

## Performance Summary

### ECONOMIC PERFORMANCE

GRI Standard	Performance	Unit	2019	2020	2021	2022	
201-1	<b>Direct economic value generated and distributed</b>						
	Direct economic value generated						
	Revenue	Million Baht	13,386	9,407	11,964	15,568	
	Economic Value distributed						
	Operating Cost	Million Baht	7,262	4,282	6,306	9,574	
	Employee wages and benefits		870	855	961	871	
	Annual dividend payment		2,398	1,348	1,348	2,098	
	Payment to the government		301	293	679	546	
	Social investment		26	41	7	44	
	Economic value retained	Million Baht	2,529	2,588	2,663	2,435	
205-2	<b>Anti-corruption</b>						
	<b>Communication and training on anti-corruption policy to governance body members</b>						
	WHA Industrial Development	%	100	100	100	100	
	WHA Utilities and Power		100	100	100	100	
	WHA Logistics		100	100	100	100	
	WHA Digital Platform		100	100	100	100	
	<b>Communication and training on anti-corruption policy to employees</b>						
	WHA Industrial Development	%	100	100	100	100	
	WHA Utilities and Power		100	100	100	100	
	WHA Logistics		100	100	100	100	
	WHA Digital Platform		100	100	100	100	
	<b>Communication on anti-corruption policy to business partners</b>						
	WHA Industrial Development	%	N/A	N/A	N/A	100	
	WHA Utilities and Power		N/A	N/A	N/A	100	
	WHA Logistics		N/A	N/A	N/A	100	
	WHA Digital Platform		N/A	N/A	N/A	100	
	205-3	<b>Confirmed incidents of corruption</b>					
		Total number of confirmed incidents of corruption	Case	1	0	0	0
Number of employees who dismissed due to corruption		Person	1	0	0	0	
Total number of confirmed incidents when contracts with business partners were terminated or not renewed due to violations related to corruption		Case	0	0	0	0	
Public legal cases regarding corruption		Case	1	0	0	0	
<b>Anti-competitive practice</b>							
Total amount of fines and settlements		Baht	0	0	0	0	
Total amount of fines and settlements		% of revenues	0	0	0	0	
<b>Corruption and Bribery Cases</b>							
Total number of confirmed incidents of corruption		Case	0	0	0	0	
Employees who were dismissed due to corruption		Person	0	0	0	0	
Business partners who were terminated or not renewed due to corruption		Number	0	0	0	0	
Public legal cases regarding corruption (public investigations, prosecution or close cases)		Case	0	0	0	0	
<b>Violations of Business Ethics</b>							
Violations received from grievance mechanisms specified by the company		Case	0	0	0	0	
Violations that are in the process of being resolved		Case	0	0	0	0	
Violations that have been resolved		Case	0	0	0	0	
<b>Confirmed incidents of Discrimination or Harassment</b>							
Total number of confirmed incidents of Discrimination or Harassment		Case	0	0	0	0	
<b>Confirmed incidents of Conflicts of Interest</b>							
Total number of confirmed incidents of Conflicts of Interest		Case	0	0	0	0	
<b>Confirmed incidents of Conflicts of Money Laundering or Insider trading</b>							
Total number of confirmed incidents of Money Laundering or Insider trading		Case	0	0	0	0	

GRI Standard	Performance	Unit	2019	2020	2021	2022
	<b>Written/Digital Acknowledgement of codes of conduct</b>					
	<b>Employees</b>		N/A	N/A	100	100
	WHA Industrial Development		N/A	N/A	100	100
	WHA Utilities & Power		N/A	N/A	100	100
	WHA Logistics		N/A	N/A	100	100
	WHA Digital Platform		N/A	N/A	100	100
	<b>Contractors/ Suppliers/ Service Providers</b>		N/A	N/A	100	100
	WHA Industrial Development	%	N/A	N/A	100	100
	WHA Utilities & Power		N/A	N/A	100	100
	WHA Logistics		N/A	N/A	100	100
	WHA Digital Platform		N/A	N/A	100	100
	<b>Subsidiaries</b>		N/A	N/A	100	100
	WHA Industrial Development		N/A	N/A	100	100
	WHA Utilities & Power		N/A	N/A	100	100
	WHA Logistics		N/A	N/A	100	100
	WHA Digital Platform		N/A	N/A	100	100
	<b>Joint Ventures (including stakes above 10%)</b>		N/A	N/A	100	100
	WHA Industrial Development	%	N/A	N/A	100	100
	WHA Utilities & Power		N/A	N/A	100	100
	WHA Logistics		N/A	N/A	100	100
	WHA Digital Platform		N/A	N/A	100	100
	<b>Training Provided of codes of conduct</b>					
	<b>Employees</b>		N/A	N/A	100	100
	WHA Industrial Development		N/A	N/A	100	100
	WHA Utilities & Power		N/A	N/A	100	100
	WHA Logistics		N/A	N/A	100	100
	WHA Digital Platform		N/A	N/A	100	100
	<b>Contractors/ Suppliers/ Service Providers</b>		N/A	N/A	100	100
	WHA Industrial Development		N/A	N/A	100	100
	WHA Utilities & Power		N/A	N/A	100	100
	WHA Logistics		N/A	N/A	100	100
	WHA Digital Platform	%	N/A	N/A	100	100
	<b>Subsidiaries</b>		N/A	N/A	100	100
	WHA Industrial Development		N/A	N/A	100	100
	WHA Utilities & Power		N/A	N/A	100	100
	WHA Logistics		N/A	N/A	100	100
	WHA Digital Platform		N/A	N/A	100	100
	<b>Joint Ventures (including stakes above 10%)</b>		N/A	N/A	100	100
	WHA Industrial Development		N/A	N/A	100	100
	WHA Utilities & Power		N/A	N/A	100	100
	WHA Logistics		N/A	N/A	100	100
	WHA Digital Platform		N/A	N/A	100	100
206-1	Legal actions for anti-competitive behavior, anti-trust and monopoly practices	case	0	0	0	0

Supply Chain Management

GRI Standard	Performance	Unit	2019	2020	2021	2022
308-1	<b>Supplier Environmental Assessment</b>					
	<b>New suppliers that were screened using environmental criteria</b>					
	<b>New suppliers that were screened using environmental criteria</b>	Number	0	1	2	4
		%	0	100	100	100
	WHA Industrial Development	Number	0	0	1	0
	WHA Utilities and Power		0	0	0	4
	WHA Logistics		0	1	0	0
WHA Digital Platform	0		0	1	0	
308-2	<b>Negative environmental impacts in the supply chain and actions taken</b>					
	<b>Number of suppliers assessed for environmental impacts</b>	Number	N/A	9	29	21
	WHA Industrial Development		N/A	0	9	5
	WHA Utilities and Power		N/A	9	16	14
	WHA Logistics		N/A	0	1	1
	WHA Digital Platform		N/A	0	3	1
	<b>Number of suppliers identified as having significant actual and potential negative environmental impacts.</b>		N/A	0	0	0
	WHA Industrial Development		N/A	N/A	0	0
	WHA Utilities and Power		N/A	0	0	0
	WHA Logistics		N/A	N/A	0	0
WHA Digital Platform	N/A		N/A	0	0	
414-1	<b>Supplier Social Assessment</b>					
	<b>New suppliers that were screened using social criteria</b>					
	<b>New suppliers that were screened using social criteria</b>	Number	0	1	2	4
		%	0	100	100	100
	WHA Industrial Development	Number	0	0	1	0
	WHA Utilities and Power		0	0	0	4
	WHA Logistics		0	1	0	0
WHA Digital Platform	0		0	1	0	
414-2	<b>Negative social impacts in the supply chain and actions taken</b>					
	<b>Number of suppliers assessed for social impacts</b>	Number	N/A	9	29	21
	WHA Industrial Development		N/A	0	9	5
	WHA Utilities and Power		N/A	9	16	14
	WHA Logistics		N/A	0	1	1
	WHA Digital Platform		N/A	0	3	1
	<b>Number of suppliers identified as having significant actual and potential negative social impacts.</b>		N/A	0	0	0
	WHA Industrial Development		N/A	N/A	0	0
	WHA Utilities and Power		N/A	0	0	0
	WHA Logistics		N/A	N/A	0	0
WHA Digital Platform	N/A		N/A	0	0	
S&P CSA	<b>Total tier 1 supplier</b>					
	Absolute number of suppliers	Number	N/A	745	638	594
	Share of total procurement spent	%	N/A	100	100	100
	<b>Critical tier 1 suppliers</b>					
	Absolute number of suppliers	Number	N/A	35	29	21
	Share of total procurement spent	%	N/A	81	81	81
	<b>Critical non-tier 1 suppliers</b>					
	Absolute number of suppliers	Number	N/A	0	2	4
	<b>Supply chain risk exposure</b>					
	Tier 1 suppliers assessed (for sustainability risks) in the last 3 years	Number	N/A	N/A	638	594
		%	N/A	N/A	100	100
	Tier 1 suppliers classified as high-risk	Number	N/A	N/A	0	0
		%	N/A	N/A	0	0
	S&P CSA	Critical non Tier 1 suppliers assessed (for sustainability risks) in the last 3 years	Number	N/A	N/A	2
Critical non Tier 1 suppliers classified as high-risk		Number	N/A	N/A	0	0
<b>Supplier Risk Management Measures</b>						
Critical suppliers assessed annually		%	N/A	72	100	100

GRI Standard	Performance	Unit	2019	2020	2021	2022
	<b>Suppliers with high sustainability risk</b>					
	Suppliers with high sustainability risk assessed (ongoing sustainability monitoring) annually	%	N/A	N/A	0	0
	Percentage of current suppliers with high sustainability risk which have corrective action plans	%	N/A	N/A	100	100
	Percentage of current high sustainability risk suppliers with corrective action plans that have improved their ESG performance within 12 months of the plan's launch	%	N/A	N/A	100	100
	<b>Supply Chain KPIs</b>					
	<b>KPI 1: % of Acknowledgement of Supplier Code of Conduct</b>		<b>Target: 100%</b>			
			<b>Target Year: 2023</b>			
	% of Acknowledgement of Supplier Code of Conduct	%	0	25.26	43.75	100%
	<b>KPI 2: % of New Supplier Screening using Pre-Questionnaire Form</b>		<b>Target: 100%</b>			
			<b>Target Year: 2023</b>			
	% of New Supplier Screening using Pre-Questionnaire Form	%	0	100	100	100%
	<b>KPI 3: % of Existing Supplier ESG Performance Evaluation</b>		<b>Target: 100%</b>			
			<b>Target Year: 2023</b>			
	% of Existing Supplier ESG Performance Evaluation	%	0	100	100	100%

## Customer Relationship Management

GRI Standard	Performance	Unit	2019	2020	2021	2022
S&P CSA	<b>Satisfaction Measurement</b>					
	Satisfied Respondents (as % of % of satisfied respondents out of total number of respondents to survey)	%	87	89	90	86
		Target: 90 Target Year: 2022				
Data coverage (% of customers/consumers surveyed)	%	99.98	99.98	99.98	99.98	

## Customer Privacy

GRI Standard	Performance	Unit	2019	2020	2021	2022
418-1	<b>Substantiated complaints concerning breaches of customer privacy and losses of customer data</b>					
	Total number of substantiated complaints received concerning breaches of customer privacy	Number	0	0	0	0
	Complaints received from outside parties and substantiated by the organization	Incident	0	0	0	0
	WHA Industrial Development		0	0	0	0
	WHA Utilities and Power		0	0	0	0
	WHA Logistics		0	0	0	0
	WHA Digital Platform	0	0	0	0	
	Complaints from regulatory bodies	Incident	0	0	0	0
	WHA Industrial Development		0	0	0	0
	WHA Utilities and Power		0	0	0	0
	WHA Logistics		0	0	0	0
	WHA Digital Platform	0	0	0	0	
	Total number of identified leaks, thefts, of losses of customer data	Incident	0	0	0	0
	WHA Industrial Development		0	0	0	0
	WHA Utilities and Power		0	0	0	0
	WHA Logistics		0	0	0	0
WHA Digital Platform	0	0	0	0		

## Information Security/ Cybersecurity

GRI Standard	Performance	Unit	2019	2020	2021	2022
S&P CSA	<b>Information Security/ Cybersecurity breach cases</b>					
	Total number of information security breaches	Incident	0	0	0	0
	WHA Industrial Development		0	0	0	0
	WHA Utilities and Power		0	0	0	0
	WHA Logistics		0	0	0	0
	WHA Digital Platform		0	0	0	0
	Total number of clients, customers and employees affected by the breaches	Incident	0	0	0	0
	WHA Industrial Development		0	0	0	0
	WHA Utilities and Power		0	0	0	0
	WHA Logistics		0	0	0	0
WHA Digital Platform	0		0	0	0	

ENVIRONMENT PERFORMANCE

Waste

GRI Standard	Performance	Unit	2019	2020	2021	2022
306-3	<b>Waste composition</b>					
	<b>Total Waste</b>	Tons	5,492.90	9,234.87	8,180.07	7,574.59
	Hazardous waste		6.93	8.24	8.69	8.78
	Non-hazardous waste		5,485.97	9,226.63	8,171.38	7,565.81
306-4	<b>Hazardous waste diverted from disposal by recovery option</b>					
	<b>Total</b>	Tons	5.93	7.41	7.02	7.99
	- Preparation for reuse		0	0	0	0
	- Recycling		0	0	0	0
	- On-site storage		5.93	7.41	7.02	7.99
	<b>Non-hazardous waste diverted from disposal by recovery option</b>					
	<b>Total</b>	Tons	487.12	3,732.12	5,638.74	5,823.24
	- Preparation for reuse		0	2,000.00	0	0
	- Recycling		0	23.94	4,319.12	3,957.87
	- On-site storage		487.12	1,708.18	1,319.62	1,865.37
	S&P CSA	<b>Total waste recycled / reused</b>	Tons	0	2,023.94	4,319.12
<b>Total waste disposed</b>		Tons	4,999.85	5,495.34	2,534.31	1,743.37
Total waste landfilled		Tons	4,999.85	5,494.51	2,532.64	1,418.95
Total incineration (with energy recovery)			0	0	0	323.63
Total incineration (without energy recovery)			0	0.83	1.67	0.79
Total waste with unknown disposal method			0	0	0	0
Data coverage		% of Revenue	100	100	100	100
<b>Target 2022 (total waste disposed)</b>		<b>Tons</b>	2,000			

Energy

GRI Standard	Performance	Unit	2019	2020	2021	2022
302-1	<b>Energy consumption within the organization</b>					
	<b>Energy consumption from non-renewable sources</b>					
	<b>Total non-renewable energy consumption</b>	<b>MWh</b>	<b>32,309.84</b>	<b>31,508.85</b>	<b>41,150.05</b>	<b>41,673.72</b>
	Diesel / Petrol/ Gasoline	MWh	235.43	571.45	4,883.00	5,649.96
	Grid electricity consumption intensity ratio	MWh	32,074.41	30,937.40	36,267.05	36,023.76
	Total non-renewable energy consumption intensity ratio	MWh/THB mm	2.96	3.35	3.44	2.68
	<b>Target 2022</b>	<b>MWh</b>	<b>51,938.75</b>			
	<b>Energy consumption from renewable source</b>					
	<b>Total renewable energy consumption</b>	<b>MWh</b>	<b>623.11</b>	<b>555.99</b>	<b>863.03</b>	<b>1,656.84</b>
	Solar Power	MWh	623.11	555.99	863.03	1,656.84
	Percentage of electricity from renewable sources (wind, water, solar, biogas) used in buildings in portfolio	%	1.93	1.76	2.05	3.82
	<b>Total energy consumption</b>					
	Total	MWh	32,932.95	32,064.84	42,013.08	43,330.56
	<b>Data coverage for Energy Consumption</b>					
	Data coverage	% of Revenue	100	100	100	100
	<b>Type of energy consumption</b>					
	Electricity	MWh	32,697.52	31,493.39	37,130.08	37,680.60
	Heating		235.43	571.45	4,883.00	5,649.96
	Cooling		-	-	-	-
	Steam		-	-	-	-
	<b>Type of energy sold</b>					
Electricity	MWh	N/A	N/A	52,767.61	72,135.23	
Heating		-	-	-	-	
Cooling		-	-	-	-	
Steam		-	-	-	-	
302-2	<b>Energy consumption outside of the organization</b>					
<b>Total energy consumption</b>	<b>MWh</b>	<b>235.43</b>	<b>571.45</b>	<b>4,883.00</b>	<b>5,649.96</b>	
302-3	<b>Energy intensity</b>					
Energy intensity ratio	MWh/THB mm	3.02	3.41	3.51	2.78	
Energy intensity ratio	MWh/ton production	N/A	N/A	N/A	N/A	

GHG Emission

GRI Standard	Performance	Unit	2019	2020	2021	2022
305-1	<b>Scope 1 emissions by business unit</b>		639	645	1,146	1,322
	WHA Industrial Development	ton CO <sub>2</sub> e	556	748	639	699
	WHA Utilities and Power		89	560	274	356
	WHA Logistics		N/A	255	228	255
	WHA Digital Platform		N/A	N/A	5	12
	Data coverage	% of Revenue	100	100	100	100
	<b>Target 2022</b>	ton CO <sub>2</sub> e	1,446			
305-2	<b>Scope 2 emissions by business unit (Market-based)</b>		19,419	18,671	18,104	15,722
	WHA Industrial Development	ton CO <sub>2</sub> e	2,296	1,912	3,041	2,538
	WHA Utilities and Power		15,730	13,554	13,458	12,083
	WHA Logistics		260	240	956	918
	WHA Digital Platform		384	683	649	183
	<b>Market-based</b>		19,419	18,671	18,104	15,722
	Data coverage	% of Revenue	100	100	100	100
	<b>Target 2022</b>	ton CO <sub>2</sub> e	22,850			
	<b>Location-based</b>	ton CO <sub>2</sub> e	19,419	18,671	18,130	17,925
	Data coverage	% of Revenue	100	100	100	100
	<b>Target 2022</b>	ton CO <sub>2</sub> e	22,883			
305-3	<b>Scope 3 emissions by business unit</b>		N/A	N/A	116,421	120,290
	WHA Industrial Development	ton CO <sub>2</sub> e	N/A	N/A	N/A	767
	WHA Utilities and Power		N/A	N/A	N/A	22,621
	WHA Logistics		N/A	N/A	N/A	96,866
	WHA Digital Platform		N/A	N/A	N/A	36
	Data coverage		% of Revenue	100	100	100
	<b>Target 2022</b>	ton CO <sub>2</sub> e	146,944			
S&P CSA	Purchased goods and services (upstream)	ton CO <sub>2</sub> e	N/A	N/A	96,921	109,683
	Waste generated in operations	ton CO <sub>2</sub> e	N/A	N/A	14,853	6,326
	Fuel-and-energy-related activities (not included scope 1 or scope 2)	ton CO <sub>2</sub> e	N/A	N/A	4,647	4,280
305-4	<b>GHG emissions intensity ratio</b>					
	Scope 1	Tons	0.05	0.07	0.10	0.08
	Scope 2	CO <sub>2</sub> e/THB	1.78	1.98	1.51	1.01
305-5	<b>Scope 1 emissions reduction by business unit</b>					
	WHA Industrial Development	ton CO <sub>2</sub> e	N/A	N/A	(109)	60
	WHA Utilities and Power		N/A	N/A	(286)	82
	WHA Logistics		N/A	N/A	(27)	27
	WHA Digital Platform		N/A	N/A	N/A	7
	<b>Scope 2 emissions reduction by business unit</b>					
	WHA Industrial Development	ton CO <sub>2</sub> e	N/A	N/A	1,129	(503)
	WHA Utilities and Power		N/A	N/A	(96)	(1,375)
	WHA Logistics		N/A	N/A	716	(38)
	WHA Digital Platform		N/A	N/A	(34)	(466)
	<b>Scope 3 emissions reduction by business unit</b>	ton CO <sub>2</sub> e				
	WHA Industrial Development	ton CO <sub>2</sub> e	N/A	N/A	N/A	138
	WHA Utilities and Power		N/A	N/A	N/A	(13,123)
	WHA Logistics		N/A	N/A	N/A	16,948
	WHA Digital Platform		N/A	N/A	N/A	(93)



Water and Effluents

GRI Standard	Performance	Unit	2019	2020	2021	2022
303-3	<b>Water withdrawal by source</b>					
	<b>Total Fresh water withdrawal</b>	MI	<b>67,343.64</b>	<b>64,830.39</b>	<b>69,233.39</b>	<b>66,205.07</b>
	Fresh Surface water		3,811.91	15,555.50	9,245.49	10,521.46
	Fresh groundwater		0	0	0	0
	Third party water		63,531.73	49,274.89	59,987.90	55,683.61
	<b>Total water withdrawal from area with water stress</b>	MI	<b>8,186.47</b>	<b>7,457.07</b>	<b>7,513.29</b>	<b>5,348.80</b>
	Surface water		N/A	N/A	N/A	N/A
	Third party water		8,186.47	7,457.07	7,513.29	5,348.80
	Data coverage	% of Revenue	100	100	100	100
303-4	<b>Water discharge by destination</b>					
	<b>Total water discharge</b>	MI	<b>46,162.76</b>	<b>17,950.58</b>	<b>58,538.05</b>	<b>17,226.23</b>
	- Surface water		44,292.55	16,117.38	44,918.63	14,765.67
	- Seawater		1,870.21	1,833.20	13,619.42	2,460.56
	<b>Total water discharge from area with water stress</b>	MI	<b>2,948.53</b>	<b>2,570.31</b>	<b>2,756.09</b>	<b>2,543.68</b>
	- Surface water		2,948.53	2,570.31	2,756.09	2,543.68
	- Seawater		N/A	N/A	N/A	N/A
	<b>Water discharge by category</b>					
	Freshwater (≤ 1,000 mg/L Total Dissolved Solids)	MI	44,292.55	16,117.038	24,711.40	14,765.67
	Other water (> 1,000 mg/L Total Dissolved Solids)		1,870.21	1,833.20	33,826.65	2,460.56
	<b>Water discharge by quality and location</b>					
	<b>WHA CIE1</b>					
	pH	-	7.20	7.40	7.42	7.26
	Temperature	°C	32.40	30.40	30.17	30.65
	Biochemical Oxygen Demand (BOD)	mg/L	11.00	8.75	8.50	7.00
	Chemical Oxygen Demand (COD)	mg/L	44.00	37.00	37.64	38.00
	Grease and Oil	mg/L	<3.00	<3.00	<3.00	<3.00
	Suspended Solid (SS)	mg/L	12.00	9.00	7.43	8.08
	Total Dissolved Solid (TDS)	mg/L	965.00	1011.00	1,139.00	1136.00
	Total Kjeldahl Nitrogen (TKN)	mg/L	5.20	6.52	6.88	8.97
	Mercury (Hg)	mg/L	0.0002	<0.0001	ND	ND
	Selenium (Se)	mg/L	N/A	N/A	N/A	<0.0005
	Cadmium (Cd)	mg/L	<0.0001	<0.0001	<0.0001	ND
	Lead (Pb)	mg/L	0.001	0.005	0.007	0.001
	Arsenic (As)	mg/L	0.003	0.004	0.003	0.004
	Chromium (Cr)	mg/L	<0.01	<0.01	ND	ND
	Barium (Ba)	mg/L	N/A	N/A	N/A	0.04
Nickel (Ni)	mg/L	0.1	0.08	0.05	0.07	
Copper (Cu)	mg/L	0.31	0.33	0.22	0.25	
Zinc (Zn)	mg/L	0.21	0.40	0.26	0.23	
Sulfide as H <sub>2</sub> S	mg/L	N/A	N/A	N/A	<0.5	
Cyanide as HCN	mg/L	N/A	N/A	N/A	ND	
Chloride as Cl <sub>2</sub>	mg/L	N/A	N/A	N/A	N/A	
<b>WHA CIE 2</b>						
pH	-	8.30	8.50	8.32	8.10	
Temperature	°C	29.7	30.35	28.58	30.85	
Biochemical Oxygen Demand (BOD)	mg/L	5	3.3	3.83	5.00	
Chemical Oxygen Demand (COD)	mg/L	51.00	26.00	33.25	23.00	
Grease and Oil	mg/L	<3.00	<3.00	<3	<3.00	
Suspended Solid (SS)	mg/L	12.00	14.3	13.83	10.83	
Total Dissolved Solid (TDS)	mg/L	2160.00	1634.00	1,603.00	1,684.67	
Total Kjeldahl Nitrogen (TKN)	mg/L	2.30	1.86	1.90	2.25	
Mercury (Hg)	mg/L	0.0003	<0.0001	ND	ND	
Selenium (Se)	mg/L	N/A	N/A	N/A	ND	
Cadmium (Cd)	mg/L	<0.0001	<0.0001	ND	ND	
Lead (Pb)	mg/L	<0.0002	<0.0002	<0.0002	ND	

GRI Standard	Performance	Unit	2019	2020	2021	2022
	Arsenic (As)	mg/L	0.01	0.007	0.008	0.005
	Chromium (Cr)	mg/L	<0.01	<0.01	ND	ND
	Barium (Ba)	mg/L	N/A	N/A	N/A	0.035
	Nickel (Ni)	mg/L	0.02	0.006	0.006	0.010
	Copper (Cu)	mg/L	0.00	0.004	0.022	0.002
	Zinc (Zn)	mg/L	0.16	0.05	0.04	0.06
	Sulfide as H <sub>2</sub> S	mg/L	N/A	N/A	N/A	<0.5
	Cyanide as HCN	mg/L	N/A	N/A	N/A	ND
	Chloride as Cl <sub>2</sub>	mg/L	N/A	N/A	N/A	N/A
<b>ESIE Please 1</b>						
	pH	-	7.69	7.60	7.80	7.50
	Temperature	°C	29.80	29.60	29.00	29.40
	Biochemical Oxygen Demand (BOD)	mg/L	3.00	4.00	4.30	3.00
	Chemical Oxygen Demand (COD)	mg/L	44.00	31.00	31.67	43.00
	Grease and Oil	mg/L	<3.00	<3.00	<3.00	<3.00
	Suspended Solid (SS)	mg/L	10.00	<5.00	10.00	5.42
	Total Dissolved Solid (TDS)	mg/L	890.00	1,105.00	736.00	1,415.00
	Total Kjeldahl Nitrogen (TKN)	mg/L	2.70	2.50	8.90	4.88
	Mercury (Hg)	mg/L	0.0003	<0.0001	ND	ND
	Selenium (Se)	mg/L	0.0004	0.0002	<0.0001	ND
	Cadmium (Cd)	mg/L	0.0001	<0.0001	ND	ND
	Lead (Pb)	mg/L	0.0003	<0.0002	<0.0002	ND
	Arsenic (As)	mg/L	0.005	0.005	0.002	0.005
	Trivalent Chromium (Cr+3)	mg/L	<0.01	<0.01	<0.01	<0.01
	Hexavalent Chromium (Cr+6)	mg/L	<0.01	<0.01	0.042	ND
	Barium (Ba)	mg/L	0.11	0.11	0.06	0.12
	Nickel (Ni)	mg/L	0.07	0.07	0.0005	0.08
	Copper (Cu)	mg/L	0.003	0.003	0.11	0.003
	Zinc (Zn)	mg/L	0.12	0.12	<0.5	0.09
	Sulfide as H <sub>2</sub> S	mg/L	<0.50	<0.50	<0.005	<0.50
	Cyanide as HCN	mg/L	<0.005	0.009	N/A	0.012
	Chloride as Cl <sub>2</sub>	mg/L	N/A	N/A	N/A	N/A
<b>ESIE Phase 2B</b>						
	pH	-	7.60	7.60	8.2	7.64
	Temperature	°C	30.10	29.80	29.29	29.69
	Biochemical Oxygen Demand (BOD)	mg/L	5.00	4.00	4.7	7.00
	Chemical Oxygen Demand (COD)	mg/L	45.00	24.00	41.45	36.00
	Grease and Oil	mg/L	<3.00	<3.00	<3	3.00
	Suspended Solid (SS)	mg/L	9.00	11.00	15.45	13.67
	Total Dissolved Solid (TDS)	mg/L	905.00	744.00	593.50	851.00
	Total Kjeldahl Nitrogen (TKN)	mg/L	2.50	1.50	1.36	4.01
	Mercury (Hg)	mg/L	0.0001	<0.0001	ND	ND
	Selenium (Se)	mg/L	0.0001	0.0003	N/A	ND
	Cadmium (Cd)	mg/L	0.0001	ND	ND	ND
	Lead (Pb)	mg/L	0.0002	0.0003	0.0003	ND
	Arsenic (As)	mg/L	0.002	0.002	0.0025	0.002
	Trivalent Chromium (Cr+3)	mg/L	<0.01	<0.01	<0.01	<0.01
	Hexavalent Chromium (Cr+6)	mg/L	<0.01	<0.01	N/A	ND
	Barium (Ba)	mg/L	0.03	0.02	N/A	0.04
	Nickel (Ni)	mg/L	0.009	0.016	0.035	0.008
	Copper (Cu)	mg/L	0.001	0.0013	0.0019	<0.0005
	Zinc (Zn)	mg/L	0.05	0.073	0.033	0.024
	Sulfide as H <sub>2</sub> S	mg/L	<0.50	<0.50	N/A	<0.50
	Cyanide as HCN	mg/L	<0.005	<0.005	N/A	<0.005
	Chloride as Cl <sub>2</sub>	mg/L	N/A	N/A	N/A	N/A
<b>WHA ESIE 1 Phase 1</b>						
	pH	-	7.70	7.50	8.0	7.55
	Temperature	°C	30.00	30.00	30.70	29.31
	Biochemical Oxygen Demand (BOD)	mg/L	10.16	6.80	6.4	9.00
	Chemical Oxygen Demand (COD)	mg/L	50.26	30	51.25	42.00
	Grease and Oil	mg/L	3.00	3.00	<3	3.00

GRI Standard	Performance	Unit	2019	2020	2021	2022
	Suspended Solid (SS)	mg/L	17.16	12.16	7.50	11.92
	Total Dissolved Solid (TDS)	mg/L	626.00	647.00	1391	898
	Total Kjeldahl Nitrogen (TKN)	mg/L	7.80	8.9	2.8	18.85
	Mercury (Hg)	mg/L	0.0001	0.0001	ND	ND
	Selenium (Se)	mg/L	0.0003	0.0003	0.0003	ND
	Cadmium (Cd)	mg/L	0.0001	0.0002	<0.0001	ND
	Lead (Pb)	mg/L	0.0003	0.0007	0.0003	ND
	Arsenic (As)	mg/L	0.0055	0.0023	0.005	0.002
	Chromium (Cr)	mg/L	0.01	0.01	<0.01	<0.01
	Barium (Ba)	mg/L	0.035	0.033	<0.01	0.044
	Nickel (Ni)	mg/L	0.07	0.10	0.14	0.08
	Copper (Cu)	mg/L	0.0007	0.0009	0.09	0.0009
	Zinc (Zn)	mg/L	0.04	0.04	0.002	0.065
	Sulfide as H2S	mg/L	0.50	0.60	0.14	0.53
	Cyanide as HCN	mg/L	0.005	0.005	<0.5	ND
	Chloride as Cl2	mg/L	N/A	N/A	<0.005	N/A
<b>WHA ESIE 1 Phase 3</b>						
	pH	-	7.5	7.5	8.7	7.48
	Temperature	°C	29.36	29.60	N/A	29.62
	Biochemical Oxygen Demand (BOD)	mg/L	8.1	5.8	2.1	7.00
	Chemical Oxygen Demand (COD)	mg/L	49.17	33	28.8	39.00
	Grease and Oil	mg/L	3	4	3	3.00
	Suspended Solid (SS)	mg/L	8.7	7.6	N/A	7.75
	Total Dissolved Solid (TDS)	mg/L	319	294	291	452
	Total Kjeldahl Nitrogen (TKN)	mg/L	9.70	17.10	N/A	6.29
	Mercury (Hg)	mg/L	0.0001	0.0005	ND	ND
	Selenium (Se)	mg/L	0.0003	0.0002	<0.0001	ND
	Cadmium (Cd)	mg/L	0.0001	0.0001	ND	ND
	Lead (Pb)	mg/L	0.0002	0.0004	0.0002	ND
	Arsenic (As)	mg/L	0.0059	0.0035	0.002	0.004
	Chromium (Cr)	mg/L	0.01	0.01	ND	<0.01
	Barium (Ba)	mg/L	0.06	0.07	0.01	0.04
	Nickel (Ni)	mg/L	0.002	0.002	0.0011	0.002
	Copper (Cu)	mg/L	0.0007	0.0008	0.0007	0.0007
	Zinc (Zn)	mg/L	0.02	0.03	0.01	0.01
	Sulfide as H2S	mg/L	0.7	0.5	N/A	<0.5
	Cyanide as HCN	mg/L	0.005	0.005	N/A	<0.005
	Chloride as Cl2	mg/L	N/A	N/A	N/A	N/A
<b>WHA ESIE 2</b>						
	pH	-	8.75	8.37	8.20	8.02
	Temperature	°C	31.00	29.95	29.29	29.40
	Biochemical Oxygen Demand (BOD)	mg/L	5.00	5.59	4.7	5.00
	Chemical Oxygen Demand (COD)	mg/L	52.00	35.50	41.45	51.00
	Grease and Oil	mg/L	<3	<3	<3	<3
	Suspended Solid (SS)	mg/L	17.00	15.32	15.45	21.50
	Total Dissolved Solid (TDS)	mg/L	668.00	629.45	593.5	483.9
	Total Kjeldahl Nitrogen (TKN)	mg/L	3	2.26	1.36	3.02
	Mercury (Hg)	mg/L	0.002	0.0001	ND	ND
	Selenium (Se)	mg/L	N/A	N/A	N/A	N/A
	Cadmium (Cd)	mg/L	Not detected	Not detected	ND	ND
	Lead (Pb)	mg/L	0.0002	0.0002	0.0003	ND
	Arsenic (As)	mg/L	0.004	0.004	0.0025	0.002
	Chromium (Cr)	mg/L	<0.01	<0.01	<0.01	<0.01
	Barium (Ba)	mg/L	N/A	N/A	N/A	N/A
	Nickel (Ni)	mg/L	0.008	0.02	0.035	0.064
	Copper (Cu)	mg/L	0.001	0.001	0.0019	0.0039
	Zinc (Zn)	mg/L	0.02	0.02	0.033	0.129
	Sulfide as H2S	mg/L	N/A	N/A	N/A	N/A
	Cyanide as HCN	mg/L	N/A	N/A	N/A	N/A
	Chloride as Cl2	mg/L	N/A	N/A	N/A	N/A

GRI Standard	Performance	Unit	2019	2020	2021	2022
<b>WHA ESIE 4</b>						
	pH	-	7.4-8.9	8.0	8.0	7.43
	Temperature	°C	26.8-32.3	30.5	30.8	31.30
	Biochemical Oxygen Demand (BOD)	mg/L	4-13	5	4.8	6.00
	Chemical Oxygen Demand (COD)	mg/L	19-64	37	34.1	38.00
	Grease and Oil	mg/L	<3	<3	<3	3.00
	Suspended Solid (SS)	mg/L	6-50	21	17.5	19.2
	Total Dissolved Solid (TDS)	mg/L	152-260	256	295	361
	Total Kjeldahl Nitrogen (TKN)	mg/L	1.4-5.7	2	1.7	5.03
	Mercury (Hg)	mg/L	ND, <0.0001	<0.0001	ND	ND
	Selenium (Se)	mg/L	ND, <0.0001	0.0002	0.0006	ND
	Cadmium (Cd)	mg/L	ND, <0.0001	ND,	ND	ND
	Lead (Pb)	mg/L	<0.0002	0.0004	0.0005	ND
	Arsenic (As)	mg/L	0.0008-0.002	0.0011	0.0010	0.0020
	Trivalent Chromium (Cr+3)	mg/L	<0.01	<0.01	<0.01	<0.01
	Hexavalent Chromium (Cr+6)	mg/L	ND, <0.01	<0.01	ND	ND
	Barium (Ba)	mg/L	0.02-0.04	0.04	0.05	0.06
	Nickel (Ni)	mg/L	0.0006-0.001	0.001	0.002	0.004
	Copper (Cu)	mg/L	0.001-0.006	0.007	0.0059	0.015
	Zinc (Zn)	mg/L	0.01-0.13	0.10	0.03	0.18
	Sulfide as H2S	mg/L	<0.05	<0.05	<0.5	<0.5
	Cyanide as HCN	mg/L	<0.005	<0.005	<0.005	<0.005
	Chloride as Cl2	mg/L	N/A	N/A	N/A	N/A
<b>WHA EIE</b>						
	pH	-	8.00	8.50	8.45	8.32
	Temperature	°C	34.00	34.30	34.60	34.80
	Biochemical Oxygen Demand (BOD)	mg/L	2.00	4.00	4.00	3.00
	Chemical Oxygen Demand (COD)	mg/L	49.00	20.00	42.58	38.00
	Grease and Oil	mg/L	3.00	3.00	<3.0	<3.0
	Suspended Solid (SS)	mg/L	22.00	17.00	11.16	24.25
	Total Dissolved Solid (TDS)	mg/L	2405.00	2430.00	2,417.00	2,070.00
	Total Kjeldahl Nitrogen (TKN)	mg/L	3.00	2.50	2.27	1.77
	Mercury (Hg)	mg/L	0.00	0.0001	<0.0001	ND
	Selenium (Se)	mg/L	0.00	0.0007	0.0008	0.0008
	Cadmium (Cd)	mg/L	0.00	0.0012	0.0020	0.0020
	Lead (Pb)	mg/L	0.00	0.0011	0.0006	0.0019
	Arsenic (As)	mg/L	0.00	0.007	0.006	0.005
	Chromium (Cr)	mg/L	N/A	N/A	ND	<0.01
	Barium (Ba)	mg/L	0.00	0.017	0.17	0.12
	Nickel (Ni)	mg/L	0.00	0.034	0.023	0.019
	Copper (Cu)	mg/L	0.00	0.011	0.004	0.005
	Zinc (Zn)	mg/L	0.00	0.49	0.36	0.23
	Sulfide as H2S	mg/L	1.00	<0.5	<0.5	<0.5
	Cyanide as HCN	mg/L	0.00	0.015	0.016	0.009
	Chloride as Cl2	mg/L	N/A	N/A	N/A	N/A
<b>WHA RIL</b>						
	pH	-	7.00	6.80	7.00	6.87
	Temperature	°C	31.00	32.25	29.50	32.33
	Biochemical Oxygen Demand (BOD)	mg/L	8.00	8.00	7.83	8.00
	Chemical Oxygen Demand (COD)	mg/L	49.00	37.00	37.16	39.00
	Grease and Oil	mg/L	3.00	4.00	<3.0	<3.0
	Suspended Solid (SS)	mg/L	10.00	11.00	10.83	13.58
	Total Dissolved Solid (TDS)	mg/L	1083.00	1211.00	1,224.00	1,049.00
	Total Kjeldahl Nitrogen (TKN)	mg/L	11.00	5.00	9.10	13.20
	Mercury (Hg)	mg/L	ND	<0.0001	<0.0001	ND
	Selenium (Se)	mg/L	N/A	N/A	0.0004	ND
	Cadmium (Cd)	mg/L	N/A	N/A	<0.0001	ND
	Lead (Pb)	mg/L	N/A	N/A	0.0010	0.0014
	Arsenic (As)	mg/L	N/A	N/A	0.0065	0.004
	Chromium (Cr)	mg/L	N/A	N/A	<0.01	<0.01
	Barium (Ba)	mg/L	N/A	N/A	0.065	0.050

GRI Standard	Performance	Unit	2019	2020	2021	2022
	Nickel (Ni)	mg/L	0.00	0.0013	0.013	0.033
	Copper (Cu)	mg/L	N/A	0.004	0.003	0.004
	Zinc (Zn)	mg/L	0.00	0.24	0.15	0.30
	Sulfide as H2S	mg/L	1.00	<0.5	<0.5	<0.50
	Cyanide as HCN	mg/L	N/A	N/A	0.0060	<0.005
	Chloride as Cl2	mg/L	N/A	N/A	N/A	N/A
	<b>WHA SIL</b>					
	pH	-	8.00	7.4	7.5	7.53
	Temperature	°C	30.00	31.00	34.6	30.52
	Biochemical Oxygen Demand (BOD)	mg/L	4.00	3.00	3.00	3.00
	Chemical Oxygen Demand (COD)	mg/L	41.00	40.00	35.00	28.00
	Grease and Oil	mg/L	3.00	3.00	3.00	3.00
	Suspended Solid (SS)	mg/L	11.00	12.00	10.60	9.80
	Total Dissolved Solid (TDS)	mg/L	1,073.00	1,207.00	1,263.00	1,268.00
	Total Kjeldahl Nitrogen (TKN)	mg/L	3.00	1.52	1.94	1.48
	Mercury (Hg)	mg/L	ND	ND	<0.0001	ND
	Selenium (Se)	mg/L	N/A	N/A	N/A	N/A
	Cadmium (Cd)	mg/L	<0.0001	<0.0001	ND	ND
	Lead (Pb)	mg/L	0.00	0.0014	0.0014	0.0010
	Arsenic (As)	mg/L	N/A	N/A	N/A	N/A
	Chromium (Cr)	mg/L	N/A	N/A	N/A	N/A
	Barium (Ba)	mg/L	N/A	N/A	N/A	N/A
	Nickel (Ni)	mg/L	0.00	0.01	0.009	0.013
	Copper (Cu)	mg/L	0.00	0.06	0.004	0.003
	Zinc (Zn)	mg/L	0.00	0.013	0.060	0.065
	Sulfide as H2S	mg/L	<0.5	<0.5	<0.5	<0.5
	Cyanide as HCN	mg/L	N/A	N/A	N/A	N/A
	Chloride as Cl2	mg/L	N/A	N/A	N/A	N/A
<b>303-5</b>	<b>Water consumption</b>					
	Total water consumption from all areas		67,343.64	64,830.39	69,233.39	66,205.07
	Total water consumption from areas with water stress	MI	8,186.47	7,457.07	7,513.29	5,348.80
	Change in water storage, if water storage has been identified as having a significant water-related impact.		0	0	0	0
	Total net fresh water consumption		23,051.09	48,713.01	24,314.76	51,439.40
	Data coverage	% of Revenue	100	100	100	100
	<b>Target 2022 Total Fresh water consumption</b>	MI	<b>82,668.61</b>			

Remark: NA = Not applicable; Na = Not analyzed; ND = Not detected

Air Emission

GRI Standard	Performance	Unit	Standard	2019	2020	2021	2022
THSI	<b>Ambient air quality monitoring by industrial estate operation*</b>						
	<b>WHA ESIE</b>						
	<b>Location 1: Chompon Chao Phraya Temple</b>						
	NOx	ppm	≤ 0.17	0.007-0.016	0.014-0.052	** 0.004-0.011	0.0139-0.0344
	SOx	mg/m <sup>3</sup>	≤ 0.3	0.0100-0.0120	0.0039-0.0100	**0.0185-0.0204	0.0021-0.0024
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.028-0.053	0.031-0.061	** 0.065-0.080	0.019-0.035
	Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	-	-	-	-
	<b>Location 2: Klong Gram Temple</b>						
	NOx	ppm	≤ 0.17	0.007-0.019	0.004-0.027	** 0.006-0.008	0.0143-0.0268
	SOx	mg/m <sup>3</sup>	≤ 0.3	0.0097-0.0106	0.0031-0.0072	**0.0217-0.0253	0.0018-0.0027
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.026-0.074	0.027-0.106	**0.051-0.092	0.017-0.035
	Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	-	-	-	-
	<b>Location 3: Ras Asadaram Temple</b>						
	NOx	ppm	≤ 0.17	0.007-0.019	0.007-0.050	** 0.006-0.010	0.0136-0.0320
	SOx	mg/m <sup>3</sup>	≤ 0.3	0.0035-0.0040	0.0012-0.0232	**0.0124-0.0146	0.0026-0.0029
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.026-0.123	0.047-0.216	** 0.114-0.236	0.037-0.096
	Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	-	-	-	-
	<b>Location 4: Ban Wang Ta Pin</b>						
	NOx	ppm	≤ 0.17	0.007-0.019	0.012-0.050	** 0.003-0.007	0.0132-0.0310
	SOx	mg/m <sup>3</sup>	≤ 0.3	0.0047-0.0053	0.0036-0.0138	**0.0088-0.0096	0.0016-0.0028
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.040-0.129	0.035-0.307	**0.059-0.282	0.018-0.100
	Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	-	-	-	-
	<b>Location 5: Ban Map Lang School</b>						
	NOx	ppm	≤ 0.17	0.007-0.019	0.009-0.054	**0.007-0.012	0.0119-0.0248
	SOx	mg/m <sup>3</sup>	≤ 0.3	0.0092-0.0103	0.0015-0.0145	**0.0060-0.0067	0.0023-0.0030
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.015-0.051	0.040-0.118	**0.065-0.077	0.018-0.044
	Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	-	-	-	-
	<b>Location 6: Sri Sattanam Monk Center</b>						
	NOx	ppm	≤ 0.17	0.003-0.016	0.020-0.055	**0.005-0.011	0.0145-0.0312
	SOx	mg/m <sup>3</sup>	≤ 0.3	0.0050-0.0354	0.0029-0.0111	**0.0045-0.0060	0.0022-0.0030
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.018-0.030	0.022-0.105	**0.056-0.078	0.018-0.039
	Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	-	-	-	-
	<b>WHA ESIE1</b>						
	<b>Location 1: Eastern Sugar Company Community School</b>						
	NOx	ppm	≤ 0.17	0.004-0.016	0.001-0.022	** 0.001-0.030	0.0086-0.0333
	SOx	mg/m <sup>3</sup>	≤ 0.12	0.0035-0.004	0.0020-0.0231	**0.0045-0.0060	0.0019-0.0031
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.023-0.049	0.028-0.178	**0.030-0.231	0.033-0.079
	Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.014-0.021	0.015-0.076	**0.011-0.120	0.019-0.079
	<b>Location 2: Surasak School</b>						
	NOx	ppm	≤ 0.17	0.008-0.014	<0.001-0.0250	**0.004-0.065	0.0047-0.0171
	SOx	mg/m <sup>3</sup>	≤ 0.12	0.0003-0.004	0.0009-0.0119	** 0.0003-0.0052	0.0018-0.0065
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.038-0.068	0.023-0.223	** 0.021-0.251	0.027-0.050
	Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.018-0.028	0.009-0.071	**0.010-0.093	0.011-0.035
	<b>Location 3: Weather Station</b>						
	NOx	ppm	≤ 0.17	0.031-0.038	0.004-0.084	**0.011-0.018	0.0016-0.0230
	SOx	mg/m <sup>3</sup>	≤ 0.12	0.002-0.012	0.001-0.0080	**0.002-0.013	0.0012-0.0065
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.021-0.030	0.023-0.087	**0.020-0.087	0.027-0.050
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.013-0.018	0.008-0.071	**0.018-0.042	0.018-0.070
	<b>Location 4: Klong Gram Temple</b>						
	NOx	ppm	≤ 0.17	0.031-0.038	0.004-0.084	** 0.002-0.015	0.0038-0.0148
	SOx	mg/m <sup>3</sup>	≤ 0.12	0.002-0.012	0.001-0.0080	** 0.005-0.023	0.0016-0.0020
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.021-0.030	0.023-0.087	** 0.024-0.082	0.031-0.089
Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.013-0.018	0.008-0.071	**0.010-0.044	0.019-0.045	
<b>Location 5: Ban Tai Sun</b>							
NOx	ppm	≤ 0.17	0.008-0.012	<0.001-0.017	** 0.009-0.033	0.0082-0.0188	
SOx	mg/m <sup>3</sup>	≤ 0.12	0.002-0.003	0.0023-0.0057	**0.0047-0.012	0.0016-0.0024	
Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.019-0.039	0.017-0.071	**0.019-0.052	0.034-0.073	

GRI Standard	Performance	Unit	Standard	2019	2020	2021	2022
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.014-0.020	0.008-0.042	**0.013-0.044	0.012-0.037
<b>Location 6: Khao Kan Song Temple</b>							
	NOx	ppm	≤ 0.17	0.005-0.013	0.001-0.022	** 0.003-0.023	0.0025-0.0097
	SOx	mg/m <sup>3</sup>	≤ 0.12	0.004-0.0097	0.0084-0.0225	** 0.007-0.021	0.0018-0.0027
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.034-0.082	0.023-0.097	** 0.023-0.097	0.032-0.088
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.019-0.050	0.014-0.055	** 0.017-0.050	0.019-0.033
<b>Location 7: Ta Kien Ku Temple</b>							
	NOx	ppm	≤ 0.17	0.004-0.010	<0.001-0.019	** 0.002-0.010	0.0030-0.0098
	SOx	mg/m <sup>3</sup>	≤ 0.12	0.001-0.003	0.0012-0.0036	** 0.0003-0.006	0.0016-0.0027
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.019-0.037	0.019-0.105	** 0.018-0.062	0.019-0.068
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.016-0.029	0.01-0.068	** 0.010-0.043	0.009-0.033
<b>Location 8: Ban Som</b>							
	NOx	ppm	≤ 0.17	0.003-0.010	<0.001-0.055	**0.002-0.020	0.0019-0.0095
	SOx	mg/m <sup>3</sup>	≤ 0.12	0.0019-0.0042	0.0018-0.0055	**0.0004-0.007	0.0019-0.0026
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.023-0.035	0.022-0.074	** 0.014-0.102	0.025-0.051
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.015-0.025	0.01-0.038	** 0.005-0.038	0.012-0.039
<b>WHA ESIE 2</b>							
<b>Location 1: Ban Map Lam Bid School</b>							
	NOx	ppm	≤ 0.17	0.016-0.039	0.007-0.021	** <0.001-0.015	0.0063-0.0090
	SOx	mg/m <sup>3</sup>	≤ 0.30	0.0084-0.0089	0.0024-0.011	** 0.003-0.008	0.0063-0.0076
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.046-0.115	0.020-0.062	** 0.024-0.039	0.023-0.048
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.034-0.053	0.007-0.039	**0.015-0.023	0.012-0.024
<b>Location 2: Industrial estate area</b>							
	NOx	ppm	≤ 0.17	0.010-0.018	0.010-0.027	**0.004-0.010	0.0089-0.0122
	SOx	mg/m <sup>3</sup>	≤ 0.30	0.0060-0.0079	0.0017-0.0159	**0.002-0.003	0.0066-0.0079
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.049-0.071	0.020-0.052	**0.017-0.030	0.026-0.050
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.016-0.030	0.013-0.039	**0.010-0.018	0.014-0.032
<b>Location 3: Ban Map Lam Bid Moo. 7</b>							
	NOx	ppm	≤ 0.17	0.004-0.012	0.002-0.013	**0.003-0.010	0.0087-0.0108
	SOx	mg/m <sup>3</sup>	≤ 0.30	0.0037-0.0047	0.0046-0.0084	**0.008-0.009	0.0068-0.0076
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.038-0.062	0.023-0.120	**0.025-0.039	0.018-0.041
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.024-0.031	0.007-0.079	**0.014-0.024	0.008-0.024
<b>Location 4: Khao Kan Song Moo. 3</b>							
	NOx	ppm	≤ 0.17	0.010-0.028	0.004-0.017	** 0.002-0.009	0.0087-0.0109
	SOx	mg/m <sup>3</sup>	≤ 0.30	0.0042-0.0060	0.0035-0.0101	** 0.005-0.011	0.0063-0.0081
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.050-0.087	0.031-0.089	** 0.033-0.093	0.028-0.045
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.022-0.036	0.018-0.075	** 0.029-0.048	0.009-0.020
<b>Location 5: Chong Lom Temple</b>							
	NOx	ppm	≤ 0.17	0.002-0.008	0.001-0.015	**0.003-0.010	0.0078-0.0108
	SOx	mg/m <sup>3</sup>	≤ 0.30	0.0029-0.0037	0.0024-0.0049	**0.008-0.012	0.0090-0.0113
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.039-0.080	0.020-0.092	**0.018-0.047	0.021-0.071
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.016-0.026	0.011-0.034	**0.008-0.013	0.008-0.027
<b>Location 6: Ban Map Kla Moo. 4</b>							
	NOx	ppm	≤ 0.17	0.007-0.014	0.008-0.014	**0.007-0.009	0.0090-0.0113
	SOx	mg/m <sup>3</sup>	≤ 0.30	0.0031-0.0092	0.0052-0.0118	**0.006-0.015	0.0066-0.0076
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.079-0.175	0.010-0.069	**0.031-0.077	0.036-0.220
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.034-0.076	0.022-0.112	**0.014-0.029	0.012-0.102
<b>WHA ESIE 3</b>							
<b>Location 1: Ban Ta Jam School</b>							
	NOx	ppm	≤ 0.17	-	-	-	0.0074-0.0229
	SOx	mg/m <sup>3</sup>	≤ 0.30	-	-	-	0.0017-0.0033
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.080-0.218	0.040-0.295	***0.210-0.790	0.041-0.092

GRI Standard	Performance	Unit	Standard	2019	2020	2021	2022
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.034-0.053	0.020-0.086	***0.071-0.175	0.019-0.042
<b>Location 2: Ta Jam Sub-District Hospital</b>							
	NOx	ppm	≤ 0.17	-	-	-	0.0061-0.0206
	SOx	mg/m <sup>3</sup>	≤ 0.30	-	-	-	0.0017-0.0032
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.065-0.087	0.037-0.019	*** 0.039-0.061	0.023-0.061
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.028-0.051	0.078-0.036	***0.021-0.046	0.013-0.041
<b>Location 3: Huay Mara Sub-District Hospital</b>							
	NOx	ppm	≤ 0.17	-	-	-	0.0088-0.0184
	SOx	mg/m <sup>3</sup>	≤ 0.30	-	-	-	0.0017-0.0032
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.031-0.055	0.017-0.010	*** 0.043-0.129	0.032-0.090
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.023-0.037	0.061-0.029	***0.021-0.052	0.022-0.080
<b>Location 4: Ban Meun Jit Sub-District Hospital</b>							
	NOx	ppm	≤ 0.17	-	-	-	0.0083-0.0216
	SOx	mg/m <sup>3</sup>	≤ 0.30	-	-	-	0.0016-0.0033
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.033-0.076	0.023-0.011	*** 0.043-0.056	0.039-0.071
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.025-0.032	0.062-0.032	***0.020-0.030	0.020-0.045
<b>Location 5: Raweng School</b>							
	NOx	ppm	≤ 0.17	-	-	-	0.0073-0.0221
	SOx	mg/m <sup>3</sup>	≤ 0.30	-	-	-	0.0018-0.0034
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.050-0.076	0.044-0.014	*** 0.037-0.093	0.026-0.060
	PM10	mg/m <sup>3</sup>	< 0.12	0.027-0.040	0.086-0.036	*** 0.020-0.041	0.011-0.028
<b>Location 6: Chaloejr Temple</b>							
	NOx	ppm	≤ 0.17	-	-	-	0.0065-0.0194
	SOx	mg/m <sup>3</sup>	≤ 0.30	-	-	-	0.0017-0.0035
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.027-0.101	0.020-0.012	*** 0.028-0.050	0.031-0.059
	PM10	mg/m <sup>3</sup>	< 0.12	0.020-0.033	0.058-0.033	***0.013-0.024	0.020-0.048
<b>WHA ESIE 4</b>							
<b>Location 1: Ban Nikom Sans Ton Eng-main road</b>							
	NOx	ppm	≤ 0.17	0.004-0.030	0.004-0.013	** 0.003-0.009	0.0012-0.0109
	SOx	mg/m <sup>3</sup>	≤ 0.30	0.0083-0.0089	0.0009-0.0032	**0.0113-0.0162	0.0008-0.0052
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.079-0.123	0.024-0.074	**0.022-0.036	0.023-0.055
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.038-0.066	0.012-0.030	**0.028-0.042	0.010-0.031
<b>Location 2: Ban Nong Mapring</b>							
	NOx	ppm	≤ 0.17	0.004-0.021	0.001-0.015	** 0.005-0.010	0.0010-0.0093
	SOx	mg/m <sup>3</sup>	≤ 0.30	0.0056-0.0060	0.002-0.0043	**0.0034-0.0063	0.0015-0.0050
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.064-0.096	0.024-0.072	**0.020-0.029	0.025-0.047
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.025-0.039	0.016-0.035	**0.028-0.038	0.012-0.032
<b>Location 3: Mae Nam Ku Temple</b>							
	NOx	ppm	≤ 0.17	0.004-0.022	0.001-0.022	**0.005-0.016	0.0030-0.0158
	SOx	mg/m <sup>3</sup>	≤ 0.30	0.0005-0.0013	0.0022-0.0052	**0.0031-0.0042	0.0017-0.0062
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.073-0.117	0.013-0.032	**0.020-0.032	0.019-0.038
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.011-0.043	0.021-0.070	**0.028-0.040	0.008-0.028
<b>Location 4: Ban Mae Nam Ku</b>							
	NOx	ppm	≤ 0.17	0.013-0.024	0.008-0.044	**0.008-0.016	0.0027-0.0125
	SOx	mg/m <sup>3</sup>	≤ 0.30	0.0100-0.0114	0.0037-0.0145	**0.0068-0.0168	0.0012-0.0077
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.074-0.115	0.021-0.077	**0.025-0.037	0.021-0.033
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.034-0.061	0.012-0.040	**0.043-0.077	0.009-0.011
<b>WHA CIE1</b>							
<b>Location 1: Resident and commercial area within the industrial estate</b>							
	NOx	ppm	≤ 0.17	0.010-0.034	0.006-0.018	**<0.001-0.028	0.0045-0.0129
	SOx	mg/m <sup>3</sup>	≤ 0.30	0.0029-0.0183	0.0031-0.0047	**0.0026-0.0079	0.0019-0.0066
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.110-0.146	0.099-0.152	** 0.183-0.257	0.043-0.064
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	-	-	-	-



GRI Standard	Performance	Unit	Standard	2019	2020	2021	2022
<b>Location 2: Bo Win School</b>							
	NOx	ppm	≤ 0.17	<0.001-0.010	0.001-0.002	** <0.001-0.033	0.0015-0.0091
	SOx	mg/m <sup>3</sup>	≤ 0.30	0.0017-0.0027	0.0029-0.0032	**0.0055-0.0086	0.0011-0.0075
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.028-0.031	0.085-0.205	**0.132-0.161	0.021-0.026
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	-	-	-	-
<b>Location 3: Pan Saded Nok Temple</b>							
	NOx	ppm	≤ 0.17	0.033-0.010	0.001	**0.0060-0.0580	0.0041-0.0111
	SOx	mg/m <sup>3</sup>	≤ 0.30	0.0079-0.0088	0.0025-0.0026	**0.0037-0.0081	0.0010-0.0055
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.016-0.031	0.032-0.044	**0.157-0.167	0.026-0.032
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	-	-	-	-
<b>WHA CIE2</b>							
<b>Location 1: Hoobon Sub-District Hospital</b>							
	NOx	ppm	≤ 0.17	<0.001-0.003	0.001-0.004	** <0.001-0.032	0.0041-0.0142
	SOx	mg/m <sup>3</sup>	≤ 0.30	0.0053-0.0054	0.0011-0.0029	**0.0026-0.0037	0.0008-0.0058
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.032-0.069	0.022-0.057	**0.044-0.064	0.038-0.068
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.018-0.033	0.013-0.025	**0.031-0.057	0.018-0.041
<b>Location 2: Khao Hin Lad Temple</b>							
	NOx	ppm	≤ 0.17	<0.001-0.018	0.001-0.004	**<0.001-0.007	0.0026-0.0100
	SOx	mg/m <sup>3</sup>	≤ 0.30	0.0154-0.0236	0.0014-0.0024	**0.0037-0.0217	0.0010-0.0076
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.015-0.042	**0.041-0.082	**0.041-0.082	0.029-0.057
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.015-0.031	0.012-0.019	**0.030-0.057	0.016-0.042
<b>Location 3: Khao Kan Song Moo.3 Community</b>							
	NOx	ppm	≤ 0.17	0.004-0.030	0.001-0.004	** <0.001-0.008	0.0016-0.0151
	SOx	mg/m <sup>3</sup>	≤ 0.30	0.0010-0.0017	0.0039-0.0054	**0.0003-0.0058	0.0010-0.0050
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.024-0.060	0.021-0.073	**0.080-0.135	0.031-0.066
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.019-0.035	0.008-0.028	**0.045-0.069	0.015-0.044
<b>Location 4: Siri Anusorn Community</b>							
	NOx	ppm	≤ 0.17	0.001-0.027	0.004-0.007	** <0.001-0.035	0.0036-0.0153
	SOx	mg/m <sup>3</sup>	≤ 0.30	0.0192-0.0196	0.0120-0.0130	**0.0173-0.0212	0.0010-0.0093
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.027-0.059	0.020-0.050	**0.048-0.096	0.034-0.085
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.001-0.027	0.004-0.007	**0.028-0.048	0.019-0.041
<b>WHA EIE</b>							
<b>Location 1: WHA EIE office</b>							
	NOx	ppm	≤ 0.17	0.001-0.024	0.010-0.030	<0.001-0.018	0.0015-0.0087
	SOx	mg/m <sup>3</sup>	≤ 0.30	0.0034-0.0228	0.0006-0.0007	0.0004-0.0014	0.0050-0.0060
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.018-0.055	0.037-0.083	0.016-0.029	0.016-0.049
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.020-0.115	0.019-0.038	0.020-0.047	0.035-0.086
<b>Location 2: Nong Fab Temple</b>							
	NOx	ppm	≤ 0.17	<0.001-0.025	0.016-0.025	** <0.001-0.033	0.0012-0.0088
	SOx	mg/m <sup>3</sup>	≤ 0.30	0.0037-0.0436	0.005-0.007	**0.0046-0.0059	0.0042-0.0052
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.027-0.055	0.046-0.097	**0.023-0.042	0.030-0.045
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.047-0.096	0.023-0.042	**0.038-0.065	0.052-0.081
<b>Location 3: Map Chalud Temple</b>							
	NOx	ppm	≤ 0.17	<0.001-0.016	0.009-0.028	**<0.001-0.017	0.0018-0.0117
	SOx	mg/m <sup>3</sup>	≤ 0.30	0.0198-0.0278	0.003-0.005	**0.0014-0.0026	0.0047-0.0052
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.023-0.055	0.040-0.089	**0.02-0.072	0.014-0.028
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.045-0.118	0.024-0.055	**0.035-0.101	0.057-0.090
<b>WHA RIL</b>							
<b>Location 1: WHA RIL office</b>							
	NOx	ppm	≤ 0.17	0.001-0.025	0.001-0.047	**<0.001-0.041	0.0060-0.0173
	SOx	mg/m <sup>3</sup>	≤ 0.30	<0.001-0.041	0.001-0.005	**0.002-0.006	0.0009-0.0032
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.015-0.032	0.024-0.061	**0.013-0.039	0.024-0.052
	PM10	mg/m <sup>3</sup>	< 0.12	0.021-0.053	0.014-0.034	**0.023-0.061	0.040-0.078

GRI Standard	Performance	Unit	Standard	2019	2020	2021	2022
<b>Location 2: Ban Sam Yak Community</b>							
	NOx	ppm	≤ 0.17	<0.001-0.030	<0.001-0.055	** <0.001-0.026	0.0009-0.0032
	SOx	mg/m <sup>3</sup>	≤ 0.30	<0.001-0.002	<0.001-0.004	**<0.001-0.009	0.0011-0.0034
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.007-0.029	0.019-0.070	**0.018-0.048	0.028-0.071
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.017-0.049	0.013-0.040	**0.030-0.066	0.034-0.061
<b>Location 3: Nong La Lok Community</b>							
	NOx	ppm	≤ 0.17	0.001-0.029	0.001-0.044	**<0.001-0.008	0.0024-0.0153
	SOx	mg/m <sup>3</sup>	≤ 0.30	<0.001-0.006	<0.001-0.004	**0.003-0.008	0.0011-0.0031
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.013-0.027	0.018-0.060	**0.015-0.031	0.018-0.052
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.022-0.042	0.010-0.23	**0.031-0.054	0.028-0.071
<b>Location 4: Ban Klong Nam Yen Community</b>							
	NOx	ppm	≤ 0.17	<0.001-0.026	<0.001-0.036	**<0.001-0.032	0.0061-0.0145
	SOx	mg/m <sup>3</sup>	≤ 0.30	<0.001-0.006	0.002-0.005	**0.001-0.008	0.0009-0.0032
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.015-0.033	0.029-0.051	**0.014-0.088	0.022-0.047
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.025-0.049	0.012-0.024	**0.031-0.125	0.033-0.066
<b>WHA SIL</b>							
<b>Location 1: WHA SIL office</b>							
	NOx	ppm	≤ 0.17	<0.001-0.062	0.002-0.027	**<0.001-0.020	0.0075-0.0132
	SOx	mg/m <sup>3</sup>	≤ 0.30	0.002-0.007	<0.001-0.006	**0.002-0.003	0.0016-0.0045
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.069-0.121	0.042-0.088	**0.016-0.021	0.030-0.147
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.031-0.087	0.026-0.057	**0.030-0.038	0.019-0.054
<b>Location 2: Nong Pla Mo School</b>							
	NOx	ppm	≤ 0.17	<0.001-0.051	0.002-0.024	** 0.002-0.018	0.0031-0.0056
	SOx	mg/m <sup>3</sup>	≤ 0.30	<0.001-0.002	<0.001-0.002	** 0.002-0.005	0.0016-0.0035
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.079-0.204	0.025-0.150	** 0.026-0.053	0.030-0.051
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.040-0.104	0.015-0.081	** 0.058-0.141	0.014-0.035
<b>Location 3: Bua Loi Klang School</b>							
	NOx	ppm	≤ 0.17	0.001-0.032	<0.001-0.041	** 0.003-0.017	0.0038-0.0070
	SOx	mg/m <sup>3</sup>	≤ 0.30	0.001-0.002	<0.001-0.005	**0.001-0.005	0.0016-0.0034
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.073-0.132	0.020-0.103	**0.014-0.023	0.031-0.055
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.045-0.079	0.016-0.068	**0.043-0.063	0.019-0.029
<b>Location 4: Ban Mai Tung Din Khor School</b>							
	NOx	ppm	≤ 0.17	<0.001-0.048	0.001-0.029	** 0.001-0.017	0.0050-0.0104
	SOx	mg/m <sup>3</sup>	≤ 0.30	0.001-0.003	<0.001-0.003	** 0.002-0.005	0.0016-0.0038
	Total Suspended Particulate (TSP)	mg/m <sup>3</sup>	≤ 0.33	0.066-0.146	0.018-0.100	** 0.017-0.026	0.030-0.068
	Total Suspended Particulate matter10 (PM10)	mg/m <sup>3</sup>	< 0.12	0.036-0.080	0.012-0.066	** 0.034-0.060	0.016-0.031

Note: \*\*Data from WHAID, \*\*\*Data from WHAUP

## Biodiversity

GRI Standard	Performance	Unit	2019	2020	2021	2022
S&P CSA	<b>Biodiversity Exposure &amp; Assessment</b>					
	Total number of sites and the total area used for operational activities	Number	N/A	N/A	11	11
		Area (Hectares)	N/A	N/A	7,200.3056	7,200.3056
	Total number of sites and total area for operational activities that have conducted biodiversity impact assessments in past 5 years	Number	N/A	N/A	11	11
		Area (Hectares)	N/A	N/A	7,200.3056	7,200.3056
	Total number of sites and total area of sites assessed in past 5 years are in close proximity to critical biodiversity	Number	N/A	N/A	2	2
		Area (Hectares)	N/A	N/A	1,532.39	1,532.39
	Total number of sites, in close proximity to critical biodiversity, that have biodiversity management plan	Number	N/A	N/A	2	2
Area (Hectares)		N/A	N/A	1,532.39	1,532.39	

## Environmental Compliance

GRI Standard	Performance	Unit	2019	2020	2021	2022
307-1	<b>Non-compliance with environmental laws and regulations</b>					
	Total number of violations of legal obligations/regulations	Cases	0	0	0	0
	- Significant fines	Baht	0	0	0	0
	- Non-monetary sanctions	Cases	0	0	0	0
	- Case brought through dispute resolution mechanisms	Cases	0	0	0	0

SOCIAL PERFORMANCE

Employment

GRI Standard	Performance	Unit	2019		2020		2021		2022		
			Male	Female	Male	Female	Male	Female	Male	Female	
2-7	Total number of employees	Persons	571		613		615		732		
			372	199	395	218	390	225	458	274	
			Thailand	372	199	395	218	390	225	427	251
		Vietnam	N/A	N/A	N/A	N/A	N/A	N/A	31	23	
	<b>Total employee by age group</b>										
	Below 30 years old	Person	74	36	75	35	78	42	79	45	
		% FTEs	21.14	15.25	20.11	14.77	21.43	16.28	17.25	16.42	
	30-50 years old	Person	256	143	263	148	258	155	318	197	
		% FTEs	73.14	60.59	70.51	62.45	70.88	60.08	69.43	71.90	
	>50 years old	Person	20	57	35	54	28	61	61	32	
		% FTEs	5.71	24.15	9.38	22.78	7.69	23.64	13.32	11.68	
	<b>Number of new employees by region</b>										
	Thailand	Persons	46	24	59	34	44	34	72	48	
	Vietnam		N/A	N/A	N/A	N/A	N/A	N/A	1	6	
	<b>Total new employees</b>		<b>46</b>	<b>24</b>	<b>59</b>	<b>34</b>	<b>44</b>	<b>34</b>	<b>73</b>	<b>54</b>	
			70		93		78		127		
	<b>Employee by gender</b>										
	Thailand	Persons	372	199	395	218	390	225	427	251	
	Vietnam		N/A	N/A	N/A	N/A	N/A	N/A	31	23	
	<b>Total number of employees</b>		<b>372</b>	<b>199</b>	<b>395</b>	<b>218</b>	<b>390</b>	<b>225</b>	<b>458</b>	<b>274</b>	
			571		613		615		732		
<b>Permanent employees by region</b>											
Thailand	Persons	361	196	386	215	387	224	423	247		
Vietnam		N/A	N/A	N/A	N/A	N/A	N/A	31	23		
<b>Total permanent employees</b>		<b>361</b>	<b>196</b>	<b>386</b>	<b>215</b>	<b>387</b>	<b>224</b>	<b>454</b>	<b>270</b>		
		557		601		611		724			
<b>Temporary employees by region</b>											
Thailand	Persons	11	3	9	3	3	1	4	4		
Vietnam		0	0	0	0	0	0	0	0		
<b>Total temporary employees</b>		<b>11</b>	<b>3</b>	<b>9</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>4</b>		
		14		12		4		8			
<b>Employee with disabilities</b>											
<b>Total</b>	Persons	1	0	1	0	0	0	0	0		
<b>Non-guaranteed hours employees by region</b>											
Thailand	Persons	0	0	0	0	0	0	0	0		
Vietnam		0	0	0	0	0	0	0	0		
<b>Total Non-guaranteed hours employee</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		
<b>Full-time employee by region</b>											
Thailand	Persons	372	199	395	218	390	225	427	251		
Vietnam		N/A	N/A	N/A	N/A	N/A	N/A	31	23		
<b>Total full-time employee</b>		<b>372</b>	<b>199</b>	<b>395</b>	<b>218</b>	<b>390</b>	<b>225</b>	<b>458</b>	<b>274</b>		
		571		613		615		732			
<b>Part-time employee by region</b>											
Thailand	Persons	0	0	0	0	0	0	0	0		
Vietnam		0	0	0	0	0	0	0	0		
<b>Total part-time employee</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		
		0		0		0		0			
<b>Management position</b>											
Thailand	Persons	95	83	94	96	97	99	111	110		
Vietnam		N/A	N/A	N/A	N/A	N/A	N/A	9	10		
<b>Total number of management</b>		<b>95</b>	<b>83</b>	<b>94</b>	<b>96</b>	<b>97</b>	<b>99</b>	<b>120</b>	<b>120</b>		
		178		190		196		240			
<b>Top management</b>											
Thailand	Persons	20	10	25	18	25	16	27	16		
Vietnam		N/A	N/A	N/A	N/A	N/A	N/A	0	1		
<b>Total top management</b>		<b>20</b>	<b>10</b>	<b>25</b>	<b>18</b>	<b>25</b>	<b>16</b>	<b>27</b>	<b>17</b>		
		30		43		41		44			

GRI Standard	Performance	Unit	2019		2020		2021		2022	
			Male	Female	Male	Female	Male	Female	Male	Female
	<b>Middle management</b>									
	Thailand	Persons	56	54	53	57	53	62	63	66
	Vietnam		N/A	N/A	N/A	N/A	N/A	N/A	7	8
	<b>Total middle management</b>		<b>56</b>	<b>54</b>	<b>53</b>	<b>57</b>	<b>53</b>	<b>62</b>	<b>70</b>	<b>74</b>
			<b>110</b>		<b>110</b>		<b>115</b>		<b>144</b>	
	<b>Junior management</b>									
	Thailand	Persons	19	19	16	21	19	21	21	28
	Vietnam		N/A	N/A	N/A	N/A	N/A	N/A	2	1
	<b>Total junior management</b>		<b>19</b>	<b>19</b>	<b>16</b>	<b>21</b>	<b>19</b>	<b>21</b>	<b>23</b>	<b>29</b>
			<b>38</b>		<b>37</b>		<b>40</b>		<b>52</b>	
	<b>Staff</b>									
	Thailand	Persons	277	116	301	122	293	126	316	141
	Vietnam		N/A	N/A	N/A	N/A	N/A	N/A	22	13
	<b>Total staff</b>		<b>277</b>	<b>116</b>	<b>301</b>	<b>122</b>	<b>293</b>	<b>126</b>	<b>338</b>	<b>154</b>
			<b>393</b>		<b>423</b>		<b>419</b>		<b>492</b>	

GRI Standard	Performance	Unit	2019		2020		2021		2022	
			Male	Female	Male	Female	Male	Female	Male	Female
401-1	<b>New employee hires</b>									
	Total number of new employee hires	Persons	46	24	59	34	44	34	73	54
			70		93		78		127	
	New hire rate	% of total employee	12.26		15.17		12.68		17.35	
	Open positions filled by internal candidate (internal hires)	%	10.84		11.86		11.54		9.17	
	Average Hiring Cost/ FTE	Baht	-		8,200.00		9,300.00		19,032.51	
	<b>New employee hires by region</b>									
	Thailand	Persons	46	24	59	34	44	34	72	48
		% of total employee	8.06	4.20	9.62	5.55	7.15	5.53	9.84	6.56
	Vietnam	Persons	N/A	N/A	N/A	N/A	N/A	N/A	1	6
		% of total employee	N/A	N/A	N/A	N/A	N/A	N/A	0.14	0.82
	<b>New employee hires by nationality</b>									
	Thai	Persons	N/A	N/A	N/A	N/A	N/A	N/A	72	48
		% of total employee	N/A	N/A	N/A	N/A	N/A	N/A	9.84	6.56
	Vietnamese	Persons	N/A	N/A	N/A	N/A	N/A	N/A	1	6
		% of total employee	N/A	N/A	N/A	N/A	N/A	N/A	0.14	0.82
	American	Persons	N/A	N/A	N/A	N/A	N/A	N/A	0	0
		% of total employee	N/A	N/A	N/A	N/A	N/A	N/A	0.00	0.00
	Canadian	Persons	N/A	N/A	N/A	N/A	N/A	N/A	0	0
		% of total employee	N/A	N/A	N/A	N/A	N/A	N/A	0.00	0.00
	French	Persons	N/A	N/A	N/A	N/A	N/A	N/A	0	0
		% of total employee	N/A	N/A	N/A	N/A	N/A	N/A	0.00	0.00
	Japanese	Persons	N/A	N/A	N/A	N/A	N/A	N/A	0	0
		% of total employee	N/A	N/A	N/A	N/A	N/A	N/A	0.00	0.00
	<b>New employee hires by management level</b>									
	<b>Top Management</b>									
	Thailand	Persons	2	1	4	4	4	3	4	2
		% of total employee	0.35	0.18	0.65	0.65	0.65	0.49	0.55	0.27
	Vietnam	Persons	N/A	N/A	N/A	N/A	N/A	N/A	0	0
		% of total employee	N/A	N/A	N/A	N/A	N/A	N/A	0	0
	<b>Middle Management</b>									
	Thailand	Persons	5	3	4	8	7	9	13	9
		% of total employee	0.88	0.53	0.65	1.31	1.14	1.46	1.78	1.23
	Vietnam	Persons	N/A	N/A	N/A	N/A	N/A	N/A	0	1
		% of total employee	N/A	N/A	N/A	N/A	N/A	N/A	0	0.14
	<b>Junior/ Low level Management</b>									
	Thailand	Persons	5	3	2	2	5	1	9	10
		% of total employee	0.88	0.53	0.33	0.33	0.81	0.16	1.23	1.37
	Vietnam	Persons	N/A	N/A	N/A	N/A	N/A	N/A	0	1
		% of total employee	N/A	N/A	N/A	N/A	N/A	N/A	0	0.14
	<b>New employee by age</b>									
Below 30 years old	Persons	23	15	29	14	21	17	26	21	
	% of total employee	4.03	2.63	4.73	2.28	3.41	2.76	3.55	2.87	
Thailand	Persons	23	15	29	14	21	17	26	18	
Vietnam		N/A	N/A	N/A	N/A	N/A	N/A	0	3	
30-50 years old	Persons	23	10	40	22	23	20	46	33	
	% of total employee	4.03	1.58	4.89	3.26	3.74	2.60	6.28	4.51	

GRI Standard	Performance	Unit	2019		2020		2021		2022	
			Male	Female	Male	Female	Male	Female	Male	Female
	Thailand	Persons	23	9	30	20	23	16	45	30
	Vietnam		N/A	N/A	N/A	N/A	N/A	N/A	1	3
	Over 50 years old	Persons	0	0	0	0	0	1	1	0
		% of total employee	0	0	0	0	0	0.15	0.14	0.00
	Thailand	Persons	0	0	0	0	0	1	1	0
	Vietnam		N/A	N/A	N/A	N/A	N/A	N/A	0	0
<b>Turnover rate</b>										
	Total employee turnover	Persons	30	17	25	10	25	22	24	22
			47	35	47	46				
	Dismissal of Employees	Persons	0	0	0	0	0	0	0	0
	Voluntary Leave	Persons	30	17	25	10	25	22	24	22
	Turnover rate	% of total employee	8.23		5.71		7.64		6.28	
	Voluntary employee turnover	% of total employee	8.23		5.71		7.64		6.28	
	Data coverage (as % of all FTEs globally)	%	100		100		100		100	
<b>Employee turnover by region</b>										
	Thailand	Persons	28	16	22	10	25	19	23	21
		% of total employee	4.90	2.80	3.59	1.63	4.07	3.09	3.14	2.87
	Vietnam	Persons	N/A	N/A	N/A	N/A	N/A	N/A	1	1
		% of total employee	N/A	N/A	N/A	N/A	N/A	N/A	0.14	0.14
<b>Employee turnover by age</b>										
	Below 30 years old	Persons	9	6	4	2	4	9	5	5
		% of total employee	1.58	1.05	0.65	0.33	0.65	1.46	0.68	0.68
	30-50 years old	Persons	21	11	18	8	20	13	18	17
		% of total employee	3.68	1.93	2.94	1.31	3.25	2.11	2.46	2.32
	Over 50 years old	Persons	0	0	3	0	1	0	1	0
		% of total employee	0.00	0.00	0.49	0.00	0.16	0.00	0.14	0.00
<b>Turnover by management level</b>										
<b>Top Management</b>										
	Thailand	Persons	4	0	1	0	2	2	1	1
		% of total employee	0.70	0.00	0.16	0.00	0.33	0.33	0.14	0.14
	Vietnam	Persons	N/A	N/A	N/A	N/A	N/A	N/A	0	0
		% of total employee	N/A	N/A	N/A	N/A	N/A	N/A	0.00	0.00
<b>Middle Management</b>										
	Thailand	Persons	5	2	5	2	7	3	4	6
		% of total employee	0.88	0.35	0.82	0.33	1.14	0.49	0.55	0.82
	Vietnam	Persons	N/A	N/A	N/A	N/A	N/A	N/A	1	0
		% of total employee	N/A	N/A	N/A	N/A	N/A	N/A	0.14	0.00
<b>Junior/ Low level Management</b>										
	Thailand	Persons	2	2	3	1	2	1	3	2
		% of total employee	0.35	0.35	0.49	0.16	0.33	0.16	0.41	0.27
	Vietnam	Persons	N/A	N/A	N/A	N/A	N/A	N/A	0	0
		% of total employee	N/A	N/A	N/A	N/A	N/A	N/A	0.00	0.00

GRI Standard	Performance	Unit	2019		2020		2021		2022	
			Male	Female	Male	Female	Male	Female	Male	Female
404-1	<b>Employee training</b>									
	Total number of training hours provided to employees	Hours	15,654		5,860		17,646		18,798	
			9,725	5,929	3,987	1,873	10,450	7,196	11,383	7,415
	Average hours of training and development	Hours/FTE /Year	27.41		9.56		28.69		25.68	
			26.94	30.25	10.30	8.75	27.00	32.12	26.66	29.54
	Average amount spent on FTE on training and development	Baht	-		3,523.17		2,766.48		9,520.85	
			-	-	3,838.37	2,953.14	2,326.27	3,527.62	8,847.43	12,714.80
	<b>Total number of training hours provided to employees by business units</b>									
	WHA Industrial Development	Hours	5,230	2,686	935	864	5,527	4,079	5,007	3,692
	WHA Utilities and Power		1,347	408	2,187	276	3,145	726	3,443	924
	WHA Logistics		2,632	2,755	832	730	1,600	2,360	2,472	2,638
	WHA Digital Platform		516	80	33	3	178	31	459	158
	<b>Average training hours by business units</b>									
	WHA Industrial Development	Hours	26.28	24.87	4.35	7.00	27.77	36.75	29.84	36.51
	WHA Utilities and Power		14.64	22.67	20.63	12.00	25.99	23.41	30.41	31.67
	WHA Logistics		46.18	40.51	16.00	11.22	28.57	29.13	38.62	29.31
	WHA Digital Platform		39.69	40.00	2.36	1.50	16.21	30.96	38.25	39.50
	<b>Average hours of training by employee category</b>									
	Total number of executives	Persons	30		43		41		44	
	Total number of training hours provided to executives	Hour	280.00		225.00		803.77		2,026.00	
	Average hours of training for executives	Hour	9.33		5.23		19.60		46.05	
	Total number of middle management	Persons	110		110		115		144	
	Total number of training hours provided to middle management	Hour	58.00		1,711.00		3,905.94		7,564.50	
	Average hours of training for middle management	Hour	0.53		15.55		33.96		52.53	
	Total number of junior management	Persons	38		37		40		52	
	Total number of training hours provided to junior management	Hour	-		388.00		1,539.38		232.00	
	Average hours of training for middle management	Hour	-		10.49		38.48		4.46	
	Total number of staff	Person	393		423		419		492	
	Total number of training hours provided to staffs	Hour	1,258.00		3,535.50		11,396.88		8,975.00	
	Average hours of training for staffs	Hour	3.20		8.36		27.20		18.24	
	<b>Average hours of training by age group</b>									
	Below 30 years old	Hours/FTE /Year	-	-	-	-	-	-	19.18	26.44
	30-50 years old		-	-	-	-	-	-	27.16	17.06
	Over 50 years old		-	-	-	-	-	-	20.18	17.06
	<b>Average hours of training by training type</b>									
	In-house training	Hours/FTE /Year	-	-	-	-	-	-	22.00	25.00
	Public training		-	-	-	-	-	-	3.00	2.00
	<b>Average hours of training by nationality</b>									
	Thai	Hours/FTE/ Year	-	-	-	-	-	-	26.66	29.54
	Others		-	-	-	-	-	-	0.00	0.00



GRI Standard	Performance	Unit	2019		2020		2021		2022	
			Male	Female	Male	Female	Male	Female	Male	Female
	<b>Human Capital Return on Investment</b>									
	Human Capital Return on Investment (Normalized Basis-)	Times	11.54		10.45		11.49		13.51	
	Human Capital Return on Investment (Reported Basis)	Times	14.40		10.49		11.78		13.52	
401-3	<b>Parental leave</b>									
	<b>Employees that were entitled to parental leave</b>	Person	-	199	-	218	-	225	-	274
	WHA Industrial Development		-	108	-	114	-	111	-	143
	WHA Utilities and Power		-	18	-	23	-	31	-	37
	WHA Logistics		-	68	-	76	-	81	-	90
	WHA Digital		-	5	-	5	-	2	-	4
	<b>Total employees that took parental leave</b>	Person	-	2	-	5	-	1	-	7
	WHA Industrial Development		-	1	-	0	-	0	-	3
	WHA Utilities and Power		-	0	-	1	-	0	-	0
	WHA Logistics		-	1	-	4	-	1	-	4
	WHA Digital		-	0	-	0	-	0	-	0
	<b>Total employees that returned to work in the reporting period after parental leave ended</b>	Person	-	2	-	5	-	1	-	7
	WHA Industrial Development		-	1	-	0	-	0	-	3
	WHA Utilities and Power		-	0	-	1	-	0	-	0
	WHA Logistics		-	1	-	4	-	1	-	4
	WHA Digital		-	0	-	0	-	0	-	0
	<b>Total employees that returned to work after parental leave ended that were still employed 12 months after their return to work</b>	Person	-	2	-	5	-	1	-	7
	WHA Industrial Development		-	1	-	0	-	0	-	3
	WHA Utilities and Power		-	0	-	1	-	0	-	0
	WHA Logistics		-	1	-	4	-	1	-	4
	WHA Digital		-	0	-	0	-	-	-	0
	<b>Total return to work rate</b>	%	-	100	-	100	-	100	-	100
	WHA Industrial Development		-	100	-	-	-	-	-	100
	WHA Utilities and Power		-	-	-	100	-	-	-	-
	WHA Logistics		-	100	-	100	-	100	-	100
	WHA Digital		-	-	-	-	-	-	-	-
	<b>Total retention rate</b>	%	-	100	-	100	-	100	-	100
	WHA Industrial Development		-	100	-	-	-	-	-	100
	WHA Utilities and Power		-	-	-	100	-	-	-	-
	WHA Logistics		-	100	-	100	-	100	-	100
WHA Digital	-		-	-	-	-	-	-	-	
404-3	<b>Employees receiving regular performance and career development reviews</b>									
	<b>Total number of employees receiving regular performance and career development reviews by gender</b>	Persons	372	199	395	218	390	225	454	270
		%	100.00	100.00	100.00	100.00	100.00	100.00	99.13	98.54
	<b>Performance review by employee category</b>									
	<b>Total number of executives who received regular performance and career development reviews</b>	Persons	30		43		41		44	
			14		20		19		20	
			7		8		7		8	
			8		14		14		15	

GRI Standard	Performance	Unit	2019		2020		2021		2022	
			Male	Female	Male	Female	Male	Female	Male	Female
	WHA Digital		1		1		1		1	
	Percentage of executive receiving regular performance and career development reviews by employee category	%	100		100		100		100	
	Total number of middle management who received regular performance and career development reviews	Persons	110		110		115		138	
	WHA Industrial Development		55		55		51		63	
	WHA Utilities & Power		13		11		17		24	
	WHA Logistics		40		43		45		49	
	WHA Digital		2		1		2		2	
	Percentage of middle management who received regular performance and career development reviews	%	100		100		100		95.83	
	Total number of junior management who received regular performance and career development reviews	persons	38		37		40		50	
	WHA Industrial Development		16		14		14		21	
	WHA Utilities & Power		3		6		8		8	
	WHA Logistics		18		17		17		20	
	WHA Digital		1		0		1		1	
	Percentage of junior management who received regular performance and career development reviews	%	100		100		100		96.15	
	Total number of staffs who received regular performance and career development reviews	Persons	393		423		419		492	
	WHA Industrial Development		221		232		226		269	
	WHA Utilities & Power		87		104		120		141	
	WHA Logistics		59		61		62		70	
	WHA Digital Platform		26		26		11		12	
	Percentage of staffs who received regular performance and career development reviews	%	100		100		100		100	
<b>Trend of Employee Engagement</b>										
	Employee Engagement	% of actively engaged employee	83		87		68		75	
	Employee Engagement Target 2022		75							
	Data Coverage	% of total employee	67		90		93		99	
	Data Coverage Target 2022		100							

Note: \*Normalized Revenue excluded FX impact and impact from accounting standard adjustment

Labor Practice Indicator

GRI Standard	Performance	Unit	2019		2020		2021		2022		
			Male	Female	Male	Female	Male	Female	Male	Female	
405-1	<b>Total number of governance bodies members</b>	<b>Persons</b>	<b>10</b>	<b>1</b>	<b>9</b>	<b>1</b>	<b>8</b>	<b>1</b>	<b>9</b>	<b>1</b>	
	WHA Industrial Development	Persons	3	0	3	0	3	0	3	0	
	WHA Utilities and Power		3	0	2	0	2	0	3	0	
	WHA Logistics		3	1	4	1	3	1	3	1	
	WHA Digital Platform		1	0	0	0	0	0	0	0	
	Diversity of governance bodies by gender	%	90.91	9.09	90.00	10.00	88.89	11.11	90.00	10.00	
	<b>Diversity of governance bodies by age group</b>										
	<30 years old	Persons	1		0		0		0		
		%	9.09		0.00		0.00		0.00		
	30-50 years old	Persons	8		7		4		3		
		%	72.73		70.00		40.00		30.00		
	>50 years old	Persons	2		3		6		7		
		%	18.18		30.00		60.00		70.00		
	<b>Diversity of total workforce by age group</b>										
	Below 30 years old	Persons	74	36	75	35	78	42	79	45	
% FTEs		19.89	18.09	18.99	16.06	20.00	18.67	17.25	16.42		
30-50 years old	Persons	256	143	263	148	258	155	318	197		
	% FTEs	68.82	71.86	66.58	67.89	66.15	68.89	69.43	71.90		
>50 years old	Persons	42	20	57	35	54	28	61	32		
	% FTEs	11.29	10.05	14.43	16.06	13.85	12.44	13.32	11.68		
<b>Diversity of employee by gender</b>											
Top management	Persons	20	10	25	18	25	16	27	17		
	% FTEs	66.67	33.33	58.14	41.86	60.98	39.02	61.36	38.64		
Middle management	Persons	56	54	53	57	53	62	70	74		
	% FTEs	50.91	49.09	48.18	51.82	46.09	53.91	48.61	51.39		
Junior management	Persons	19	19	16	21	19	21	23	29		
	% FTEs	50.00	50.00	43.24	56.76	47.50	52.50	44.23	55.77		
Staff	Persons	277	116	301	122	293	126	338	154		
	% FTEs	70.48	29.52	71.16	28.84	69.93	30.07	68.70	31.30		
<b>Diversity of employee by level and age group</b>											
<b>Top management</b>											
Below 30 years old	Persons	0		0		0		0			
	% FTEs	0		0		0		0			
30-50 years old	Persons	19		32		23		26			
	% FTEs	63.33		74.42		56.10		59.09			
>50 years old	Persons	11		11		18		18			
	% FTEs	36.67		25.58		43.90		40.91			
<b>Total of top management</b>	<b>Persons</b>	<b>30</b>		<b>43</b>		<b>41</b>		<b>44</b>			
<b>Middle management</b>											
Below 30 years old	Persons	1		3		3		1			
	% FTEs	0.91		2.78		2.61		0.69			
30-50 years old	Persons	94		89		93		120			
	% FTEs	85.45		82.41		80.87		83.33			
>50 years old	Persons	15		16		19		23			
	% FTEs	13.64		14.81		16.52		15.97			
<b>Total of middle management</b>	<b>Persons</b>	<b>110</b>		<b>108</b>		<b>115</b>		<b>144</b>			
<b>Junior management</b>											
Below 30 years old	Persons	4		1		3		2			
	% FTEs	10.53		3.13		7.50		3.85			
30-50 years old	Persons	31		27		33	47				
	% FTEs	81.58		84.38		82.50		90.38			
>50 years old	Persons	3		4		4		3			
	% FTEs	7.89		12.50		10.00		5.77			
<b>Total of junior management</b>	<b>Persons</b>	<b>38</b>		<b>32</b>		<b>40</b>		<b>52</b>			

GRI Standard	Performance	Unit	2019		2020		2021		2022	
			Male	Female	Male	Female	Male	Female	Male	Female
	<b>Staff</b>									
	Below 30 years old	Persons	105		120		114		121	
		% FTEs	26.72		27.91		27.21		24.59	
	30-50 years old	Persons	25		272		264		322	
		% FTEs	64.89		63.26		63.01		65.45	
	>50 years old	Persons	33		38		41		49	
		% FTEs	8.40		8.84		9.79		9.96	
	<b>Total of staff</b>	<b>Persons</b>	<b>393</b>		<b>430</b>		<b>419</b>		<b>492</b>	
	<b>Share of women in total workforce</b>									
	Share of women in total workforce	Person	0	199	0	218	0	225	0	274
	Share of women in total workforce	% of total force	0	34.85	0	35.40	0	36.59	0	37.43
	<b>Target 2023</b>	<b>%</b>	<b>40</b>							
	Share of women in all management positions, including junior, middle and top management	Person	0	83	0	96	0	99	0	124
	Share of women in all management positions, including junior, middle and top management	% of total management positions	0	46.63	0	50.53	0	50.51	0	51.67
	<b>Target 2023</b>	<b>%</b>	<b>55</b>							
	Share of women in junior management positions, i.e. first level of management	Person	0	20	0	21	0	21	0	25
	Share of women in junior management positions, i.e. first level of management	% of total junior management positions	0	52.63	0	56.76	0	52.50	0	48.08
	<b>Target 2023</b>	<b>%</b>	<b>55</b>							
	Share of women in top management positions, i.e. maximum two levels away from the CEO or comparable positions	Person	0	9	0	17	0	15	0	16
	Share of women in top management positions, i.e. maximum two levels away from the CEO or comparable positions	% of total top management positions	0	30.00	0	39.53	0	36.59	0	36.36
	<b>Target 2023</b>	<b>%</b>	<b>45</b>							
	Share of women in management positions in revenue-generating functions (e.g. sales)	Person	0	14	0	20	0	21	0	24
	Share of women in management positions in revenue-generating functions (e.g. sales)	% of all such managers (i.e. excluding support functions such as HR, IT, Legal etc.)	0	60.87	0	62.50	0	53.85	0	48.00
	<b>Target 2023</b>	<b>%</b>	<b>50</b>							
	Share of women in STEM-related positions	Person	0	81	0	88	0	87	0	97
	Share of women in STEM-related positions	% of total STEM positions	0	46.55	0	51.46	0	53.37	0	54.19
	<b>Target 2023</b>	<b>%</b>	<b>55</b>							

GRI Standard	Performance	Unit	2019	2020	2021	2022				
	<b>Breakdown based on Nationality: Thailand</b>									
	Share in total workforce	Person	369	198	392	217	386	225	423	251
	Share in total workforce	% of total employee	64.62	34.68	63.95	35.40	62.76	36.59	57.79	34.29
	Share in all management positions, including junior, middle and senior management	Person	95	83	94	96	97	99	111	110
	Share in all management positions, including junior, middle and senior management	% of total employee	16.64	14.54	15.33	15.66	15.77	16.10	15.16	15.03
	<b>Breakdown based on Nationality: Others</b>									
	Share in total workforce (American)	Persons	1	0	1	0	1	0	1	0
		% of total employee	0.18	0	0.16	0	0.16	0	0.14	0
	Share in all management positions, including junior, middle and senior management (American)	Persons	1	0	1	0	1	0	1	0
		% of total management workforce	0.56	0	0.53	0	0.51	0	0.42	0
	Share in total workforce (Canadian)	Persons	1	0	1	0	1	0	1	0
		% of total employee	0.18	0	0.16	0	0.16	0	0.14	0
	Share in all management positions, including junior, middle and senior management (Canadian)	Persons	1	0	1	0	1	0	1	0
		% of total management workforce	0.56	0	0.53	0	0.51	0	0.42	0
	Share in total workforce (French)	Persons	1	0	1	0	1	0	1	0
		% of total employee	0.18	0	0.16	0	0.16	0	0.14	0
	Share in all management positions, including junior, middle and senior management (French)	Persons	1	0	1	0	1	0	1	0
		% of total management workforce	0.56	0	0.53	0	0.51	0	0.42	0
	Share in total workforce (Vietnamese)	Persons	0	1	0	1	0	0	31	23
		% of total employee	0	0.18	0	0.16	0	0	4.23	3.14
	Share in all management positions, including junior, middle and senior management (Vietnamese)	Persons	0	1	0	1	0	0	0	1
		% of total management workforce	0	0.56	0	0.53	0	0	0	0.42
	Share in total workforce (Japanese)	Persons	0	0	0	0	1	0	1	0
		% of total employee	0	0	0	0	0.16	0	0.14	0
	Share in all management positions, including junior, middle and senior management (Japanese)	Persons	0	0	0	0	1	0	1	0
		% of total management workforce	0	0	0	0	0.51	0	0.42	0
<b>405-2</b>	<b>Ratio of basic salary and remuneration of women to men</b>									
	<b>Average pay for female to male executives</b>		<b>0.66</b>	<b>1.48</b>	<b>1.41</b>	<b>1.41</b>				
	<b>Average pay for female to male management</b>	-	<b>1.21</b>	<b>0.12</b>	<b>1.20</b>	<b>1.20</b>				<b>1.21</b>
	<b>Average pay for female to male non-management</b>		<b>1.18</b>	<b>1.17</b>	<b>1.04</b>	<b>1.04</b>				<b>1.07</b>

GRI Standard	Performance	Unit	2019		2020		2021		2022	
	<b>Equal pay analysis</b>									
	Executive level (base salary only)	Average Baht/Person	413,300	272,500	405,000	270,000	444,000	320,000	541,000	370,000
	Executive level (base salary + other cash incentives)		512,000	339,200	467,300	316,000	495,500	352,000	553,000	391,300
	Management level (base salary only)		93,200	108,000	98,900	97,000	94,500	110,080	81,200	111,250
	Management level (base salary + other cash incentives)		115,500	140,000	115,100	113,500	119,400	143,000	95,800	116,300
	Non-Management level (base salary only)		24,200	35,700	24,900	35,500	37,500	38,800	28,400	33,800
	Non-Management level (base salary + other cash incentives)		35,900	42,500	36,300	42,500	44,500	46,500	32,500	34,650

#### Collective Bargaining Agreements

GRI Standard	Performance	Unit	2019	2020	2021	2022
2-30	<b>Freedom of Association</b>					
	Percentage of total employees covered by collective bargaining agreements	% of total employees	100	100	100	100

Human Rights

GRI Standard	Performance	Unit	2019	2020	2021	2022
412-1	<b>Operations that have been subjected to human rights review or impact assessments</b>					
	<b>Human Rights Assessment in Own Operations (including Joint Ventures with management control)</b>					
	A. % of total assessed in Own Operation	Sites	-	-	11	11
		% of Sites	-	-	100	100
	B. % of total assessed (of A.) where risks have been identified	Sites	-	-	11	11
		% of Sites	-	-	100	100
	C. % of total assessed (of B.) with mitigation actions taken	Sites	-	-	11	11
		% of Sites	-	-	100	100
	<b>Human Rights Assessment in Contractors and Tier-1 Suppliers</b>					
	A. % of total assessed in Contractors and Tier-1 Suppliers	Contractors and Tier-1 Suppliers	-	-	638	594
		% of Contractors and Tier-1 Suppliers	-	-	100	100
	B. % of total assessed (of A.) where risks have been identified	Contractors and Tier-1 Suppliers	-	-	0	0
		% of Contractors and Tier-1 Suppliers	-	-	0	0
	C. % of total assessed (of B.) with mitigation actions taken	Contractors and Tier-1 Suppliers	-	-	0	0
		% of Contractors and Tier-1 Suppliers	-	-	0	0
	<b>Human Rights Assessment in Joint Ventures (including stakes above 10%, and without management control)</b>					
	A. % of total assessed in Contractors and Tier-1 Suppliers	Joint Ventures	-	-	32	32
		% of Joint Ventures	-	-	100	100
	B. % of total assessed (of A.) where risks have been identified	Joint Ventures	-	-	0	0
		% of Joint Ventures	-	-	0	0
	C. % of total assessed (of B.) with mitigation actions taken	Joint Ventures	-	-	0	0
		% of Joint Ventures	-	-	0	0

GRI Standard	Performance	Unit	2019	2020	2021	2022
412-2	<b>Employee training on human rights policies or procedures</b>					
	Total number of hours in the reporting period devoted to training on human rights policies or procedures concerning aspects of human rights that are relevant to operations.	Hours	-	-	180	100
412-3	% of employees trained during the reporting period in human rights policies or procedures concerning aspects of human rights that are relevant to operations.	% of total workforce	-	-	100	100
	<b>Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening</b>					
412-3	Total number of significant investment agreements and contracts	Number	-	-	-	-
	and percentage	%	-	-	-	-



Community Development

GRI Standard	Performance	Unit	2019	2020	2021	2022
413-1	<b>Industrial estates with community engagement</b>					
	<b>Total number of industrial estate</b>	<b>Operation unit</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>11</b>
	- Industrial estates involved with local community engagement	Operation unit	10	10	10	11
		%	100.00	100.00	100.00	100.00
	- Industrial estates involved with social impact assessment	Operation unit	10	10	10	10
		%	100.00	100.00	100.00	81.81
	- Industrial estates with environmental impact assessments and ongoing monitoring	Operation unit	10	10	10	11
		%	100.00	100.00	100.00	100.00
	- Industrial estates involved with public disclosure of results of environmental and social impact assessments	Operation unit	10	10	10	9
		%	100.00	100.00	100.00	81.81
	- Industrial estates involved with local community development programs based on local communities' needs	Operation unit	10	10	10	11
		%	100.00	100.00	100.00	100.00
	- Industrial estates involved with broad based local community consultation committees and processes that include vulnerable groups	Operation unit	9	10	10	11
		%	90.00	100.00	100.00	100.00
	- Industrial estates involved with works councils, occupational health and safety committees	Operation unit	10	10	10	11
		%	100.00	100.00	100.00	100.00
	<b>Type of Philanthropic Activities</b>					
	Total type of philanthropic activities	% of total cost	100.00	100.00	100.00	100.00
	A) Charitable Donations	% of total costs	25.15	26.51	29.10	25.39
WHA Industrial Development	7.55		7.69	8.73	5.33	
WHA Utilities & Power	17.61		18.82	20.37	20.06	
WHA Logistics	0		0.00	0.00	0.00	
WHA Digital Platform	0		0.00	0.00	0.00	
B) Community investment	% of total costs	25.56	18.64	32.46	24.61	
WHA Industrial Development		3.49	5.41	7.86	5.17	
WHA Utilities & Power		8.13	13.24	18.33	19.44	
WHA Logistics		13.94	0	6.27	0.00	
WHA Digital Platform		0.00	0.00	0.00	0.00	
C) Community initiatives	% of total costs	49.28	54.85	38.44	50.00	
WHA Industrial Development		14.79	8.76	11.53	9.82	
WHA Utilities & Power		34.50	21.44	26.91	36.93	
WHA Logistics		0.00	24.66	0.00	3.26	
WHA Digital Platform		0.00	0.00	0.00	0.00	
<b>Philanthropic Contributions</b>						
<b>Total amount of Cash contributions</b>	Baht	<b>53,050,000.00</b>	<b>42,590,000.00</b>	<b>22,480,000.00</b>	<b>34,380,000.00</b>	
WHA Industrial Development		15,650,000.00	9,310,000.00	6,320,000.00	6,980,000.00	
WHA Utilities & Power		36,400,000.00	22,780,000.00	14,470,000.00	26,280,000.00	
WHA Logistics		1,000,000.00	10,500,000.00	1,410,000.00	1,120,000.00	
WHA Digital Platform		0.00	0.00	0.00	0.00	
<b>Total amount of Time: employee volunteering during paid working hours</b>	Baht	<b>5,219,257.00</b>	<b>5,513,978.00</b>	<b>4,517,921.00</b>	<b>13,280,284.84</b>	
WHA Industrial Development		2,755,898.00	2,864,822.00	1,016,989.00	7,241,091.11	
WHA Utilities & Power		1,181,091.00	1,227,781.00	2,372,974.00	3,928,824.00	
WHA Logistics		1,276,549.00	1,415,462.00	1,120,865.00	2,078,020.36	
WHA Digital Platform		5,836.00	5,913.00	7,094.00	32,349.38	

GRI Standard	Performance	Unit	2019	2020	2021	2022
	<b>Total amount of In-kind giving: product or services donations, projects/partnerships or similar</b>	Baht	<b>5,000,000.00</b>	<b>588,975.00</b>	<b>43,497,315.00</b>	<b>46,134,952.72</b>
	WHA Industrial Development		2,000,000.00	588,975.00	588,975.00	11,734,905.07
	WHA Utilities & Power		2,000,000.00	0.00	0.00	33,276,547.65
	WHA Logistics		1,000,000.00	0.00	42,908,340.00	1,123,500.00
	WHA Digital Platform		0.00	0.00	0.00	0.00
	<b>Total amount of Management overheads</b>	Baht	<b>5,463,688.00</b>	<b>5,194,328.00</b>	<b>5,632,153.00</b>	<b>7,748,222.06</b>
	WHA Industrial Development		4,414,994.00	4,040,634.00	3,914,123.00	5,295,577.50
	WHA Utilities & Power		661,738.00	818,910.00	1,108,809.00	1,066,162.50
	WHA Logistics		356,244.00	302,535.00	609,221.00	1,304,849.25
	WHA Digital Platform		30,713.00	32,248.00	0.00	81,632.81

Occupational Health and Safety

GRI Standard	Performance	Unit	2019	2020	2021	2022
403-8	<b>Number of worker who covered by an occupational health and safety management system</b>					
	employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by such a system;	%	100	100	100	100
	employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by such a system that has been internally audited		100	100	100	100
	employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by such a system that has been audited or certified by an external party		-	-	-	-
403-9	<b>The number of hours worked</b>					
	<b>Employee</b>	Hour	<b>1,110,024</b>	<b>1,249,174</b>	<b>1,726,988</b>	<b>1,185,274</b>
	WHA Industrial Development		596,808	686,329	1,188,194	583,743
	WHA Utilities & Power		213,840	333,189	320,746	444,553
	WHA Logistics		244,944	229,656	185,768	149,250
	WHA Digital Platform		54,432	-	32,280	7,728
	<b>Contractor</b>		<b>1,195,996</b>	<b>1,043,095</b>	<b>1,045,239</b>	<b>8,345,341</b>
	WHA Industrial Development		571,236	656,921	74,750	3,086,284
	WHA Utilities & Power		616,000	386,174	391,993	695,813
	WHA Logistics		-	-	578,496	4,461,919
	WHA Digital Platform		8,760	-	-	101,325
	<b>Lost time injury frequency rate (LTIFR) – Employee</b>					
	<b>Employee</b>	Case per 1,000,000 hours worked	0.90	0.00	1.16	1.61
	WHA Industrial Development		0.00	0.00	0.00	5.14
	WHA Utilities and Power		4.68	0.00	0.58	0.00
	WHA Logistics		0.00	0.00	0.58	0.00
	WHA Digital Platform		0.00	0.00	0.00	0.00
	Data coverage	% of employee	100.00	100.00	100.00	100.00
	<b>Lost time injury frequency rate (LTIFR) – Contractor</b>					
	<b>Contractor</b>	Case per 1,000,000 hours worked	0.00	0.93	0.00	0.35
	WHA Industrial Development		0.00	0.00	0.00	0.32
	WHA Utilities and Power		0.00	0.93	0.00	1.44
	WHA Logistics		0.00	0.00	0.00	0.22
	WHA Digital Platform		0.00	0.00	0.00	0.00
	Data coverage	% of Contractor	100.00	100.00	100.00	100.00
	<b>Number of high consequences work related injuries</b>					
	<b>Employee</b>	Case/ 1,000,000 hours worked	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
	WHA Industrial Development		0.00	0.00	0.00	0.00
	WHA Utilities and Power		0.00	0.00	0.00	0.00
	WHA Logistics		0.00	0.00	0.00	0.00
	WHA Digital Platform		0.00	0.00	0.00	0.00
	<b>Contractor</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.19</b>
	WHA Industrial Development		0.00	0.00	0.00	<b>0.29</b>
	WHA Utilities and Power		0.00	0.00	0.00	0.00
	WHA Logistics		0.00	0.00	0.00	0.00
	WHA Digital Platform		0.00	0.00	0.00	0.00
	<b>Number of recordable work-related injuries</b>					
<b>Employee</b>	Case	<b>1</b>	<b>0</b>	<b>0</b>	<b>3</b>	
WHA Industrial Development		0	0	0	3	
WHA Utilities and Power		1	0	1	0	
WHA Logistics		0	0	1	0	
WHA Digital Platform		0	0	0	0	

GRI Standard	Performance	Unit	2019	2020	2021	2022		
	<b>Contractor</b>		<b>0</b>	<b>0</b>	<b>1</b>	<b>3</b>		
	WHA Industrial Development		0	0	0	1		
	WHA Utilities and Power		0	0	1	1		
	WHA Logistics		0	0	0	1		
	WHA Digital Platform		0	0	0	0		
	<b>Fatalities as a result of work-related injury</b>							
	Employee	Persons	0	0	0	0		
	Contractor		0	0	0	0		
	<b>Absentee Rate as a result of work-related injury</b>							
	Employee	% of total days scheduled	0	0	0	0		
	<b>Target 2022</b>	<b>% of total days scheduled</b>	<b>0</b>					
	Data Coverage	% of employees	100	100	100	100		
	<b>Absentee Rate</b>							
	Employees	% of total days scheduled	0.90	0.94	0.82	0.99		
	<b>Target 2022</b>	<b>% of total days scheduled</b>	<b>1.00</b>					
	Data Coverage	% of employees	100	100	100	100		
	403-10	<b>Fatalities as a result of work-related ill health</b>						
		<b>Employee</b>	Persons	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
		WHA Industrial Development		0	0	0	0	
WHA Utilities and Power		0		0	0	0		
WHA Logistics		0		0	0	0		
WHA Digital Platform		0		0	0	0		
<b>Contractor</b>		<b>0</b>		<b>0</b>	<b>0</b>	<b>0</b>		
WHA Industrial Development		0		0	0	0		
WHA Utilities and Power		0		0	0	0		
WHA Logistics		0		0	0	0		
WHA Digital Platform		0		0	0	0		
<b>Number of recordable work-related ill health</b>								
<b>Employee</b>		Case	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		
WHA Industrial Development			0	0	0	0		
WHA Utilities and Power			0	0	0	0		
WHA Logistics			0	0	0	0		
WHA Digital Platform			0	0	0	0		
<b>Contractor</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		
WHA Industrial Development			0	0	0	0		
WHA Utilities and Power	0		0	0	0			
WHA Logistics	0		0	0	0			
WHA Digital Platform	0		0	0	0			