment with the Group's sustainability goals.
Board of Directors	Oversee and establish policy directions for the Group's waste management, with responsibilities including long-term strategic planning, performance monitoring, impact assessment of environmental policies, and setting continuous improvement guidelines. These efforts aim to ensure that waste management operations are conducted with good governance, transparency, and in support of the Group's sustainable growth.

3.2 RISK AND OPPORTUNITIES MANAGEMENT STRATEGY

The waste and residues generated from WHA Group's activities encompass various types, primarily consisting of general solid waste, sludge from industrial water production plants, and wastewater treatment systems from WHAUP services as well as hazardous waste from office buildings and machinery maintenance activities, such as fluorescent tubes and oil-contaminated rags. This could be extended to waste arising from incidental activities related to the construction of projects or infrastructure undertaken by the Group.



The Group places great importance on effective waste management to mitigate potential risks and create opportunities for sustainable business development.

Risks Opportunities

If the Group fails to manage waste and refuse generated from its activities and operations appropriately, it may result in environmental impacts such as pollution, energy consumption for waste disposal, and greenhouse gas emissions from waste treatment processes, which could negatively affect the climate. Additionally, improper waste management may affect surrounding communities in terms of public health and quality of life, leading to regulatory risks, stakeholder complaints, and reputational damage to the organization.

Effective waste management presents an opportunity to reduce resource and disposal costs, while increasing business value through the transformation of waste into new products. This approach helps minimize environmental and social impacts, supports the Group's sustainability goals, and creates value for stakeholders across the value chain. Moreover, adopting best practices in waste management enhances corporate credibility and opens up new business opportunities related to the circular economy and environmental innovation.

The Company has established waste management planning as an integral part of the Environmental Impact Assessment (EIA) process for all new project developments to ensure that waste management processes are effectively implemented throughout the project lifecycle. Furthermore, the Group communicates this plan to customers within various industrial estates and oversees performance through reports received from these customers.

3.3 RISK MANAGEMENT WASTE MANAGEMENT APPROACH

- The Group has set a goal to operate its business under a fully circular economy (100% Circularity) by the year 2050 through implementation based on three key principles: Design & Resource, Green Products, and Operation Excellence.
- The Group has developed strategies aligned with the circular economy and zero waste goals for waste management as follows:
 - Integrate circular economy principles into business processes, starting from product design and material selection to maximize resource value.
 - Promote the use of renewable energy and recycled materials in construction and production processes to reduce waste and residuals.
 - Extend product lifespan through reuse, repair, value enhancement, and product refurbishment to restore like-new condition.
 - Encourage product leasing programs as an alternative to outright purchase.
 - Initiate and transform business models towards Products as a Service (PaaS) and Sharing Platform concepts.
 - Employ digital technologies to improve business process efficiency.
 - Research and develop innovations and new materials to extend the life of materials and products.

- Collaborate with customers, partners, suppliers, and regulatory bodies throughout the product value chain to promote the circular economy.
- The Group aims to achieve zero waste disposal by landfill or incineration without energy recovery (recycle-free disposal) by the year 2029.

For the waste data collection and monitoring process, the Group relies on systematic recording of waste volumes and types generated during each production stage. Relevant employees periodically document this information and prepare reports used to monitor waste trends and to plan more effective waste management strategies.



BIO-CIRCULAR-GREEN ECONOMY (BCG) MODEL

The Group has continuously adopted the Bio-Circular-Green Economy (BCG) model, which emphasizes the development of the bio-economy, circular economy, and green economy in its business operations. This approach prioritizes the circular use of raw materials, maximizing resource utilization throughout their life cycles, and transforming waste materials into new products. This strategy effectively reduces waste generation, promotes resource efficiency, and minimizes environmental impacts.

Moreover, it helps prevent adverse effects from business activities comprehensively benefiting industrial park operators, the Group's employees, and surrounding communities. Operating under the BCG economy concept ensures that the Group manages its business in a way that respects the rights of all stakeholders and prevents waste management issues such as improper disposal of solid waste, hazardous waste handling harmful to communities, and pollution of soil, water, and air.

WASTE MANAGEMENT ARISING FROM THE CONSTRUCTION PROCESSES OF THE GROUP'S PROJECTS AND BUILDINGS

Although the waste generated from construction projects or infrastructure developments by the Group is indirect waste and falls under the responsibility of the Group's contractors or subcontractors, the Group has established an effective waste management plan. The selection of partners and contractors is carefully conducted to ensure that all partners choose construction materials that consider environmental and social impacts.

The Group has stipulated waste management as one of the mandatory requirements in construction contracts. Additionally, the Group requires 100% waste segregation from construction and operations across all industrial estates under the Group. Furthermore, strategies and plans have been established to control and reduce the amount of waste generated from construction or demolition of projects and buildings, in line with the organization's operational direction to eliminate waste from the source.

These strategies and plans are applied to all projects, starting from the design phase where every project is mandated to have project engineers working alongside safety officers to plan and design waste management schemes that align with construction plans. This considers factors such as quantity, duration, material usage according to construction plans, construction areas, and temporary spaces, while complying with relevant laws. During project execution, the Group designates project safety officers that are responsible for documenting the removal of waste from project areas, inspecting all types of waste being removed, and monitor the condition of waste transportation out of the site.

In addition, the Group requires contractors to manage construction waste and debris for all projects (100%). This includes providing adequate closed-container receptacles distributed throughout construction areas and assigning personnel responsible for systematically collecting and segregating construction waste from various activities, storing them orderly for potential sale or utilization according to the principles of Reduce,



Reuse, Recycle (3R). Since construction processes and waste management are the responsibility of all contractors, the benefits of resource conservation, recycling of construction materials, and revenue from various trading activities are shared among all contractors, amounting to 100%.

WHA Group has also designated that 100% of employees, workers, contractors, and subcontractors are responsible to follow the waste management procedures outlined to ensure that everyone involved in the business operations has knowledge and understanding of waste management principles and correct waste management techniques. The Group has organized efficient waste management training for employees, workers in industrial factories, and all contractors involved. For example, contractors receive training before commencing work. This training includes emphasizing various waste management requirements. Additionally, knowledge is imparted through various projects such as the Sort N' Save project and the WeCYCLE project. The Group also applies the principle of separating waste from construction projects to facilitate reuse, recycling, and proper disposal. Most of the waste generated during construction is reused by converting it into leveling materials. Other waste generated by contractors is transported and disposed of by the contractors in accordance with policies. Furthermore, the Group purchased construction materials and conducted business operations from recycled sources and sold recycled materials, totaling approximately 36 tons in 2024, which helps reduce the volume of waste to be disposed of and promotes resource efficiency.

GOVERNANCE OF INDUSTRIAL FACTORIES TO PROPERLY MANAGE WASTE

While WHA Group as an industrial estate developer may not have direct authority over waste management of factories within industrial estates, the Group has established a working committee to oversee and manage waste disposal. This committee ensures factories properly manage their waste in compliance with regulations, including conducting assessments of factories and waste disposal facilities, and following waste management policies set by the management



กลุ่มบริษัทฯ ได้ส่งเสริมให้โรงงาน อุตสาหกรรม มีการบริหารจัดการ สิ่งแวดล้อมผ่านโครงการ

Green Industry

committee. Additionally, the Group advocates for industrial facilities to adopt the principles of the 3Rs (Reduce, Reuse, Recycle) and the Circular Economy. WHA Group promotes environmental management through initiatives such as the "Green Industry" and the "White Flag Green Star" programs in all industrial estates under its management. In 2024, a total of 665 factories participated in these initiatives.

PROMOTING CUSTOMER AWARENESS ON INDUSTRIAL WASTE MANAGEMENT

In addition to having a dedicated task force to oversee and manage waste to ensure that industrial factories properly handle their waste, the Group has also communicated its waste management system to the factories within the Group's industrial estates and industrial zones. This communication takes place through meetings organized by the Safety Club, which represents the factories in the Eastern Seaboard Industrial Estate (Rayong) (ESIE), WHA Eastern Seaboard Industrial Estate 1 (WHA ESIE 1), WHA Eastern Seaboard Industrial Estate 2 (WHA ESIE 2), WHA Eastern Seaboard Industrial Estate 3 (WHA ESIE 3), WHA Eastern Seaboard Industrial Estate 4 (WHA ESIE 4), WHA Chonburi Industrial Estate 1 (WHA CIE 1), WHA Chonburi Industrial Estate 2 (WHA CIE 2), WHA Rayong Industrial Logistics (WHA RIL), WHA Saraburi Industrial Logistics (WHA SIL), and WHA Eastern Industrial Estate (Map Ta Phut) (WHA EIE).

The purpose is to promote awareness and encourage cooperation in adhering to waste management guidelines within the industrial estates. In 2024, the Safety Club organized a total of 39 meetings separated by industrial estate groups. The topics communicated included waste and waste reduction, methods of waste reuse, waste transportation, use of waste transport documentation as required by law, and implementation of the CCE project (Converting Waste to Energy).

3.4 METRICS AND TARGETS

1. WASTE MANAGEMENT TARGETS AND PERFORMANCE

The Group has established both short-term and long-term targets for waste management across all its industrial estates, aiming to enhance the efficiency of waste handling practices. In 2024, the Group set a target to reduce the proportion of waste disposed of through landfilling or incineration (without energy recovery) to 0% and successfully achieved this goal. As a result, the Group is now committed to maintaining a 0% rate of such waste disposal on an ongoing basis each year.

QUANTIFIED TARGET

Performance	2018	2019	2020	2021	2022	2023	2024	Target Year
The proportion of waste disposal through landfilling or incineration (without conversion into energy)	61.0%	99.7%	53.7%	23.6%	18.7%	0.02%	0.0%	Reduce the proportion of waste disposal through landfilling or incineration (without conversion into energy) to 0 by 2029

QUALITY TARGET

WHA Group is committed to conducting its business in alignment with the principles of the Circular Economy, emphasizing waste reduction throughout operations and the efficient use of resources. The following targets were set, along with key achievements in 2024:

Target	Performance 2024
Safe and effective disposal of all hazardous waste	The Group successfully managed all hazardous waste safely and in compliance with applicable standards. No incidents of leakage or improper handling were reported.
Promotion of the Circular Economy	The Group integrated circular economy principles into its production and business operations, with increased use of recycled materials and a continuous reduction in the use of virgin resources.
Collaboration with business partners and communities	The Group launched collaborative waste management initiatives with business partners, such as the WeCycle project, and received strong support from local communities.

2. RESOURCE USE REDUCTION TARGETS AND PERFORMANCE

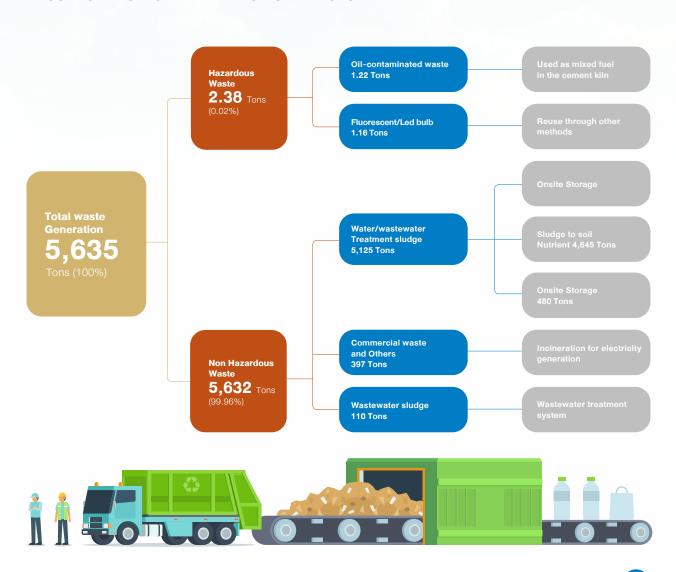
The Group is committed to conducting business in accordance with the principles of the Circular Economy to ensure efficient and sustainable use of resources. The Group has set targets to minimize resource consumption in construction processes through concrete and actionable approaches. It aims to reduce the amount of leftover materials and waste from construction projects to the lowest possible level, while continuously improving resource efficiency. This supports sustainable business operations and reduces environmental impact. Specifically, the Group has set a target to reduce construction waste by 900 tons by 2026 and aims to continuously recycle 100% of leftover concrete from construction projects into walkway blocks every year.



UNQUANTIFIED TARGET

Target	Performance 2024
Use of technology to improve efficiency and reduce resource consumption in construction	The Group applied digital technologies to assist in planning and designing projects for maximum efficiency, reducing unnecessary resource use.
Reduction of natural resource consumption	The Group adopted environmentally friendly approaches in selecting materials and resources, such as using substitute materials that do not harm nature and reducing energy consumption during construction processes.
Environmentally friendly construction project design	The Group developed projects aligned with Green Building standards such as LEED (Leadership in Energy and Environmental Design), including the installation of Smart Building systems to reduce energy use and enhance building management efficiency.
Waste management and construction material recycling	The Group reduced construction waste by recycling all leftover concrete from construction projects into paving blocks. The Group requires that 100% of leftover concrete be recycled into paving blocks, which are reused in various applications such as sidewalks around office buildings, warehouse walkways, and road curbs. This initiative helps reduce waste from business operations and lowers costs for purchasing new materials.

AMOUNT OF WASTE GENERATED FROM OPERATIONS



Performance in 2024 showed that the total amount of waste sent to landfill was reduced by 100% compared to 2023. This reduction is the result of various initiatives undertaken by the Group to manage waste efficiently, such as utilizing sludge from the wastewater treatment system as soil conditioner, reducing operational waste, reusing and recycling waste materials, and investing in technologies to find alternative waste disposal methods beyond landfilling and incineration. Other projects include supplying necessary resources to customers and communities, as well as engagement activities to raise awareness and promote the integration of sustainability principles into waste management processes and related systems.

The Group operates in accordance with established standards by properly segregating hazardous waste before outsourcing it to government-authorized agencies for hazardous waste management. Additionally, the Company monitors third-party waste disposal processes to ensure compliance with legal requirements and contractual conditions by reviewing certification documents, disposal reports, and adherence to environmental standards. This ensures that waste disposal is conducted correctly and aligns with the Group's sustainable development principles.

WASTEWATER MANAGEMENT

Wastewater management is a crucial component of industrial waste management systems because improperly treated wastewater can adversely affect ecosystems, natural water sources, and the health of surrounding communities. However, with effective treatment and reclamation approaches, organizations can transform from being waste dischargers into value creators by converting what was once considered an environmental burden into a valuable resource.

The Group has adopted this concept in its wastewater management processes, focusing on minimizing negative impacts while enhancing positive benefits for both the industrial sector and local communities. The wastewater reclamation projects play a key role in reducing dependence on natural water sources, mitigating environmental risks, and providing sustainable water supply for industry. One clear



outcome of these initiatives is the reduction of wastewater discharged into the environment, which improves the quality of public water bodies and decreases the risk of water pollution that can harm biodiversity and ecosystems particularly within the Eastern Economic Corridor (EEC), a major industrial hub that consumes vast amounts of water resources.

From an economic perspective, applying advanced technologies for wastewater treatment and reuse such as converting wastewater into demineralized water and producing premium clarified industrial water enables industries to lower water procurement costs, reduce reliance on external water supplies, and enhance their market competitiveness. Beyond that, these measures reduce the risks of conflicts between industries and communities that share the same water sources, as well as mitigate pollution impacts on local communities and societies surrounding industrial plants.

In 2024, the Group successfully reduced its withdrawal of water from natural sources by 7.8 million cubic meters, accounting for 10% of the total water consumption for that year. Furthermore, the Company has set a target to reduce water use from natural sources by approximately 21 million cubic meters per year by 2027, with a long-term goal to increase this target to 25 million cubic meters per year by 2029. This demonstrates the Company's capability in managing wastewater resources to maximize benefits, not only in terms of environmental impact but also economic and social value. Such wastewater management is therefore not merely about waste reduction but also about adding value to existing resources. It represents a strategic approach that promotes industrial sustainability and marks a significant step toward balancing economic growth with long-term environmental conservation.

4. HIGHLIGHT PROJECTS

SLUDGE TO SOIL NUTRIENT

WHA Group continues to implement the sludge-to-soil nutrient project to reduce waste disposed to landfills or incineration. The project includes soil quality analysis to ensure the absence of heavy metals, organic compounds, or plant pathogens. In 2024, the Group set a target to use 50% of the total sludge, equivalent to 2,322 tons, to produce soil nutrients in order to achieve zero waste disposal via landfill by the end of the year. The Group successfully achieved the target by utilizing 100% of the total sludge or equivalent to 4,645 tons for soil nutrient production. WHA Group remains committed to continuing this project annually to maintain zero waste to landfill performance.



การผลิตพลังงานทางเลือกจากของเสีย

WHA Group continues to recognize waste-to-energy as a highly effective solution for addressing industrial waste issues by converting various types of waste into value-added energy resources. This initiative not only maximizes resource efficiency but also addresses energy demand concerns, aligning with Thailand's Alternative Energy Development Plan (AEDP) 2015 (B.E. 2558–2579), which aims to increase the share of clean or alternative energy to 30% of total energy consumption by 2036.In 2019, WHA Group partnered with two other entities to invest in the Chonburi Clean Energy (CCE) project, located in WHA Chonburi Industrial Estate 1 (WHA CIE 1).

CCE is the first industrial waste-to-energy facility in Southeast Asia that complies with European emission standards. It was recognized by the Energy Regulatory Commission and the Ministry of Industry as the first industrial waste-to-energy power plant in the Eastern Economic Corridor (EEC). The project exemplifies circular economy principles and serves as a model for sustainable



non-hazardous industrial waste management. With the capacity to convert up to 400 tons of industrial waste per day, or approximately 100,000 tons annually into energy, the plant can generate up to 8.63 megawatts (MW) of electricity per year.

CCE Contribution in 2024:



tons waste

has generated
54,823
MWh
to the PEA

has saved around
36,000
tons co

Sustainable Electricity for around

30,457 homes

Since 2020, WHA Group has signed an agreement with Waste Management Siam, a provider of waste transportation and disposal services, to send waste to the CCE project for alternative energy production annually. Under this ongoing agreement, WHA Group sent 1,106 tons of waste to the CCE project in 2024, which was converted into 588 MWh of electricity. From 2020 to 2024, a cumulative total of 4,718 tons of waste was diverted from landfilling or incineration and instead transformed into electricity, generating a total of 3,408 MWh.



THE USE OF PRECAST





As part of its ongoing commitment to improving construction quality and efficiency, WHA Group continues to adopt precast elements in its construction processes. Precast elements, which are prefabricated reinforced concrete panels produced in factories, offer a cost-effective construction alternative by reducing on-site construction time and minimizing waste generated during the building process. This approach helps mitigate negative environmental impacts, including noise pollution, dust, and traffic disruptions around construction sites. In 2024, WHA Group utilized precast elements in its construction projects covering a total area of 135,570 square meters. As a result, the Group was able to reduce construction waste by 208 tons, equivalent to a 2% reduction compared to conventional construction methods.

GREEN BUILDING

WHA Group remains committed to sustainable construction practices that align with the principles of the circular economy. The procurement of construction materials is one of the most critical steps in project development. To ensure that no products are sourced from protected areas, the Group has adopted sustainable procurement practices and prioritizes the purchase of environmentally responsible products such as tools and construction materials. WHA Group emphasizes selecting suppliers who align with the Group's "Green Building" construction concept.

This includes encouraging the use of environmentally friendly materials and advocating for contractors to choose reusable products, which significantly helps reduce construction waste. In accordance with its Environmental Quality Policy, WHA Group is dedicated to environmental protection, energy conservation, and biodiversity preservation. The Group expects its suppliers to follow these principles throughout the construction and operational phases, and to comply with the environmental practices outlined in the Supplier Code of Conduct to minimize environmental impact.

The Group promotes suppliers' adherence to environmentally responsible frameworks. A key example reflecting circular economy practices is the use of steel-reinforced plastic formwork, a reusable material that helps reduce construction waste and debris. WHA Group also integrates sustainable design principles into its buildings in alignment with the Leadership in Energy and Environmental Design (LEED) standards. In 2023, the Group completed the construction of a LEED GOLDcertified building at WHA Mega Logistic Center Theparak KM 21, with a total floor area of 27,212 square meters and a 0.2 MW solar rooftop, contributing to significant energy savings. In addition, the Group has started exploring other international green building standards such as the EDGE standard as future options for developing and enhancing the Group's building performance.









PAVING BLOCK FROM WASTE

WHA Group places great importance on environmental conservation alongside efficient and beneficial resource management. As part of its Circular Economy initiative, the Group has incorporated circular principles into its construction projects by recycling leftover concrete waste into paving blocks.

To reduce construction waste, WHA Group mandates that 100% of concrete waste generated from construction projects must be recycled into paving blocks. These blocks are then repurposed for various

uses, including footpaths around office buildings, walkways adjacent to warehouse facilities, and roadside curbs. This approach not only minimizes waste from operations but also helps reduce the cost of purchasing new construction materials.

To measure the effectiveness of its construction waste reduction efforts, WHA Group set a target for 100% of its construction projects to recycle 100% of leftover concrete into paving blocks. In 2024 (B.E. 2567), the Group successfully recycled a total of 191 tons of concrete waste, achieving its annual target.







PAPERLESS TRANSFORMATION

WHA Group recognizes digital technology as a vital part of its business operations—transforming communication channels, data storage, and meetings onto online platforms to enable access from anywhere. The Group has implemented the "E-Paperless" project across all business units to promote a paperless work culture. This initiative encourages employees to utilize digital tools and devices to improve work efficiency. As part of this effort, tablets are provided to staff members to facilitate easier access to presentation materials, reports, inspection forms, and meeting minutes.

In 2024, the E-Paperless initiative helped the Group reduce paper usage by approximately 2% compared to the previous year. WHA Group remains committed to continuing this program, with the aim of further reducing paper consumption by another 2% in 2025.



CONSTRUCTION HANDOVER MANAGEMENT SYSTEM (CHMS) PLATFORM

WHA Group has implemented digital technology to manage construction projects during the building handover process with the objective of reducing paper usage and improving document management efficiency. A Low Code Web Application system was developed as a channel to store digital documents in the company's central system. This development not only enhanced accuracy, convenience, and speed of work but also resulted in significant paper savings. In 2024, the Group's construction projects were able to save up to 13,752 sheets of paper, equivalent to approximately 69 kilograms in weight, in building handover documentation.

HAZARDOUS CHEMICAL CONTAINER REDUCTION

WHA Group has continued its efforts to reduce hazardous waste generated from utilities and energy operations. In 2024, the Group transitioned to using loading tankers for the procurement of chemicals used in water and wastewater treatment systems. This change has helped reduce the volume of chemical packaging waste requiring landfill disposal by approximately 2 tons per year.

Although the Group still needs to procure Poly Aluminium Chloride (PAC) with 20% concentration and liquid chlorine in traditional chemical containers, agreements have been made with suppliers to take responsibility for the used packaging either by reusing it or ensuring proper disposal in line with environmental standards.

SORT N' SAVE PROJECT

WHA Group initiated the "Sort N' Save" project in 2019 and has continued it until now. The project originated from one of the WHA Innovation Leader initiatives, aiming to raise environmental awareness among WHA employees and to foster business innovation based on the Circular Economy concept. Over the years, the Group has implemented a wide range of campaigns and activities under this project. These have been promoted through various communication channels, such as desktop background screens, LINE messages, emails, and the Group's monthly newsletter. The objective is to encourage behavioral change and emphasize the importance of recycling and waste reduction among employees.

REDUCE DEPENDENCY ON PLASTICS

WHA Group recognizes that single-use plastics can pose a significant threat to ecosystems if not properly managed. While such plastics are convenient and easy to use, they often become persistent waste that is difficult to degrade, leading to serious and often irreversible consequences for both climate change and biodiversity.

To tackle this issue, the Group has been continuously reducing the use and disposal of single-use plastics since 2020. In 2024, the Group discontinued the provision of bottled water in plastic bottles for visitors and switched to paper-based packaging. This initiative alone helped reduce over 68,940 plastic bottles in 2024. Through these efforts, WHA Group successfully reduced plastic waste by approximately 0.7 tons in 2024.



WECYCLE PROJECT



The Group places great importance on efficient resource and waste management through participation in various projects and collaborations at both local and global levels aimed at reducing resource consumption and environmental impact.

Accordingly, the Group has launched the WeCYCLE project, a collaboration between WHA Group, the Industrial Estate Authority of Thailand, PTT Global Chemical Public Company Limited, SCG Packaging Public Company Limited, and BSGF Company Limited (a joint venture among Bangchak Corporation Public Company Limited, BBGI Public Company Limited, and Thanachok Oil Light Company Limited). The WeCYCLE project supports the concept of the Circular Economy by focusing on sorting and recycling waste within the operational areas of the Group and participating members. This initiative aims to reduce resource usage, lower greenhouse gas emissions, mitigate global warming, and promote efficient and sustainable use of resources.



WeCYCLE project was launched in 2022 and has since grown to include 116 companies and organizations. These members consist of WHA Group companies, WHA Group employees, customers, contractors, local communities, schools, and local government agencies. They all participate as part of a shared commitment to sustainable environmental care by donating plastic waste, paper, and used cooking oil for recycling and upcycling processes. Local community enterprises manage the sorting of waste to ensure used plastic bottles are sent to globally

certified recycling plants through the "YOUTURN" transportation system operated by PTT Global Chemical Public Company Limited. Used paper is sent to world-class recycling facilities managed by SCG Packaging Public Company Limited, and used cooking oil is transported to recycling plants under the management of BSGF Company Limited, a subsidiary of Bangchak Corporation Public Company Limited. These materials are reused, including the recycling of used cooking oil into Sustainable Aviation Fuel (SAF), an environmentally friendly alternative energy source.

The WeCYCLE project not only helps reduce waste volume and greenhouse gas emissions major contributors to current global warming but also plays a key role in generating income for local communities through the production of upcycled products made from dried water hyacinth fibers.

These fibers are sourced from WHA's industrial estate wastewater treatment project under the WHA Clean Water for Planet initiative and are processed by the Ban Chak Mahad Community Enterprise Group in Rayong Province. This effort not only adds value to waste materials but also strengthens the community's capacity and provides sustainable income opportunities for the local residents.







Since the project's inception in 2022 until now, more than 116 member organizations have joined, donating over 58 tons of used plastic bottles, 68 tons of used paper, and 1.10 tons of used oil, all of which have been processed through recycling and upcycling. This reflects the success in raising environmental awareness and active participation across all sectors, reinforcing WHA Group's commitment to driving business alongside sustainable social and environmental development under the concept of "WHA: WE SHAPE THE FUTRURE".

Additionally, the Group supports the Waste Bank project organized by the Pluak Daeng Municipality in Rayong Province. WHA Group has provided funding to improve the facility and develop the waste bank project to encourage local government organizations to efficiently manage and dispose of solid waste. The project promotes the circular economy concept in waste management through the 3Rs principle: Reduce, Reuse, and Recycle. It also campaigns to raise public awareness and understanding while fostering community participation in waste reduction and segregation of recyclable materials, which can then be sold to the waste bank, generating income for the community.





IN 2024, THE GROUP HAS IMPLEMENTED THREE WECYCLE PROJECTS, INCLUDING:

1. WeCYCLE: USED PLASTIC BOTTLES

WeCYCLE: used plastic bottles project is a pilot initiative by WHA Group and its subsidiaries, in collaboration with the Industrial Estate Authority of Thailand and PTT Global Chemical Public Company Limited. The project invites customers, contractors, communities, schools, local government agencies, as well as company employees, to donate used plastic bottles. Collection points and drop-off locations, supported by "YOUTURN", are set up inside WHA Tower and within WHA's industrial estates.

The collected used plastic bottles in the WeCYCLE project are processed through recycling and upcycling into plastic fibers, which are then woven together with water hyacinth fibers from WHA's industrial estate water treatment project, WHA Clean Water for Planet. These are made into valuable and environmentally friendly upcycled products such as pillowcases for hospital patients, laptop bags, fabric bags, and school bags. These products are then distributed to communities to generate sustainable benefits and value.

From 2022 to 2024, WeCYCLE: used plastic bottles project has helped reduce plastic waste sent to landfill by up to 58 tons, equivalent to reducing 59 tons of carbon dioxide emissions.



2. WECYCLE: USED PAPER

WeCYCLE: used plastic bottles project is a collaboration between WHA Group, the Industrial Estate Authority of Thailand, and SCG Packaging Public Company Limited. This project collects used paper donations to be recycled into products that promote learning skills, such as bookshelves, which are then given to students in schools around WHA's industrial estates. Since the project started in 2023 until now, it has helped reduce paper waste by up to 68 tons, which is equivalent to reducing carbon dioxide emissions by tons of carbon dioxide emissions.



3. WECYCLE: USED COOKING OIL

Building on the ongoing success of recycling plastic and paper waste, the Group expanded its recycling scope to include used cooking oil through the launch of WeCYCLE: used cooking oil project in 2024. This initiative is in collaboration with the Industrial Estate Authority of Thailand and BSGF Company Limited, aiming to support sustainable resource management and reduce environmental impacts.

The project focuses on collecting used cooking oil from WeCYCLE members to be recycled into Sustainable Aviation Fuel (SAF), a clean alternative energy that helps reduce greenhouse gas emissions and is environmentally friendly.

In 2024, the project collected 1.1 tons of used cooking oil, which is equivalent to reducing greenhouse gas emissions by 0.36 tons of carbon dioxide emissions. This success demonstrates the Group's concrete capability to drive a Circular Economy by transforming waste into valuable and sustainable clean energy.



USEOFLIFECYCLEANALYSIS (LCA) IN CONSTRUCTION

Since 2024, the Group has applied Life Cycle Analysis (LCA) in the design and construction of infrastructure within the industrial estates. This approach assesses the environmental impact of resource use at each stage of construction, from selecting building materials, transportation, and construction processes, to maintenance and waste management after construction completion. The application of LCA in structural design enables the selection of materials and construction methods that minimize environmental impact and optimize the efficient use of natural resources.

LIFE CYCLE ASSESSMENT (LCA) OF WATER PRODUCTION PROCESS

The Group is committed to conducting business alongside sustainable development by prioritizing the reduction of environmental impacts. The Group has initiated a Life Cycle Assessment (LCA) of the water production process to analyze environmental impacts in detail throughout the entire life cycle from raw material acquisition, production, transportation, usage, to waste management. In 2025, the Group plans to further advance its environmental management by studying and developing the Carbon Footprint of its products. This initiative will help evaluate the greenhouse gas emissions generated from each water product produced.

4. IMPACTS ON STAKEHOLDERS AND ENVIRONMENT

The Group operates its business using the Bio-Circular-Green (BCG) Economy model, which aims to maximize resource efficiency and minimize waste generation from the very beginning of the process—covering procurement, transportation, material selection, reuse, and recycling of waste into new products. Continuous waste management projects have successfully reduced waste by 720 tons and saved operational and construction costs and resources by up to 5 Million Baht. Effective waste management has positively impacted the environment and society on multiple levels by reducing waste destined for landfill or incineration. This is achieved through approaches such as converting sludge into soil conditioners, using industrial waste for alternative energy production, and recycling leftover

concrete into walkway blocks. These initiatives reduce pollution, conserve resources, lower material and waste management costs, and support the circular economy. Moreover, the Group focuses on using environmentally friendly construction materials, such as precast components and recycled materials, while promoting green building construction aligned with international standards to enhance energy efficiency, reduce construction waste, and lower greenhouse gas emissions. All these projects not only mitigate environmental impacts but also create value for the Group's stakeholders, including communities, partners, and customers. They support clean energy use, reduce costs, and enhance the Company's image as a responsible organization committed to environmental and social stewardship.

5. NEXT STEP

WHA Group is committed to maintaining effective waste management practices while continuously improving its waste management approach in the future. The Group places strong emphasis on managing the entire supply chain ranging from procurement and production to proper waste disposal to ensure efficient resource utilization, minimize environmental impacts, and promote the circular economy.

WHA Group has set an ongoing target of achieving zero landfill or incineration (without energy recovery) waste disposal each year. This will be supported by maintaining the achievement of utilizing 100% of construction sludge for the production of soil conditioners, instead of landfilling, across all construction projects annually.

In addition, the Group has developed a plan to reduce construction waste by 900 tons in 2026, with the target of continuously recycling 100% of excess concrete from 100% of construction projects into walkway blocks each year. Furthermore, the Group has set a goal to launch the WeCYCLE project in 2025, focusing on the reduction of plastic waste, paper waste, and used cooking oil through recycling processes. The initiative aims to reduce CO₂ emissions by 20%, while also expanding participation to include customers, contractors, and communities to promote environmental awareness and increase engagement by 10%.





1. GLOBAL TREND

Air emissions from business operations, particularly in the industrial sector, continue to have widespread impacts on both the environment and public health, including communities located near operational sites. These factors affect long-term quality of life and pose obstacles to the sustainable development of the economic system if not addressed appropriately and in a timely manner.

In a changing global context, advanced technologies have been integrated to address air emissions effectively. These include the installation of high-efficiency emission control equipment, the use of renewable energy to replace fossil fuels, and real-time air quality monitoring through smart systems. These measures enable rapid identification of issues and allow for targeted solutions. Furthermore, promoting the participation of local communities and internal personnel has become a key factor in the long-term effort to manage air pollution. For example, raising awareness through activities, providing education on pollution reduction methods, supporting green area restoration projects, and collaborating with the public sector in the development of environmental policies. Through these proactive approaches, business organizations can demonstrate a higher level of social and environmental responsibility while supporting sustainable development goals, which are increasingly expected by stakeholders at all levels.

2. OUR POSITION

WHA Group recognizes the importance of air emission management that may arise from industrial operations. Without effective management, such pollution can create long-term impacts on the environment, public health, and overall sustainability. As a result, the Group is committed to operating in accordance with international standards to mitigate and prevent potential impacts. This includes the integration of modern technologies such as high-precision air quality monitoring systems and the adoption of clean energy in place of fossil fuels to reduce greenhouse gas emissions. The Group also increases green space within and around industrial areas to help reduce air pollution and create a better environment for surrounding communities.



In practice, WHA Group promotes the engagement of all sectors, including employees and local communities, through training activities on air pollution reduction, clean energy usage, and environmental conservation. The "Mission To The Sun" project is an example that demonstrates the Group's commitment to applying innovation and green technology in our production processes. This initiative not only helps reduce air emissions but also fosters sustainable growth in economic, social, and environmental (ESG) dimensions. In addition, the Group has supported and collaborated with Saraburi Province through the Federation of Thai Industries, which has launched a strategic transition toward clean energy under the "Saraburi Sandbox" project. This project focuses on research and development in clean energy production and usage in Saraburi as Thailand's first model lowcarbon city. The Group actively encourages industrial factories to participate in the Green Industry project, which emphasizes the use of new innovations and technologies to reduce fossil fuel consumption and shift toward greater use of clean energy.



The Group has also established comprehensive pollution control measures that cover every stage of production, from design to field operations. Particular attention is given to dust control during construction activities. Measures include spraying water to suppress dust, washing vehicle wheels before leaving the site, and limiting soil exposure to prevent negative impacts on

nearby communities and the environment. In addition, the Group has assigned environmental specialists to continuously monitor and inspect pollution sources to ensure that operations comply with the standards set by the Ministry of Natural Resources and Environment as well as the Ministry of Industry.

With this commitment, the Group has strengthened our air pollution management by continuously improving policies and measures. The Group also discusses with relevant agencies at both the local and national levels to ensure that operational processes can effectively and sustainably reduce environmental impacts. The Group firmly believes that these efforts will help achieve a balance between industrial estates, communities, and nature to coexist in harmony and sustainability in the long run.

3. MANAGEMENT APPROACH

3.1 GOVERNANCE STRUCTURE

In air emissions management, the Group has established the Corporate Governance and Sustainable Development Committee under the supervision of the Board of Directors. This committee plays a key role in setting strategies and directions to reduce air pollution resulting from business operations. The committee is responsible for closely monitoring and evaluating the progress of related initiatives to ensure that the pollution reduction targets are achieved effectively and are practically implemented in accordance with international standards. Additionally, the Corporate Governance and Sustainability Committee plays an important role in formulating policies and guidelines on air pollution management that align with the Group's operational framework and our sustainable development goals. The focus is on preventing and mitigating potential impacts from business activities, promoting the use of emission reduction technologies, and implementing proactive measures to improve air quality in surrounding areas.

The Corporate Governance and Sustainable Development Committee has assigned a working team with the key responsibility of developing action plans that align with the Group's strategic goals. This includes establishing air pollution control measures within production processes, using advanced technologies to monitor air quality, and assessing environmental impacts arising from business activities.

In addition, the working team is responsible for regularly reporting progress and performance outcomes to the Corporate Governance and Sustainable Development Committee. This enables timely monitoring, evaluation, and refinement of the action plans. The team also proposes new methods to reduce air emissions and enhance management efficiency in compliance with both national and international environmental regulations. Furthermore, the team collaborates with external organizations and local communities to foster long-term partnerships in the prevention and reduction of air pollution.

3.2 RISK AND OPPORTUNITIES MANAGEMENT STRATEGY

Air pollution represents a significant challenge that could impact the Group's operations across multiple dimensions, including legal compliance, corporate image, and operational costs. Without appropriate pollution management, the Group may face fines or penalties under environmental laws, as well as the risk of losing the trust of customers and investors, potentially undermining long-term competitiveness. Moreover, mitigating pollution impacts requires additional investment in emission reduction technologies, as well as continuous environmental monitoring and impact assessments.

The consequences of air emissions extend to various stakeholders. Communities living near operational areas may suffer health problems from exposure to particulate matter and toxic gases, resulting in respiratory diseases and a diminished quality of life. Employees may also be affected if they work in polluted environments over extended periods, leading to chronic health issues and reduced work efficiency. At the same time, customers and business partners who prioritize environmental responsibility may question the Group's commitment if pollution issues are not properly managed. This could reduce business opportunities and increase the risk of losing clients to competitors with more clearly defined environmental policies. Therefore, air pollution management is one of the top priorities for the Group

in order to maintain business sustainability, build stakeholder confidence, and uphold strong relationships with all parties through transparent operations and genuine environmental accountability in every aspect of the business.

AIR POLLUTION IMPACT ASSESSMENT

The Group places great importance on assessing the costs associated with the impacts of air pollution from our business operations, including fees and taxes related to environmental compliance. In 2024, the Group evaluated our preventive and control measures, with results show that air pollution indicators for each project remained at appropriate levels and met regulatory standards, with no instances of emissions exceeding legal limits. Proactive implementation and investment in advanced technologies have proven to be key strategies in mitigating these impacts, allowing the Group to operate sustainably while protecting the environment.

Consequently, the Group has allocated the budget to fund research and development of technologies aimed at reducing air emissions. This includes investment in innovations that enhance energy efficiency, which can directly minimize air pollution. Efficient energy use reduces fuel combustion, thereby lowering greenhouse gas emissions and air pollutants such as sulfur dioxide (SO2) and nitrogen oxides (NO2), both of which contribute to fine particulate matter (PM2.5) and other forms of air pollution. One example is the engagement of energy consultants to conduct assessments and provide recommendations for energy use at the Eastern Seaboard Industrial Estate (Rayong) (ESIE), WHA Chonburi Industrial Estate 1 (WHA CIE 1), WHA Eastern Industrial Estate (Map Ta Phut) (WHA EIE), and WHA Eastern Seaboard Industrial Estate 4 (WHA ESIE 4), representing a total investment of over 850,000 Baht. These initiatives aim to enhance the Group's capacity for effective environmental impact management, reduce business risks, and maintain a balance between economic growth and our responsibility to stakeholders and the surrounding environment.

3.3 RISK MANAGEMENT

The Group recognizes the importance of minimizing environmental impacts, particularly in managing air pollution, an essential factor influencing community well-being and the sustainability of natural resources. Accordingly, the Group has established a comprehensive approach to air emission management across all areas of our operations, with a particular focus on its two main business segments that have a higher potential for air emissions: the logistics business and the industrial estate development business. The goal is to systematically and effectively control and reduce emissions through measures that comply with international standards and legal requirements. This includes the advancement of environmentally friendly technologies, enabling the Group to strike a balance between economic growth and its environmental and social responsibilities.

AIR EMISSIONS IN LOGISTICS BUSINESS

To effectively manage air emissions associated with its logistics business, the Group has adopted the practices of designing and constructing environmentally friendly warehouses. This includes the application of precast construction methods, which help reduce waste and mitigate environmental impacts such as noise, dust, and traffic congestion at construction sites. Warehouses are also designed in alignment with the Leadership in Energy and Environmental Design (LEED) standards.

The Group values the well-being, health and safety, and comfort of building users, such as workers in the warehouses, by implementing various design and operational measures. For example, indoor air quality has been optimized through the implementation of an efficient air circulation system in accordance with ASHRAE standards, as well as the installation of MERV or HEPA filters in both newly constructed and renovated projects to meet specific customer requirements. The Heating, Ventilation, and Air Conditioning (HVAC) system is controlled to ensure user comfort. For example, the Group uses high-performance heat-resistant building materials and low-emissivity (low-e) glass to block UV rays, and replaces traditional metal sheet roofing with Colorbond to improve heat dissipation. Fresh air filling systems are installed to reduce indoor dust levels. The design also incorporates natural lighting through



appropriately placed skylights and full LED lighting systems to ensure adequate brightness. Additional features include entrance dust mats and low-VOC paints, which contain fewer volatile organic compounds and are non-toxic to occupants, to help maintain indoor air quality. Moreover, resource efficiency is emphasized through the installation of water-saving sanitary ware, solar systems, and building energy monitoring systems, allowing for detailed energy usage assessments in accordance with internationally recognized standards for efficient building energy performance. Notably, 100% of the Group's warehouses are designed to support renewable energy generation, particularly solar power systems.

In addition, the Group has launched Mobilix, Thailand's first green logistics solution developed under the concept of "Driving Sustainability in Motion." Mobilix aims to revolutionize the transportation sector through a comprehensive Electric Vehicle (EV) ecosystem, helping to reduce environmental impact, lower logistics costs, and drive responsible growth for modern businesses. The solution is designed to cover every aspect of the commercial EV value chain, integrating cutting-edge innovations and sustainable practices.

AIR EMISSIONS IN INDUSTRIAL DEVELOPMENT BUSINESS

WHA Group emphasizes the importance of monitoring air quality in the atmosphere by measuring Total Suspended Particulates (TSP), particulate matter not exceeding 10 micrometers in diameter (PM10), particulate matter not exceeding 2.5 micrometers in diameter (PM2.5), Nitrogen Dioxide (NO2), and Sulfur Dioxide (SO2) both within the industrial estate areas and within a 5-kilometer radius of the industrial estate community areas, at least twice a year. The air quality monitoring results show that 100% of the Group's operational areas meet the required standards, reflecting our strong commitment to effective environmental management.



Furthermore, the Group has established automatic Air Quality Monitoring Stations (AQMS) capable of continuously and automatically monitoring air quality and meteorological data in the industrial estate areas. The AQMS provides real-time monitoring results to the Environmental Monitoring and Control Center (EMCC) and WHA Tower through the Unified Operation Center (UOC) system. The above-mentioned air quality monitoring results will be reported to relevant government agencies, such as the Ministry of Natural Resources and Environment, Industrial Estate Authority of Thailand, Provincial Industry Office, and the Office of Natural Resources and Environmental Policy and Planning, twice a year, as part of the Environmental Impact Assessment (EIA) Monitoring report. In 2024, the Group achieved our goals for the Environmental Impact Assessment, with all air quality indicators meeting the specified standards.

SUPERVISION AND PROMOTION OF EMISSION REDUCTION FROM INDUSTRIAL FACTORIES

WHA Group has measures to oversee emissions from industrial factories located within our industrial estates to meet the air emission standards for stationary sources set by the Ministry of Industry and the Industrial Estate Authority of Thailand (IEAT), and the allocated emission rates specified in the environmental impact mitigation measures outlined in each industrial estate's Environmental Impact Assessment (EIA) report. If any factory is found to have emission rates exceeding the specified limits, the Group will notify the factory to improve its pollution control system to meet the standards and report to the IEAT for further supervision. However, if the plant cannot control the emissions, the Group and the IEAT will implement measures to suspend the operations of such plant, such as revoking the plant's license. Additionally, the Group has set internal standards for our business operations and industrial factories in the industrial estates to maintain air pollutant levels below 20% of the legal emission intensity limits per unit area. The results

show that 100% of the industrial factories within WHA's industrial estates comply with the specified standards.

The Group has also designed and managed the environmental aspects of the industrial estates according to the eco-industrial estate model, focusing on the management of resource use, energy use, and environmentally friendly production processes. Moreover, we have compiled data and promoted the reduction of greenhouse gas emissions to ensure that customers using the warehouses and industrial factories within the WHA's industrial estates operate responsibly towards the environment.

MANAGEMENT OF AIR EMISSIONS FROM CONSTRUCTION PROJECTS OF WHA GROUP

WHA Group complies with measures to control air pollution from construction projects, such as dust particles, by minimizing the impact of dust generated from land grading activities. This includes limiting soil exposure, scheduling water spraying at construction sites at least twice a day to reduce dust dispersion into the atmosphere, increasing the frequency as appropriate based on weather conditions, and requiring truck tires to be washed before leaving the project area.

ENERGY MANAGEMENT TO REDUCE AIR EMISSIONS

WHA Group has adopted the use of renewable energy, such as solar power, and has implemented energy efficiency projects by using clean and energy-saving technologies. This includes replacing streetlights with solar-powered lighting, using LED lights in office buildings and electrical control buildings, and upgrading electrical equipment to be more suitable for actual use. For example, replacing air conditioners with four-way cassette types to better fit the building layout.

Additionally, energy management practices have been implemented to reduce and optimize energy consumption in accordance with environmental standard system objectives and targets, as well as the Group's Operation Excellence Policy. In 2024, the performance shows an energy reduction of approximately 826,837 kWh/year, equivalent to a carbon dioxide emission reduction of approximately 430,556 kgCO2. (More information on the use of renewable energy can be found under the Energy Management section.)

3.4 METRICS AND TARGETS

Target	2024 Performance	2024 Target	Long-term Target
Reduce emissions from NOx and SOx from WHA Group's direct business operations to 0 tons	0 tons	0 tons	0 tons in every year

TARGET

Ensure the proper management and control of air pollution emissions from industrial factories located within the industrial estate of WHA industrial Group in accordance with the air emission standards set by the ministry of industrial of Thailand

TARGET

Ensure the proper monitoring and control of air pollution to comply with the specified emission standards as stated in the environment impact assessment (EIA) reports of each industrial estate.

TARGET

Control and maintain air pollution levels below 20 percent of the specified emission intensity per unit of designated area

MOREOVER, THE GROUP HAS SET TARGETS TO ENHANCE PROCESSES OR APPROACHES TO REDUCE AIR EMISSIONS, AS FOLLOWS:

Target	2024 Indicators
Adapting technologies to reduce air emissions	Use of an automatic vehicle management systemUse of drones to reduce air emissions
Utilizing clean energy to reduce air emissions	Use of electric vehicles as company fleetUse of solar-powered streetlights
Developing roads and infrastructure within industrial estates to reduce dust	Road paving with materials that minimize dust dispersion

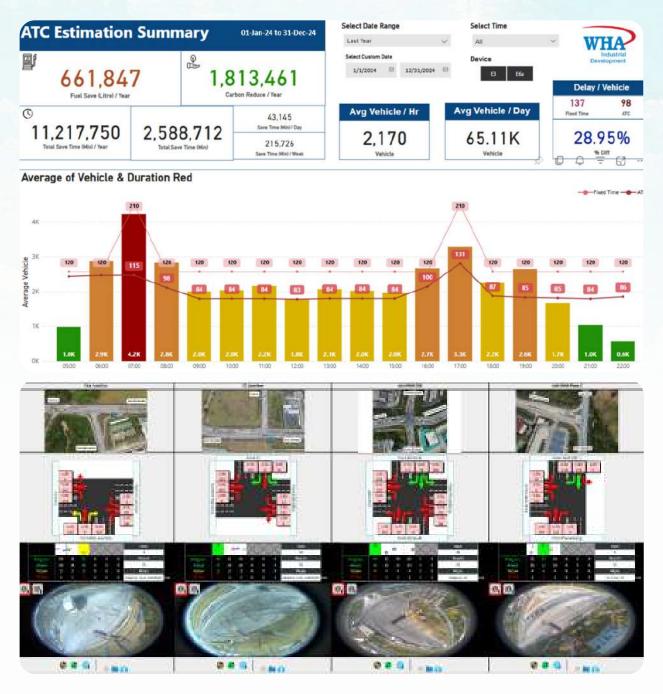
4. HIGHLIGHT PROJECTS VEHICLE MANAGEMENT SYSTEM: VMS

Traffic congestion both within and outside industrial estates has resulted in significant air pollution, particularly from the release of carbon dioxide from the combustion of fuel in vehicles traveling on roads. WHA Group recognizes the importance of reducing carbon dioxide emissions to the maximum extent possible. Therefore, investments have been made in permanent tracking technology for vehicles, commuters, and drones to facilitate efficient traffic management. The goal is to reduce congestion time and reduce pollution from combustion. The Vehicle Management System (VMS) is a critical system that can count and register the license plates of vehicles traveling in and out of the industrial estate's gates. This system not only benefits security but also analyzes various data to improve traffic flow. By using closed-circuit cameras to measure traffic volume and calculate the number of vehicles in the industrial estate, the Adaptive Traffic Control Signal (ATCs) can be adjusted according to traffic conditions. When traffic flows smoothly, the duration of red-light signals is reduced, helping to shorten waiting times at traffic lights. This helps to improve traffic flow, save fuel, reduce costs for vehicle users, and reduce air pollution by reducing greenhouse

gas emissions. Since the engines continue to operate while waiting at traffic lights, this system helps save fuel for vehicles traveling within the Group's industrial estate. In 2024, the Group installed additional VMS that are now operational at two intersections in the Eastern Seaboard Industrial Estate (Rayong) which has reduced overall fuel consumption by 661,847 liters, equivalent to 1,813,461 tonCO2e. In 2025, we plan to install ATCs in 2 projects, one intersection in WHA Eastern Seaboard Industrial Estate 4 (WHA ESIE 4) and two intersections in WHA Rayong 36 Industrial Estate (WHA Rayong 36).



Since the launch of the VMS project in 2021, WHA Group has implemented traffic control systems across 11 projects, including Eastern Seaboard Industrial Estate (Rayong) (ESIE), WHA Eastern Seaboard Industrial Estate 1 (WHA ESIE 1), WHA Eastern Seaboard Industrial Estate 2 (WHA ESIE 2), WHA Eastern Industrial Estate (Map Ta Phut) (WHA EIE), WHA Chonburi Industrial Estate 1 (WHA CIE 1), WHA Chonburi Industrial Estate 2 (WHA CIE 2), WHA Eastern Seaboard Industrial Estate 4 (WHA ESIE 4), WHA Rayong Industrial Land (WHA RIL), WHA Saraburi Industrial Land (WHA SIL), WHA Eastern Seaboard Industrial Estate 3 (WHA ESIE 3), and WHA Rayong 36 Industrial Estate (WHA Rayong 36). Another project is currently under installation at WHA Industrial Estate Rayong (WHA IER). By 2025, the Group plans to implement the VMS across all WHA's industrial estates.



AIR QUALITY MONITORING STATIONS (AQMS)

WHA Group has implemented continuous monitoring, surveillance, and measures to prevent and mitigate environmental impacts. This includes the installation and development of continuous Air Quality Monitoring Stations (AQMS) in various industrial estates. In 2024, WHA Group has 8 AQMS in operation, located in WHA Eastern Seaboard Industrial Estate 1 (WHA ESIE 1), WHA Chonburi Industrial Estate 2 (WHA CIE 2), WHA Eastern Seaboard Industrial Estate 2 (WHA ESIE 2), WHA Eastern Seaboard Industrial Estate 4 (WHA ESIE 4), WHA Eastern Seaboard Industrial Estate 4 (WHA ESIE 4), WHA Rayong 36 Industrial Estate (WHA Rayong 36), WHA Industrial Estate Rayong (WHA IER) and WHA Vietnam Industrial Estate.

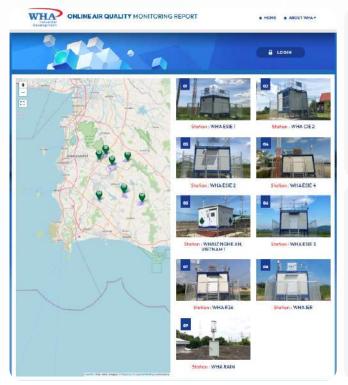
Each station collects real-time data on air quality, which is displayed and reported on the website. This allows for timely and efficient monitoring and response to air pollution incidents.

Each air quality monitoring station provides real-time monitoring data through an online reporting system allowing all stakeholders, including employees, customers, tenants, and nearby communities,





to conveniently and effectively track air quality conditions via https://air.wha-industrialestate.com/. In addition, each station immediately sends monitoring results to WHA's Environmental Monitoring and Control Center (EMCC) and the Unified Operation Center (UOC), enabling prompt and efficient tracking and response to air pollution incidents.





CLEAN TECHNOLOGY TO REDUCE AIR EMISSIONS

WHA Group is dedicated to leading business development by integrating clean technologies to reduce air pollution. We have implemented concrete measures to lower emissions and enhance environmental standards for a more sustainable industrial sector, including:

- Using electric vehicles (EV) as company fleet to reduce fossil fuel consumption and greenhouse gas emissions
- Expanding WHA Mobility services to provide more convenient access for entrepreneurs to EV rental services and EV charging solutions, thereby promoting clean energy use in logistics

- Installing solar rooftop systems within WHA Group's operating areas in industrial estates to reduce reliance on conventional electricity which is still largely generated from fossil fuels
- Developing the Hydro Micro Turbine Generator (HydroXS) project to generate hydroelectric power.
- Installing automated air circulation control censors in office buildings
- Installing solar-powered streetlights in industrial estates to reduce electricity use from fossil fuelbased sources
- Supporting air quality monitoring projects within industrial areas

"WHITE FLAG-GREEN STAR PROJECT" AND "ECO-INDUSTRIAL TOWN PROJECT"

WHA Group has promoted and played a significant role in encouraging factories in industrial estates to participate in the "White Flag-Green Star" project under the policy of Industrial Estate Authority of Thailand (IEAT), which emphasizes the importance of environmental concerns and social responsibility. In 2020, WHA Saraburi Industrial Land (WHA SIL) was awarded by the Ministry of Industry as the first 100% green industrial estate in Thailand. As of 2024, there were a total of 18 projects in WHA's industrial estates that received the White Flag-Green Star awards.

WHA Group also emphasizes the design and management of industrial estates according to the guidelines of the Eco-Industrial Town framework, developed by the Industrial Estate Authority of Thailand (IEAT) to promote and drive economic and sustainable development. In 2024, the Group was certified as





Eco-Industrial Towns for a total of 7 estates. These include WHA Eastern Industrial Estate (Map Ta Phut) (WHA EIE), which was elevated from the "Eco-Excellence" level to the "Eco-World Class" Level; WHA Eastern Seaboard Industrial Estate 4 (WHA ESIE 4), which was re-certified at the "Eco-Champion" level; and WHA CIE 1, which has maintained the "Eco-Excellence" Level since 2020. Other 4 industrial estates that also maintained the "Eco-Champion" level are Eastern Seaboard Industrial Estate (Rayong) (ESIE), WHA Eastern Seaboard Industrial Estate 1 (WHA ESIE 1), WHA Eastern Seaboard Industrial Estate 2 (WHA ESIE 2), WHA Chonburi Industrial Estate 2 (WHA CIE 2). The continuous award of the Environmental Governance Flag every year is a good indicator that the Group is committed to developing business operations towards sustainability.



TRIPARTITE MEETINGS TO MONITOR AND INSPECT THE AIR QUALITY OF FACTORIES WITHIN INDUSTRIAL ESTATES

WHA Group has established a Tripartite Committee or Environmental Impact Assessment (EIA) Committee consisting of representatives from the Group, government representatives, and community representatives. All three parties work together to monitor compliance with environmental measures as specified in the Environmental Impact Assessment (EIA) report. They also act as representatives for forwarding and receiving information regarding the Group's business operations, as well as serving as the contact point for environmental complaints and air quality issues from stakeholders. Additionally, the committee reviews projects to promote and develop the quality of life for the community and the surrounding environment. In the meetings, air quality has been identified as one of the continuous monitoring points to ensure that the air quality within the industrial estates meets the specified standards for further improvement. In 2024, a total of 10 Tripartite Committees were established based on each industrial estate area, with meetings held at least twice a year and a total of 212 participants attending. The meeting outcomes are recorded in the EIA report for presentation to relevant government agencies and local administrative organizations.

PM 2.5 MONITORING PROJECT FOR COMMUNITIES

WHA Group recognizes the importance of air quality and its impact on the health of communities surrounding our industrial estates and prioritizes comprehensive environmental management. As a result, the Group has implemented the PM 2.5 Monitoring Project for Communities, which serves as an additional measure beyond the requirements outlined in the Environmental Impact Assessment (EIA). Under this initiative, WHA Group conducts annual measurements of PM 2.5 levels across all 11 of WHA's industrial estates to monitor air quality and track PM level trends that may impact the environment and public health. Following the monitoring process, the Group reports the results to the Tripartite Committees, comprising representatives from the public sector, private sector, and local communities, to ensure transparency and inclusive access to information. This project reflects the Group's commitment to socially responsible business operations, while promoting environmentally friendly industrial development and fostering confidence among communities surrounding WHA's industrial estates.

PROJECT TO ADJUST INDOOR AIR FILLING RATES BASED ON OUTDOOR CONDITIONS IN WHA TOWER

WHA Group has implemented a project to improve the air ventilation system in WHA Tower by installing a fresh air filling system to enhance indoor air quality. This system increases oxygen levels and reduces carbon dioxide concentrations through automated control using CO2 detectors. When indoor CO2 levels exceed the defined standard, the system is activated to fill fresh air. The air is filtered through high-efficiency MERV 14 filters, which are designed to capture small particles and airborne allergens effectively. These filters can remove particles as small as 0.3 to 1.0 microns, including pollen, mold spores, pet fur and dander, and PM2.5. As a result, the indoor air becomes cleaner and safer for building occupants. This initiative is part of the Group's sustainable building development approach, aimed at creating a healthier working environment, supporting employee well-being, and minimizing long-term environmental impact.

AUTO RUN FIRE PUMP PROJECT

WHA Group has implemented a fire pump system at 16 warehouse facilities. In compliance with legal requirements, the fire pumps must be tested weekly to ensure operational readiness. Traditionally, each test required on-site visits, leading to fuel consumption from round-trip travel and contributing to greenhouse gas emissions. To address this issue, the Group initiated the Auto Run Fire Pump Project, beginning with a pilot at the Laem Chabang warehouse. This system enables remote fire pump testing via an online platform from WHA Tower, utilizing engineering technologies, measurement instruments, and safety systems. With this innovation, the team can monitor and control the fire pump system remotely, eliminating the need for physical site visits. As a result, the project has reduced diesel consumption by 898.56 liters per year and cut CO2 emissions by 2.46 tCO2e per year, contributing to lower air emissions and supporting the Group's commitment to sustainable business practices.



Online Desktop from Auto Run Fire Pump Project

5. IMPACTS ON STAKEHOLDERS AND ENVIRONMENT

The Group has continuously managed air pollution to minimize the negative impacts of its business operations and create positive environmental and social outcomes. This includes reducing greenhouse gas emissions through the implementation of the Vehicle Management System (VMS), which helps decrease fuel consumption and alleviate traffic congestion within the industrial estates. Efficient traffic flow reduces travel time and enhances safety for all commuters within the Group's industrial estates, while also lowering fuel costs for vehicle users.

The Group's adoption of clean technologies and renewable energy not only reduces greenhouse gas emissions but also lessens dependence on fossil fuels, conserves natural resources, and reduces air emissions. These efforts include installing air quality monitoring stations that improve air quality within operational and surrounding areas. These stations serve as essential tools to monitor and control air quality within the industrial estates, enabling rapid management of air pollution and mitigating environmental impacts. The Group provides online access to air quality data via our website, allowing stakeholders, including customers, tenants, local communities, etc., to conveniently and transparently track the information. This enhances stakeholder trust in the Group's commitment to sustainable operations.

6. NEXT STEP

The Group recognizes the importance of managing air pollution as a critical factor in promoting environmental sustainability and enhancing the quality of life for surrounding communities. Efforts to reduce the impacts of air pollution reflect the Company's commitment to environmental responsibility leadership, while supporting long-term sustainable development goals. Therefore, the Group plans to expand projects and develop new approaches for continuous air emission management, particularly in the Group's industrial estates, warehouses, and factories, which serve as key hubs of industry and transportation that may



affect the air quality of neighboring communities. The Group focuses on adopting advanced technologies to reduce air emissions, such as developing clean energy solutions within industrial estates, promoting green transportation systems through the WHA Mobility project, and installing air quality monitoring stations around the industrial estates to enable real-time air quality surveillance and management.

Furthermore, the Group implements circular economy initiatives across all business groups to reduce pollution and greenhouse gas emissions from business operations, fostering the development of environmentally friendly industries and generating positive impacts for surrounding communities. The Group also continues to develop new measures and plans focused on minimizing environmental impacts, and strengthen collaboration with the government, private sector, and communities to jointly drive long-term sustainable development.

In 2024, the Group committed to a reforestation project in the green areas of our industrial estates. This initiative is an effective approach to absorb greenhouse gases (GHG), particularly carbon dioxide (CO2), which is a major contributor to global warming and climate change. The pilot area was completed at WHA Industrial Estate Rayong (WHA IER) covering a total of 24.4 rai with 64,535 trees planted, and at green areas of WHA Eastern Seaboard Industrial Estate 2 (WHA ESIE 2) covering 104 rai with 43,995 trees planted. These efforts are expected to absorb approximately 668,724 tCO2e per year. In 2025, the Group plans to expand the reforestation project by an additional 126.5 rai in Rayong and Saraburi.





1. GLOBAL TREND

Environmental issues and climate change continue to be critical global concerns. In recent years, the impacts of climate change have become increasingly evident and severe across various dimensions. Natural disasters such as heatwaves, floods, droughts, and storms are occurring more frequently and with greater intensity, affecting ecosystems, economies, communities, and quality of life. Vulnerable groups, in particular, face significant challenges in adapting to these rapidly changing conditions.

In 2024, the urgency to advance the goals of the Paris Agreement and the United Nations Framework Convention on Climate Change (UNFCCC) remains a priority. The primary objective is to limit the rise in global temperature to no more than 1.5°c above pre-industrial levels, in order to prevent severe consequences for the planet and ecosystems.

The 29th Conference of the Parties (COP29), held at the end of 2024 in Baku, Azerbaijan, marked a significant milestone in driving global carbon reduction targets. The conference emphasized support for the development of renewable energy and emerging technologies, such as solar cells, wind energy, biomass energy, and energy storage systems, to enhance energy security and reduce

reliance on fossil fuels. At the same time, climate finance continues to play a crucial role in supporting projects related to green infrastructure, sustainable community development, and enhancing disaster resilience. In addition, COP29 highlighted the importance of addressing unequal impacts on vulnerable groups, especially low-income communities that often struggle to adapt to these changes. Governments of many countries and private sector organizations have also accelerated their Net Zero Emission targets to be sooner than previously planned, while promoting innovations to meet these goals. All these efforts reflect the global commitment to unite in tackling climate change and building a sustainable future for all.

2. OUR POSITION

The Group recognizes that climate change in 2024 is not solely an environmental issue, but one that affects all dimensions, including economic, political, and social aspects. International cooperation across all sectors is the key to addressing the issue and achieving long-term sustainability goals. In 2024, the Group continues to advance our sustainability operations in response to the climate crisis, focusing on aligning with the goals of the Paris Agreement and reducing greenhouse gas emissions in line with the Net Zero target by 2050. This year's operations have made progress in several

areas, including the expansion of renewable energy projects such as the installation of solar power systems integrated with smart energy management systems and improvements in solar battery efficiency. The Group also initiated floating solar projects in major industrial estates, with a goal of reaching a cumulative signed power purchase agreement capacity for renewable energy (on an equity basis) of 657 MW by 2025. Additionally, the Group launched advanced renewable energy projects such as large-scale solar battery storage and the installation of solar systems integrated with smart energy management systems, which enhance energy management efficiency and reduce environmental impacts. In the past year, the Group achieved a total cumulative signed power purchase agreement capacity for renewable energy (on an equity basis) of 437 MW, which is expected to reduce greenhouse gas emissions by 61,808 tCO2e per year.

In terms of reducing Scope 3 greenhouse gas emissions, the Group has strengthened collaboration with suppliers and logistics providers by developing low-carbon transportation systems and promoting the use of environmentally friendly materials in the supply chain. The Group has also implemented low-carbon community development projects by working with local communities to raise awareness on efficient energy use, as well as waste reduction within the organization.

Through dedicated and intensive efforts, along with ongoing development toward achieving the Net Zero target by 2050, these continuous advancements reflect the Group's strong commitment to creating a sustainable future and addressing climate change in all dimensions.

3. MANAGEMENT APPROACH COMMITMENT TO LONG-TERM CARBON EMISSIONS REDUCTION

WHA Group has adjusted its future investment approach to align with long-term greenhouse gas reduction targets and the objectives of the Paris Agreement, which aims to limit the global temperature increase to no more than 1.5°c. For every investment, the Group considers environmental impacts and the potential to reduce

emissions from various activities. Future investment decisions will consider sustainability and long-term development, as well as technology and innovation changes that support emission reduction and decrease reliance on energy sources that negatively affect the environment. In addition, the Group has established a plan to phase out investments in high-carbon assets or products that are not aligned with sustainable development pathways. We will consider shifting investments to projects that can more effectively reduce greenhouse gas emissions, particularly in sectors that rely on fossil fuels or carbon-intensive technologies. The Group has set investment targets to reduce Scope 3 greenhouse gas emissions in accordance with the Science-based Target Initiative (SBTi), with planned investments supporting clean energy, high-efficiency technologies, and projects that help mitigate long-term environmental impacts. Furthermore, the Group places importance on collaborating with business partners across the supply chain to promote carbon reduction practices throughout all operational processes. We are also developing criteria and standards for selecting investment projects that align with sustainability goals and contribute to driving a low-carbon economy in a tangible manner.

The Group has applied an approach that links future investment spending with decarbonization goals, through environmental risk assessments and the use of sustainable technologies in planning and allocating investment budgets for all projects. These assessments consider the potential impacts of climate change on the Group's activities, with clear targets set for long-term greenhouse gas emissions reduction, and monitoring the adherence to investment plans to ensure that our investment strategies contribute to a transition



toward a sustainable and low-carbon future. The Group emphasizes the use of renewable energy within our own operations and encourages customers to invest in and adopt more renewable energy sources. The Group has set a target to achieve 1,200 MW of renewable energy capacity by 2029, equivalent to a reduction of 683,000 tCO2e per year. As of 2024, the Group had accumulated 437 MW of renewable energy capacity.

In addition to the use of renewable energy from solar power systems, the Group is committed to exploring new approaches for clean energy generation to reduce reliance on power grids. One of our initiatives is the installation of a hydro micro turbine generator, a technology that generates electricity by utilizing excess water pressure. Construction is expected to be completed and operations to commence by 2025. Moreover, the Group has adopted high-efficiency technologies in the water production process of WHAUP. This includes the installation of Variable Speed

Drive (VSD) systems, which apply advanced technology to enhance the operational efficiency of machinery and equipment, reduce energy consumption, and minimize losses in the production process.

In 2024, the Group strictly aligned our environmental disclosures with the Task Force on Climate-related Financial Disclosures (TCFD) framework. The sustainability report was revised to ensure consistency with TCFD recommendations, aiming to enhance transparency and effectively reflect the Group's climate risk management practices. The report also provides key information on strategies for addressing climate-related risks and opportunities. Additionally, the Group plans to improve our environmental data management, governance, and risk management processes in line with the TCFD framework, as well as strengthen our sustainable business operations to meet the expectations of international stakeholders.

CLIMATE CHANGE MANAGEMENT FRAMEWORK

WHA Group recognizes the urgency of climate change and its potential impacts on business operations, particularly as many of our activities rely on natural resources, such as rainwater for water production and sunlight for renewable energy. Natural disasters, including floods, droughts, and storms, may directly affect operations and have broader impacts for both internal stakeholders (e.g., employees) and external stakeholders (e.g., customers and communities). In response, the Group is committed to pursuing business growth while maintaining a balance between economic, environmental, and social considerations. The group plays an active role in the industrial, utilities, and power sectors, in managing greenhouse gas emissions, one of the primary contributors to global warming.

To effectively address climate change, the Group monitors global trends and conducts comprehensive risk analyses, including physical risks (e.g., those related to extreme weather events) and transition risks (e.g., those arising from regulatory changes and innovation advancements). The Group also actively seek for opportunities to enhance business resilience. The risk and opportunity management framework is as follows:

Governance

Establish dedicated committee and executives particularly responsible for overseeing climate-related matters.

Risk and opportunity

Assess actual and potential impacts of climate-related risks and opportunities on the business.

Risk Management

Develop a company-wide risk management strategy that covers short-, medium-, and long-term climate-related risks and opportunities.

Metrics and Targets

Identify metrics and targets to assess and manage climaterelated risks and opportunities.

3.1 GOVERNANCE STRUCTURE

WHA Group has established the Corporate Governance and Sustainability Development Committee alongside the Risk Management Committee, both of which operate under the supervision of the Board of Directors. The Corporate Governance and Sustainability Development Committee is responsible for setting climate-related strategies and monitoring progress toward the established goals. Meanwhile, the Risk Management Committee is responsible for establishing working teams to manage climate-related risks and opportunities in alignment with these strategies.

The Risk Management Working Team is responsible for analyzing and discussing risks that may affect the organization, considering both external and internal factors. Risks include strategic risks, operational risks, financial risks, compliance risks, and emerging risks, such as climate policy risk. (For more details, see the Risk and Crisis Management section).

The working team's performance is reviewed by the Risk Management Committee to evaluate the effectiveness of management, and the results are subsequently reported to the Board of Directors at least four times per year. This close monitoring ensures that risks remain within the organization's risk appetite level and supports the achievement of the Group's strategic objectives.



CLIMATE CHANGE GOVERNANCE AND RESPONSIBILITES

Role	Responsibilitites
Board of Directors (BOD)	The BoD provides visions, missions, directions, and operational strategies with an efficient performance monitoring as well as the evaluation system, which is independent from the management team.
Corporate Governance and Sustainable Development Committee	The Corporate Governance and Sustainable Development Committee is responsible for developing climate-related strategies, monitoring progress, conducting audits, overseeing risk management, and ensuring that policy implementation aligns with the defined plans. These efforts are part of the Group's overall sustainable development strategy. The Committee holds meetings to follow up on climate-related issues at least once a year. In 2024, the Committee held a meeting on 2 February 2024 to review and establish appropriate practices.
Chief Executive Officer (Group CEO)	The CEO is responsible to manage the organization according to the established policies, plans and budgets under the approval of the Board of Directors. CEO also has the responsibility of establishing strategic plans to oversee climate-related risks and opportunities, and ensuring that sufficient resources are allocated for mitigating impacts of climate-related risks.
Risk Management Working Team, Sustainable Development Working Team, in collaborations with divisions and business units	The working teams are tasked to establish risk management policies and practices to manage climate-related risks, as well as assess and review risk factors, considering both internal and external factors which may interfere the Group's target achievement. They also oversee the operations to ensure appropriate measures in line with the business are taken place to tackle climate change. The teams are leading by Mr. Natthapatt Tanboon–ek, Group CFO, who also acts as an executive level climate who oversees climate change related issues according to our sustainability strategy.

CLIMATE-RELATED MANAGEMENT INCENTIVES

In addition to economic performance, WHA Group has set climate change issue as a Key Performance Indicator (KPI) for all executives and employees involved in related operations. The KPIs vary for each position and role as follows:

GROUP CHIEF EXECUTIVE OFFICER (GROUP CEO)

The Group has established Key Performance Indicators (KPIs) directly linked to the remuneration of the Chief Executive Officer (CEO) in relation to greenhouse gas (GHG) emissions reduction. This forms a key part of guiding the organization's climate and sustainability direction, both at the strategic and operational levels. Emphasis is placed on minimizing pollution throughout all business processes, thereby motivating the CEO to lead the organization toward its sustainability goals and create positive environmental and social impacts.

SENIOR EXECUTIVES

The Group has established Key Performance Indicators (KPIs) directly linked to the remuneration of senior executives, focusing on the reduction of greenhouse gas emissions. This approach ensures that executives are actively involved in shaping operational climate change performance, with emissions reduction recognized as a core mission requiring continuous and effective execution. For example:

Each business unit executive is required to achieve a 3% reduction in energy consumption. Performance against these KPIs directly affects bonus payouts during performance evaluations. If the baseline target is achieved, the establishment of this KPI serves to further motivate senior executives to actively reduce the impacts of climate change and drive sustainable outcomes for the organization.

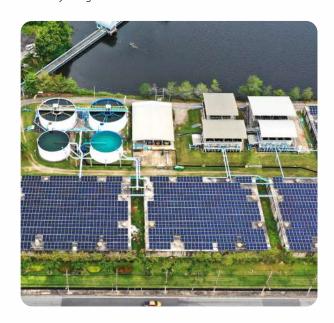
WHA Utilities and Power (WHAUP) has set a KPIs for increasing the capacity of electricity generation from renewable energy sources, accounting for 10% of the overall WHAUP's KPIs, linked to financial performance evaluation. Setting climate-related KPI is crucial for motivating the organization to achieve its goals. In 2024, all executives and employees involved were able to achieve their KPIs.

Moreover, the Group has set other environmental KPIs for senior executives in business units, which are crucial to drive the Group's performance of climate impact reduction. KPIs are as follows:

- Installation and signing of cumulative power purchase agreements for renewable energy (equity-based) totaling 1,200 MW by 2029, which is expected to reduce greenhouse gas emissions (Scope 2) by over 683,000 tCO2e per year.
- Expansion of the WHA Mobility electric vehicle fleet to 20,000 units by 2029, which will help reduce greenhouse gas emissions in stakeholders' supply chains by approximately 280,000 tCO2e per year.
- 3. Reducing the water consumption from natural water sources by approximately 25,000,000 cubic meters per year by 2029, equivalent to the household water consumption of more than 685,000 people.
- 4. Zero waste management, with zero waste to landfill or incineration by 2029.

MANAGER

The Group has established Key Performance Indicators (KPIs) for managers involved in GHG reduction operations, assigning each individual a key role in proposing innovations and practices that help mitigate environmental impacts. This also aims to raise awareness of the importance of sustainable operations in every stage.





3.2 RISK AND OPPORTUNITIES MANAGEMENT STRATEGY

WHA Group recognizes the importance of climate-related risks and opportunities analysis, as this issue impacts both the business and all relevant stakeholders. Climate change not only increases operational risks through uncertainties in resources, raw materials, and regulations, but also presents opportunities for businesses to develop innovations and adaptive strategies that effectively address the sustainability demands of customers, investors, and communities. Accordingly, the Group prioritizes climate risk management by integrating these considerations into the organization's enterprise risk management system to proactively respond to potential scenarios and mitigate impacts across the value chain, from upstream to downstream operations.

CLIMATE-RELATED SCENARIO ANALYSIS

The main tool WHA Group uses to analyze risks and opportunities is the Climate-related Scenario Analysis, which has been in continuous operation since 2022.

In this analysis, WHA Group has defined timeframes for climate-related risks, both physical and transition risks, categorized them into short-term (1-3 years), medium-term (3-10 years), and long-term (more than 10 years). The group has also planned projects to adapt to the risks, such as adaptation to physical risks and environmental regulatory risks. This includes conducting scenario analysis to prepare for potential challenges and opportunities in the future. WHA Group has conducted a climate-related scenario analysis which follows the guidelines of the Task Force on Climate-related Financial Disclosures (TCFD) and covers 4 scenarios. For the physical risk scenarios, the analysis refers to the Representative Concentration Pathways (RCP) model of the Intergovernmental Panel on Climate Change (IPCC) for greenhouse gas emissions. For transition risk, the analysis refers to scenarios from the International Energy Agency (IEA). This scenario analysis also takes into account new regulations in Thailand, such as the government's target for Thailand to achieve carbon neutrality by 2050 and net zero greenhouse gas emissions by 2065.



Short-term 1-3 years

Medium-term 3-10 years

Long-term
10 years and beyond

TYPE OF CLIMATE RELATED SCENARIO ANALYSIS

Physical Risk		Transition Risk	
Scenario 1 RCP 8.5 Business as Usual	Scenario 2 RCP 2.6 Low Future Carbon	Scenario 1 IEA STEPS	Scenario 2 IEA NZE 2050
The policies addressing climate change issues are still not stringent enough, and greenhouse gas emissions remain high. The risks associated with physical changes, transitional changes, and the impacts of climate change persist. This may lead to increased temperatures, water scarcity, and more volatile and severe weather conditions. And assume that there is no significant difference in business opportunities compared to the current situation.	There is a rapid transition towards a low-carbon economy, driven by the development of new technologies and policy changes aimed at limiting global temperature increase to no more than 1.5 degrees Celsius.	The policies used to address climate issues are not yet stringent, and greenhouse gas emissions remain high. As a result, the risks from physical changes, transition risks, and the impacts of climate change persist.	Rapid transition to a low-carbon economy through the development of technology and policy changes aimed at limiting the global temperature increase to no more than 1.5 degrees Celsius (achieving Net Zero Emissions by 2050).

THE PHYSICAL RISKS ASSOCIATED WITH CLIMATE CHANGE

	Financial Impact			
Physical Risk	RCP 8.5 Scenario	RCP 2.8 Scenario		
Acute Risk: The increasing volatility and severity of weather patterns, including the occurrence of natural disasters, pose significant risks to WHA Group's operational areas.	 The development and construction of projects may experience delays, which can result in increased costs. These delays can also impact the reputation of WHA Group and erode customer trust if projects are not delivered on schedule. The client's business operations in the industrial estate may be temporarily halted due to natural disasters, impacting both their confidence in WHA Group and the image of their business. Additionally, there can be indirect repercussions on the supply chain management, such as the inability to deliver products on time and an increase in product prices. Increased cost from flood management and prevention expenses. For examples, improving ramp infrastructure within projects located in high-risk areas, and preparing flood prevention equipment, sandbags and water pumps. Increased cost from increased insurance premium payment. Damage is estimated at approximately 78 million Baht, affecting assets and properties such as infrastructure deterioration and premature wear and tear. This can lead to additional expenses for maintenance and repairs of buildings, machinery, and solar panels. 	The impact is less severe on maintenance expenses and revenues if the global temperature increases by no more than 1.5 degrees Celsius. The severity and frequency of natural disasters will be lower than anticipated in the case of a temperature increase of more than 4 degrees Celsius. Therefore, there will be a lower impact on maintenance costs and revenues. Short-term: No impact Medium-term: Low Long-term: Low		
	Medium-term: Medium			
	Long-term: Medium			

	Financial Impact			
Physical Risk	RCP 8.5 Scenario	RCP 2.8 Scenario		
Acute Risk: The increasingly severe and frequent fluctuations in weather conditions, including droughts, pose a risk to the operational areas of WHA Group	 The insufficient water supply to meet the demands of customers within the industrial estate can impact the trustworthiness of WHA Group and the confidence of our customers. However, the group has planned to effectively manage water resources by increasing the capacity of Reclaimed Water production. This will reduce dependence on natural water sources to the maximum extent possible. The increased cost resulting from the expenses incurred in sourcing water resources. Customers may reduce their production capacity, resulting in reduced water demand and subsequently decreased revenue. Furthermore, this could be a reason for customers to decide to relocate their facilities to other countries or areas. There is a need to increase research and development investment in new products and services to combat the challenges of drought. Short-term: Medium Medium-term: Medium 	Drought-related problems would have a lesser impact on financial capital and R&E costs at a lower temperature increase of a degrees Celsius. Short-term: No impact Medium-term: Low Long-term: Low		
Acute Risk: Increasingly severe and unpredictable weather conditions, including storms, thunderstorms, and lightning.	Thunderstorms and lightning can cause damage to the assets of WHA Group, which can impact overall operations, such as increased repair and maintenance costs and higher insurance premiums. Damage to assets and properties, such as infrastructure deterioration and premature aging, can result in additional expenses for maintenance and repairs of buildings, machinery and solar panels for WHA Group. Indirect impacts from supply chain management, such as delayed product deliveries and increased product prices, can occur as a result. Short-term: Medium Medium-term: Medium Long-term: Medium	Minor impacts to operation if the global temperature increases by no more than 1.5 degrees Celsius. The severity and frequency of natural disasters would be lower than anticipated compared to a scenario where the global temperature rises by more than 4 degrees Celsius Consequently, there would be minimal effects on maintenance costs and revenue Short-term: No impact Medium-term: Low Long-term: Low		
Chronic Risk: Increasing mean temperature	The increasing average temperature may result in inadequate ventilation within warehouses, prompting tenants to request building improvements or additional equipment installation to enhance heat dissipation efficiency. Consequently, WHA Group may incur higher operating and maintenance expenses. The use of construction materials, such as	In this case, the risk is low and the impact is less than when the temperature increases by 4 degrees Celsius. However, it may result in a slight lack of ventilation inside the warehouse Therefore, the tenant may request building improvements or additional equipmen installation to enhance heat dissipation efficiency, which may increase the operating		

The use of construction materials, such as metal sheets or translucent roofing sheets, may deteriorate more quickly, leading to increased maintenance costs and higher construction project expenses

Short-term: Medium Medium-term: Medium Long-term: Medium

- efficiency, which may increase the operating/ maintenance costs for the Group.
- · The construction materials used in the building may deteriorate or be damaged quickly.

Short-term: No impact Medium-term: Low Long-term: Low

THE PHYSICAL RISKS ASSOCIATED WITH CLIMATE CHANGE

	Financial Impact			
Transition Risk	IEA STEPS Scenario	IEA NZE 2050 Scenario		
Policy & Legal: Changes in laws and regulations related to	 Carbon tax is enforced in 2031. Carbon price starts at USD 5 and remains constant 	 Carbon tax is enforced in 2026. Carbon price is derived from NGFS* climate scenarios. 		
greenhouse gas reduction, such as carbon tax	 Impacts and Timeframe: The anticipated impact on business and finance is not significant since the laws are not yet enforced in near future. Additionally, the current risk management measures and operational strategies are considered sufficient, and WHA Group is capable of managing and mitigating this risk effectively. New low-carbon technologies often require significant upfront capital. WHA Group will require additional investments in compliance, adding to the overall cost burden of adopting new technologies. Decrease in EBITDA after carbon tax deducted (%) - 2031 onwards = -0.02% 	 Impacts and Timeframe: The government may need to enforce laws and regulations related to greenhouse gas emissions in near future, with a tendency to prioritize heavy industries. Changes in laws and regulations regarding greenhouse gas emissions may result in higher construction material costs. Increased operational costs due to changes in climate regulations. New low-carbon technologies often require significant upfront capital. WHA Group will require additional investments in compliance, adding to the overall cost burden of adopting new technologies. Decrease in EBITDA after carbon tax deducted (%) 2026 = -0.58% (55 million Baht) 2030 = -0.88% 2040 = -1.6% 2050 = -5.2% 		
Technology: Cost of new technology	 require significant upfront capital. Require additional investments in compliance, adding to the overall cost burden of adopting new technologies. WHA Group has considered this scenario as low impact to the organization, as the group already has technology related to renewable energy that is offered to customers, as well as being used within the company itself. This enables efficient and timely response to customer needs. Short-term: No Impact	 New low-carbon technologies often require significant upfront capital. Require additional investments in compliance, adding to the overall cost burden of adopting new technologies. WHA Group considers this scenario as an opportunity. This is because the group already possesses technologies related to renewable energy, which are offered to customers and used internally within WHA Group. These technologies enable WHA Group to meet the demands of customers effectively and promptly. 		
	Medium-term: No Impact Long-term: WHA may be impacted (Impact level has not been quantified)	Short-term: No Impact Medium-term: No Impact Long-term: WHA may be impacted (Impact level has not been quantified)		

	Financial Impact			
Transition Risk	IEA STEPS Scenario	IEA NZE 2050 Scenario		
Market: Customer Preference Shift to Low-Carbon Products and Services	 Customer demand has shifted towards seeking industrial parks that provide more low-carbon facilities and utilities. WHA may need to invest in renewable energy sources, energy-efficient buildings, and low-emission transportation options to meet the demand for low-carbon services. The decrease in demand for certain products and services of WHA Group due to changing customer preferences and needs. Short-term: No Impact Medium-term: WHA may be impacted (Impact level has not been quantified) Long-term: WHA may be impacted (Impact level has not been quantified) 	 Customer demand has shifted towards seeking industrial parks that provide more low-carbon facilities and utilities. WHA may need to invest in renewable energy sources, energy efficient buildings, and lowemission transportation options to meet the demand for low-carbon services. Customers are placing increasing importance on green energy and renewable energy. WHA Group is capable of offering renewable energy solutions to customers to meet their demands. The decreasing demand for certain products and services of WHA Group due to changing customer preferences and needs. Short-term: No Impact Medium-term: WHA may be impacted (Impact level has not been quantified) Long-term: WHA may be impacted (Impact level has not been quantified) 		
Reputation: Limitation to access capital	 Companies perceived as environmentally irresponsible or lagging in sustainability efforts may struggle to attract investment. Companies with damaged reputations might encounter higher interest rates on loans or less favorable terms on debt issuance as investors and lenders perceive them as higher risk. If WHA Group fails to meet the expectations and demands of stakeholders (such as customers, investors, communities, and society) regarding environmental responsibility and raising awareness about climate resilience, it could have an impact on its reputation and lead to long-term financial consequences. 	 Companies perceived as environmentally irresponsible or lagging in sustainability efforts may struggle to attract investment. Companies with damaged reputations might encounter higher interest rates on loans or less favorable terms on debt issuance as investors and lenders perceive them as higher risk If WHA Group fails to meet the expectations and demands of stakeholders (such as customers, investors, communities, and society) regarding environmental responsibility and increasing awareness of climate resilience, it could have an impact on its reputation and lead to long-term financial consequences. 		

Medium-term: WHA may be impacted

(Impact level has not been quantified)

(Impact level has not been quantified)

Long-term: WHA may be impacted

Medium-term: WHA may be impacted

(Impact level has not been quantified)

Long-term: WHA may be impacted

(Impact level has not been quantified)

OPPORTUNITIES ASSOCIATED WITH CLIMATE CHANGE

Our establish	Financial Impact			
Opportunity	IEA STEPS Scenario	IEA NZE 2050 Scenario		
Demand shift: Customer Preference Shift to Low- Carbon Products and Service	 The growing market demand in the real estate sector for renewable energy, ecofriendly practices, and energy-efficient buildings offers a substantial business opportunity for WHA Group. WHA Group can increase market opportunity from sustainable built environment (BREEAM, LEED, etc.) WHA Group can reduce waste generation through circular economy principles. WHA Group and WHAUP can focus on providing renewable energy services, such as solar panel installations, to support customers who seek to utilize renewable energy sources. Short-term: No Impact 	 The growing market demand in the real estate sector for renewable energy, ecofriendly practices, and energy-efficient buildings offers a substantial business opportunity for WHA Group. WHA Group can increase market opportunity from sustainable built environment (BREEAM, LEED, etc.) WHA Group can reduce waste generation through circular economy principles. WHA Group and WHAUP can focus on providing renewable energy services, such as solar panel installations, to support customers seeking to utilize renewable energy sources. This opportunity is valued at approximately 413 million Baht, with estimated development costs around 231 		
	Medium-term: WHA may be impacted (Impact level has not been quantified) Long-term: WHA may be impacted (Impact level has not been quantified)	million Baht. Short-term: Low Medium-term: Low Long-term: Low		

3.3 STRATEGIES AND BUSINESS OPPORTUNITIES IN RESPOND TO CLIMATE CHANGE STRATEGIC APPROACH IN NET ZERO TRANSITION

WHA Group recognizes the profound impacts of climate change on the environment, economy, and society, particularly its long-term implications for business sustainability. Achieving net-zero greenhouse gas emissions is therefore a key mission in driving the organization to meet future challenges and ensure long-term sustainability. In 2024, the Group established a comprehensive and robust strategy to effectively pursue the Net Zero target. This approach focuses on reducing environmental risks and creating value for society and all stakeholders through integration across three key dimensions.





1. DECARBONIZE OWN OPERATIONS

WHA Group is committed to continuously improving its operational processes to reduce greenhouse gas emissions in Scope 1 and Scope 2. We focused on enhancing energy efficiency across all departments while transitioning to renewable and clean energy sources, such as the installation of solar panels, the use of smart energy management systems, and the adoption of technologies that reduce reliance on fossil fuels. The Group also transforms technologies, product designs, and the supply chain, as well as investing in research and development to drive long-term sustainability effectively.

In addition, the Group promotes employee engagement in energy conservation initiatives by organizing training programs and campaigns to raise awareness of energy saving and individual-level greenhouse gas reduction. This ensures that everyone in the organization plays an active role in achieving the Net Zero target. (The performance and targets related to greenhouse gas emissions reduction in Scope 1 and Scope 2 through this strategy are presented in the "Metrics and Targets" section.)

2. DECARBONIZE INVESTMENT PORTFOLIO

WHA Group places great importance on investing in projects that support Scope 3 greenhouse gas emissions reduction by accelerating investments in renewable energy and promoting investments that utilize low-carbon technologies, such as wind power, solar energy, and biomass power plants. These efforts aim to increase the share of clean energy within the investment portfolio.

At the same time, the Group collaborates with business partners and entrepreneurs within the supply chain to support operations that reduce greenhouse gas emissions. Examples include the development of infrastructure that helps lower emissions, support for green logistics projects, and the establishment of monitoring and evaluation systems to assess the environmental impact of supply chain activities. These efforts ensure that the Group's investments contribute to long-term environmental impact reduction. (The performance and targets related to Scope 3 greenhouse gas emissions reduction through this strategy are presented in the "Metrics and Targets" section.)

3. DEVELOP SUSTAINABLE ECOSYSTEM

WHA Group is committed to contributing to the creation of a sustainable ecosystem by collaborating with communities, customers, and stakeholders across all sectors to develop processes and projects that meet stakeholder needs and promote a low-carbon economy. Initiatives include the establishment of sustainability learning programs in the communities, support for the development of clean energy skills and innovation, and the development of infrastructure that enables clean energy use within communities.

The Group also emphasizes the development of policies and frameworks aligned with the Net Zero target, such as setting greenhouse gas emission standards for new projects, promoting environmentally responsible procurement, and creating incentives for suppliers and entrepreneurs who contribute to emissions reduction. These efforts reflect the Group's commitment to building a balanced and sustainable future across all dimensions.

The Group's journey toward Net Zero not only helps reduce environmental impacts but also enhances community quality of life, creates new economic opportunities, and strengthens stakeholder confidence in the Group's long-term dedication to being a socially and environmentally responsible organization.

CLIMATE CHANGE-RELATED RISK MANAGEMENT **PROCESS**

The Group takes a comprehensive approach to managing climate change-related risks, beginning with the identification of key risks based on severity, likelihood of occurrence, and relevance to business operations. This process helps the Group understand potential long-term impacts on our operations. The

Group also focuses on understanding how climate change may affect various aspects of the business, such as impacts on production, supply chain operations, and customer confidence.

In addition, the Group continuously evaluates the effectiveness of existing mitigation measures to ensure that they are capable of reducing impacts efficiently and in a timely manner. The Group has also developed solutions to address potential future climate-related issues through strategic planning and the establishment of comprehensive prevention plans at both project and organizational levels. These efforts aim to strengthen the Group's readiness for emerging risks and ensure long-term business sustainability.

WHA GROUP'S CLIMATE RISK MANAGEMENT PROCESS

Risk Identification

- · Identification of internal and external climaterelated risks and business impacts through Climate-Related Scenario Analysis.
- identified risks under four categories: Strategic Risk, Financial Risk, Operational Risk and Compliance Risk.

Risk Assessment

- Calculation of risk levels following standardized assessment criteria to evaluate the impacts from climate change.
- Categorization of Prioritization of climaterelated risks in the organizational level along with identification of risk appetite scope in line with the business strategy and goals.

Risk Response and **Mitigation Measures**

- Determine measures and risk management process to respond with the climate-related risks and opportunities in every level of the organization (company-wide risk management), covering short-, medium-, and long-term, to prevent potential impacts on the organization and relevant stakeholders as well as reduce the risk level to acceptable level.
- Determine remediation measures for those affected by climate change, restoring conditions to their pre-impact state to ensure effective and sustainable recovery.

Risk Reporting, Monitoring, and Communication

- · Communication of risks to all executives and employees to build a strong risk management culture and reporting risk management progress to Risk Management Committee (RMC) on a quarterly basis.
- Optimize internal communication channels to disclose climate-related risk information to all relevant departments.



PROJECTS AND PLANS FOR ADAPTING TO PHYSICAL RISKS

FLOOD RISK MANAGEMENT

- Selecting areas with low risk of natural disasters or no reported history of disasters for project development: The majority of WHA Group's projects are located in the Bangna-Trad or Eastern Economic Corridor (EEC) region, which has a low risk of natural disasters.
- Designing and constructing flood prevention systems that are appropriate for the rainfall and water conditions in each project area, including the installation and monitoring of water levels in water storage reservoirs and rainwater retention ponds for every industrial estate project. Additionally, WHA Group excavates pits to accommodate continuous water drainage in the event of regular flooding. However, it is essential that the design of the drainage system does not impact the natural water systems by avoiding the construction of barriers to natural water courses to prevent impacts on the nature and surrounding communities.
- Improving infrastructure to address potential climate-related incidents, such as building ramps in projects at risk.
- Installing and continuously monitoring of rainfall depth measurements in every industrial estate.
- Inspect and maintain water barriers and water pumps as required to ensure they are always in proper working condition.
- Installing water level monitoring and alert systems in the drainage channels of WHA Saraburi Industrial Land (WHA SIL) in order to provide timely notifications and enable proactive planning and problem prevention in case of flooding.
- Installing water level monitoring and alert systems, including SCADA systems, to control the operation of water pumps and closely monitor water levels. Additionally, allocate raw water quantities in the raw water reservoir and water retention ponds within Eastern Seaboard Industrial Estate (Rayong) (ESIE), WHA Eastern Seaboard Industrial Estate 1 (WHA ESIE 1), and WHA Rayong Industrial Land (WHA RIL).
- Establishing emergency response plans and procedures, including conducting drills to prepare for and respond to volatile weather conditions.
- Regularly assessing the changes of the environment and surrounding areas in each project.

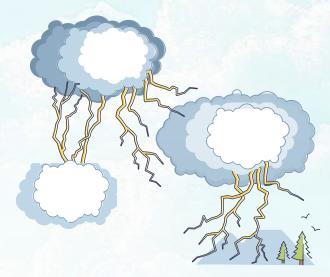


DROUGHT RISK MANAGEMENT

- Implementing the Natural Water SCADA project to efficiently manage the utilization of water from natural sources. This includes installing water level monitoring devices in water storage reservoirs and an automated control system for water pumping equipment to closely monitor water levels. Additionally, allocate the raw water quantity in raw water storage tanks and water retention ponds in ESIE, WHA ESIE 1, and WHA RIL industrial zones.
- Considering water sources local government or private sector that have the potential to increase the raw water supply for industrial customer services (Alternative Raw Water Resources). Study and develop desalination technologies to convert seawater into fresh water (Desalination Technologies).
- Monitoring and assessing the usage of water from natural sources and provide reports to relevant parties at least once a month to keep them informed.
- Repairing and maintaining the surrounding soil around the water barriers in the water distribution system to prevent erosion and instability.
- Constructing additional ponds and reservoirs to ensure an adequate water supply in WHA Saraburi Industrial Land (WHA SIL). A new reservoir will be built in WHA Saraburi Industrial Land (WHA SIL) area, increasing the water capacity from 416,671 cubic meters to 800,271 cubic meters. In addition, floating pumps will be installed to maximize the water pumping capability up to the minimum capacity level of the reservoir, which is 998,798 cubic meters.
- Upgrading the groundwater reservoir at WHA Rayong Industrial Land (WHA RIL) to increase the water supply efficiency within the area by a daily increment of 1,121 cubic meters, which accounts for 10% of the water demand.
- Implementing a water reclamation system, which helps reduce reliance on natural water sources. This system enables the reuse of wastewater and reduces the volume of discharged water into public water sources. The project not only reduces the cost of sourcing raw water but also avoids potential conflicts arising from shared resources with the local community. As a result, the project has been considered for license renewal to continue our sustainable business operations.
- Regularly assessing the changes of the environment and surrounding areas in each project.

STORM AND LIGHTING RISK MANAGEMENT

- Selecting construction materials and equipment that meet high standards to ensure durability and withstand severe weather conditions.
- Studying and developing innovative materials and equipment used in the construction of solar power generation projects to reduce temperatures, prevent overheating and lightning strikes.
- Inspecting the installations thoroughly to ensure compliance with the design standards for mounting systems that can withstand wind speeds of 25 meters per second (equivalent to a tropical storm).
- Monitoring the weather conditions and changes closely through various news channels and notifying customers to be prepared.



Regularly assessing the changes of the environment and surrounding areas in each project.

INCREASING TEMPERATURE RISK MANAGEMENT

- Selecting innovative materials for constructing warehouses that can help reduce internal temperatures and enhance the efficiency of the overall structure, including air ventilation.
- Developing a long-term disaster management and risk mitigation plan.
- Upgrading the infrastructure to accommodate events that may arise from climate change, such as installing solar cells using long L-fleet for better air ventilation under PV module.
- Enhancing awareness and capabilities to effectively manage the entire value chain.

PLANS FOR ADAPTING TO ENVIRONMENTAL REGULATORY (TRANSITION RISK)

POLICY AND LEGAL RISK MANAGEMENT

- Tracking relevant legal changes and establishing guidelines for effective mitigation actions.
- Planning to increase energy production from renewable energy to reduce greenhouse gas emissions and environmental impacts as well as controlling greenhouse gas emissions.
- Focusing on the use of construction materials that reduce greenhouse gas emissions, including the use of high-performance construction materials to reduce the generation of waste, and supporting the reuse and recycle process of construction materials.

TECHNOLOGY RISK MANAGEMENT

- expanding alternative energy services with the readiness from the building design process, enabling immediate solar rooftop installation. The solar panel installation services are provided by WHAUP, a specialist in comprehensive energy solutions.
- Exploring technologies related to carbon capture and storage to reduce the impact of climate change in the future.
- Exploring technologies that impact business operations, including construction processes and building materials, to prepare for technological changes.





MARKET RISK MANAGEMENT

- Continuously adopting modern technologies to promote the concept of Smart Eco Industrial Estates, supporting seamless operations in manufacturing, logistics, and other business activities.
- Designing and constructing buildings that are environmentally friendly and adhere to international standards, such as LEED Certification, to meet the needs of customers interested in sustainable buildings.
- Providing alternative energy services, especially solar energy, fully integrated in the Group's warehouse, supporting customers to reduce energy costs and the environmental impacts.
- Promoting sustainable logistics through a comprehensive Electric Vehicle (EV) ecosystem that helps reduce environmental impacts, including EVs, charging stations, and software solutions, offered by Mobilix, a provider of endto-end green logistics solutions.
- Supporting sustainable logistics initiatives such as the use of electric vehicles and fuel switch.

REPUTATION RISK MANAGEMENT

- Planning and implementing strategy towards becoming net zero while supporting customers and business partners in renewable energy transition.
- Collaborating with customers and business partners to mitigate the impacts of climate change across the value chain.

FINANCIAL PLANNING

- WHA Group has conducted comprehensive and careful financial planning to align with the climate-related risks and opportunities, a current critical issue. This planning covers various aspects affecting business sustainability, including operational expenses (OPEX) related to efficient cost management, capital expenditures (CAPEX) to support projects and innovations that reduce environmental impacts, mergers and acquisitions (M&A) aimed at strengthening long-term capability and sustainability, as well as effective debt management to maintain the organization's financial stability. Currently, the Group plans to install solar rooftop systems at our water treatment facilities, with a total capacity of approximately 1.62 MWp within the next two years. Preliminary assessments estimate this will reduce electricity costs by about 9.26 Million Baht per year, amounting to a total savings of approximately 277.71 Million Baht over the project's lifetime until 2055. This initiative not only helps reduce long-term operational costs but also promotes the use of clean energy, aligning with the Group's sustainability goals.
- evaluating and adjusting our financial strategic plans to suit the evolving environment, focusing on minimizing business risks, enhancing opportunities for sustainable growth, and creating added value for all stakeholders in every dimension. This approach ensures the Group can become a sustainability leader in the industry and effectively respond to climate change challenges.

ACTION PLANS TO REDUCE THE IMPACTS OF CLIMATE CHANGE

Even though in 2024, WHA Group was able to achieve our energy and environmental goals, the Group continues to drive the organization forward, by initiating new projects that incorporate technology, aiming to become a Net Zero organization by 2050.

WHA Group has assessed climate change as a materiality issue and has defined key operational strategies to effectively reduce greenhouse gas emissions in all timeframes The action plans are aligned with the climate strategy and cover short-, medium-, and long-term periods, aiming to achieve net zero greenhouse gas emissions by 2050 as follows:

Action Plan	Approach
Increase the proportion of production and consumption of renewable energy.	Focus on increasing the share of renewable energy production and consumption across all operations to reduce reliance on fossil fuels and promote environmentally friendly energy use, thereby lowering greenhouse gas emissions and supporting long-term sustainability.
Improve and transform business processes to enhance energy efficiency.	Improving business processes is another vital strategy to enhance energy efficiency in every aspect, from production to transportation, by adopting advanced technologies that reduce energy consumption and increase productivity. This includes supporting the use of electric vehicles within the organization, business sector, and Thailand by investing in EV infrastructure and promoting EV adoption nationwide to help reduce carbon emissions from transportation.
Increase the share of green portfolio within the business group.	Expand the share of green portfolio, which includes products and services that reduce environmental impacts. Investing in low-impact assets and activities supports growth of socially and environmentally responsible businesses.
Develop and offer products and services that help reduce greenhouse gas emissions throughout the value chain.	Develop and offer products or services that can reduce GHG emissions throughout the entire value chain, ensuring sustainability at every stage, from raw material sourcing and production to consumption and recycling.
Raise awareness of energy conservation and climate change among employees, business partners, and all stakeholders involved.	Raise awareness of energy conservation and climate change as a key strategy to engage all parties, including employees, partners, and stakeholders, collectively in driving sustainable change within the organization and society.
Plan reforestation, forest conservation, and expansion of green spaces to naturally absorb carbon dioxide from the atmosphere.	Conduct reforestation and forest management projects to increase green areas, using natural methods to absorb carbon dioxide from the atmosphere, which helps mitigating climate change impacts.

WHA Group constantly monitors and evaluates performance against these plans to ensure that the Group is moving toward the achievement of net zero greenhouse gas emissions in 2050, and support the sustainable development of all parties.

COMMITMENTTOCLIMATECHANGEMANAGEMENT

WHA Group recognizes the importance of leading efforts to address environmental issues through strategies that integrate technologies, innovations, and stakeholder engagement to reduce environmental impacts and foster long-term sustainability.

 Roles and targets of environmental impact reduction WHA Group focuses on reducing environmental impacts from our business operations which is related to natural resources. Therefore, the Group has implemented our technology to address greenhouse gas and global warming issues. Our main goal is to reduce greenhouse gas emissions, promote to use of renewable energy, and develop new innovations to drive sustainability throughout our value chain.

2. Success in reducing greenhouse gas emissions With strong commitment and systematic operations, WHA Group successfully achieved carbon neutrality in 2021. The Group is now working toward the ultimate goal of net zero emission by 2050, following the Science Based Targets Initiative (SBTi) guidelines.

Collaboration in carbon emissions reduction of WHA Group and other organizations WHA Group has been continuously accelerating our efforts to achieve the Paris Agreement's goals of limitation of global temperature and greenhouse gas emissions reduction in all areas of our operations. Therefore, in 2023, WHA Group collaborated with partners from leading educational institutions, private companies, and public sector organizations to establish the Thailand CCUS Consortium. This consortium aims to enhance Thailand's competitiveness in Carbon Capture Utilization and Storage (CCUS) technology. The goal is to drive the development of CCUS technology in Thailand in a sustainable manner for maximum future benefits, including the limitation of global temperature rise to no more than 1.5 degrees Celsius in alignment with the Paris Agreement's target.

WHA Group has played a key role in supporting the budget and promoting technologies related to carbon capture. In 2024, the Group became a member of the Steering Committee of the Thailand CCUS Alliance (TCCA) under the Thailand CCUS Consortium, in collaboration with the National Nanotechnology Center and other leading partners.

The main mission of this alliance is to accelerate the development of Carbon Capture, Utilization, and Storage (CCUS) technology to reduce greenhouse gas emissions in line with Thailand's goals of achieving carbon neutrality and net-zero emissions.

CCUS is considered a crucial factor in the transition of Thai industries toward a low-carbon economy. Amid increasing pressure to reduce emissions, CCUS not only helps mitigate environmental impacts but also presents opportunities for industries to grow sustainably and remain competitive in global markets. For CCUS to be effectively adopted across the industrial sector, Thailand must develop suitable infrastructure, establish investment-friendly policy frameworks, and foster collaboration between the public and private sectors.

Moreover, integrating CCUS with renewable energy and advancing carbon utilization technologies will enhance overall energy system efficiency. If CCUS can be systematically applied to key industries such as power plants, petrochemicals, and manufacturing, Thailand will be able to significantly reduce greenhouse gas emissions, move closer to its global climate goals, and strengthen national competitiveness in the emerging green economy.

ENVIRONMENTAL OVERSIGHT OF CUSTOMERS AND TENANTS IN INDUSTRIAL ESTATES

WHA Group is committed to managing our real estate portfolio sustainably by encouraging customers to adopt good environmental practices. WHA Group offers solar rooftop installation services for buildings and warehouses and provides power purchase agreements (PPAs) with customers at rates lower than conventional grid electricity. This initiative is designed to promote the use of solar energy as an alternative energy source among customers and tenants. Such collaboration between the Group and our tenants delivers tangible benefits of reducing environmental impacts and supports long-term sustainable development. WHA Group's approaches include:

RESOURCE EFFICIENCY MANAGEMENT

The Group encourages tenants to use resources efficiently and minimize waste throughout their operations, such as through the effective use of water and energy. This includes supporting technologies and innovations that help reduce greenhouse gas emissions and fossil fuel consumption.

PROMOTION OF THE CIRCULAR ECONOMY

The Group focuses on waste management from tenants' operations by promoting waste separation, recycling, and reducing landfill waste. Tenants are also encouraged to use reusable materials to minimize environmental impact.

CONSULTATION AND TRAINING ACTIVITES

The Group organizes training sessions and seminars to equip tenants with knowledge and practical guidance on environmentally friendly practices. In addition, consultation are offered to support operations aligned with sustainable development goals.

3.4 MATRICS & TARGETS

PERFORMANCE ON GREENHOUSE GAS EMISSION REDUCTION (SCOPE 1, SCOPE 2, AND SCOPE 3)

Performance	Unit	2020	2021	2022	2023	2024
Direct (Scope 1) GHG Emissions	tons CO ₂ e	644	1,146	1,322	1,401	1,637
Indirect (Scope 2) GHG Emissions		18,671	18,104	15,722	17,209	20,219
GHG Emissions (Scope 1 and Scope 2)		19,315	19,250	17,044	18,610	21,856
Indirect (Scope 3) GHG Emissions			2,452,575	2,546,778	2,431,638	2,854,005
GHG Emissions Intensity (Scope 1 and Scope 2)	tCO ₂ e/ Million THB	2.1	1.6	1.1	1.1	1.5
Data Coverage	%	100	100	100	100	100

Remark: WHA Group is in the process of registering for Renewable Energy Certificates (RECs), which is expected to be completed by the third quarter of 2025. Once registered, the Group will be able to use the certificates to reduce our indirect greenhouse gas emissions (Scope 2) to zero or the lowest possible level, in accordance with the calculation criteria under the GHG Protocol Scope 2 Guidance (market-based method).

The Group monitors the effectiveness of our climate change measures through systematic data collection and recording, periodic progress reporting, and continuous strategy reviews to ensure alignment with evolving circumstances. Although the Group experienced an upward trend in greenhouse gas emissions this year due to business expansion and various uncontrollable factors, we remain committed to effective management. Root causes have been analyzed, and the emission reduction plans have been appropriately revised to enhance efficiency and maintain long-term alignment with international standards.

GHG EMISSION REDUCTION TARGETS

Short-term GHG emission reduction targets Targets within 5 years from the base year			HG emission reduct nd 5 years from the	_
Absolute GHG emission reduction target (Scope 1 and 2) by 18.7% by 2025 and 37% in 2029 from the base year 2021.	GHG emission intensity target per total revenue and share of profit (Scope 1 and 2) to be 1.45 tCO2e per 1 million THB of total revenue and share of profit by 2025 from the base year 2021.	Absolute GHG emission reduction target (Scope 1 and 2) by 42% by 2030 and by 90% by 2050 from the base year 2021.	GHG emission reduction target (Scope3) by reducing emission intensity from investments by 74% by 2030 and by 90% by 2050 from the base year 2021.	Net Zero emission target by 2050.

5. IMPACTS ON STAKEHOLDERS AND ENVIRONMENT

WHA Group is committed to managing climate-related risks and opportunities with the aim of generating positive impacts on the environment, society, and stakeholders, while minimizing potential negative impacts associated with its business operations. These include the use of fossil fuels in certain production processes, greenhouse gas emissions from transportation systems, and waste management from industrial factories within WHA's industrial estates. The Group places great importance on developing and improving projects that effectively respond to these challenges and create long-term value, as outlined below:

POSITIVE IMPACT ON ENVIRONMENT

The Group focuses on minimizing environmental impacts through the implementation of renewable energy and advanced energy-saving projects. These include renewable energy consumption, GHG emission reduction in all levels of operations, and the application of circular economy principles, such as reuse wastewater treatment. These efforts not only help conserve limited natural resources but also contribute to the long-term mitigation of climate change.

POSITIVE IMPACT ON SOCIETY AND STAKEHOLDERS

WHA Group values the strong relationship with all stakeholder groups, including surrounding communities, employees, customers, and suppliers, through active engagement and incorporating feedback into the development of energy and environmental projects that effectively address stakeholders' needs. These efforts include the development of processes that help reduce costs, enhance efficiency, and minimize negative impacts. The Group also organizes initiatives to enhance sustainability awareness among employees at all levels and promotes community participation in various projects to build long-term trust and confidence.

For customers, the Group has developed policies that enhance business flexibility and reduce climate-related risks, thereby safeguarding business interests and minimizing operational impacts. At the same time, investors and suppliers are assured that the Group upholds our social and environmental responsibilities across all dimensions.

Furthermore, the Group's operations cover risk management related to drought, flood, and climate uncertainties through regular climate risk assessment and planning. This is to ensure that the Group is well-prepared to respond to future scenarios, helping to protect customer benefits and mitigate potential negative impacts throughout the value chain.

6. NEXT STEP

The Group has established both short-term and long-term targets for greenhouse gas (GHG) emission reduction. In the short term, within 5 years from the base year in 2021, the Group aims to reduce absolute GHG emissions (Scope 1 and 2) by 18.7% by 2025 and 37% by 2029, and to reduce GHG emission intensity per total revenue and share of profit (Scope 1 and 2) to 1.45 tCO2e per 1 million baht of total revenue and share of profit by 2025. For the long term, the Group has set targets to reduce absolute GHG emissions (Scope 1 and 2) by 42% by 2030 and 90% by 2050, compared to the base year in 2021. Regarding Scope 3 emissions from investments, the Group has set a target to reduce GHG emission intensity by 74% by 2030 and by 90% by 2050 from the base year in 2021. Furthermore, the Group is committed to achieving Net Zero GHG emissions by 2050 in support of the global transition to clean and sustainable energy.

ENERGY MANAGEMENT



1. OUR POSITION

Efficient energy management is a key element of business operations in the modern era. Enhancing energy efficiency and transitioning to clean energy sources help reduce reliance on fossil fuels, which are the primary source of greenhouse gas emissions in the industrial and business sectors. These efforts not only mitigate environmental impacts but also promote long-term sustainability.

Leading organizations have adopted energy management strategies such as improving production process efficiency, integrating renewable energy systems like solar and wind power into operations, and investing in energy-saving technologies. In addition, setting clear targets to reduce energy consumption or greenhouse gas emissions within a specified timeframe helps drive organizational action towards achieving environmental goals effectively.

2. ENERGY CONSERVATION COMMITMENT

WHA Group is well aware that business operations unavoidably involve production and energy use, which directly impact climate change. Moreover, these activities can potentially pollute communities and nearby environments if not managed properly. Therefore, the Group is committed to conducting business with quality and global standards, alongside environmental conservation efforts through energy conservation activities.

To this end, WHA Group has established an energy conservation policy approved by management, assigning an Environmental Committee to develop plans and guidelines for environmental operations. This includes setting targets for environmental and energy conservation operations, as well as implementing activities and projects to demonstrate the necessity of energy conservation projects within the Group. This policy covers the practices of all employees, as well as the management of construction and utility systems of all four business groups to comply with the Building Control Act B.E. 2540 (1997) and the Environmental Conservation Promotion and Enhancement Act (No. 2) B.E. 2550 (2007). This is to align with the global move towards the Net Zero emissions target and Low Carbon Society.

As "The Ultimate Solution for Sustainable Growth", WHA Group offers services to customers seeking to offset their carbon footprint through a variety of renewable energy solutions. The use of renewable energy enables customers to manage energy more efficiently, reduce reliance on the electricity grid, and minimize environmental impact, while adding business value. WHA Group provides customers with an end-to-end solar rooftop service on a long-term post-installation contract basis, without any upfront costs. This includes design services, permit applications, long-term operations, and maintenance. WHA Group's energy management approaches are as follows:

2.1 ENERGY CONTROL WITHIN WHA GROUP

WHA Group focuses on energy efficiency in our operational processes, aiming to reduce dependence on non-renewable energy while promoting greater use of sustainable energy through various projects.

Action Plan	Approach
Energy Conservation in Industrial Estates and Office Buildings	The Group promotes efficient energy use within industrial estates and office buildings through effective management aimed at reducing excessive energy consumption and enhancing operational sustainability. This includes installing automatic lighting and air conditioning systems, selecting energy-efficient air conditioning units appropriate to building size, and replacing pumps and motors to match the volume of wastewater.
Solar System Installation	The Group has implemented solar power systems to supply electricity for telecommunications towers and office rooftops and has also transitioned to solar-powered streetlights within industrial estate roads. These measures aim to reduce reliance on non-renewable energy sources and lower greenhouse gas emissions in energy management processes.
Green Product Development for Construction	In construction processes, the Group selects materials and tools with minimal environmental impacts to reduce waste and carbon emissions, while supporting the use of sustainable products in project developments.
Application of Technology for Energy Analysis and Optimization	The Group adopts modern technologies to analyze energy use within operations and improve process efficiency. This helps reduce energy loss and enhance outcomes aligned with environmental goals.
Adoption of High-Efficiency Technology to Enhance Operations	The Group emphasizes the adoption of high-efficiency technology in operational processes to increase the capability of machinery and equipment, reduce energy consumption, and minimize process losses. This includes installing Variable Speed Drives (VSD) to control and adjust the motor speed of high-pressure pumps in RO systems for optimal performance, reducing energy overload and improving energy efficiency. The Group also focuses on using clean and renewable energy to reduce dependence on grid electricity by implementing the hydro micro turbine generator (HydroXS) project with a production capacity of 112 KW. The system utilizes excess pressure from raw water pipelines to generate electricity through a micro turbine generator. These initiatives contribute to reducing energy consumption while promoting efficient and sustainable energy use in the long term.
Smart Building and Energy Efficiency System	The Group incorporates Smart Building System and Energy Management Systems (EMS) into office buildings and warehouses to control energy usage, reduce waste, and enhance energy efficiency.
Development of Renewable Energy Projects	The Group aims to develop and expand renewable energy projects, such as solar rooftop and wind energy within industrial estates and office buildings, to increase the proportion of clean energy use, reduce reliance on fossil fuels, and lower greenhouse gas emissions.
Green Mobility and EV Infrastructure Project	The Group supports the use of clean energy in transportation by promoting electric vehicles (EVs) and developing infrastructure such as EV charging stations within industrial estates and office buildings to reduce fossil fuel consumption.

Apart from the projects mentioned above, WHA Group also encourages all employees to participate in energy conservation projects. We aim to increase outcomes, reduce operational costs, and minimize greenhouse gas emissions, reflecting our commitment to long-term sustainability development.

THE ROLE OF WHAUP IN ENERGY CONSUMPTION CONTROL WITHIN WHA GROUP

WHAUP plays a crucial role in supporting WHA Group's energy targets by providing efficient energy system installation and management. Currently, WHAUP has achieved its accumulated target of signing Power Purchase Agreements (PPAs) for renewable energy (on an equity basis) exceeding 437 MW. This marks a significant step in promoting the use of renewable energy across all sectors, while also supporting organizational development focused on long-term sustainability and environmental friendliness.

2.2 PROMOTING ENERGY SAVING AMONG CUSTOMERS AND ENTREPRENEURS

Even though WHA Group does not have direct power to control entrepreneurs in industrial estate areas or warehouse tenants to reduce energy consumption, the Group remains committed to and responsible for supporting renewable energy transition of customers by developing sustainable energy projects and solutions.

Action Plan	Approach
Offering diverse renewable energy solutions and projects	The Group offers a variety of solutions, such as the solar energy system installation to help customers utilize efficient and environmentally friendly natural renewable energy.
Supporting Customers in Reducing Fossil Fuel Dependence and Shifting to Clean Energy	The Group supports and encourages customers to adopt clean energy sources such as solar and wind power. This helps reduce their reliance on fossil fuels and minimizes environmental impact.
Supporting the Use of Smart Technology for Energy Management	The Group promotes customers' use of smart energy monitoring and control systems. These systems enable the analysis of energy consumption, reduce waste, and improve energy efficiency within buildings and factories.
Supporting Energy-Saving Ventilation Systems and Appliances	The Group encourages the transition to energy-saving equipment, such as LED lighting, high-efficiency ventilation systems, or Inverter air conditioners in buildings and factories.
Supporting Energy Storage Solutions	The Group supports the use of energy storage systems, such as Battery Energy Storage Systems (BESS), to help customers manage energy efficiently, reduce peak electricity demand, and enhance the stability of the energy system.
Providing Consulting and Energy Management Services	The Group provides consulting and supports the development of energy management solutions for customers, such as Smart Energy Management System. This solution helps reduce excess energy consumption and increase energy efficiency in buildings and industrial factories.
Developing Infrastructure for Clean Energy Use	The Group supports the development of Smart Grids and infrastructure for clean energy use, such as EV Charging Stations, to facilitate the transition to sustainable energy.

These dedication and initiatives not only benefit the environment but also contribute to sustainable value for customers and surrounding communities in the long term. This approach also prome es sustainable and innovative economic growth under a framework of efficient energy consumption and redu ed environmental impacts.



3. METRICS & TARGETS

WHA Group recognizes the impact of climate change on our business operations and stakeholders, including customers in industrial estates and surrounding communities. To prevent disruptions and impacts across the value chain, the Group has developed a climate change risk management process that focuses on climate-related risks and opportunities. Even though our industrial estates have never experienced floods due to thorough site selection analysis,

rigorous risk assessment and mitigation measures are continuously implemented. The Group consistently prepares for climate change, with the Chief Executive Officer responsible for setting policies and monitoring environmental performance. In 2024, The Group clearly defined our climate change targets according to plan and tracked performance through systematically data collection and recording, with regular progress reports and reviews of outcomes and lessons learned to continuously refine policies and strategies.

ENERGY CONSUMPTION REDUCTION PERFORMANCE AND TARGETS ENERGY CONSERVATION PERFORMANCE INDICATORS AND TARGETS

Amount of Energy Consumption	Unit	2021	2022	2023	2024	2024 Target
Non-renewable energy consumption	kWh	41,150,050	41,673,720	44,724,338	49,158,158	43,400,000
Proportion of non-renewable energy consumption per total revenue and share of profit	kWh/ million baht	3,440	2,677	2,629	3,427	3,000
Renewable energy consumption	kWh	863,029	1,656,834	1,619,702	1,675,890	1,700,000

RENEWABLE ENERGY CONSUMPTION AND ON-SITE ENERGY GENERATION

Altogether, operational energy used in buildings in WHA Group's investment portfolio and projects derived from renewable sources (wind, water, solar, biogas) are demonstrated below:

Indicator	2021	2022	2023	2024
The use of electricity from renewable sources (wind, water, solar, biogas) used in buildings in portfolio (kWh)	863,029	1,656,834	1,619,702	1,675,890

TARGET OF PROVIDING RENEWABLE ENERGY SERVICES

In 2024, WHAUP has achieved our accumulated target of signing Power Purchase Agreements (PPAs) for renewable energy (on an equity basis) of 437 MW. By the end of 2024, WHA Group had installed solar rooftop systems for customers, with a total installed capacity of 151 MW. The electricity generated from these solar panels can replace electricity grid, thereby reducing Scope 2 greenhouse gas emissions by approximately 61,808 tCO2e per year. Additionally, the Group continues to implement long-term plans to increase production capacity and expand long-term contracts in the future to support the growing demand for clean energy.

Bud all a Complex	Performance	Target		
Production Capacity	2024 2024		2029	
Capacity of Renewable Power Purchasing Agreement (PPAs) at Year-End (MW) ¹	437	450	1,200	
Annual reduction of the amount of greenhouse gases from substituting electricity of the power supply				
system provided to customers per year which can be used to offset the carbon emissions of WHA Group (tCO2e) (assuming full year operation basis) ²	61,808	85,000	683,000	

- Remark: ^{1/-} Included MW under both operation and development stage; as of end 2024, operational 173 MW and 264 MW under development.
 - Expected level of GHG offset on per year basis. Actual level can be varied with multiple operating parameters and standard used to calculate kg CO2 e/kWh of the grid.

Capacity of operating solar projects selling to industrial customers increased from 131 MW to 173 MW in 2024. Specifically, the total solar power supplied to customers in 2024 amounted to 157,354,758 kWh in 2024, accounted for a reduction of 61,808 tCO2e, based on the amount of electricity replaced from the grid.



OFFSET FROM GRID ELECTRICITY CONSUMPTION TCO2E PER YEAR

2024 Performance 61,808 tCO2e



2029 Target

683,000

ENERGY SAVING TARGETS

The Group aims to reduce our electricity consumption from the grid within our own operations by 3% by 2024, compared to the base year 2019. In 2024, The Group's accumulated electricity generation capacity from signed Power Purchase Agreements (PPAs) for renewable energy (on an equity basis), which includes solar power, totals 437 MW. Considering the volume of renewable energy sold in 2024, this translates to a Scope 2 greenhouse gas emissions reduction of 61,808 tCO2e, an increase from 51,497 tCO2e in 2023. The Group has also set long-term greenhouse gas reduction targets as follows:



OFFSET FROM GRID ELECTRICITY CONSUMPTION TCO2E PER YEAR

2024 Performance

61,808

tCO2e



2026 Target

160,000

tCO2e



2029 Target

683,000

tCO2e

WHA Group remains committed to improving energy efficiency, optimizing production processes, and utilizing modern technologies like smart energy management systems to achieve these targets. To further this goal, the Group also encourages employee participation at all levels in reducing energy consumption. Additionally, the Group continuously assesses and refines our organizational energy systems to create a positive impact on both cost reduction and long-term environmental sustainability.

4. HIGHLIGHT PROJECTS

OVERVIEW OF ENVIRONMENTAL PROJECTS AND PROGRESS IN REDUCING GREENHOUSE GAS EMISSIONS

In contributing to mitigating the impacts of climate change and preventing negative effects on biodiversity, WHA Group has integrated our specialized technologies to develop projects aimed at reducing greenhouse gas emissions to combat the rapidly changing climate. This is a step towards achieving the goal of Net Zero emissions, as detailed below:

4.1 ENERGY EFFICIENCY PROJECTS AND INTERNAL GHG EMISSIONS REDUCTION

WHA Group has initiated energy saving projects in industrial estates, utility systems in industrial estates, and warehouse rental projects, including WHA Tower, to promote energy efficiency.



Solar Telecom Tower



Solar Street Light

ENERGY-SAVING PROGRAMS IN INDUSTRIAL ESTATES, WAREHOUSES, AND OFFICE BUILDINGS.

The Group initiated energy-saving projects within industrial estates by designing utilities in the industrial estates and leased warehouses for efficient energy consumption. This includes installing LED lights for signage and streetlights in the industrial estates, replacing electrical equipment with more suitable alternatives such as air conditioners, pumps, and motors in wastewater treatment systems, and implementing automatic on/off lighting systems for industrial estate signages and meeting rooms. These efforts extend to energy management projects in the Group's office buildings and rental buildings. In 2024, the energy-saving projects within the industrial estates successfully reduced electricity consumption by approximately 330,646 kWh per year, equivalent to reducing greenhouse gas emissions by approximately 164,993 kilograms of carbon dioxide.

ENERGY-SAVING PROGRAMS IN INDUSTRIAL WATER PRODUCTION PLANTS

WHA Group recognizes the importance of systematic energy management in the water production process to enhance energy efficiency and reduce energy loss at every stage. To achieve this, the following key approaches have been implemented:

- Appointment of an Energy Management Working Team to define guidelines and systematically drive the action plan.
- Assessment of Current Energy Consumption Status to analyze strengths, weaknesses, and opportunities for improvement.
- Implementation of Clear Energy Conservation Policies: Evaluating the energy-saving potential of machinery to identify spaces for efficiency enhancement.

- Setting challenging and tangible energy conservation goals and plans: Developing training programs and activities to promote energy conservation, aimed at enhancing the knowledge and skills of personnel.
- Dedicated and continuous implementation of the action plan: Monitoring and analyzing performance results to align with established targets.
- Continuous system auditing and improvement to foster sustainable development.

Two main energy-saving projects were carried out in 2024, as follows:

HIGH-EFFICIENCY LIGHTING REPLACEMENT PROJECT

In 2024, The Group undertook a project to replace lighting fixtures in production plants in ESIE, WHA EIE 1, WHA CIE 1, and WHA CIE 2. This initiative resulted in an electricity consumption reduction of 125,376 kWh per year, or an estimated greenhouse gas emission reduction of approximately 63 tCO2e.

WASTEWATER PUMPING SYSTEM IMPROVEMENT PROJECT

WHA Group replaced inefficient wastewater pumps, due to their long operational life, with high-efficiency pumps at the water filtration plant in WHA CIE 1. This initiative resulted in an energy consumption reduction of 108,522 kWh per year, or an estimated greenhouse gas emission reduction of approximately 54 tCO2e. In 2025, the Group plans further energy efficiency development and improvements, including:

- Installing Variable Speed Drives (VSDs) to control high pressure pump motors in the Reverse Osmosis (RO) system. This aims to reduce electricity consumption by optimizing the speed of water pumps to suit the operation of the RO water production system at the plants in WHA EIE, ESIE, and WHA ESIE 1. This is expected to reduce energy consumption by up to 1,263,204 kWh per year, equivalent to reducing greenhouse gas emissions by approximately 631 tCO2e.
- Replacing machinery in the industrial water pumping system. By replacing older, less efficient machinery with high-efficiency counterparts, The Group anticipates reducing energy consumption by 336,094 kWh per year, or approximately 168 tCO2e in greenhouse gas emissions.

These approaches reflect the Group's commitment to enhancing energy management and promoting efficient energy consumption, alongside reducing environmental impact, to achieve long-term sustainable business operations.

ENERGY SAVING IN OFFICE BUILDINGS

In addition to implementing energy-saving projects within the industrial estate, all business groups also collaborate to fully support energy conservation efforts in the WHA Tower and office buildings within the industrial estate through the "Let's Save the World Together" project. The objective of this project is to inspire employees to change their energy consumption behaviors to help save energy. This includes optimizing the use of air conditioning and lighting systems, such as turning off electrical appliances, using stairs instead of elevators, and more. This project has led to positive behavior changes towards energy conservation. Furthermore, in 2024, the Group was able to significantly reduce electricity consumption within the WHA Tower office building through various measures. These measures included optimizing the efficiency of operation of the cooling water and air replenishment system for the building's air conditioning system, adjusting the light control system to better suit the nature and working hours of the building's occupants, and installing equipment such as inverters to control electricity usage for optimal efficiency compared to the energy used. These measures implemented in 2024 resulted in a reduction in electricity consumption of more than 532,191 KWh, or approximately reduced greenhouse gas emissions around 265,563 kgCO2.



MOTION SENSOR SYSTEM

The Group recognizes the importance of reducing energy waste caused by lights or air conditioning systems being left on when not in use. To address this, The Group has installed motion sensors in executive offices, meeting rooms, and restrooms. These systems are configured to activate within 5 minutes of no detected motion, automatically turning off lights and air conditioning to efficiently conserve energy. In case a user re-enters the room, the system will immediately reactivate the lights and air conditioning upon detecting motion. This ensures cost-effective energy use, minimizes unnecessary energy waste, and enhances overall energy management efficiency within the buildings.



LifeBeing sensor Model: MSA021D RC (5.0)

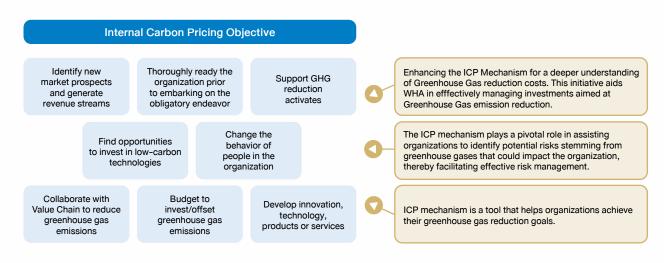


Motion sensor Model: FL-MS MINI360

INTERNAL CARBON PRICING

WHA Group has implemented an Internal Carbon Pricing (ICP) mechanism as part of our climate strategy. This supports sustainable greenhouse gas (GHG) emission reduction. This mechanism plays a crucial role in enabling the Group to effectively identify GHG-related risks and promotes investment in low-carbon technologies, along with developing new innovations, products, or services that meet future demands.

Furthermore, the ICP mechanism encourages behavioral change among internal personnel while facilitating budget planning to reduce or offset organizational GHG emissions. This initiative enhances the Group's understanding of GHG reduction costs and strengthens the effectiveness of risk management, ultimately leading to the ability to achieve long-term GHG reduction targets.



In 2024, The Group established an Internal Carbon Price (ICP) in the form of a Shadow Price, implemented at a company-wide level. This ICP is flexible and can be adjusted to suit local contexts. The price has been set at 40 baht per metric ton of carbon dioxide equivalent (CO2e). This serves as a crucial standard for the Group's environmental management and planning, ensuring future sustainability.

4.2 SOLAR ENERGY PROJECT WITHIN WHA GROUP'S OPERATIONAL AREA

In 2024, WHA Group installed rooftop solar panels at the water treatment plant in WHA Eastern Industrial Estate (Map Ta Phut) (WHA EIE) which reduced traditional electricity consumption by 431,080 kWh per year. Additionally, rooftop solar panels were installed on carports at WHA Eastern Seaboard Industrial Estate 2 (WHA ESIE 2) and WHA Eastern Seaboard Industrial Estate 4 (WHA ESIE 4) leading to a reduction of 439,723 kWh from traditional electricity generation. Furthermore, WHA Group installed solar panels on the office buildings at WHA Eastern Seaboard Industrial Estate 3 (WHA ESIE 3) and implemented a floating solar project at WHA Eastern Seaboard Industrial Estate 1 (WHA ESIE 1). In 2024, these two projects collectively reduced traditional electricity consumption by 728,640 kWh per year. Overall, these initiatives enabled the Group to reduce our commercial fuel energy consumption by approximately 1,599,450 kWh per year, leading to a Scope 2 greenhouse gas emissions reduction of 800 tCO2e per year.

The Group has also been exploring the installation of solar panels integrated with battery storage, kicking off a pilot project at the water treatment plant in ESIE. This project has enabled the Group to reduce traditional electricity consumption by 1,150 MWh annually or converted to 3.34 million baht in savings per year. In 2024, the Group developed and implemented a total of 8 solar power generation projects at water treatment plants, with a combined installed capacity of 1.57 MW. These projects are expected to generate 2,015,972 kWh of renewable energy annually, reducing reliance on fossil fuels and cutting greenhouse gas emissions by 1,007 tCO2e per year. These facilities are anticipated to begin electricity production in 2025.





Looking ahead to 2025, The Group plans to install over 23 solar energy systems with a combined installed capacity of 1.67 MW. These initiatives are projected to produce 2,301,824 kWh of renewable energy annually, further reducing fossil fuel dependence and avoiding 1,151 tCO2e in greenhouse gas emissions per year.

BATTERY ENERGY STORAGE SYSTEM (BESS)

WHAUP Group has implemented a pilot project installing solar panels combined with a Battery Energy Storage System (BESS) on the rooftop of a water treatment plant within Eastern Seaboard Industrial Estate (Rayong) (ESIE). This initiative aims to enhance renewable energy production capabilities and reduce reliance on the main power grid. In 2023, the Group installed solar panels with a total installed capacity of 826 KW, coupled with a BESS capable of storing 580 kWh of electricity. This enabled the Group to reduce its electricity consumption from the main grid by 1,150 MWh per year, resulting in an estimated annual electricity cost saving of approximately 4 Million Baht. Furthermore, this project is projected to reduce indirect greenhouse gas emissions by up to 10,500 tCO2e over its lifespan. In 2024, the project successfully produced 963 MW of renewable energy per year, contributing to a reduction of 481 tCO2e in indirect greenhouse gas emissions annually.

The Group plans to install solar panels with a total capacity of 40,000 KW and a BESS system with a capacity of 24,000 kWh by 2029, with a goal to reduce electricity consumption by 56,000,000 kWh per year, or equivalent to saving about 195 million baht per year in electricity costs. Additionally, this expansion will enable greenhouse gas emissions reduction by 784,000 tCO2e over the project's lifespan.





4.3 CARBON EMISSIONS REDUCTION FOR



CUSTOMERS

Due to the increasing interests from industrial operators looking to transition to green energy for lower costs and to protect the environment, solar rooftop services have matured into the preferred solution. WHAUP's reputation for high engineering and safety standards along with expertise in solar rooftops has fundamentally embedded the trust of customers to shift towards renewable energy use.

WHAUP offers an all-in solar rooftop service package for customers at no upfront cost to customers under long-term Power Purchase Agreements (PPAs). The services includes design, permitting, installation, and long-term operation and maintenance throughout the contract period. With zero upfront cost, customers can allocate their resources to other areas without

concerns about installation or maintenance practices. This helps reduce costs and allows for better resource management in other areas. Additionally, solar power is a cost-effective alternative with less environmental impact compared to conventional fossil fuel-based electricity. The Group has integrated solar system solutions for customers to promote the use of clean energy in industrial estates through the following initiatives.

SAHA FARM AND GOLDEN LINE BUSINESS PROJECT

The project involves the installation and operation of solar power generation for Saha Farms Co., Ltd. and Golden Line Business Co., Ltd., end-to-end chicken product manufacturers and distributors. This project comprises 14 solar floating solar farm and solar rooftop projects with a combined generation capacity of 46.36 MW in Lopburi and Phetchabun areas. These projects are expected to reduce electricity costs by over 1,600 Million Baht throughout the 14-year Power Purchase Agreement (PPA) term and will help reduce greenhouse gas emissions by over 35,000 tCO2e annually.



KIRIU SOLAR FLOATING PROJECT

The solar power project for Kiriu (Thailand) Co., Ltd., a manufacturer of metal components involved in producing brake discs, brake rotors, and automotive parts, is a solar floating and solar farm project. This project will have a generation capacity of 12.3 MW across a 94,000 square meter pond area, located within Eastern Seaboard Industrial Estate (Rayong) (ESIE). Commercial operation (COD) is expected by June 2025. This will enable Kiriu to reduce energy costs and utilize up to 12.2 million units of clean energy annually. Additionally, it is projected to reduce greenhouse gas emissions into the atmosphere by over 9,800 tCO2e per year.



CANADIAN SOLAR ROOFTOP PROJECT

The solar power project for Canadian Solar Manufacturing (Thailand) Co., Ltd., a solar panel manufacturer, is a solar rooftop project with a generation capacity of 11.986 MW across a 67,000 square meter pond area, located within WHA Eastern Seaboard Industrial Estate 4 (WHA ESIE 4). Commercial operation (COD) is expected by 2025. This will enable Canadian Solar Manufacturing (Thailand) Co., Ltd. to reduce energy costs and utilize up to 16 million units of clean energy annually. Furthermore, it is projected to reduce greenhouse gas emissions into the atmosphere by over 8,000 tCO2e per year.





In 2024, WHA Group has installed comprehensive solar system for customers totaling 106 MW.

MOBILIX: DECARBONIZING THE SUPPLY CHAIN

The Group has launched MOBILIX, Thailand's first green alternative transportation solution, operating under the concept of "Driving Sustainability in Motion". This initiative aims to promote sustainability in every movement. MOBILIX is a comprehensive Electric Vehicle (EV) ecosystem designed to meet both individual and business transportation needs. MOBILIX solutions encompass EV fleet rental services with extensive after-sales support, covering a wide range of vehicle types including bicycles, trucks, buses, personal cars, pickup trucks, vans, and industrial EVs. It also offers comprehensive charging solutions, including on-site charging stations and public charging stations that support both personal and commercial EVs.

Furthermore, The Group has developed the MOBILIX platform, a digital platform designed to enhance the efficient management of electric vehicles and batteries for business customers. This platform integrates various services and technologies in one place to support fleet management, optimize travel routes, connect to charging stations, and offer other services that boost operational efficiency, reduce costs, and elevate customer satisfaction through modern technology and seamless connectivity.

Currently, the MOBILIX project has achieved continuous success, with a total of 318 electric vehicles operating under the program. This represents a significant step in developing environmentally friendly transportation solutions to reduce greenhouse gas emissions and



support sustainable operations. The Group plans to expand this project extensively, aiming to increase the number of vehicles under the MOBILIX program to 20,000 units by 2029. This expansion will cater to growing demand and create positive long-term changes for both the economy and the environment.

SMART BUILDING

WHA Group uses technology to manage its buildings efficiently, focusing on energy conservation. The Group adopted a policy to design and construct environmentally friendly and energy-efficient smart buildings to build WHA Tower, our premium office building. The workspaces in WHA Tower feature a floor-to-ceiling height of 2.9 meters and are equipped with large, triple-layered glass panels that allow natural light to illuminate the offices, reducing electricity consumption. These glass panels are also 70% effective at heat insulation, further cutting electricity consumption for air conditioning. Additionally, the Group installed LED lighting throughout the building, which saves up to 50% on electricity compared to traditional light bulbs over the same usage period.

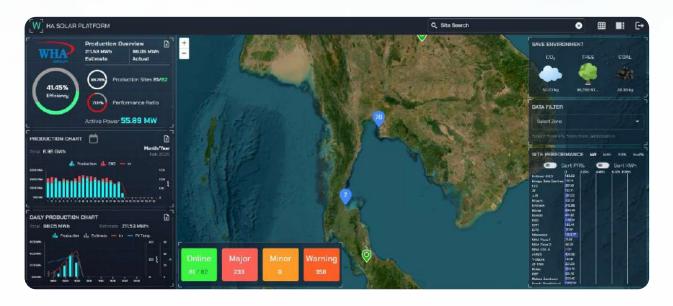
Beyond these features, WHA Tower incorporates a chilled water air conditioning system to enhance occupant comfort while conserving energy. The building also includes inter-floor staircases to reduce elevator usage and save energy. The Group has leveraged technology to transform WHA Tower into a smart building by installing various systems: contactless building access control, temperature screening at the entrance, motion sensors, and comprehensive security features such as fire detection systems, license plate recognition for vehicles entering and exiting the building, and 24-hour CCTV surveillance. To further reduce energy consumption and greenhouse gas emissions, the Group also provides shuttle services from WHA Tower to nearby public transportation hubs and shopping malls.

SOLAR AI SYSTEM

WHA Group is committed to being a leader in providing comprehensive solar energy system installation services, offering modern and highly efficient solutions to customers. In 2024, the Group significantly expanded our service scope with an increase of over 82 projects, reflecting the trust customers place in our services. To elevate service quality, enhance operational efficiency, reduce costs, and gain a competitive advantage in the rapidly growing solar energy sector, and to ensure maximum energy management efficiency, the Group has integrated Artificial Intelligence (AI) technology into its management system for operational control and data analysis through three key components:

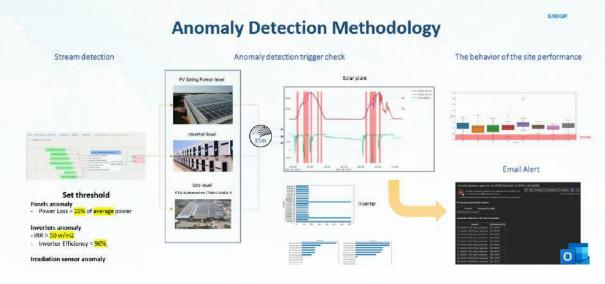
- Solar Monitoring Platform This real-time solar energy monitoring and management system enables precise control over energy production, detailed electricity generation data checks, and instant notifications of any anomalies. Its key features include:
 - **Precise energy production control:** Real-time monitoring of electricity generation data to ensure the system operates at peak efficiency.
 - Rapid problem detection and resolution: Immediate alerts for abnormalities, reducing the risk of energy loss.
 - Enhanced energy production efficiency: Data analysis to improve the performance of solar energy systems.
 - Efficient energy management: Optimal planning of energy production and management.

The solar energy performance monitoring platform is designed for ease of use and accessibility from anywhere, allowing convenient and efficient oversight of solar energy systems. With this platform, the Group aims to help fully leverage solar energy, enhance energy security, and contribute to building a sustainable future.



- Al Anomaly Detection: This intelligent anomaly detection system has been applied to revolutionize maintenance processes and elevate energy production efficiency to the next level. This system leverages the power of Artificial Intelligence (AI) to collect and analyze data from various energy production projects. This allows for precise and rapid detection of potential anomalies, enabling us to effectively plan preventive maintenance, reduce the risk of system downtime, and promptly address issues before severe damage occurs.
 - **Prevent System Downtime:** Reduce losses from electricity production interruptions and minimize energy loss caused by system anomalies.
 - Extend Machine and Equipment Lifespan: Increase return on investment and reduce maintenance costs.
 - Forecast Future Production Volume: Analyze data to accurately forecast electricity production volume, allowing for efficient planning of energy procurement and management.

The AI Anomaly Detection system not only enhances operational efficiency but also contributes to the stability and sustainability of energy production systems.



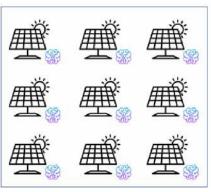
- AI Forecasting (AI Forecasting System): This powerful tool has become instrumental in gaining a competitive advantage and maximizing profitability. The AI Forecasting system possesses the following management capabilities:
 - Predicting future energy production possibilities: Analyzing in-depth data to assess long-term energy capacity.
 - Forecasting electricity production volume:
 Accurately predicting electricity production volume, enabling efficient planning of energy procurement and management.
 - Recommending maintenance activities:

 Planning preventive maintenance to reduce
 the risk of system downtime.
 - Accurately alerting on future potential damage: Detecting early warning signs of potential damage to prevent severe harm.

The Group is committed to offering advanced AI technology to support the creation of a secure and sustainable energy future.



Deployment & Feedback



Solar Sites

GREEN BUILDING

WHA Group has a policy to design and build environmentally friendly warehouses, such as using precast systems in the construction process to help reduce waste that impacts the environment, as well as noise pollution, dust, and traffic issues at construction sites. Furthermore, building designs are aligned with the Leadership in Energy and Environmental Design (LEED) standards. WHA Group also considers resource utilization by using water-saving sanitary ware, installing solar energy systems, and implementing electricity monitoring systems in buildings to assess energy use in more detail (efficient building energy use standards that are globally recognized). Additionally, 100% of the Group's warehouses are also designed to accommodate energy production, especially structures that support solar power systems.



LEED GOLD CERTIFICATION AT WHA MEGA LOGISTICS CENTER

Currently, WHA Group is a property manager of WHA Mega Logistic Center Theparak KM 21, a building certified with LEED GOLD standard. This building features a floor space of 27,212 square meters with a 0.28 MW solar rooftop area to contribute to energy savings, etc. It is now fully operational and accesstible to customers.

RAISING AWARENESS ON ENERGY CONSERVATION

WHA Group recognizes the importance of effective and sustainable energy management, understanding that the foundation of our success is every individual within the organization. As a result, in 2024, the Group implemented the following trainings to enhance staff skills in energy management:

- Compliance for Energy Management Systems: This workshop was held on September 17, 2024, for operational staff from Eastern Seaboard Industrial Estate (Rayong) Co., Ltd., WHA Eastern Industrial Estate Co., Ltd., and WHA Industrial Development PLC. A total of 35 employees participated.
- Energy Conservation Promotion Game and Sports
 Event: This event, aimed at promoting energy







conservation, took place on November 27, 2024, for operational staff from Eastern Seaboard Industrial Estate (Rayong) Co., Ltd., WHA Eastern Industrial Estate Co., Ltd., and WHA Industrial Development PLC. A total of 165 employees participated in the activities.

Encouraging Employee Engagement in Organizational Environmental Management through Various Projects: This includes a bootcamp project to foster collaboration among employees in developing innovative sustainability projects, providing knowledge to staff through training, and the WHAppy project themed "WHAppyVerse, Land of Sharing." This event focused on educating and engaging employees to raise awareness of the importance of sustainability operations.

ENERGY EFFICIENT BUILDINGS

In 2023, WHA Tower Bangna received the MEA Energy Awards certification from the Metropolitan Electricity Authority (MEA) in recognition of its outstanding performance in energy efficiency and conservation. The award was granted based on the MEA Index, a standardized metric developed to evaluate energy usage and management practices in buildings. This achievement underscores WHA Group's strong commitment to promoting sustainability and reducing environmental impact through the adoption of advanced energy-saving technologies and green building standards. As a result of these efforts, the company has seen increased interest from tenants seeking environmentally responsible workspaces, contributing to growing revenues from energy efficient buildings. This not only supports WHA Group's long-term sustainability goals but also enhances the overall value and competitiveness of its property portfolio in the market.

5. IMPACTS ON STAKEHOLDERS AND ENVIRONMENT

WHA Group recognizes both the positive and negative impacts that may arise on the economy, environment, and society, including the human rights of its stakeholders. On the positive side, promoting clean energy and energy conservation projects helps reduce energy costs for industries, lowers greenhouse gas emissions, and creates new, environmentally friendly business opportunities. At the same time, the Group acknowledges that its operations may have negative impacts, such as the consumption of natural resources in energy infrastructure development projects, land-use changes for industrial development, and potential human rights risks within the industrial supply chain. To mitigate these, the Group has established proactive measures through practices aligned with good governance principles and international sustainability standards.

The Group is committed to systematically managing energy to address climate change. We prioritize developing and improving energy projects that meet environmental challenges and create long-term value for our stakeholders. This includes reducing environmental impact, enhancing energy efficiency, and promoting sustainability at both organizational and societal levels.



We focus on developing and delivering efficient, eco-friendly energy projects to our customers. Our efforts include increasing the proportion of renewable energy used, developing Smart Energy infrastructure, and leveraging cutting-edge technology to reduce greenhouse has emissions. The Group promotes clean energy generation and energy conservation projects for customers, such as solar rooftop systems, energy storage systems, and comprehensive energy management initiatives. These solutions empower customers to manage energy efficiently, lower energy costs, and lessen their overall environmental impact.

The Group also implements projects that support the circular economy, enabling customers to reuse energy and utilize energy resources as efficiently as possible. This approach not only helps customers achieve their sustainability goals but also mitigates the impacts of climate change, while supporting the stable and sustainable growth of both industry and the broader economy.

6. NEXT STEP

WHA Group is committed to developing and investing in renewable energy projects to enhance the sustainability of our operations. We aim to achieve a total renewable energy generation capacity of 1,200 megawatts by 2029, which will reduce carbon dioxide equivalent (CO2e) emissions by up to 683,000 tons annually. This investment in renewable energy is crucial not only for mitigating environmental impact but also for supporting the Group's expansion in an environmentally friendly and socially responsible manner. The Group will utilize renewable energy to power all our operations, including providing the necessary energy for our water plants. By 2029, we will source 100% of the energy needs for our water plants from renewable sources. This transition to clean energy will boost production efficiency and lessen our reliance on unsustainable energy sources, ensuring that the Group's business operations align with our greenhouse gas reduction targets and contribute to a better environment in the long term.

BIODIVERSITY AND NO DEFORESTATION



1. GLOBAL TREND

Biodiversity has increasingly become a critical component of global business strategies, as organizations recognize the profound interconnection between healthy ecosystems and long-term business sustainability. Key trends include the adoption of frameworks that aim to generate positive impacts on biodiversity, such as ecosystem restoration, deforestation prevention, and the promotion of sustainable resource use. Businesses are placing greater emphasis on biodiversity-related disclosures through international standards such as the Taskforce on Nature-related Financial Disclosures (TNFD), in order to manage risks and dependencies related to natural capital. In addition, Nature-based Solutions (NbS), such as reforestation, habitat restoration, and sustainable supply chain practices aligned with environmental objectives, are gaining widespread adoption. Companies are also forming partnerships with environmental organizations, governments, and local communities to jointly implement projects that support global biodiversity goals. These efforts reflect a growing understanding that thriving ecosystems are fundamental to long-term economic resilience and sustainable development.

2. OUR POSITION

The Group places great importance on managing the impacts of its operations, activities, and processes on biodiversity throughout its value chain. This includes building construction, water extraction from natural sources, transportation, and industrial production activities all of which have the potential to affect biodiversity, ecosystems, and surrounding natural environments.

To demonstrate our commitment to minimizing these impacts, the Group has established a biodiversity policy that is reviewed and approved annually by the Sustainability Governance Committee. This policy is regularly updated to align with global trends. Furthermore, the Group integrates the Mitigation Hierarchy approach comprising avoidance, minimization, restoration, and offsetting into its operational practices to manage risks and reduce biodiversity-related impacts to the greatest extent possible.

The Group also conducts annual biodiversity risk assessments to ensure that its business operations result in the lowest possible environmental impact. To enhance transparency, we are committed to disclosing biodiversity-related information through internationally recognized frameworks such as the Taskforce on Nature-related Financial Disclosures (TNFD), reflecting our ongoing efforts to conserve biodiversity and ensure the long-term sustainability of ecosystems.

The Group committed to managing both current and future projects responsibly to achieve a Net Positive Impact on biodiversity by 2050. We also pledge to achieve No Gross Deforestation by 2050, aligning with our broader ambition to reach Net-Zero greenhouse gas emissions by the same year.

As a part of our current operations, we strictly adhere to legal requirements and regulations specified in Environmental Impact Assessment (EIA) reports. Additionally, we avoid negative impacts by carefully selecting business sites and implementing appropriate design and construction plans. We have a policy in place to avoid conducting business operations in areas registered by the United Nations Educational, Scientific and Cultural Organization (UNESCO) as World Heritage Sites or protected areas under IUCN Category HIV. However, if any business operations areas are in proximity to these conservation areas, WHA Group will undertake measures to mitigate any negative impacts. If the forest resource destruction is unavoidable, the Group will compensate for the loss by replanting forests in another area. The compensatory forest plantation must be equal to or larger than the area affected by deforestation. Furthermore, the Group implements control measures to reduce other negative impacts, restore any damage resulting from our business activities, and compensate any negative impacts occurred.

Additionally, WHA Group also establish the biodiversity policy to cover all our suppliers and contractors, especially contractors and suppliers directly engage with the Group (Tier-1), and business partners. If any entities are unable to follow the regulations in the policy, the Group will immediately investigate to raise awareness of contractors and business partners on forest and biodiversity conservation during the operations. We also conducted a risk assessment from business activities to ensure that such activities do not generate negative impacts on biodiversity.

3. MANAGEMENT APPROACH

3.1 GOVERNANCE STRUCTURE

The Group places strong emphasis on the conservation and restoration of biodiversity, recognizing the vital role that balanced ecosystems play in supporting sustainable business operations and generating positive impacts for both society and the environment. To drive this commitment, the Group has established a Corporate Governance and Sustainable Development Committee under the oversight of the Board of Directors. This committee is responsible for defining strategies, policies, and operational guidelines related to biodiversity, with a focus on prevention, mitigation, and restoration of impacts from business activities. It also promotes ecosystem balance through environmentally friendly approaches. Furthermore, the committee actively supports the development and adoption of technologies and innovations that minimize biodiversity impacts—such as the use of clean energy, efficient resource management, and the restoration of green areas affected by the Group's operations.

To ensure effective implementation, the Corporate Governance and Sustainable Development Committee has assigned the Working Group to develop and execute a Biodiversity Action Plan. Key measures include the conservation of native flora and fauna, ecological restoration in impacted areas, and balancing resource use with environmental preservation. The working group is also tasked with monitoring ecological impacts, evaluating the effectiveness of implemented measures, and reporting progress to the committee on a regular basis. This process enables continuous improvement in line with both national and international environmental regulations, and helps enhance the overall efficiency of biodiversity management.



3.2 RISK AND OPPORTUNITIES MANAGEMENT STRATEGY

Biodiversity plays a critical role in the sustainability of the Group's business operations. The Group faces dependency-related biodiversity risks, particularly due to its reliance on natural resources such as soil, water, and local ecosystems. Degradation or loss of these resources can significantly impact the supply chain, production efficiency, and operational costs. In addition, impact-related biodiversity risks—such as habitat destruction, waste discharge, or deforestation caused by business activities can lead to growing pressure from stakeholders, the tightening of environmental regulations, and reputational damage.

Conversely, biodiversity also presents opportunities for the Group to create long-term value. These include the development of nature-based solutions, ecosystem restoration in industrial areas to support environmental sustainability, and the promotion of products and services that contribute to conservation. These opportunities not only help mitigate long-term risks but also enhance business credibility and support the Group's overall sustainability agenda.

To address these challenges and opportunities, the Group conducts an annual biodiversity risk assessment focusing on areas with potential biodiversity impacts. In 2024 (B.E. 2567), the assessment classified operational sites into three main categories based on risk levels.

1. OWN OPERATIONS

The Group's business operations are clearly defined within designated areas inside WHA's industrial estates, ensuring that all activities remain confined to these boundaries to prevent any encroachment on surrounding forest ecosystems. Notably, two of the Group's industrial estates WHA CIE 2 and WHA ESIE 2 located in Chonburi Province, are situated near the Khao Khiao–Khao Chomphu Wildlife Sanctuary, covering a total area of 4,167 rai (approximately 567 hectares). Environmental Impact Assessments (EIA) have confirmed that these operations do not adversely affect local terrestrial or marine ecosystems. The Group has also implemented ongoing monitoring plans

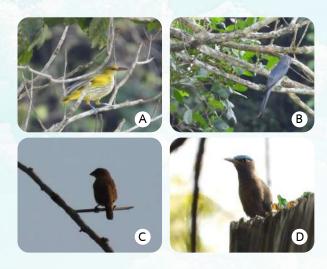
and supports collaborative research with relevant conservation organizations to preserve the local biodiversity.

Biodiversity monitoring in the surrounding areas is conducted biennially, focusing on species richness and wildlife populations near the industrial estates. The Group also conducts regular air quality assessments and supports forest conservation projects and academic research on the impacts of industrial activities on ecosystems. As part of its ecological stewardship, the Group has initiated reforestation efforts, particularly with air-purifying species such as Pterocarpus indicus (pradoo) and Polyalthia longifolia (Indian ashoka), to help mitigate industrial air pollution. Furthermore, zoning restrictions are enforced to prevent highemission factories from operating near the Khao Khiao –Khao Chomphu Wildlife Sanctuary.

Employees are strictly prohibited from engaging in activities that could damage biodiversity, such as tree cutting, hunting, or any behavior that violates wildlife protection laws. To strengthen its understanding of local biodiversity, the Group conducts comprehensive wildlife and plant surveys, including assessments of species diversity, abundance, conservation status, and distribution. These surveys cover areas within wildlife sanctuaries, nearby communities, agricultural zones, and industrial estates. As part of the EIA requirements, bioindicators are studied and plant species assessments are conducted. The Group has been granted official permission from the national park authority to collect data on flora and fauna from November 5, 2024 to June 2025, with fieldwork already underway.



Image showing the surveyed forest area



The birds observed in the forested area include:(a) Black-naped Oriole (Oriolus chinensis),(b) Ashy Drongo (Dicrurus leucophaeus), (c) Scaly-breasted Munia (Lonchura punctulata), and (d) Indian Roller (Coracias benghalensis).

In addition, WHAID and WHAUP have conducted studies on aquatic biodiversity such as plankton, aquatic animals, and aquatic plants at WHA Eastern Seaboard Industrial Estate 4 (WHA ESIE 4) and WHA Rayong 36 Industrial Estate (WHA Rayong 36), focusing on canals that receive treated wastewater discharge from the industrial estates. These studies are conducted once a year.

2. ADJACENT AREA

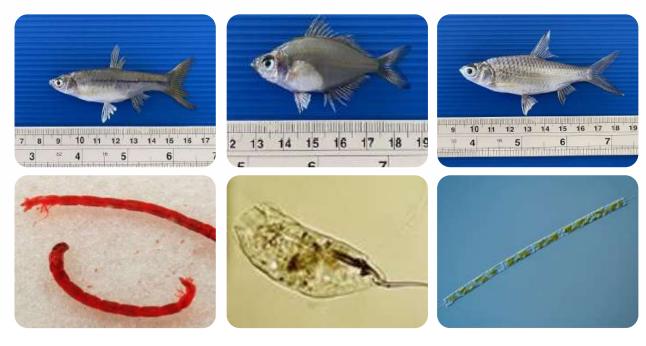
The Khao Khiao-Khao Chomphu Wildlife Sanctuary is located near the Group's industrial estates and is an area of concern regarding biodiversity. It covers an area

of 90,438 rai (14,470 hectares). The focus is on studying biodiversity such as plankton, aquatic animals, and aquatic plants to compare results with established standards, as well as complying with ISO14001 standards and developing business in alignment with sustainability policies.

3. UPSTREAM & DOWNSTREAM

The upstream and downstream areas assessed for biodiversity risk include the aquatic ecosystem canals within WHA Chonburi Industrial Estate 2 (WHA CIE 2), and WHA Eastern Seaboard Industrial Estate 2 (WHA ESIE 2), covering an area of 4,167 rai (667 hectares). The Group studies the aquatic ecosystems and has established management plans to monitor biodiversity risks every two years, aiming to balance business development with long-term natural resource conservation.

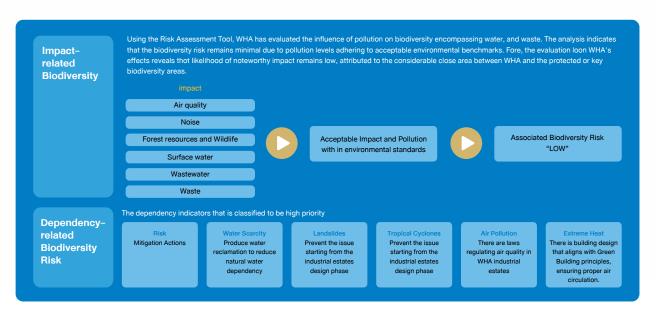
For the adjacent, upstream, and downstream areas, the Group monitors aquatic ecosystems of living organisms in mountain and reservoir areas that receive treated wastewater from the industrial estates. Samples are collected to study biodiversity indicator variables (such as phytoplankton, zooplankton, aquatic animals, aquatic plants, and benthic organisms) and are compared with assessment results. Monitoring is conducted twice a year, from the upstream areas to the downstream points receiving treated wastewater from the projects.



Type of Site	Location	Site	Areas	Exposure	Assessment	Management Plan	
Own Operations	Chonburi	WHA Chonburi Industrial Estate 2 (WHA CIE 2)	631 rai or 101 hectares	Located near Khao Khiao- Khao Chompu Wildlife Sanctuary	Impact Assessment :EIA Terrestrial : No impact Marine: No impact	 Monitoring ambient air quality and provide support for research conducted by local forest conservation 	
	Chonburi	Chonburi WHA Eastern 3,536 rai province. Seaboard or 566 Industrial hectares Estate 2 (WHA ESIE 2)			organizations or educ institutions on the effe industrial operations o ecosystem.		
Adjacent Area	Chonburi	Khao Khiao- Khao Chompu Wildlife Sanctuary	90,438 rai or 14,470 hectares	Wildlife sanctuary located near WHA's industrial estates that have biodiversity concerns.	A baseline study of each biodiversity parameter (phytoplankton, zooplankton, aquatic animals, aquatic plants, and benthos) was conducted to allow for comparison with monitoring result.	WHA ensures the business development to comply with forest and biodiversity regulations with following tools: Procedure of Risk Assessment as ISO requirement Biodiversity measurement and evaluation of change EIA Monitoring report	
Upstream & Downstream	Chonburi & Rayong	Supply chain located in WHA CIE 2 and WHA ESIE 2	4,167 rai or 667 hectares	Aquatic ecology within the canal into which the industrial estate Withdraw water and discharges its treated wastewater.	A baseline study of each biodiversity parameter (phytoplankton, zooplankton, aquatic, animals, aquatic plants, and benthos) was conducted to allow for comparison with monitoring result.	Biodiversity risks at are re-assessed every two years, as required by the EIA, to investigate changes and additional impacts caused by industrial developments on forest resources and wildlife.	

BIODIVERSITY RISK ASSESSMENT RESULTS

The biodiversity risk assessment in 2024 indicated that the biodiversity index remains within the standard range, reflecting no severe impacts on biodiversity from the operations of the industrial estates. This applies both to dependency-related biodiversity risks (risks associated with reliance on natural resources) and impact-related biodiversity risks (risks arising from the business's impact on biodiversity). The assessment shows that the Group's operations remain within acceptable environmental standards, with biodiversity-related risks classified as "low." This indicates that the impact of the Group's business activities on ecosystems and biodiversity is controllable and aligns with the established environmental standards. Furthermore, the Group has implemented water quality improvement projects to enhance biodiversity.



3.3 RISK MANAGEMENT

BIODIVERSITY MANAGEMENT APPROACH

The Group has implemented a comprehensive Biodiversity Assessment and Monitoring System to ensure that its operations fully comply with applicable laws and standards. The process is divided into two main stages as follows:

PRE-PROJECT DEVELOPMENT AND CONSTRUCTION PROCESS

The Group conducts location-specific assessments by referencing relevant sources such as the National Environmental Protection and Preservation Act B.E. 2535 and its amendments in B.E. 2561, as well as other biodiversity tools and frameworks like the Integrated Biodiversity Assessment Tool (IBAT) and the Species Threat Abatement and Restoration Metric (STAR).

Biodiversity data in the area is collected through geological and land-use studies, surveys of plant species and forests, as well as ecological studies of plants and animals, including food sources in the food chain. This information is used to carry out the Environmental Impact Assessment (EIA) and to develop mitigation and prevention plans.

PROJECT OPERATION PHASE

The Group adheres to the mitigation and prevention measures specified in the EIA reports for each industrial estate and develops a Biodiversity Action Plan (BAP) to manage potential risks to plants, wildlife, and the environment. Monitoring and reporting are conducted, such as checking the number and diversity of species in the industrial area and surrounding zones every two years. The monitoring results are reported to local authorities and the EIA committee of the industrial estate. The Group also participates in a tripartite committee to communicate with stakeholders and raise awareness about the importance of the ecosystem within the Group's industrial estates.

Pre-Project Development and Construction Process

Location-Specific Assessment



Farmwork/ Regulation / Information Source

- The National Environmental Protection and Preservation Act B.E.E.2535 (1992) and (No. 2) B.E. 2561 (2018)
- Integrated Biodiversity Assessment Tool (IBAT)
- Species Threat Abatement and Restoration Metric (STAR)
- Natural Capital Finance Alliance's Encore



Collect Biodiversity Data in the Area

- Geology study and land use
- Survey forest and plant species in area
- Study ecology of plants and animals including food chain source



Environment Impact Assessment (EIA)

- ELA mitigation for preventing
- Prepare Control and Mitigation Plan

Project Operation Phase

Strictly adheres to the preventive and mitigative measures stipulated in the reports of each industrial estate in order to minimize and alleviate the impacts.

 Developed a Biodiversity Action Plan (BAP) as part of its risk management strategy to mitigate potential impacts on plants, wildlife, and the environment



EIA Monitoring and Report

 WHA is required to monitor the species count and abundance of wildlife within the industrial complex and surrounding areas every two years in potential area.



Report and Engagement

- All EIA-required monitoring results are reported to local authorities as well as the Industrial Estate EIA Committee.
- WHA Group participates in a Tripartite Committee to communicate with stakeholders to recognize the significance of the ecosystem in each WHA Group's Industrial Estate.

BIODIVERSITY ACTION PLAN: BAP

The Group has developed a Biodiversity Action Plan (BAP), which is one of the Group's key risk management plans. Its goal is to prevent and mitigate potential impacts on plants, wildlife, and the environment in all areas where the Group operates. The plan is designed to align with the organization's sustainable development guidelines and considers environmental factors at every stage of operation.

Under this Biodiversity Action Plan, the Group has established comprehensive measures including the conservation of ecologically important areas, restoration of affected areas, monitoring and surveillance of ecological changes, and promoting community participation in nearby areas. The plan emphasizes collaboration with stakeholders across all sectors to achieve sustainable long-term outcomes.

The Biodiversity Action Plan has also been integrated across all operational areas of the Group, including industrial estates, infrastructure development projects, and all related activities. This ensures that operations in every area cause minimal environmental impact while adding value to the ecosystems within the organization's operational zones.

To ensure alignment with the established plans and measures, the Group engages external agencies to conduct regular audits and evaluations of the Biodiversity Action Plan (BAP Audit) across all operational sites. This is part of the Environmental Impact Assessment monitoring (EIA Monitoring), with compliance checks conducted every six months. These audits help identify any issues or gaps, allowing for necessary improvements and the development of measures to enhance effective and sustainable operations in the future.

 Assessing and managing biodiversity through the enforcement of the Group's Environmental Quality, Energy Conservation, and Biodiversity Policy.



- Conducting a biodiversity risk assessment in our own operations and critical suppliers to ensure that areas with biodiversity risks are strictly controlled and managed.
- Operating business with the highest responsibility in the Group's operational areas and addressing biodiversity sensitivities.
- Identify actions to avoid and mitigate negative impacts on biodiversity.
- Applying the Mitigation Hierarchy framework (avoid, reduce, regenerate, restore, transform), starting with avoiding and reducing severe impacts by improving the operations while regenerating and restoring the affected ecosystems as well as addressing the nature loss.
- Encouraging community and key stakeholder engagement to improve the efficiency of biodiversity management, emphasizing participation and consultation in related operations.
- Collaborating with external partners and biodiversity experts to conserve, restore, and evaluate biodiversity to find the biodiversity management approach to achieve the business commitment to no net loss of biodiversity values.

MITIGATION HIERARCHY FOR REDUCING BIODIVERSITY IMPACTS

The Group has adopted a comprehensive strategy for biodiversity conservation based on the Mitigation Hierarchy approach to minimize negative impacts on biodiversity. This approach ensures no net loss and no deforestation. The Group has implemented five key measures as follows:

Туре	Strategy / Measures
Avoid	 To prevent environmental damage, the Group prioritizes avoiding activities that may negatively impact nature. Key avoidance strategies include: Commitment to avoid business operations in areas of high biodiversity importance. Implementing group-wide policies on environmental quality, energy conservation, and biodiversity to manage all types of waste effectively and prevent impacts on ecosystems. Assessing biodiversity risks and preparing Environmental Impact Assessment (EIA) reports to identify risks and plan mitigation before construction or operations. Prohibiting operations in UNESCO World Heritage sites or protected areas under IUCN Category IV. Establishing guidelines for sustainable and clean construction practices.
Reduce	 The Group is committed to reducing reliance on natural resources through strategies such as improving production processes, designing new products, enhancing product care, developing business models, and engaging suppliers. Key reduction actions include: Developing water recycling systems to reduce dependence on natural water sources and maximize reuse of wastewater. Constructing green buildings by selecting environmentally friendly materials and avoiding materials that emit volatile organic compounds (VOCs) and asbestos. Initiating the WeCYCLE project to reduce waste and emissions by recycling PET bottles, paper, and oil into reusable products. Strengthening cooperation with suppliers to raise awareness about natural resource dependence, helping to reduce environmental and biodiversity impacts across the value chain.
Regenerate	The Group commits to regenerating and sustainably developing existing real estate or land with an integrated approach focusing on environmental, social, and economic factors. This includes design, construction, and management of properties and communities to restore natural systems, improve social well-being, and promote economic prosperity. Examples include: • Forest conservation projects planting species like Resin tree (Yang Na), Mammea siamensis (Sarapee), Cha-Om, and Saeng Sanab to reduce biodiversity loss in operational areas. • Reforestation in other areas equal or larger in size to those affected by company deforestation. • Establishing biodiversity action plans to guide projects with high biodiversity risk and properly monitor and mitigate impacts.
Restore	The Group collaborates continuously with government agencies, private sector, and local communities to restore and enhance forest ecosystems, increasing green space as oxygen producers and community lungs, reducing greenhouse gas emissions, and promoting sustainable business practices in industrial estates. Examples include: • Forest restoration projects in green areas around the Group's industrial estates to enhance green space and ecosystem integrity. • Increasing oxygen in wastewater before discharge to public water bodies, e.g., installing waterfalls at WHA Eastern Seaboard Industrial Estates 2 & 4 (WHA ESIE 2 & 4) to improve water oxygen levels suitable for aquatic life.
Transform	 The Group addresses root causes of nature loss by collaborating with partners and pushing strong policies on nature and climate change. Transformation projects include: Collaborating with supply chains and sectors to promote solar power generation to reduce greenhouse gas emissions, such as partnering with the Electricity Generating Authority of Thailand (EGAT) on peer-to-peer energy trading systems and working with PTT Public Company Limited and Certis Company Limited on solar energy trading platforms. Partnering with leading educational institutions, private companies, and government agencies to establish the Thailand CCUS Consortium to boost competitiveness in CCUS technology. Promoting transition from fossil fuels to clean energy by using electric vehicles (EVs) and installing EV charging stations powered by renewable energy for employees and customers. Supporting government projects to achieve climate and nature goals such as carbon neutrality and net zero greenhouse gas emissions through environmental management technologies. Implementing technology in operations such as "smart" warehouse inspections using drones and "smart meters" to digitally monitor water and electricity use, reducing emissions from transport activities.

NO DEFORESTATION

In line with the biodiversity guidelines, WHA Group has established a no-deforestation policy which is approved by a dedicated oversight committee annually. WHA Group committed to compensating for deforestation resulting from the operations of WHA Group, tier-1 suppliers, and partners with future reforestation (no net deforestation) which we have successfully achieved. We are currently focusing on our commitment to end all deforestation (no gross deforestation) in our own operations, tier-1 suppliers, and partners by 2050.

Furthermore, WHA Group has developed supporting plans to manage and mitigate risks and impacts in line with the anti-deforestation policy. A monitoring and



compliance system has been established to ensure the diligent implementation of the policy and adherence to relevant forestry regulations and/or mandatory standards. The implementation and oversight of these measures are assigned to the Operations Department (IEO) to conduct regular inspections and controls, including reporting on the results. These actions are specified in the Environmental Impact Assessment (EIA) conducted every 6 months.

4. METRICS AND TARGETS

WHA Industrial Development Public Company Limited, the Industrial Estate Authority of Thailand, and the Community of Village No. 7, Klong Kio Subdistrict, Ban Bueng District, Chonburi Province, jointly signed a memorandum of understanding on tree planting and maintenance under the project Let's Zero Together.

In 2024, 1,200 trees were planted on a 3-rai area at Khao Nok Takrum Monastery, Khao Kan Song Subdistrict, Ban Bueng District, Chonburi Province, on August 22, 2024.





The Group has supported environmental activities to conserve forest resources and water sources in collaboration with the Office of Natural Resources and Environment, Rayong Province, through two projects

- 1. The "Revive and Restore Life to Rayong's Water" activity, held on September 6, 2024.
- 2. The "Love Rayong, Love Rayong River" activity, which involved releasing seabass to celebrate Thai Environment Day 2024, held on December 17, 2024.





The tree planting project aims to increase green areas, enhance carbon dioxide absorption rates, and promote biodiversity in the area. In 2024, on December 17, a total of 15,165 trees were planted at WHAESIE2 on the green area adjacent to the Khao Khiao-Khao Chomphu Wildlife Sanctuary. Meanwhile, at WHAIER, 23,500 trees have already been planted in the industrial estate's green zones. The planting approach focuses on creating forests with evergreen trees, supplemented by "nurse trees" that produce fruits to provide food for local birds, thereby promoting biodiversity within the industrial estate area.





WATER QUALITY IMPROVEMENT PROJECT TO ENHANCE BIODIVERSITY

Beyond studying water quality to assess impacts on aquatic ecosystems, the Group also implements various projects to ensure its water management operations are sustainable, maintain good quality, and do not harm biodiversity, including:

A wastewater rehabilitation project aimed at reducing the volume of wastewater discharged into natural water sources. The amount of wastewater treated in this project is equivalent to the domestic water consumption of approximately 240,000 people per day (based on a consumption rate of 150 liters per person). This means the Group can conserve natural soil surface area equivalent to about 32% of the total population in Rayong Province (based on the registered population of 751,000 in 2021).

Additionally, the Group has measures to increase oxygen levels in treated wastewater before releasing it into public water bodies, such as installing cascades at WHA Eastern Seaboard Industrial Estate 2 (WHA ESIE 2) and WHA Eastern Seaboard Industrial Estate 4 (WHA ESIE 4). These cascades raise the oxygen concentration in the water to more than 4 milligrams per liter, which helps increase biodiversity in aquatic environments.

TRIPARTITE COMMITTEE MEETING TO FOSTER ENVIRONMENTAL AND ECOSYSTEM AWARENESS

The Group has organized meetings of the Tripartite Committee, appointed by the Industrial Estate Authority of Thailand (IEAT), to promote awareness of environmental

management and ecosystem conservation within the industrial estate area. This Tripartite Committee was established under the quality of life measures (covering social and economic aspects) outlined in the Environmental Impact Assessment (EIA) report. It comprises representatives from the Group, government agencies, local communities, and civil society within a 5-kilometer radius of the industrial estate. All three parties work closely together to ensure that the Group's business operations do not negatively impact the environment, society, or biodiversity. Additionally, the committee supports improving the quality of life of local communities and the surrounding environment, aligning with the Group's long-term sustainable growth goals.

The Tripartite Committee meetings are held twice a year as required by the EIA report. Each industrial estate reports on the implementation of measures to mitigate and prevent environmental impacts, and discusses key topics related to biodiversity conservation. The agenda includes participation in efforts to reduce biodiversity loss by gathering feedback and suggestions from all stakeholders, as well as addressing problems and complaints. The outcomes are used to improve environmental policies and measures.

The meeting results are documented in the EIA report submitted to the Office of Natural Resources and Environmental Policy and Planning (ONEP). The Group places high importance on continuous monitoring and safeguarding of biodiversity to prevent impacts from business activities. In 2024, meetings were held on

September 17 at WHA Eastern Seaboard Industrial Estate 2 (WHA ESIE 2) and October 27 at WHA Chonburi Industrial Estate 2 (WHA CIE 2), emphasizing cooperation among all sectors to achieve tangible results in biodiversity loss reduction.

PUBLIC OPINION SURVEY

When establishing a new industrial estate, the WHA Group conducts public opinion surveys and prepares an Environmental Impact Assessment (EIA) report that includes biodiversity management. The Group invites various relevant agencies, including local authorities, government agencies, and independent organizations (NGOs) such as the Volunteer Network for Natural





Resources and Environmental Protection (ทสม.) of Rayong Province, the Eastern Environmental Network, Ban Khai Rak Ban Koet Group, the Anti-Global Warming Coalition Network, and the Rayong River Water Quality Monitoring Network in Ban Khai District, Rayong Province.

These stakeholders are invited to express their opinions and concerns, especially regarding biodiversity, to ensure that the construction of the new industrial estate by the Group does not negatively impact stakeholders or the biodiversity of the local ecosystem.

BIODIVERSITY-RELATED CERTIFICATION PROJECTS

The Group has participated in biodiversity-related certification projects through pilot initiatives and systematic implementation. This includes testing and assessing impacts in the early stages and continuously applying the certification system throughout all operational processes. This ensures that all activities positively impact biodiversity and comply with established standards. The Group is committed to developing and improving operations to support sustainable development and environmental responsibility across all business dimensions.

The Group complies with biodiversity standards, including ISO 14001 certification, which guarantees that business operations do not negatively affect biodiversity. This certification covers all industrial estates of the Group in both Thailand and Vietnam.

5. IMPACT ON STAKEHOLDERS AND THE ENVIRONMENT

The Group's biodiversity initiatives have significant positive impacts on both the environment and stakeholders in a comprehensive manner. For the environment, the Group applies the Mitigation Hierarchy, which includes avoidance, minimization, restoration, and compensation measures to reduce damage to ecosystems, support natural resource conservation, and prevent degradation of natural areas. Moreover, aligning operations with international standards such as the Taskforce on Nature-related Financial Disclosures (TNFD) clearly supports long-term sustainable development goals.

Regarding stakeholders, mitigating impacts from the Group's activities plays a crucial role in preserving the quality of life for local communities, strengthening confidence in the organization's social responsibility, and reflecting a commitment to transparent and sustainable management. These efforts help build trust among customers, partners, and stakeholders, while continuously fostering environmental awareness among employees.

With a strong commitment to biodiversity management, the Group continues to generate positive impacts for the environment and stakeholders, actively promoting sustainable development across all dimensions in a tangible manner.

6. NEXT STEP

The Group is committed to responsibly implementing various projects both now and in the future to create a Net Positive Impact on biodiversity by the year 2050. At the same time, the Group pledges to avoid any gross deforestation within the same timeframe. This commitment forms a key part of the Group's operational plan, focusing on sustainable resource management and business development alongside the goal of achieving Net-Zero greenhouse gas emissions by 2050. This approach aims to create a sustainable balance between development and environmental conservation.

WATER MANAGEMENT



1. GLOBAL TREND

Water is an essential resource that connects all dimensions of life. It is not only fundamental to human survival and ecosystem but also serves as a key driver of economic activities across various industries, including agriculture, manufacturing, and services. However, the intensifying impacts of climate change have posed increasing challenges to water management, such as prolonged droughts, sudden flooding, and the contamination of water sources, all of which directly affect people's quality of life.

Currently, the trend toward sustainable water management emphasizes the adoption of technologies and innovations that can effectively respond to emerging challenges. Organizations and industries are increasingly leveraging digital technologies such as smart sensor systems and artificial intelligence to monitor water quality, forecast water demand, and minimize water loss in production systems. At the same time, the concept of the Water Circular Economy has gained significant traction. This approach promotes water reuse and recycling in industrial processes and public utility systems, enhancing water-use efficiency, reducing wastewater discharge, and mitigating environmental impacts. Building water resilience has also become a critical priority. Efforts in this area include the development of infrastructure that can withstand climate variability, such as water reservoirs, flood protection systems, and the integration

of renewable energy in water treatment operations. Moreover, participatory water governance has emerged as a key strategy, encouraging collaboration among government, private sector, and local communities. This inclusive approach aims to ensure equitable access to water resources and uphold the rights of all stakeholders within the same watershed.

WHA Group recognizes the critical role of water as a fundamental resource that underpins its business operations, economic development, social wellbeing, and environmental sustainability. Accordingly, the Group places great importance on using water efficiently and responsibly in alignment with sustainable development principles. Water resource management is a strategic priority for WHA Group in its capacity as a utility service provider. The Group is committed to ensuring sufficient and reliable water supply for both consumption and business activities, while also respecting the rights of all stakeholders along the water value chain. This commitment drives WHA Group to continuously improve its water management efficiency, secure backup water sources, and ensure that wastewater is properly treated before being discharged into the environment. These efforts are designed to minimize negative impacts on society, communities, and ecosystems, and reflect the Group's broader aspiration to support economic growth in harmony with long-term environmental stewardship.

2. OUR POSITION

WHA Group recognizes the vital role of water as a core resource that significantly influences its business operations, the broader economy, society, and the environment. The Group is therefore committed to efficient water management alongside the advancement of modern problem-solving capabilities to support long-term sustainability. To this end, WHA Group has integrated digital technologies and innovative solutions to enhance water management efficiency, reduce the use of freshwater resources, and minimize the discharge of wastewater into the environment.

In alignment with the principles of the Water Circular Economy, WHA Group places a strong focus on water reuse and recycling within its business operations and utility services. The Group has developed a water reclamation system that allows for the reuse of treated wastewater, thereby optimizing water resource utilization. Additionally, WHA Group has invested in the development of water reservoirs, both within and outside WHA's industrial estates, to serve as backup water sources. These efforts reduce reliance on natural freshwater sources such as reservoirs and canals, which are essential to surrounding communities and ecosystems. At the same time, WHA Group conducts thorough assessments to ensure that no water is withdrawn from areas identified as water-stressed or regions facing long-term water scarcity.

In addition to the success in reclaiming water and securing alternative water sources for WHA Group's industrial estates, WHA Utilities and Power Public Company Limited (WHAUP), the Group's utility arm, has extended its wastewater reuse systems beyond WHA's industrial estates. In 2024, the Group began implementing wastewater reuse initiatives within

the Asia Industrial Estate, reinforcing its position as a leading provider of utilities and facilities in industrial estates. This initiative aligns with the Group's strategic direction to continuously expand its utility and energy businesses, supporting the provision of utility services across all four WHA's industrial estates and zones, as well as other potential locations, in accordance with the principles of the Circular Economy. This foundation underpins WHA Group's aspiration to become a leader in water management across industrial estates.

Furthermore, in the past year, the Group initiated a study on Water Footprint methodology to assess the impacts of water usage throughout various stages of its supply chain. This will enable the development of strategies to efficiently reduce reliance on natural water sources. As of now, reclaimed water sales account for 6.9% of total water distribution, demonstrating WHA Group's commitment to supporting sustainable community water use. This represents another significant step toward balancing economic growth with long-term environmental stewardship.

3. MANAGEMENT APPROACH

As a comprehensive provider of industrial water and wastewater treatment services, the Group recognizes the potential impacts its operations may have on natural water sources and surrounding communities economically, socially, and environmentally. Consequently, the Group places strong emphasis on efficient water management to meet the demands of industrial operators within its estates, while also promoting the sustainable use of water resources in nearby communities. This approach ensures equitable access to water for all stakeholders, mitigates the risk of conflict, and supports balanced and fair water allocation.



3.1 GOVERNANCE STRUCTURE

WHA Group places great importance on a systematic and sustainable approach to water management, with a strong focus on the efficient use of water resources alongside the application of technology and innovation in operations to align with the organization's sustainability goals. Water management is overseen by the Group's Board of Directors, which sets policies and strategic directions. The Chief Operating Officer (COO) is responsible for implementing these strategies and integrating technology to enhance efficiency across all processes.

Position	Responsibility						
Chief Operating Officer	Responsible for overseeing water management and technological infrastructure across the Group. This includes planning, developing, and implementing digital technologies to enhance operational efficiency, reduce costs, and promote the efficient use of resources. The COO also leads the technology and innovation working group and supports the development of advanced technology-based products and services to meet customer needs and strengthen the Group's competitive capabilities.						
Board of Directors	Plays a critical role in long-term strategic planning and governance of the Group's water management initiatives. Responsibilities include monitoring the performance of relevant working groups, assessing the impacts of policy implementation, and defining continuous development strategies to ensure effective water management practices that align with sustainable development principles.						

3.2 RISK AND OPPORTUNITIES MANAGEMENT STRATEGY

WHA Group recognizes the importance of sustainable water management, as water is a critical resource that directly impacts operating costs, business continuity, and stakeholder relationships. Effective water management not only mitigates external risks—such as climate change and increasingly stringent legal requirements—but also creates opportunities to develop innovations and services

Risks	Opportunities
Water scarcity resulting from droughts or the impacts of climate change may adversely affect production processes and increase costs associated with securing backup water sources. This could impact business operations and result in missed market opportunities if water cannot be sourced in time, or if the associated costs rise significantly. Additionally, competition for water resources between industries and local communities is another issue that could lead to conflicts, damaging the organization's reputation. Furthermore, stricter legal requirements related to efficient water usage and wastewater treatment will likely increase the burden of compliance and raise capital expenditures for the necessary infrastructure.	WHA Group can leverage digital technologies, such as real-time water usage monitoring systems, using Artificial Intelligence (AI) to calculate water consumption and reduce water loss in production processes efficiently. Such technologies can significantly enhance water resource management and reduce the cost of securing backup water sources. The Group also plans to implement circular economy principles, including water reuse and recycling, through water reclamation systems, which reduce the need for raw water and improve the efficiency of water usage. Additionally, WHA Group is considering innovative water production technologies, such as seawater desalination, to address water scarcity caused by droughts or the effects of climate change. Furthermore, the Group can expand its offerings of efficient water solutions to customers and local communities, such as providing clean water in water-scarce areas or managing water for diverse uses. These initiatives will help enhance investor and business partner confidence in the long term.

3.3 RISK MANAGEMENT

WHA Group focuses on the development and maintenance of infrastructure, including water production and wastewater treatment systems, to comply with established standards. This approach helps mitigate environmental impacts and reduce reliance on natural water sources. Water used in production is sourced from natural bodies of water as well as external water sources to be processed and distributed for sale within industrial estates, in addition to managing water quality throughout the production process. Water management at WHA Group is critical in reducing the environmental impact of water usage in various processes within the industrial estates. This includes efforts to control water loss and develop backup water sources, such as constructing water reservoirs, ensuring efficient water use, and reducing the risk of water shortages.

Additionally, WHA Group's Environmental Committee is tasked with setting guidelines and action plans for water management. The committee promotes involvement from both management and staff through process controls aimed at reducing water loss, alongside the development of water reclamation systems. These systems allow the reuse of water resources in production processes, thus reducing dependence on natural water sources and enhancing the sustainability of water use.

The water management operations of WHA Group are overseen by the Industrial Estate Operations (IEO) division of WHA Industrial Development (WHAID), in collaboration with the utilities operations of WHA Utilities and Power (WHAUP). Both parties work together to improve water resource quality and mitigate potential adverse effects on the surrounding environment and natural ecosystems. The group places significant

emphasis on managing the quality of wastewater, ensuring that treated wastewater meets the standards set by the Ministry of Industry, the Industrial Estate Authority of Thailand (IEAT), and the Ministry of Natural Resources and Environment. Wastewater is sent to the centralized wastewater treatment system of the WHA Industrial Estate, where it undergoes treatment until it meets the required standards. The water quality must comply with the Environmental Impact Assessment (EIA) report and the regulations of the Department of Industrial Works. After treatment, the water is either discharged into external water sources or recycled back into the industrial estate, reducing the reliance on natural water sources. This process supports sustainable water resource management while simultaneously protecting the environment and improving the quality of life for surrounding communities.

WATER MANAGEMENT POLICY AND PRACTICES

WHA Group has established an Environmental Quality, Energy Conservation, and Biodiversity Policy, which has been endorsed and adopted by the executive committees of all four business groups. This policy emphasizes comprehensive environmental management, with a particular focus on water management. Waterrelated issues are designated as a priority agenda item at quarterly executive meetings to ensure that environmental practices remain current, aligned with evolving circumstances, and capable of setting ambitious yet achievable water management targets.

To align with the policy, WHA Group has established operational guidelines and a framework aimed at maintaining an effective water balance. The Group is committed to utilizing water resources efficiently and maximizing their benefits. The Group's water



management policy encompasses both reducing water consumption and enhancing internal water resource efficiency, while adhering to the principles of sustainable development. In 2024, the Group successfully reduced water usage by more than 7.8 million cubic meters.

In addition, the Group places strong emphasis on minimizing water losses in its systems, particularly through leakage reduction across all processes from water production to distribution. This approach ensures the efficient use of water resources, reduces environmental impact, and improves operational efficiency. The Group has adopted advanced technologies and innovations for systematic water leakage monitoring and detection, enabling rapid and effective responses to any issues. In 2024, the Group successfully reduced water leakage by over 600,000 cubic meters.

THE APPLICATION OF TECHNOLOGY IN WATER MANAGEMENT

WHA Group's water management plan encompasses water sourcing, industrial water production, wastewater treatment and reuse, as well as reducing water losses in production and distribution systems. The Group has formulated appropriate and efficient water resource management strategies to reduce risks, ensure regulatory compliance, and achieve water management goals, while also minimizing impacts on surrounding communities.

To enhance water sourcing capabilities, the Group has adopted technologies aimed at identifying new water sources, such as R&D into technologies that reduce reliance on surface water. Additionally, the Group has applied a wide range of new innovations and technologies in water management. This includes upgrading existing wastewater treatment systems to increase reclaimed water capacity currently at 35,320 cubic meters per day with a target of 60,400 cubic

meters per day or approximately 21 million cubic meters annually by 2027, and a long-term goal of reaching 25 million cubic meters annually by 2029. These efforts significantly reduce the use of natural water sources.

To improve water management efficiency, WHA Group has developed the RO Performance Prediction project, utilizing Al technology to detect and predict membrane clogging, resulting in up to 20% maintenance cost reduction. The Group also applies EPANET software to monitor and control leakage in pipeline systems, effectively enhancing water resource efficiency and reducing losses. WHA Group remains committed to continuous development to add value and introduce new utility products and services to meet the diverse needs of entrepreneurs. The Group has launched projects incorporating new management concepts and approaches, shifting from conventional to digital water service and management systems. These include real-time monitoring and control through SCADA systems, the establishment of a Unified Operation Center (UOC), and the implementation of Smart Utilities Solutions at WHA Eastern Industrial Estate (Map Ta Phut), including upgrades to smart meters, pump controls, and flow rate measurement equipment.

Furthermore, WHA Group continues to enhance its use of the "WHAUP Intelligence Platform" to achieve its goal of becoming a Tech-Driven Organization by 2025. This platform helps improve the efficiency and accuracy of generating digital as-built drawings for wastewater management systems. Leveraging smart data analytics and smart operation technologies, it supports the development of various projects including the GIS Hydraulic Model system, Smart Metering system, OCR technology for image-to-digital conversion, Automatic Meter Reading (AMR), Pressure Transmitter devices, and Data Integration Database systems. A dedicated annual budget of 2 million Baht has been allocated to support projects under this platform.

WATER RECLAMATION PROCESS, INPUT REUSE. AND PRODUCT REUSE

The development of a water reclamation system is a strategic approach to reducing direct dependence on natural water resources and maximizing the beneficial reuse of treated wastewater. This method has been adopted by WHAUP as an alternative water production solution to support truly sustainable development, particularly in the Eastern Economic Corridor (EEC). The project integrates conventional technologies with new innovations to enhance the value of wastewater by converting it into high-purity water suitable for industrial use. Through the transformation of treated wastewater into demineralized water by removing various minerals this reclaimed water meets the highpurity standards required by industries such as power generation, petrochemicals, and electronics.

Additionally, the Group produces premium clarified water, a type of industrial water with superior quality membrane technology. This water is primarily supplied only reduces production costs but also enhances the market value of the product, thereby reinforcing

WHA Group has set a target to double its water production capacity from treated wastewater from 30,200 cubic meters per day in 2020 to 60,400 cubic meters per day by 2027. As of 2024, the Group's water production capacity reached 35,320 cubic meters per day, generating revenue of 302.3 million Baht from the Water Reclamation project, accounting for 12% of total revenue and profit share from utility businesses, up from 9.5% in 2023. This approach to reusing treated water has enabled the Group to reduce the use of natural water sources by 7.8 million cubic meters in 2024, representing 10% of total water consumption. Therefore, the project significantly benefits both the environment and society by reducing wastewater discharge, minimizing water extraction from natural sources, conserving natural resources, and mitigating potential conflicts with nearby communities that rely on the same water sources.

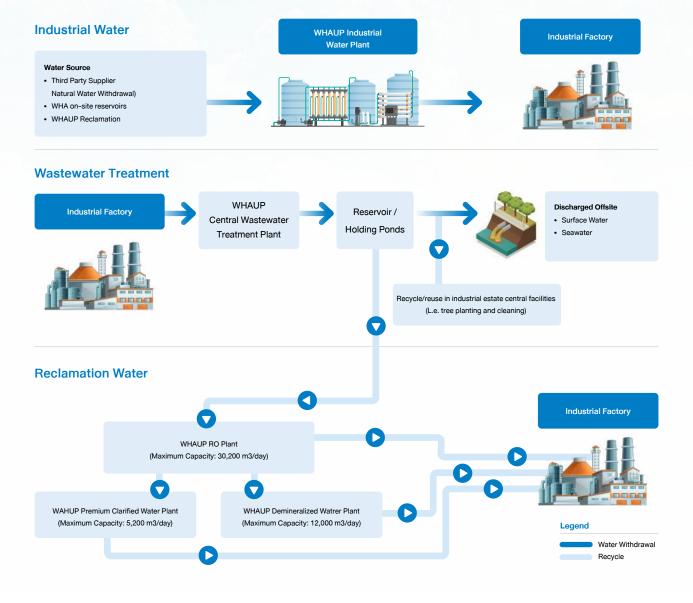


WATER USAGE AND WATER MANAGEMENT

WHA Group sources water from two primary sources: natural water bodies (such as public rivers and the Group's own water reservoirs) and direct purchases from raw water suppliers. These sources are thoroughly verified for origin and quality in accordance with established standards. The water is used in production processes or supplied to customers across various industries. However, to ensure sustainable water management and reduce reliance on natural water sources as well as raw water purchases, the Group has constructed water storage ponds both inside and outside its industrial estates. These serve as reserve water sources and help minimize dependence on natural sources.

In addition, WHA Group implements wastewater reuse measures by treating used water through centralized wastewater treatment ponds using Reverse Osmosis (RO) technology, which filters and purifies the water for reuse in production processes. Biological treatment methods are also employed, with the objective of ensuring that the quality of discharged water meets environmental standards before being returned to natural water bodies. This ensures no adverse impact on the environment, public health, or surrounding natural resources. Strict monitoring is conducted to ensure compliance with all prescribed effluent quality standards.

Reverse Osmosis: RO



TREAT AND REUSE WASTEWATER VIA REVERSE OSMOSIS (RO)

Moreover, WHA Group also provides wastewater treatment services to other industrial estates according to the specific industrial processes of the clients, such as Activated Sludge (AS) treatment systems, Aerated Lagoon (AL) systems, and Hybrid-Rotating Biological Contactor (Hybrid-RBC) systems. The Hybrid-RBC system combines Rotating Biological Contactor (RBC) and Activated Sludge (AS) treatment systems, offering enhanced efficiency in treating wastewater with higher Organic Loading Rates (OLR) compared to conventional levels. Additionally, the Group utilizes Vertical Flow Constructed Wetland systems, which have been employed since 2003, and shares this knowledge with local communities to enhance wastewater treatment efficiency, providing appropriate techniques and budget allocation through the WHA Clean Water for Planet project, aimed at promoting and developing wastewater treatment for external individuals.

After wastewater treatment in centralized wastewater treatment plants, WHA Group conducts quality assessments of the water according to standards set by the Ministry of Natural Resources and Environment, the Ministry of Industry, the Industrial Estate Authority of Thailand, and Environmental Impact Assessments (EIA) before discharge. This ensures no adverse environmental effects. In 2024, all indicators remained within the standard criteria set. Furthermore, the water sources from which water was released have been verified not to be densely populated residential areas, and the residents there do not rely on water from these sources for their daily lives. Additionally, the water sources supporting wastewater discharge from industrial estates have been assessed since the industrial estate's EIA process, confirming their capability to discharge wastewater without adverse environmental impacts. The impacts of water on all stakeholders, including communities, customers, and contractors, are measured annually through engagement processes to identify impacts resulting from the Group's operations. The outcomes of this engagement are used to improve future operations, including planning mitigation measures for those affected by actual impacts, to restore their confidence that everything will return to its original state.



In 2024, the Group received one suggestion from stakeholders regarding the water production process. This suggestion was aimed at improving production efficiency, helping the Group enhance its operations. The Group has conducted quality reviews and continuously implemented measures to improve quality monitoring, aiming for better service and the highest level of satisfaction for all stakeholders.

WATER RISK ASSESSMENT

WHA Group continuously analyses and evaluates the costs related to water risks to effectively plan for mitigation. From the evaluation in 2024, it was found that the costs related to water risks, including the cost of securing backup water sources, wastewater treatment, and compliance with relevant regulations, amounted to approximately 140 million Baht. The Group has implemented measures to reduce the impact of these risks through investments in water infrastructure and the development of efficient water use strategies.

Additionally, the Group places significant emphasis on investing in research and development (R&D) to mitigate water-related risks. In 2024, a budget of approximately 3 million Baht was allocated for the development of water management technologies, such as the use of digital systems for monitoring and analyzing water data, the development of water reuse technologies, and the study of alternative sustainable water sourcing options to reduce dependency on natural water sources and ensure long-term water security.

WHA GROUP OPERATION IN IN WATER-STRESSED AREAS

WHA Group recognizes the importance of water resources to all stakeholders and has prioritized efficient water management to address current and future water challenges. Therefore, the Group has conducted a water risk assessment in areas prone to water scarcity (Water-Stressed Areas) using the Water Tools (Aqueduct), a standard tool to analyze and assess proactive water-related risk factors. The risk assessment results can be categorized into the following main issues:

- Extreme High Water Stress
- High Water Stress
- No Water Stress

After conducting the risk assessment, the Group identified areas that may be affected by water scarcity issues, enabling efficient water resource management, reducing potential operational risks, and minimizing impacts on communities and the environment. The 2024 assessment revealed industrial estates of the Group facing the following risks:

Туре	Number of industrial estates	% of industrial estate in water stressed location
Extreme High Water Stress	1	8%
High Water Stress	12	92%
No Water Stress	0	0%
Total	13	100%

To ensure efficient operations in water-stressed areas, the Group has implemented strategies to engage stakeholders in the operational areas through regular meetings, listening to community feedback, developing water conservation projects, and joint water resource management initiatives. These efforts aim to create a balance in the shared use of water resources. This approach helps prevent and reduce potential conflicts while fostering long-term cooperation between the business sector and communities. Additionally, the Group continuously monitors and evaluates the water situation using data from various organizations, including:

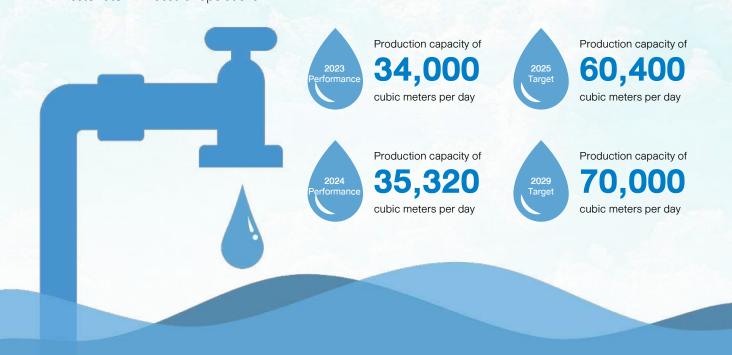
- Meteorological data on weather and rainfall in Thailand from the Thai Meteorological Department
- Water situation data from reservoirs in the Eastern Economic Corridor (EEC) area, derived from the four major dams in the Chao Phraya Basin in central Thailand, using data from the Royal Irrigation Department. The Group also has a Business Continuity Plan (BCP) in place to manage potential water scarcity situations in various areas of its industrial estates.



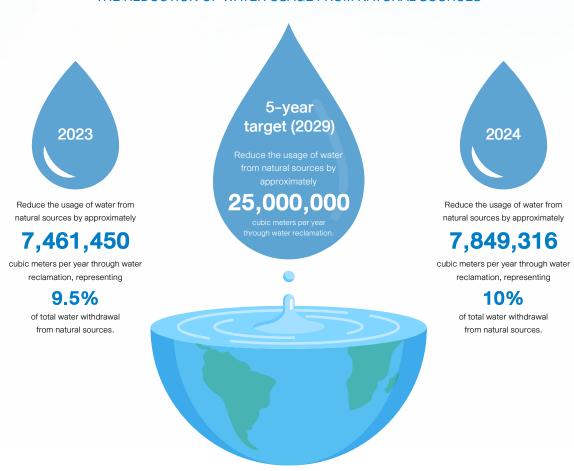
The image shows a standard tool used to analyze Water-Stressed Areas using Water Tools (Aqueduct).

3.4 METRICS AND TARGETS

WHA Group has set a production capacity target for its Water Reclamation project, which involves reusing treated wastewater in industrial operations.



THE REDUCTION OF WATER USAGE FROM NATURAL SOURCES



4. HIGHLIGHT PROJECTS

In 2024, WHA Group continued to place strong emphasis on sustainable and efficient water management, aiming to optimize the use of water resources while minimizing environmental impacts. This approach not only enhances water use efficiency but also reflects the Group's commitment to social and environmental responsibility toward local communities and other stakeholders. During the year, the Group initiated several water management projects, including the continuation of existing initiatives as well as the development of new ones currently under study. These projects are designed to meet the growing and diverse water demands and to further improve water resource management efficiency across all sectors of the organization in a sustainable manner.

DEMINERALIZED RECLAIMED WATER: THE REAL SUSTAINABLE RESOURCE FOR FUTURE DEVELOPMENT

WHAUP has invested in the Demineralized Reclaimed Water project to produce demineralized water with the aim of enhancing the quality of water treated from wastewater systems, enabling it to be reused as high-quality industrial water effectively, with reduced costs and environmentally friendly processes. This project addresses the demand for industrial water in a wide range of sectors.

The Demineralized Reclaimed Water project has been developed as an alternative water source that plays a crucial role in supporting sustainable industrial growth in the country. It combines existing technologies with new innovations to enhance product value. By improving the quality of wastewater from treatment



systems to produce mineral-free industrial water, the water is supplied to various industrial operators to support efficient and sustainable water resource usage.

Currently, the project includes two production facilities:



1. A Demineralized Reclaimed Water plant at WHA Eastern Industrial Estate (Map Ta Phut) (WHA EIE) with a production capacity of 12,000 cubic meters per day.



2. A joint venture with Asia Industrial Estate, with a production capacity of 2,200 cubic meters per day. Together, these two projects have a total production capacity of 14,200 cubic meters per day, covering 3% of the total industrial water production capacity.

To date, the Demineralized Water system has helped the Group reduce external water usage by approximately 7.8 million cubic meters per year, saving about 91 million THB annually in raw water procurement costs.

The implementation of this project has led to positive impacts on industrial development in several ways:

- 1. Significantly reducing the amount of wastewater released into the environment.
- 2. Reducing the government's investment budget for developing water storage and delivery infrastructure.
- 3. Reducing conflicts between communities and industries over water resource allocation.
- 4. The industrial sector gains access to high-quality water products at competitive costs.
- 5. Industrial operators within the Group's industrial estates receive comprehensive utility services and a wide range of products.

Furthermore, this project has helped the Group reduce its reliance on major raw water suppliers and mitigate the risks associated with fluctuations in the quantity and quality of upstream water sources, such as drought, pollution, and contamination key risks for utility providers. The project also enables the Group's industrial customers to access high-quality water products at reasonable prices. Additionally, the innovation behind the Demineralized Reclaimed Water project serves as a prototype that can be replicated in the Group's new industrial estates and expanded to local communities, such as using treated wastewater from communities to produce high-quality industrial water.

DEMINERALIZED RECLAIMED WATER



SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) TECHNOLOGY AT WASTEWATER TREATMENT PLANT

Currently, WHAUP has implemented SCADA technology to maximize efficiency in wastewater treatment plants across all industrial estates of the company, located within the Eastern Economic Corridor of Innovation (EECi) in Wang Chan District, Rayong Province. This technology enables continuous monitoring of wastewater treatment operations 24 hours a day. By using this system, the company is able to save operational costs by reducing the need for onsite staff by up to four people, resulting in savings of up to 960,000 baht annually. The company operates Control Centers at both WHA Eastern Industrial Estate (Map Ta Phut) (WHA EIE) and Eastern Seaboard Industrial Estate (Rayong) (ESIE), and there are plans to integrate Artificial Intelligence (AI) technology. Using data collected by SCADA technology, AI will be employed for Predictive Maintenance to forecast machinery maintenance needs, ensuring continuous operation and reducing the risk of equipment failure.

SMART METERING TECHNOLOGY

The "Smart Metering" technology has been implemented by WHAUP to enhance the ability to monitor water consumption. This involves replacing the previously installed analog water meters, which recorded water usage, with digital display systems. In addition, Pressure Transmitters have been set up to monitor pressure levels for industrial operators within the industrial estates. The use of digital data recording reduces personnel costs associated with gathering and organizing data from all water meters for billing purposes. Furthermore, this system allows for the expansion of services, enabling customers to access their water usage data on an hourly basis. This capability helps customers observe their usage patterns and quickly identify any abnormalities, such as potential leaks in the water distribution system. The technology also enables WHAUP staff to efficiently monitor and resolve meter irregularities. Additionally, the system simplifies the billing process by transmitting and storing data at the WHA Tower, eliminating the need for staff to travel to customer locations and



manually record water usage. Currently, the Smart Metering system is operational within WHA Eastern Industrial Estate (Map Ta Phut) (WHA EIE), helping to save approximately 4 Million Baht annually by reducing water loss, improving meter accuracy, and minimizing meter-related abnormalities.

ONLINE METERING FOR CUSTOMERS

In addition to implementing Smart Metering technology for its own operations, the Group has launched the Online Metering project for new customers located within WHA's industrial estates in 2024. This project allows customers to access their water usage data more efficiently through the development of an Online Metering Platform. The goal of this initiative is to reduce water management costs for customers, enabling them to manage water usage quickly and sustainably. The Group aims for the project to ease the burden on customers in recording water consumption data, while providing them with the ability to monitor and manage their water usage more conveniently and effectively.



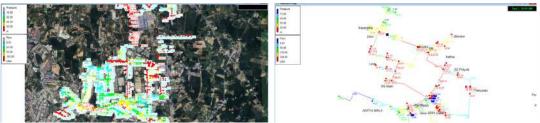
RO PERFORMANCE FORECASTING

The Reverse Osmosis (RO) Performance Forecasting project by WHAUP Group is an initiative aimed at enhancing water management efficiency through digital technology. By leveraging Machine Learning and AI, the project forecasts water quality and membrane lifespan in RO systems. This tool allows for monitoring of critical parameters such as water temperature, heavy metal contamination, and microbial presence, enabling consistent water quality management even in the face of uncertain water sources. Accurate forecasting of membrane lifespan allows for efficient maintenance planning, reducing water resource waste, minimizing wastewater production, and decreasing the need for premature membrane replacements. The data gathered from this monitoring process is transmitted

to an IoT system and processed via the Cloud, enabling real-time water quality monitoring through a dashboard with alerts for any irregularities.

The Group remains committed to applying technology to enhance water management efficiency, promoting the optimal use of water resources in the industrial sector. The RO Performance Forecasting project is one of the key innovations that the Group has introduced to improve water resource management, reduce water losses, lower costs, and minimize environmental impacts. Additionally, this project supports continuous business operations while aligning with sustainable development practices.





COLLABORATIVE WATER USAGE REDUCTION AND MANAGEMENT EFFICIENCY PROJECT

WHA Group prioritizes the efficient use of water and improving water management practices by collaborating with various sectors, including government agencies, private entities, and industrial operators within the Group's industrial estates. These collaborations aim to find ways to share water resources effectively. Initiatives include the establishment of industrial water user organizations and participation as a committee member of industrial watershed management

bodies to conduct activities that benefit water usage, management, maintenance, and conservation efforts. The Group has also focused on developing systems for reusing wastewater from production processes as industrial water, which can then be repurposed in other processes following the principles of Industrial Ecology. This approach helps reduce reliance on external raw water sources and minimizes environmental impacts.

The Group believes that effective water management not only reduces costs and strengthens water security for the organization but also plays a crucial role in fostering collaboration with stakeholders, building investor confidence, and supporting the organization's long-term sustainability goals.

5. IMPACTS ON STAKEHOLDERS AND ENVIRONMENT

WHA Group is confident that managing water resources through the principles of the Circular Economy is a key driver in advancing Thailand's industrial sector towards achieving government goals. The Group's water management approach strives to balance financial performance with sustainable environmental impact while addressing the challenges brought on by rapid economic and climate change.

WHA Group believes that the success of integrating innovation and modern technology in water management not only mitigates negative environmental and social impacts but also generates positive outcomes in both areas. For example, the Water Reclamation project plays a crucial role in societal and environmental development by reducing the amount of wastewater discharged into natural sources. In 2024, this project successfully reduced water extraction from natural sources by 7.8 million cubic meters, equivalent to the annual water usage of approximately 215,071 people. This is considered one of the Group's most successful initiatives.

Additionally, the Group continues to engage in water management projects in collaboration with local communities. An example is "WHA Clean Water for Planet" project, an initiative aimed at fostering environmental and economic sustainability in

partnership with neighboring communities around the Group's industrial estates. This project also serves to raise awareness and understanding among the public about the long-term conservation of water and natural resources.

6. NEXT STEP

Water management has always been a priority for WHA Group since its inception in the public utility and energy business in 2008. As a result, the Group is committed to enhancing its water management capabilities both in the short and long term through a robust management plan. In 2024, the Group's public utility services business achieved its highest-ever performance, both in terms of financial outcomes and environmental impact since its establishment. To sustain this success, the Group has set long-term goals, with a target for 2032 to expand its production capacity and grow its business in wastewater recycling projects. This initiative is expected to reduce water usage from natural sources by at least 25,000,000 cubic meters per year by 2032, leading to savings of up to 290 million THB per year in raw water procurement costs.

Additionally, the Group has plans to develop new projects that utilize technology and innovation to improve operational efficiency and deliver positive environmental impacts. Examples include the AI & SCADA project, which will enhance operational and maintenance capabilities, and the Online Metering project, which will improve water management by providing precise measurements of water loss, optimizing water distribution systems, reducing reliance on personnel, and increasing the accuracy of data recording and billing. Furthermore, the Group is continuously developing Optical Character Recognition (OCR) technology, which plays a key role in automatic meter reading, reducing manual data entry errors, accelerating data processing, and improving the accuracy of data analysis. Importantly, this also helps detect and alert leaks effectively, reducing water loss.

These initiatives reflect WHA Group's commitment to being a leader in smart water solutions, which not only reduce costs and enhance efficiency but also create positive long-term environmental and societal impacts.



GRI		Direlegure	Location			Omission	
Standard		Disclosure	Chapter	Page/ Note	Requirement (s) Omitted	Reason	Explanation
General Disc	osure.						
GRI 2: General Disclosure	2-1	Organizational details	About Report WHA Group Strategic Locations Shareholding Structure	14 26-27 28-29			
2021	2-2	Entities included in the organization's sustainability reporting	About Report Shareholding Structure	14 28-29			
	2-3	Reporting period, frequency and contact point	About Report	14			
	2-4	Restatements of information	(No restatements in 2024)	=			
	2-5	External assurance	External Assurance	360-361			
	2-6	Activities, value chain and other business relationships	Shareholding Structure Value Chain	28-29 33		5	
	2-7	Employees	Performance Data 2024	-			
	2-8	Workers who are not employees	Performance Data 2024	-			
	2-9	Governance structure and composition	Codes of Business Conduct	48-50			
	2-10	Nomination and selection of the highest governance body	Codes of Business Conduct	50			
	2-11	Chair of the highest governance body	Codes of Business Conduct	49			
	2-12	Role of the highest governance body in overseeing the management of impacts	Codes of Business Conduct	48-50			
	2-13	Delegation of responsibility for managing impacts	Codes of Business Conduct	49-50			
	2-14	Role of the highest governance body in sustainability reporting	Sustainability Material Issues	37			
	2-15	Conflicts of interest	Codes of Business Conduct	48-50			
	2-16	Communication of critical concerns	Codes of Business Conduct	55-56			
	2-17	Collective knowledge of the highest governance body	Codes of Business Conduct	51			
	2-18	Evaluation of the performance of the highest governance body	Codes of Business Conduct	51			
	2-19	Remuneration policies	Codes of Business Conduct Remuneration Policy for Directors and Top Executives	52 -	a.) i., ii., iii., v.	Confidentiality Constraint	Remuneration Policy is confidential constraint information for WHA Group
	2-2	Process to determine remuneration	Codes of Business Conduct	52			<u> </u>
	2-2	1 Annual total compensation ratio	-	-	a.) b.) c.)	Confidentiality Constraint	Annual total compensation ratio is confidential constraint information for WHA Group

GRI		Disclosure	Location			Omission	
Standard		Disclosure	Chapter	Page/ Note	Requirement (s) Omitted	Reason	Explanation
	2-22	Statement on sustainable development strategy	CEO Message	5-6			
	2-23	Policy commitments	Codes of Business Conduct WHA Code of Conduct and Practices	51-58 -			
	2-24	Embedding policy commitments	Codes of Business Conduct WHA Code of Conduct and Practices	51-58 -			
	2-25	Processes to remediate negative impacts	Codes of Business Conduct	55-56			
	2-26	Mechanisms for seeking advice and raising concerns	Codes of Business Conduct	55-56			
	2-27	Compliance with laws and regulations	Performance Data 2024	-			
16.3	2-28	Membership associations	Awards and Memberships	7-13			
	2-29	Approach to stakeholder engagement	Stakeholder Engagement	39-45			
	2-30	Collective bargaining agreements	Human Rights	168			
GRI 3: Material Topics 2021	3-1	Process to determine material topics	Sustainability Material Issues Stakeholder Engagement	35-38 39-45			
	3-2	List of material topics	Sustainability Material Issues	37-38			
Corporate Gove	ernanc	e & Ethics					
GRI 3: Material Topics 2021	3-3	Management of material topics	Codes of Business Conduct	47-58			
GRI 205: Anti- corruption 2016	205-1	Operations assessed for risks related to corruption	Risk Management	57			
	205-2	Communication and training about anti-corruption policies and procedures	Performance Data 2024	-			
	205-3	Confirmed incidents of corruption and actions taken	Performance Data 2024	-			
GRI 206: Anti- competitive Behavior 2016	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Performance Data 2024	-			
Technology and	d Inno	vation					
GRI 3: Material Topics 2021	3-3	Management of material topics	Technology & Innovation	116-136			
GRI 203: Indirect	203-1	Infrastructure investments and services supported	Climate Strategy	123-124			
Economic Impacts 2016	203-2	Significant indirect economic impacts	Climate Strategy	135			

CDI		D) 1	Location			Omission	
GRI Standard		Disclosure	Chapter	Page/	Requirement (s)	Reason	Explanation
			O Tap to	Note	Omitted		
Occupational I							
GRI 3: Material Topics 2021	3-3	Management of material topics	Occupational Health and Safety	181-203			
GRI 403: Occupational	403-1	Occupational health and safety management system	Occupational Health and Safety	182, 186			
Health and Safety 2018	403-2	Hazard identification, risk assessment, and incident investigation	Occupational Health and Safety	183-188			
	403-3	Occupational health services	Occupational Health and Safety	189-193, 199-200			
	403-4	Work participation, consultation, and communication on occupational health and safety	Occupational Health and Safety	188			
	403-5	Worker training on occupational health and safety	Occupational Health and Safety	195-196, 198			
	403-6	Promotion of worker health	Occupational Health and Safety	192			
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Occupational Health and Safety	192-193			
	403-8	Workers covered by an occupational health and safety system	Performance Data 2024	-	-		
	403-9	Worker-related injuries	Performance Data 2024	-	-		
	403-1	0 Work-related ill health	Performance Data 2024	=	=		
Community De	evelopn	nent and Stakeholder Engagen	nent				
GRI 3: Material Topics 2021	3-3	Management of material topics	Community Development and Stakeholder Engagement	204-255			
GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	Community Development and Stakeholder Engagement	213			
	413-2	Operations with significant actual and potential negative impacts on local communities	WHA Group Strategic Locations Stakeholder Engagement	26-27 40-41, 44			
Waste Manage	ment						
GRI 3: Material Topics 2021	3-3	Management of material topics		260-279			
GRI 306: Waszte 2020	306-1	Waste generation and significant waste-related impacts		262-263			
	306-2	Management of significant waste-related impacts		263-264, 268			
	306-3	Waste generated		-			
	306-4	Waste diverted from disposal		-			
	306-5	Waste directed to disposal		-			

GRI		Disclosure	Location			Omission		
Standard		Disclosure	Chapter	Page/ Note	Requirement (s) Omitted	Reason	Explanation	
Climate Strate	gy		'					
GRI 3: Material Topics 2021	3-3	Management of material topics	Climate Strategy	292-311				
GRI 201: Economic Performance	201-2	Financial implications and other risks and opportunities due to climate change	Climate Strategy	298-302				
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	Performance Data 2024					
	305-2	Energy indirect (Scope 2) GHG emissions	Performance Data 2024					
	305-3	Other indirect (Scope 3) GHG emissions	Performance Data 2024	-0.0000				
	305-4	GHG emissions intensity	Performance Data 2024				1/2	
	305-5	Reduction of GHG emissions	Performance Data 2024	-				
	305-6	Emissions of ozone- depleting substances (ODS)	Performance Data 2024					
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Performance Data 2024	-				
Energy Manage	ement	,						
GRI 3: Material Topics 2021	3-3	Management of material topics	Energy Management	312-327				
GRI 302: Energy 2016	302-1	Energy consumption within the organization	Performance Data 2024	-				
	302-2	Energy consumption outside of the organization	Performance Data 2024	=				
	302-3	Energy Intensity	Performance Data 2024	-				
	302-4	Reduction of energy consumption	Energy Management	318				
	302-5	Reductions in energy requirements of products and services	Energy Management	323				
Water Manage	ment							
GRI 3: Material Topics 2021	3-3	Management of material topics	Water Management	339-353				
GRI 303: Water and	303-1	Interactions with water as a shared resource	Water Management	242-346, 353				
Effluents 2018	303-2	Management of water discharge-related impacts	Water Management	346				
	303-3	Water withdrawal	Performance Data 2024	-				
	303-4	Water discharge	Performance Data 2024	-				
	303-5	Water consumption	Performance Data 2024	-				

การวิเคราะห์สถานการณ์ในอนาคต (SCENARIO ANALYSIS) ที่เกี่ยวข้องกับการเปลี่ยนแปลงสภาพภูมิอากาศ

							4C Sce	enario		
							вА	U		
			Short Term	(1-5 years)		Mediu	ım Term (>5 y	years)		
Risk Type	Specific Risk	WHALG	WHAID	WHAUP (Utilities)	WHAUP (Power)	WHALG	WHAID	WHAUP (Utilities)	WHAUP (Power)	WHALG
PHYSICAL RISKS										
	Flooding									
Acute	Drought									
	Storm and lighting									
Chronic	Increase mean temperature									
TRANSITION RISKS										
Policy and Legal										
Technology - New improvements or innovations										
Market - shift in supply and demand										
Reputation - Change in customer and community perception										
OPPORTUNITIES										
Market - shift in supply and demand										
Resource Efficiency &Energy Source										
Technology - New improvements or innovations										

				Scenario 2									
			1.5C Scenario										
			2DS										
Long Term	(>10 years)		Shor	t Term (1-5 y	ears)	Mediu	ım Term (>5	years)	Long	g Term (>10 y	rears)		
WHAID	WHAUP (Utilities)	WHAUP (Power)	WHALG	WHAID	WHAUP (Utilities & Power)	WHALG	WHAID	WHAUP (Utilities & Power)	WHALG	WHAID	WHAUP (Utilities & Power)		



LRQA INDEPENDENT ASSURANCE STATEMENT RELATING TO WHA CORPORATION PUBLIC COMPANY LIMITED'S GHG ASSERTION FOR THE CALENDAR YEAR 2024

This Assurance Statement has been prepared for WHA Corporation Public Company Limited in accordance with our contract but is intended for the readers of this Report.

TERMS OF ENGAGEMENT

LRQA (Thailand) Limited was commissioned by WHA Corporation Public Company Limited (WHA) to provide independent assurance on its GHG assertion 2024 against the AccountAbility's AA1000AS v3 assurance criteria to a moderate level of assurance with reference to GRI specific standard disclosures listed below and materiality level of the professional judgement of the verifier is applied, where the scope was a Type 2 engagement.

Our assurance engagement covered WHA's financial control in Thailand only and specifically the following requirements:

- · Evaluating the reliability of data and information for only the selected environmental indicators listed below:
 - GRI 305-1: Direct GHG emissions (Scope 1)1, 2
 - GRI 305-2: Energy indirect GHG emissions (Scope 2)

Our assurance engagement excluded the data and information of WHA's financial control and activities outside Thailand, as well as suppliers, contractors and any third parties mentioned in the report.

LRQA's responsibility is only to WHA. LRQA disclaims any liability or responsibility to others as explained in the end footnote. WHAs' responsibility is for collecting, aggregating, analysing and presenting all the data and information within the Assertion and for maintaining effective internal controls over the systems from which the Assertion is derived. Ultimately, the Assertion has been approved by, and remains the responsibility of WHA.

LRQA'S OPINION

Based on LRQA's approach nothing has come to our attention that would cause us to believe that WHA has not, in all material respects:

- · Met the requirements above
- Disclosed reliable performance data and information as no errors or omissions were detected.

The opinion expressed is formed on the basis of a moderate level of assurance and at the materiality of the professional judgement of the verifier.

Note: The extent of evidence-gathering for a moderate level of assurance engagement is less than for a high level of assurance engagement. Moderate assurance engagements focus on aggregated data rather than physically checking source data at sites. Consequently, the level of assurance obtained in a moderate assurance engagement is substantially lower than the assurance that would have been obtained had a high assurance engagement been performed.

LRQA'S APPROACH

LRQA's assurance engagements are carried out assurance using AA1000AS v3. The following tasks though were undertaken as part of the evidence gathering process for this assurance engagement:

- Auditing WHA's data management systems to confirm that there were no significant errors, material mis-statements in the
 report. We did this by reviewing the effectiveness of data handling procedures, instructions, and systems, including those for
 internal verification. We also spoke with those key people responsible for compiling the data and drafting the report.
- · Sampling of evidence during remote verification from facilities level, only the selected indicators to confirm its reliability.

² GHG quantification is subject to inherent uncertainty.



¹ https://www.globalreporting.org



OBSERVATIONS

Further observations and findings, made during the assurance engagement, is:

 Reliability: Data management systems are properly defined for the selected environmental indicators. However, should consider interim verification to further improve the reliability and timeliness of its disclosed data and information.

LRQA'S STANDARDS, COMPETENCE AND INDEPENDENCE

LRQA ensures the selection of appropriately qualified individuals based on their qualifications, training and experience. The outcome of all verification and certification assessments is then internally reviewed by senior management to ensure that the approach applied is rigorous and transparent.

This verification is the only works undertaken by LRQA for WHA Corporation Public Company Limited. WHA Industrial Development Public Company Limited and WHA Utilities and Power Public Company Limited and as such does not compromise our independence or impartiality.

grave Chy Dated: 20 March 2025

Opart Charuratana LRQA Lead Verifier

On behalf of LRQA (Thailand) Ltd.

No. 252/123 (C), Muang Thai - Phatra Complex Tower B.

26th floor, Ratchadaphisek Road., HuayKwang, Bangkok, 10310, THAILAND

LRQA reference: BGK00001206

TABLE 1. SUMMARY OF WHA CORPORTION PUBLIC COMPANY LIMITED, GHG ASSERTION 2024

Scope of CO2 emissions	CY 2021 01 Jan - 31 Dec 2021	CY 2024 01 Jan - 31 Dec 2023
• GRI 305-1: Direct GHG emissions (Scope 1) excludes HCFC-22 (R-22).	1,146	1,637
Biogenic emissions.	84	118
GRI 305-2: Energy indirect GHG emissions (Scope 2).		
Location based	18,130	21,151
Market based	18,104	20,219

Notes

- Data is presented in tonnes of CO2 equivalent.
- CY2021 is an organization selected base year.

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The English version of this Assurance statement is the only valid version. LRQA Group limited assumes no responsibility for versions translated into other languages.

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FEEDBACK FORM: 2024 SUSTAINABILITY REPORT

READER PROFILE GENDER			AGE		
Female	Male		Ве	elow 25 years old	25 – 40
Not Specified			41	I - 60	More Than 60
DEL ATIONOLUD VA/II			IOMED)		
	TH WHA GROUP (PL		ISWER)		
Shareholder/In	vestor	Customer	otox	Employee	Supplier and Creditor
Competitor		Government / Regula	ator	Community	
WHY DO YOU PR	EFER READING TH	HIS SUSTIANABILI	TY REPOR	Γ?	
For support investment decision			For understanding more about WHA's business		
Research and	educational purposes		Other	(Please specify)	
VOLID CATICEACTI	ON WITH THE PRES			AINIADI E DEDODT"	
		DENTATION FORMA			Dispatiofied
Content easy to understand Content cover your interested topics			High High	Medium Medium	Dissatisfied Dissatisfied
Reliable information			High	Medium	Dissatisfied
The design of this report			High	Medium	Dissatisfied
Readability			High	Medium	Dissatisfied
Overall satisfaction with the Report			High	Medium	Dissatisfied
AFTER READING T SUSTAINABLE GR		RT, ARE YOU CONF	FIDENT THA	T WHA POTENTIALLY	ACHIEVES THE
Yes,	pecause				
No,	pecause				
No idea,	pecause				
IN YOUR OPINION	, WHICH IS THE MO	ST SIGNIFICANT AS	SPECT TOW.	ARD WHA SUSTAINA	BLE GROWTH?
Economy	(Please specify)
Environment	(Please specify)
Society	(Please specify)
SUGGESTIONS PLEASE SPECIFY (REPORT OF THE F		INS FOR DEVELOPN	MENT AND I	MPROVEMENT OF SI	JSTAINABILITY

Thank you for your information and valuable opinion which advantages us for improvement of next issue of the report.

Questionnaire can be sent by postal mail or email to:
Sustainability Development Working Team: WHA CORPORATION PUBLIC COMPANY LIMITED
77 WHA TOWER, 23rd-25^{rn} Floor, Moo 13, Debaratna Road (Bangna-Trad) KM.7,
Bang Kaeo, Bang Phli, Samutprakarn 10540 Thailand
E-mail: Sustianabilty@wha-group.com





WHA Corporation Public Company Limited

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