

## Sustainable Performance – Information on Environment

### Volume of Materials Used in Production Processes of Mitr Phol Group

Business Unit	Data	Unit	2020*	2021*	2022**	2023**
<b>GRI 301-1 (2016) Volume of Materials Used</b>						
<b>Mitr Phol Group</b>	Renewable materials used	Tons	17,013,344	16,704,942	11,257,033	22,126,869.33
	Non-renewable materials used	Tons	186,138	336,239	456,931	294,107.06
	Total materials used	Tons	17,199,482	17,041,181	11,713,964	22,420,976.40
<b>Farming business</b>	Renewable materials used	Tons	78,187	61,012	277,824	1,198.14
	Non-renewable materials used	Tons	41	33	227	9.94
	Total materials used	Tons	78,228	61,045	278,051	1,208.09
<b>Sugar business</b>	Renewable materials used	Tons	14,195,902	13,243,323	7,868,364	19,309,674.54
	Non-renewable materials used	Tons	83,061	74,357	118,123	74,572.72
	Total materials used	Tons	14,278,963	13,317,680	7,986,487	19,384,247.26
<b>Energy business</b>	Renewable materials used	Tons	2,440,635	2,551,099	1,962,692	1,716,777.64
	Non-renewable materials used	Tons	12,543	173,791	11,845	17,388.67
	Total materials used	Tons	2,453,178	2,724,890	1,974,537	1,734,166.31
<b>Wood substitute</b>	Renewable materials used	Tons	1,443,362	1,440,332	927,357	1,458,210.67
	Non-renewable materials used	Tons	88,970	86,131	78,758	92,324.44

<b>Business Unit</b>	<b>Data</b>	<b>Unit</b>	<b>2020*</b>	<b>2021*</b>	<b>2022**</b>	<b>2023**</b>
<b>materials business</b>	Total materials used	Tons	1,532,332	1,526,463	1,006,115	1,550,535.11
<b>Fertilizer business</b>	Renewable materials used	Tons	24,982	26,849	18,015	23,233.64
	Non-renewable materials used	Tons	71.49	646	247,934	109,155.15
	Total materials used	Tons	25,053	27,495	265,949	132,388.80
<b>Logistics and warehouse business</b>	Renewable materials used	Tons	0	0	0	0
	Non-renewable materials used	Tons	1,452	1,280	34.98	14.08
	Total materials used	Tons	1,452	1,280	34.98	14.08
<b>Other business</b>	Renewable materials used	Tons	690	690	18.40	314.17
	Non-renewable materials used	Tons	0.09	0.22	41.84	642.06
	Total materials used	Tons	690.09	690.22	60.24	956.23
<b>GRI 301-2 (2016) Recycled Input Materials Used</b>						
<b>Mitr Phol Group</b>	Percentage of recycled input materials used	Percent	0.31	0.27	0.26	0.20
<b>Wood substitute materials business</b>	Percentage of recycled input materials used	Percent	3.51	2.98	2.86	2.92
	Recycled input materials used	Tons	53,851	45,521	28,758	45,259

Remarks: \* refer to data collected from 1 November of the previous year to 31 October of the reporting year.

\*\* refer to data collected from 1 January to 31 December of the reporting year.

Volume of materials purchased from business in Mitr Phol was eliminated from the data of materials used for Mitr Phol Group.

Recycled materials are used in wood substitute materials business to replace virgin materials.

Due to the new acquisition, the environmental performance was expanded to include in the reporting scope as follows:

- In 2021, the new 2 companies were included i.e. Betong Green Power Co., Ltd. and Productivity Plus Co., Ltd., (Saraburi).
- In 2022, the new 10 companies were included i.e. Green Pharmahol Co., Ltd., Bangkok Alcohol Industrial Co., Ltd., Kampaengpetch Green Energy Co., Ltd, Apcon Renewable Energy Co., Ltd., MP Apcon Operations Co., Ltd, Panel Design Lab Co., Ltd, Fair Fast Co., Ltd, Thai Environmental and Energy Development Co., Ltd, Health Innotech Co., Ltd, and Eto-Huay Kasain Valley CO., Ltd.
- In 2023, the new 9 companies were included i.e. Prize of Wood Green Energy Co., Ltd., Safe Biomass Co., Ltd., C A B Woodchip Co., Ltd., Rungtiva Biomass Co., Ltd., Saraburi Solar Co., Ltd., Sawasdee Energy Holding Co., Ltd., Steem Inc Co., Ltd., Wood Solution Co., Ltd., and Khonkaen Innovation Center Co.,Ltd.

During 2020 to 2022, Ratchasima Green Starch Co. , Ltd. (RGS) was categorized under the Energy Business. In 2023, RGS was reclassified to be included in Other Business.

**Energy Consumption**

Business Unit	Data	Unit	2020*	2021*	2022**	2023**
<b>GRI 302-1 (2016) Energy Consumption Within the Organization</b>						
<b>Mitr Phol Group</b>	Total energy consumption within the organization	Million MJ	<b>46,430.50</b>	<b>53,350.74</b>	<b>67,536.56</b>	<b>75,866.43</b>
	Energy consumption within organization from non-renewable fuel	Million MJ	319.94	312.09	515.47	531.91
	Energy consumption within organization from renewable fuel	Million MJ	50,482.80	58,212.20	73,833.07	81,611.04
	Fuel types used					
	Non-renewable fuel					
	- Liquefied petroleum gas (LPG)	Million MJ	85.18	78.11	97.01	98.44
	- Gasoline	Million MJ	0.21	0.37	1.54	4.76
	- Fuel oil	Million MJ	44.76	11.68	8.43	5.78
	- Bituminous	Million MJ	0	0	132.31	69.32
	Non-renewable fuel mixed with renewable fuel					
	- Biodiesel B7	Million MJ	389.42	449.43	270.64	337.35
	- Biodiesel B10	Million MJ	22.35	52.48	0.21	5.94
	- Gasohol E10/ Gasohol 91/ Gasohol 95	Million MJ	11.31	9.08	14.71	17.78

<b>Business Unit</b>	<b>Data</b>	<b>Unit</b>	<b>2020*</b>	<b>2021*</b>	<b>2022**</b>	<b>2023**</b>
	- Gasohol E20	Million MJ	1.49	0.95	1.08	0.70
	- Gasohol E85	Million MJ	0.23	0.13	0.15	0.05
	Renewable fuel					
	- Biogas	Million MJ	231.07	324.93	348.20	127.54
	- Biomass	Million MJ	51,434.06	59,687.68	73,474.25	81,475.29
	Electricity and steam purchased from outside Mitr Phol Group	Million MJ	538.68	565.58	576.08	595.81
	- Non-renewable electricity purchased	Million MJ	538.68	565.58	576.08	595.81
	- Non-renewable steam purchased	Million MJ	0	0	0	0
	Generated electricity from solar power	Million MJ	6.65	22.94	29.68	86.24
	Electricity and steam sold to outside Mitr Phol Group	Million MJ	4,917.56	5,762.07	7,417.73	6,958.56
	- Renewable electricity sold	Million MJ	4,917.56	5,762.07	7,417.73	6,958.56
	- Renewable steam sold	Million MJ	0	0	0	0
<b>Farming businessess</b>	<b>Total energy consumption within the organization</b>	<b>Million MJ</b>	<b>10.23</b>	<b>8.45</b>	<b>11.60</b>	<b>7.86</b>
	Energy consumption within organization from non-renewable fuel	Million MJ	8.37	6.54	4.12	5.49

<b>Business Unit</b>	<b>Data</b>	<b>Unit</b>	<b>2020*</b>	<b>2021*</b>	<b>2022**</b>	<b>2023**</b>
	Energy consumption within organization from renewable fuel	Million MJ	0.29	0.32	0.10	0.14
	Electricity and steam purchased from outside organization	Million MJ	0.99	0.97	1.96	1.30
	- Non-renewable electricity purchased	Million MJ	0.99	0.97	1.96	1.30
	- Renewable electricity purchased	Million MJ	0	0	0	0
	- Renewable steam purchased	Million MJ	0	0	0	0
	Generated electricity from solar power	Million MJ	0.58	0.61	5.42	0.93
<b>Sugar business</b>	<b>Total energy consumption within the organization</b>	<b>Million MJ</b>	<b>21,816.16</b>	<b>21,631.66</b>	<b>29,366.67</b>	<b>28,217.94</b>
	Energy consumption within organization from non-renewable fuel	Million MJ	67.66	56.82	175.29	238.10
	Energy consumption within organization from renewable fuel	Million MJ	2,082.00	2,370.42	3,243.01	3,900.73
	Electricity and steam purchased from outside organization	Million MJ	19,820.46	19,456.37	26,264.06	24,406.45
	- Non-renewable electricity purchased	Million MJ	33.40	32.35	27.83	33.33
	- Renewable electricity purchased	Million MJ	1,415.33	1,365.56	1,811.99	1,735.04
	- Renewable steam purchased	Million MJ	18,405.13	18,058.46	24,424.24	22,638.08

<b>Business Unit</b>	<b>Data</b>	<b>Unit</b>	<b>2020*</b>	<b>2021*</b>	<b>2022**</b>	<b>2023**</b>
	Generated electricity from solar power	Million MJ	0	0	0	0
	Electricity and steam sold to outside organization	Million MJ	187.37	251.95	315.70	327.33
	- Renewable electricity sold	Million MJ	187.37	251.95	315.70	327.33
	- Renewable steam sold	Million MJ	0	0	0	0
<b>Energy business</b>	<b>Total energy consumption within the organization</b>	<b>Million MJ</b>	<b>18,296.06</b>	<b>26,457.30</b>	<b>29,533.62</b>	<b>40,567.23</b>
	Energy consumption within organization from non-renewable fuel	Million MJ	65.63	94.08	177.20	134.24
	Energy consumption within organization from renewable fuel	Million MJ	44,282.78	51,191.16	65,473.42	73,251.15
	Electricity and steam purchased from outside organization	Million MJ	92.20	90.11	97.91	44.74
	- Non-renewable electricity purchased	Million MJ	92.20	90.11	97.91	44.74
	- Renewable electricity purchased	Million MJ	0	0	0	0
	- Renewable steam purchased	Million MJ	0	0	0	0
	Generated electricity from solar power	Million MJ	5.88	20.68	2.85	64.79
	Electricity and steam sold to outside organization	Million MJ	26,150.43	24,938.73	36,217.75	32,927.68
	- Renewable electricity sold	Million MJ	6,170.87	6,515.53	9,215.35	8,888.01
	- Renewable steam sold	Million MJ	19,979.56	18,423.20	27,002.40	24,039.67

<b>Business Unit</b>	<b>Data</b>	<b>Unit</b>	<b>2020*</b>	<b>2021*</b>	<b>2022**</b>	<b>2023**</b>
<b>Wood substitute materials business</b>	<b>Total energy consumption within the organization</b>	<b>Million MJ</b>	<b>4,575.76</b>	<b>5,137.38</b>	<b>5,372.79</b>	<b>4,986.55</b>
	Energy consumption within organization from non-renewable fuel	Million MJ	129.04	119.94	108.32	126.36
	Energy consumption within organization from renewable fuel	Million MJ	4,046.32	4,597.29	5,086.93	4,428.01
	Electricity and steam purchased from outside organization	Million MJ	400.30	420.07	419.98	420.37
	- Non-renewable electricity purchased	Million MJ	400.30	420.07	419.98	420.37
	- Renewable electricity purchased	Million MJ	0	0	0	0
	- Renewable steam purchased	Million MJ	0	0	0	0
	Generated electricity from solar power	Million MJ	0.10	0.08	18.86	12.04
	Electricity and steam sold to outside organization	Million MJ	0	0	0	0
	- Renewable electricity sold	Million MJ	0	0	0	0
	- Renewable steam sold	Million MJ	0	0	0	0
<b>Fertilizer business</b>	<b>Total energy consumption within the organization</b>	<b>Million MJ</b>	<b>78.57</b>	<b>72.68</b>	<b>54.68</b>	<b>49.29</b>
	Energy consumption within organization from non-renewable fuel	Million MJ	5.75	5.61	8.89	6.39



<b>Business Unit</b>	<b>Data</b>	<b>Unit</b>	<b>2020*</b>	<b>2021*</b>	<b>2022**</b>	<b>2023**</b>
	Energy consumption within organization from renewable fuel	Million MJ	68.95	51.36	27.95	30.02
	Electricity and steam purchased from outside organization	Million MJ	3.87	14.22	15.29	10.35
	- Non-renewable electricity purchased	Million MJ	3.87	14.22	15.29	10.35
	- Renewable electricity purchased	Million MJ	0	0	0	0
	- Renewable steam purchased	Million MJ	0	0	0	0
	Generated electricity from solar power	Million MJ	0	1.48	2.55	2.53
<b>Logistics and warehouse business</b>	<b>Total energy consumption within the organization</b>	<b>Million MJ</b>	<b>17.97</b>	<b>11.47</b>	<b>26.84</b>	<b>13.09</b>
	Energy consumption within organization from non-renewable fuel	Million MJ	13.08	6.91	17.84	3.92
	Energy consumption within organization from renewable fuel	Million MJ	0.69	0.17	0.08	0.03
	Electricity and steam purchased from outside organization	Million MJ	4.20	4.39	8.92	9.14
	- Non-renewable electricity purchased	Million MJ	4.20	4.39	8.92	9.14
	- Renewable electricity purchased	Million MJ	0	0	0	0
	- Renewable steam purchased	Million MJ	0	0	0	0

<b>Business Unit</b>	<b>Data</b>	<b>Unit</b>	<b>2020*</b>	<b>2021*</b>	<b>2022**</b>	<b>2023**</b>
	Generated electricity from solar power	Million MJ	0	0	0	0
<b>Other business</b>	<b>Total energy consumption within the organization</b>	<b>Million MJ</b>	<b>35.99</b>	<b>27.21</b>	<b>33.70</b>	<b>112.38</b>
	Energy consumption within organization from non-renewable fuel	Million MJ	30.41	22.18	23.81	17.40
	Energy consumption within organization from renewable fuel	Million MJ	1.77	1.47	1.57	0.96
	Electricity and steam purchased from outside organization	Million MJ	3.73	3.47	8.31	88.06
	- Non-renewable electricity purchased	Million MJ	3.73	3.47	4.19	76.58
	- Renewable electricity purchased	Million MJ	0	0	4.07	11.14
	- Renewable steam purchased	Million MJ	0	0	0.05	0.34
	Generated electricity from solar power	Million MJ	0.08	0.08	0.01	5.95
<b>GRI 302-2 (2016) Energy Consumption Outside of the Organization</b>						
<b>Mitr Phol Group</b>	Energy consumption outside of the organization	Million MJ	1,412.74	858.99	1,982.31	1,658.74
<b>Farming business</b>	Energy consumption outside of the organization	Million MJ	1.58	2.26	4.80	4.00

<b>Business Unit</b>	<b>Data</b>	<b>Unit</b>	<b>2020*</b>	<b>2021*</b>	<b>2022**</b>	<b>2023**</b>
<b>Sugar business</b>	Energy consumption outside of the organization	Million MJ	360.99	381.74	982.30	799.64
<b>Energy business</b>	Energy consumption outside of the organization	Million MJ	288.61	176.49	323.54	362.59
<b>Wood substitute materials business</b>	Energy consumption outside of the organization	Million MJ	360.99	232.44	508.00	186.17
<b>Fertilizer business</b>	Energy consumption outside of the organization	Million MJ	1.21	10.08	18.40	104.39
<b>Logistics and warehouse business</b>	Energy consumption outside of the organization	Million MJ	0	0.86	128.11	158.24
<b>Other business</b>	Energy consumption outside of the organization	Million MJ	617.50	55.12	17.16	43.72
<b>GRI 302-3 (2016) Energy Intensity</b>						

Business Unit	Data	Unit	2020*	2021*	2022**	2023**
<b>Mitr Phol Group</b>	Energy consumption within the organization per revenue	Million MJ/Million Baht	0.7660	0.8911	0.6534	0.5147
	Energy consumption outside the organization per revenue	Million MJ/Million Baht	0.0233	0.0143	0.0514	0.0113
<b>CSA 2.2.2 Total Energy Consumption (in MWh)</b>						
<b>Mitr Phol Group</b>	Total non-renewable energy consumption	MWh	238,505.75	243,797.42	303,207.78	313,255.08
	Total renewable energy consumption	MWh	12,658,868.46	14,575,864.44	18,456,962.94	20,760,772.16
	Target of total non-renewable energy consumption	MWh				291,080 (Reduced 4% from 2022)
	Total non-renewable energy consumption per revenue	MWh/Million baht	3.93	4.07	2.93	2.06
	Data coverage	% of revenue	100	100	100	100
<b>Sugar Business</b>	Energy consumption per ton of raw sugar production	MJ/ton of raw sugar production	-	-	-	11,673

Remarks: \* refer to data collected from 1 November of the previous year to 31 October of the reporting year.

\*\* refer to data collected from 1 January to 31 December of the reporting year.

NA refers to not available or no data was collected.

NR refers to not relevant.

Net calorific values refer to the data of the Department of Alternative Energy Development and Efficiency and the IPCC 2006.

Mitr Phol Group generates electricity and steam produced from biomass to use within Mitr Phol Group, and electricity produced from biomass to sell to outside Mitr Phol Group. Additionally, we purchase non-renewable electricity from outside organization to use within Mitr Phol Group.

The proportion of energy consumption within the organization per revenue includes energy consumption of fuel, electricity, steam and solar power.

Energy consumption outside the organization includes energy consumption for raw material transportation by third-party organization, product transportation by third-party organization, and employee's ground transportation and air travel.

Biomass fuel includes bagasses, cane leaves, wood chips, etc.

Due to the new acquisition, the environmental performance was expanded to include in the reporting scope as follows:

- In 2021, the new 2 companies were included i.e. Betong Green Power Co., Ltd. and Productivity Plus Co., Ltd., (Saraburi).
- In 2022, the new 10 companies were included i.e. Green Pharmahol Co., Ltd., Bangkok Alcohol Industrial Co., Ltd., Kampaengpetch Green Energy Co., Ltd, Apcon Renewable Energy Co., Ltd., MP Apcon Operations Co., Ltd, Panel Design Lab Co., Ltd, Fair Fast Co., Ltd, Thai Environmental and Energy Development Co., Ltd, Health Innotech Co., Ltd, and Eto-Huay Kasain Valley CO., Ltd.
- In 2023, the new 9 companies were included i.e. Prize of Wood Green Energy Co., Ltd., Safe Biomass Co., Ltd., C A B Woodchip Co., Ltd., Rungtiva Biomass Co., Ltd., Saraburi Solar Co., Ltd., Sawasdee Energy Holding Co., Ltd., Steem Inc Co., Ltd., Wood Solution Co., Ltd., and Khonkaen Innovation Center Co.,Ltd

During 2020 to 2022, Ratchasima Green Starch Co., Ltd. (RGS) was categorized under the Energy Business. In 2023, RGS was reclassified to be included in Other Business.

**Water Usage by the Water Sources**

Business Unit	Data	Unit	All areas				Area with Water Stress				
			2020*	2021*	2022**	2023**	2020*	2021*	2022**	2023**	
<b>GRI 303-3 (2018) Water Withdrawal</b>											
<b>Mitr Phol Group</b>	Total volume of water from surface water	Million liters	15,035.58	18,611.42	21,481.86	23,760.83	3,844.22	4,058.85	6,885.44	17,840.23	
	- Freshwater ( $\leq$ 1,000 mg/L TDS)	Million liters	15,035.58	18,611.42	21,481.86	23,760.83	3,844.22	4,058.85	6,885.44	17,840.23	
	- Other water ( $>$ 1,000 mg/L TDS)	Million liters	0	0	0	0	0	0	0	0	
	Total volume of water from groundwater	Million liters	3,041.71	1,570.00	4,888.86	2,089.02	3.02	126.89	72.18	830.06	
	- Freshwater ( $\leq$ 1,000 mg/L TDS)	Million liters	1,767.45	1,553.72	4,873.48	1,975.98	3.02	126.89	72.18	814.38	
	- Other water ( $>$ 1,000 mg/L TDS)	Million liters	1,274.26	16.28	15.38	113.05	0	0	0	15.69	
	Total volume of water from third-party water	Million liters	61.79	87.50	124.27	123.92	7.67	18.07	91.27	163.10	
	- Freshwater ( $\leq$ 1,000 mg/L TDS)	Million liters	61.79	87.50	124.27	123.92	7.67	18.07	91.27	163.10	
	- Other water ( $>$ 1,000 mg/L TDS)	Million liters	0	0	0	0	0	0	0	0	
	Total volume of water from produced water	Million liters	3,857.90	4,957.82	2,897.07	1,714.77	780.76	743.69	184.70	1,142.28	
	- Freshwater ( $\leq$ 1,000 mg/L TDS)	Million liters	3,857.90	4,957.82	2,860.67	1,714.77	780.76	743.69	184.70	1,142.28	
	- Other water ( $>$ 1,000 mg/L TDS)	Million liters	0	0	36.39	0	0	0	0	0	
	Total volume of water from third-party water	Surface water	Million liters					7.67	18.07	65.82	163.10
		Groundwater	Million liters					0	0	0	0
	<b>Total volume of water</b>		<b>Million liters</b>	<b>21,996.98</b>	<b>25,226.73</b>	<b>29,392.06</b>	<b>27,688.54</b>	<b>4,635.67</b>	<b>4,947.49</b>	<b>7,233.59</b>	<b>19,975.67</b>
	Total volume of water from surface water	Million liters	3,103.92	3,770.48	3,320.31	2,920.57	941.11	1,052.30	226.77	2,920.57	

Business Unit	Data	Unit	All areas				Area with Water Stress			
			2020*	2021*	2022**	2023**	2020*	2021*	2022**	2023**
Farming business	- Freshwater ( $\leq$ 1,000 mg/L TDS)	Million liters	3,103.92	3,770.48	3,320.31	2,920.57	941.11	1,052.30	226.77	2,920.57
	- Other water ( $>$ 1,000 mg/L TDS)	Million liters	0	0	0	0	0	0	0	0
	Total volume of water from groundwater	Million liters	350.05	383.45	3,856.25	583.11	0	124.66	48.36	583.11
	- Freshwater ( $\leq$ 1,000 mg/L TDS)	Million liters	348.07	381.47	3,856.25	583.11	0	124.66	48.36	583.11
	- Other water ( $>$ 1,000 mg/L TDS)	Million liters	1.98	1.98	0	0	0	0	0	0
	Total volume of water from third-party water	Million liters	0	0	0	0	0	0	0	0
	- Freshwater ( $\leq$ 1,000 mg/L TDS)	Million liters	0	0	0	0	0	0	0	0
	- Other water ( $>$ 1,000 mg/L TDS)	Million liters	0	0	0	0	0	0	0	0
	Total volume of water from third-party water	Surface water					0	0	0	0
		Groundwater					0	0	0	0
<b>Total volume of water</b>		<b>Million liters</b>	<b>3,453.97</b>	<b>4,153.93</b>	<b>7,176.56</b>	<b>3,503.68</b>	<b>941.11</b>	<b>1,176.96</b>	<b>275.13</b>	<b>3,503.68</b>
Sugar business	Total volume of water from surface water	Million liters	5,782.07	6,733.59	10,485.08	12,666.10	2,903.11	3,006.55	5,909.45	10,360.84
	- Freshwater ( $\leq$ 1,000 mg/L TDS)	Million liters	5,782.07	6,733.59	10,485.08	12,666.10	2,903.11	3,006.55	5,909.45	10,360.84
	- Other water ( $>$ 1,000 mg/L TDS)	Million liters	0	0	0	0	0	0	0	0
	Total volume of water from groundwater	Million liters	151.45	80.19	71.27	53.85	0	0	0	6.57
	- Freshwater ( $\leq$ 1,000 mg/L TDS)	Million liters	51.24	75.76	71.27	42.66	0	0	0	0
	- Other water ( $>$ 1,000 mg/L TDS)	Million liters	100.21	4.43	0	11.18	0	0	0	6.57
	Total volume of water from third-party water	Million liters	256.85	403.47	149.09	282.64	14.05	21.15	25.46	0

Business Unit	Data		Unit	All areas				Area with Water Stress			
				2020*	2021*	2022**	2023**	2020*	2021*	2022**	2023**
	- Freshwater ( $\leq 1,000$ mg/L TDS)		Million liters	256.85	403.47	149.09	282.64	14.05	21.15	25.46	0
	- Other water ( $> 1,000$ mg/L TDS)		Million liters	0	0	0	0	0	0	0	0
	Total volume of water from produced water		Million liters	3,857.90	4,957.82	2,897.07	1,714.77	780.77	743.69	184.71	1,142.28
	- Freshwater ( $\leq 1,000$ mg/L TDS)		Million liters	3,857.90	4,957.82	2,860.67	1,714.77	780.77	743.69	184.71	1,142.28
	- Other water ( $> 1,000$ mg/L TDS)		Million liters	0	0	36.39	0	0	0	0	0
	Total volume of water from third-party water	Surface water	Million liters					14.05	21.15	25.46	0
		Groundwater	Million liters					0	0	0	0
	<b>Total volume of water</b>		<b>Million liters</b>	<b>10,048.27</b>	<b>12,175.07</b>	<b>13,602.51</b>	<b>14,717.36</b>	<b>3,697.93</b>	<b>3,771.39</b>	<b>6,119.61</b>	<b>11,509.69</b>
<b>Energy business</b>	Total volume of water from surface water		Million liters	6,138.40	8,096.15	7,669.33	7,524.66	0	0	749.22	3,909.31
	- Freshwater ( $\leq 1,000$ mg/L TDS)		Million liters	6,138.40	8,096.15	7,669.33	7,524.66	0	0	749.22	3,909.31
	- Other water ( $> 1,000$ mg/L TDS)		Million liters	0	0	0	0	0	0	0	0
	Total volume of water from groundwater		Million liters	1,557.94	202.96	133.55	388.40	3.01	2.23	20.48	20.70
	- Freshwater ( $\leq 1,000$ mg/L TDS)		Million liters	385.87	193.10	118.17	286.53	3.01	2.23	20.48	11.59
	- Other water ( $> 1,000$ mg/L TDS)		Million liters	1,172.07	9.86	15.38	101.86	0	0	0	9.12
	Total volume of water from third-party water		Million liters	3,321.81	4,528.90	5,406.22	3,672.53	2,151.82	2,310.74	2,591.80	2,366.02
	- Freshwater ( $\leq 1,000$ mg/L TDS)		Million liters	3,321.81	4,528.90	5,272.28	3,614.13	2,151.82	2,310.74	2,591.80	2,366.02
	- Other water ( $> 1,000$ mg/L TDS)		Million liters	0	0	133.94	58.4	0	0	0	0
			Surface water	Million liters					2,151.82	2,310.74	2,591.80



Business Unit	Data		Unit	All areas				Area with Water Stress			
				2020*	2021*	2022**	2023**	2020*	2021*	2022**	2023**
	Total volume of water from third-party water	Groundwater	Million liters					0	0	0	0
	<b>Total volume of water</b>		<b>Million liters</b>	<b>11,018.15</b>	<b>12,828.01</b>	<b>13,209.11</b>	<b>11,585.58</b>	<b>2,154.83</b>	<b>2,312.97</b>	<b>3,361.50</b>	<b>6,296.04</b>
<b>Wood substitute materials business</b>	Total volume of water from surface water		Million liters	0	0	0	0	0	0	0	0
	- Freshwater ( $\leq 1,000$ mg/L TDS)		Million liters	0	0	0	0	0	0	0	0
	- Other water ( $> 1,000$ mg/L TDS)		Million liters	0	0	0	0	0	0	0	0
	Total volume of water from groundwater		Million liters	880.40	802.50	814.52	843.99	0	0	0	0
	- Freshwater ( $\leq 1,000$ mg/L TDS)		Million liters	880.40	802.50	814.52	843.99	0	0	0	0
	- Other water ( $> 1,000$ mg/L TDS)		Million liters	0	0	0	0	0	0	0	0
	Total volume of water from third-party water		Million liters	28.28	22.96	6.82	12.19	2.83	6.25	6.82	4.01
	- Freshwater ( $\leq 1,000$ mg/L TDS)		Million liters	28.28	22.96	6.82	12.19	2.83	6.25	6.82	4.01
	- Other water ( $> 1,000$ mg/L TDS)		Million liters	0	0	0	0	0	0	0	0
	Total volume of water from third-party water		Surface water	Million liters					2.83	6.25	6.82
		Groundwater	Million liters					0	0	0	0
	<b>Total volume of water</b>		<b>Million liters</b>	<b>908.68</b>	<b>825.46</b>	<b>821.35</b>	<b>856.18</b>	<b>2.83</b>	<b>6.25</b>	<b>6.82</b>	<b>4.01</b>
	Total volume of water from surface water		Million liters	0	0	0	0	0	0	0	0

Business Unit	Data	Unit	All areas				Area with Water Stress				
			2020*	2021*	2022**	2023**	2020*	2021*	2022**	2023**	
<b>Fertilizer business</b>	- Freshwater ( $\leq 1,000$ mg/L TDS)	Million liters	0	0	0	0	0	0	0	0	
	- Other water ( $> 1,000$ mg/L TDS)	Million liters	0	0	0	0	0	0	0	0	
	Total volume of water from groundwater	Million liters	4.84	4.37	5.45	9.04	0	0	0	9.04	
	- Freshwater ( $\leq 1,000$ mg/L TDS)	Million liters	4.84	4.37	5.45	9.04	0	0	0	9.04	
	- Other water ( $> 1,000$ mg/L TDS)	Million liters	0	0	0	0	0	0	0	0	
	Total volume of water from third-party water	Million liters	4.83	11.81	10.50	13.44	4.83	11.81	10.50	13.44	
	- Freshwater ( $\leq 1,000$ mg/L TDS)	Million liters	4.83	11.81	10.50	13.44	4.83	11.81	10.50	13.44	
	- Other water ( $> 1,000$ mg/L TDS)	Million liters	0	0	0	0	0	0	0	0	
	Total volume of water from third-party water	Surface water	Million liters					4.83	11.81	10.50	13.44
		Groundwater	Million liters					0	0	0	0
<b>Total volume of water</b>		<b>Million liters</b>	<b>9.67</b>	<b>16.18</b>	<b>15.95</b>	<b>22.47</b>	<b>4.83</b>	<b>11.81</b>	<b>10.50</b>	<b>22.47</b>	
<b>Logistics and warehouse business</b>	Total volume of water from surface water	Million liters	0	0	0	0	0	0	0	0	
	- Freshwater ( $\leq 1,000$ mg/L TDS)	Million liters	0	0	0	0	0	0	0	0	
	- Other water ( $> 1,000$ mg/L TDS)	Million liters	0	0	0	0	0	0	0	0	
	Total volume of water from groundwater	Million liters	0	0	0	0	0	0	0	0	
	- Freshwater ( $\leq 1,000$ mg/L TDS)	Million liters	0	0	0	0	0	0	0	0	
	- Other water ( $> 1,000$ mg/L TDS)	Million liters	0	0	0	0	0	0	0	0	
	Total volume of water from third-party water	Million liters	25.35	50.53	26.90	21.76	0	0	0	6.81	

Business Unit	Data	Unit	All areas				Area with Water Stress				
			2020*	2021*	2022**	2023**	2020*	2021*	2022**	2023**	
	- Freshwater ( $\leq 1,000$ mg/L TDS)	Million liters	25.35	50.53	26.90	21.76	0	0	0	6.81	
	- Other water ( $> 1,000$ mg/L TDS)	Million liters	0	0	0	0	0	0	0	0	
	Total volume of water from third-party water	Surface water					0	0	0	6.81	
		Groundwater	Million liters					0	0	0	6.81
	<b>Total volume of water</b>	<b>Million liters</b>	<b>25.35</b>	<b>50.53</b>	<b>26.90</b>	<b>21.76</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6.81</b>	
<b>Other business</b>	Total volume of water from surface water	Million liters	11.20	11.20	7.14	649.50	0	0	0	649.50	
	- Freshwater ( $\leq 1,000$ mg/L TDS)	Million liters	11.20	11.20	7.14	649.50	0	0	0	649.50	
	- Other water ( $> 1,000$ mg/L TDS)	Million liters	0	0	0	0	0	0	0	0	
	Total volume of water from groundwater	Million liters	97.04	96.52	7.82	210.65	0	0	0	210.65	
	- Freshwater ( $\leq 1,000$ mg/L TDS)	Million liters	97.04	96.52	7.82	210.65	0	0	0	210.65	
	- Other water ( $> 1,000$ mg/L TDS)	Million liters	0	0	0	0	0	0	0	0	
	Total volume of water from third-party water	Million liters	3.34	2.20	5.51	81.22	0	0	0	81.22	
	- Freshwater ( $\leq 1,000$ mg/L TDS)	Million liters	3.34	2.20	5.51	81.22	0	0	0	81.22	
	- Other water ( $> 1,000$ mg/L TDS)	Million liters	0	0	0	0	0	0	0	0	
	Total volume of water from third-party water	Surface water	Million liters					0	0	0	81.22
		Groundwater	Million liters					0	0	0	0
		<b>Total volume of water</b>	<b>Million liters</b>	<b>111.58</b>	<b>109.92</b>	<b>20.47</b>	<b>941.37</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>941.37</b>
<b>Proportion of Water Withdrawal from Water Sources</b>											

Business Unit	Data		Unit	All areas				Area with Water Stress				
				2020*	2021*	2022**	2023**	2020*	2021*	2022**	2023**	
Mitr Phol Group	Volume of water withdrawal from water sources per revenue		Million liters/Million baht	0.3629 <sup>A</sup>	0.4213 <sup>A</sup>	0.2843 <sup>A</sup>						
			cu.m./Million baht	362.8879 <sup>A</sup>	421.3414 <sup>A</sup>	284.3462 <sup>A</sup>						
<b>GRI 303-4 (2018) Water Discharge</b>												
<b>Mitr Phol Group</b>	Volume of water discharge by destination	Volume of water discharge to surface water	Million liters	23.50	402.53	10.05	37.71					
		Volume of water discharge to groundwater	Million liters	0	0	0	0					
		Volume of water discharge to third-party water	Million liters	70.57	48.56	17.29	63.27					
		<b>Total volume of water discharge</b>	<b>Million liters</b>	<b>94.07</b>	<b>451.09</b>	<b>27.35</b>	<b>100.98</b>					
	Volume of water discharge to	Freshwater ( $\leq$ 1,000 mg/L TDS)	Million liters	39.04	63.82	27.35	97.04	2.27	5.00	12.34	61.88	
Other water ( $>$ 1,000 mg/L TDS)		Million liters	55.04	387.27	0	3.94	0	385.34	0	3.94		

Business Unit	Data		Unit	All areas				Area with Water Stress				
				2020*	2021*	2022**	2023**	2020*	2021*	2022**	2023**	
	outside organization											
<b>Farming business</b>	Volume of water discharge by destination	Volume of water discharge to surface water	Million liters	0	0	0	0					
		Volume of water discharge to groundwater	Million liters	0	0	0	0					
		Volume of water discharge to third-party water	Million liters	0	0	0	0					
		<b>Total volume of water discharge</b>	<b>Million liters</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>					
		Volume of water discharge to outside organization	Freshwater ( $\leq 1,000$ mg/L TDS)	Million liters	0	0	0	0	0	0	0	0
		Other water ( $> 1,000$ mg/L TDS)	Million liters	0	0	0	0	0	0	0	0	
	Volume of water	Volume of water discharge to surface water	Million liters	0	378.85	0	0					

Business Unit	Data		Unit	All areas				Area with Water Stress				
				2020*	2021*	2022**	2023**	2020*	2021*	2022**	2023**	
<b>Sugar business</b>	discharge by destination	Volume of water discharge to groundwater	Million liters	0	0	0	0					
		Volume of water discharge to third-party water	Million liters	0	0	0	898.76					
		<b>Total volume of water discharge</b>	<b>Million liters</b>	<b>0</b>	<b>378.85</b>	<b>0</b>	<b>898.76</b>					
		Volume of water discharge to outside organization	Freshwater ( $\leq 1,000$ mg/L TDS)	Million liters	0	0	0	898.76	0	0	0	898.76
			Other water ( $> 1,000$ mg/L TDS)	Million liters	0	378.85	0	0	0	378.85	0	0
<b>Energy business</b>	Volume of water discharge by destination	Volume of water discharge to surface water	Million liters	0	0	0	0					
		Volume of water discharge to groundwater	Million liters	0	0	0	0					
		Volume of water discharge to third-party water	Million liters	55.04	1.93	286.70	256.19					

Business Unit	Data		Unit	All areas				Area with Water Stress			
				2020*	2021*	2022**	2023**	2020*	2021*	2022**	2023**
		<b>Total volume of water discharge</b>	<b>Million liters</b>	<b>55.04</b>	<b>1.93</b>	<b>286.70</b>	<b>256.19</b>				
	Volume of water discharge to outside organization	Freshwater ( $\leq 1,000$ mg/L TDS)	Million liters	0	0	286.70	6.63	0	0	285.98	6.37
		Other water ( $> 1,000$ mg/L TDS)	Million liters	55.04	1.93	0	249.56	0	0	0	249.56
<b>Wood substitute Materials business</b>	Volume of water discharge by destination	Volume of water discharge to surface water	Million liters	12.00	12.18	0	22.94				
		Volume of water discharge to groundwater	Million liters	0	0	0	0				
		Volume of water discharge to third-party water	Million liters	2.27	5.00	3.94	3.11				
		<b>Total volume of water discharge</b>	<b>Million liters</b>	<b>14.26</b>	<b>17.18</b>	<b>3.94</b>	<b>26.05</b>				
	Volume of water	Freshwater ( $\leq 1,000$ mg/L TDS)	Million liters	14.26	17.18	3.94	26.05	2.27	5.00	3.94	3.11

Business Unit	Data		Unit	All areas				Area with Water Stress			
				2020*	2021*	2022**	2023**	2020*	2021*	2022**	2023**
	discharge to outside organization	Other water (> 1,000 mg/L TDS)	Million liters	0	0	0	0	0	0	0	0
<b>Fertilizer business</b>	Volume of water discharge by destination	Volume of water discharge to surface water	Million liters	0	0	0	0				
		Volume of water discharge to groundwater	Million liters	0	0	0	0				
		Volume of water discharge to third-party water	Million liters	0	6.49	8.4	9.69				
		<b>Total volume of water discharge</b>	<b>Million liters</b>	<b>0</b>	<b>6.49</b>	<b>8.4</b>	<b>9.69</b>				
		Volume of water discharge to outside organization	Freshwater ( $\leq$ 1,000 mg/L TDS)	Million liters	0	0	8.4	5.75	0	0	8.4
		Other water (> 1,000 mg/L TDS)	Million liters	0	6.49	0	3.94	0	6.49	0	3.94
	Volume of water	Volume of water discharge to surface water	Million liters	10.55	7.04	6.14	5.45				



Business Unit	Data		Unit	All areas				Area with Water Stress			
				2020*	2021*	2022**	2023**	2020*	2021*	2022**	2023**
<b>Logistics and Warehouse business</b>	discharge by destination	Volume of water discharge to groundwater	Million liters	0	0	0	0				
		Volume of water discharge to third-party water	Million liters	10.60	33.38	0.01	11.96				
		<b>Total volume of water discharge</b>	<b>Million liters</b>	<b>21.15</b>	<b>40.42</b>	<b>6.15</b>	<b>17.41</b>				
	Volume of water discharge to outside organization	Freshwater ( $\leq 1,000$ mg/L TDS)	Million liters	21.15	40.42	6.15	17.41	0	0	0	5.45
		Other water ( $> 1,000$ mg/L TDS)	Million liters	0	0	0	0	0	0	0	0
<b>Other business</b>	Volume of water discharge by destination	Volume of water discharge to surface water	Million liters	0.96	4.46	3.92	9.33				
		Volume of water discharge to groundwater	Million liters	0	0	0	0				
		Volume of water discharge to third-party water	Million liters	2.67	1.76	4.22	31.88				

Business Unit	Data		Unit	All areas				Area with Water Stress			
				2020*	2021*	2022**	2023**	2020*	2021*	2022**	2023**
		<b>Total volume of water discharge</b>	<b>Million liters</b>	<b>3.63</b>	<b>6.22</b>	<b>8.14</b>	<b>41.20</b>				
	Volume of water discharge to outside organization	Freshwater ( $\leq$ 1,000 mg/L TDS)	Million liters	3.63	6.22	8.14	41.20	0	0	0	41.20
		Other water ( $>$ 1,000 mg/L TDS)	Million liters	0	0	0	0	0	0	0	0
<b>GRI 303-5 (2018) Water Consumption</b>											
<b>Mitr Phol Group</b>	Total water consumption		Million liters	21,902.90	24,775.64	29,078.73	22,778.82	4,633.40	4,557.15	6,935.27	16,096.52
<b>Farming business</b>	Total water consumption		Million liters	3,453.97	4,153.93	7,176.56	3,503.68	941.11	1,176.96	275.13	3,503.68
<b>Sugar business</b>	Total water consumption		Million liters	10,048.27	11,796.22	13,602.51	13,818.61	3,697.93	3,392.54	6,119.61	10,610.94
<b>Energy business</b>	Total water consumption		Million liters	10,963.11	12,826.08	13,049.90	11,313.81	2,154.83	2,312.97	3,075.52	6,040.11
<b>Wood substitute</b>	Total water consumption		Million liters	894.41	808.28	835.60	830.13	0.57	1.25	2.89	0.90

Business Unit	Data	Unit	All areas				Area with Water Stress			
			2020*	2021*	2022**	2023**	2020*	2021*	2022**	2023**
<b>materials business</b>										
<b>Fertilizer business</b>	Total water consumption	Million liters	9.67	9.69	7.55	12.78	4.83	5.32	2.10	12.78
<b>Logistics and warehouse business</b>	Total water consumption	Million liters	4.19	10.11	20.75	4.35	0	0	0	1.36
<b>Other business</b>	Total water consumption	Million liters	107.94	103.69	12.33	900.16	0	0	3.57	900.16
<b>CSA 2.5.2-2.5.3 Water Consumption &amp; Water Consumption in Water-Stressed Area</b>										
<b>Mitr Phol Group</b>	A. Water withdrawal (excluding saltwater)	Million cubic meters	22.00	25.23	29.39	27.69	2.90	3.15	6.04	14.59
	- Fresh surface water***	Million cubic meters	15.04	18.61	21.48	23.76	2.89	3.01	5.88	13.60
	- Groundwater	Million cubic meters	3.04	1.57	4.89	2.09	0.003	0.13	0.07	0.83
	- Produced water	Million cubic meters	3.86	4.96	2.90	1.71				

Business Unit	Data	Unit	All areas				Area with Water Stress			
			2020*	2021*	2022**	2023**	2020*	2021*	2022**	2023**
	- Third party sources	Million cubic meters	0.06	0.09	0.12	0.12	0.008	0.02	0.09	0.16
	B. Water discharge (excluding saltwater)	Million cubic meters	0.09	0.45	0.03	0.10	0.002	0.39	0.01	0.07
	Total net fresh water consumption (A-B)	Million cubic meters	21.90	24.78	29.36	27.59	2.90	2.76	6.03	14.53
	Target of total net fresh water consumption	Million cubic meters/ million baht				28.19 (Reduced 4%from 2022)				5.79 (Reduced 4%from 2022)
	Total net fresh water consumption per revenue	Million cubic meters/ million baht	0.00036	0.00041	0.00028	0.00019	0.00005	0.00005	0.00006	0.00010
	Data coverage	% of revenue	100	100	100	100	100	100	100	100

Remarks: \* refer to data collected from 1 November of the previous year to 31 October of the reporting year.

\*\* refer to data collected from 1 January to 31 December of the reporting year.

\*\*\* For total net freshwater consumption, fresh surface water in all areas includes water from rivers, streams and rainwater whilst in waster-stressed areas includes from rivers and streams.

NA refers to not available or no data was collected.

NR refers to not relevant.

The water risk map of the AQUEDUCT Water Risk Atlas was used for risk assessment of water stress area.

For the reporting of total water volume in business unit, the data includes water volume received from the Mitr Phol's entity that is outside the boundary of this business unit.

Due to the new acquisition, the environmental performance was expanded to include in the reporting scope as follows:

- In 2021, the new 2 companies were included i.e. Betong Green Power Co., Ltd. and Productivity Plus Co., Ltd., (Saraburi).
- In 2022, the new 10 companies were included i.e. Green Pharmahol Co., Ltd., Bangkok Alcohol Industrial Co., Ltd., Kampaengpetch Green Energy Co., Ltd, Apcon Renewable Energy Co., Ltd., MP Apcon Operations Co., Ltd, Panel Design Lab Co., Ltd, Fair Fast Co., Ltd, Thai Environmental and Energy Development Co., Ltd, Health Innotech Co., Ltd, and Eto-Huay Kasain Valley CO., Ltd.
- In 2023, the new 9 companies were included i.e. Prize of Wood Green Energy Co., Ltd., Safe Biomass Co., Ltd., C A B Woodchip Co., Ltd., Rungtiva Biomass Co., Ltd., Saraburi Solar Co., Ltd., Sawasdee Energy Holding Co., Ltd., Steem Inc Co., Ltd., Wood Solution Co., Ltd., and Khonkaen Innovation Center Co., Ltd.

During 2020 to 2022, Ratchasima Green Starch Co. , Ltd. (RGS) was categorized under the Energy Business. In 2023, RGS was reclassified to be included in Other Business.

### Water Discharge Quality by Business Unit

Business Unit	Water Quality	Standard Level	Average of Water Discharge Quality			
			2020*	2021*	2022**	2023**
<b>GRI 303-4 (2018) Water Discharge Quality</b>						
<b>Farming business</b>	BOD (mg/l)	-	NR	NR	NR	NR
	COD (mg/l)	-	NR	NR	NR	NR
	TSS (mg/l)	-	NR	NR	NR	NR

Business Unit	Water Quality	Standard Level	Average of Water Discharge Quality			
			2020*	2021*	2022**	2023**
<b>Sugar business</b>	BOD (mg/l)	-	NR	NR	NR	NR
	COD (mg/l)	-	NR	NR	NR	NR
	TSS (mg/l)	-	NR	NR	NR	NR
<b>Energy business</b>	BOD (mg/l)	20	14.6	13.4	12.17	2.28
	COD (mg/l)	120	80	71.2	51.88	28.88
	TSS (mg/l)	50	30.2	24.2	24.62	0
<b>Wood substitute materials business</b>	BOD (mg/l)	20	11.3	10.3	6.51	5.79
	COD (mg/l)	120	61.4	71.8	45.97	61.65
	TSS (mg/l)	50	28.9	22.9	13.76	13.99
<b>Fertilizer business</b>	BOD (mg/l)	500***	NR	23.0	34.40	35.62
	COD (mg/l)	750***	NR	169.8	137.58	128.75
	TSS (mg/l)	200***	NR	46.6	39.95	43.50
<b>Logistics and warehouse business</b>	BOD (mg/l)	20	11.6	32.6	2.32	5.34
	COD (mg/l)	120	69.7	61.7	39.39	44.77
	TSS (mg/l)	50	9.4	6.5	8.39	11.19
<b>Other business</b>	BOD (mg/l)	20	17.9	14.4	-	23.45
	COD (mg/l)	120	66.3	40.0	46.20	55.28
	TSS (mg/l)	50	27.3	15.0	33.34	17.71

Remark: \* refer to data collected from 1 November of the previous year to 31 October of the reporting year.

\*\* refer to data collected from 1 January 2022 – 31 December 2022.

NA refers to not available or no data was collected.

NR refers to not relevant.

Standard level is in accordance with the standards in the Notification of the Ministry of Industry, B.E. 2560 (2017), Re: Prescribing the Standards for the Control of Water Discharge from the Factory.

\*\*\* Standard is in accordance with the standards in the Notification of the Industrial Estate Authority of Thailand No.76/2017, Re: Prescribing General Standard to Discharge Wastewater to Central Wastewater Treatment System of Industrial Estate Authority.

Due to the new acquisition, the environmental performance was expanded to include in the reporting scope as follows:

- In 2021, the new 2 companies were included i.e. Betong Green Power Co., Ltd. and Productivity Plus Co., Ltd., (Saraburi).
- In 2022, the new 10 companies were included i.e. Green Pharmahol Co., Ltd., Bangkok Alcohol Industrial Co., Ltd., Kampaengpetch Green Energy Co., Ltd, Apcon Renewable Energy Co., Ltd., MP Apcon Operations Co., Ltd, Panel Design Lab Co., Ltd, Fair Fast Co., Ltd, Thai Environmental and Energy Development Co., Ltd, Health Innotech Co., Ltd, and Eto-Huay Kasain Valley CO., Ltd.
- In 2023, the new 9 companies were included i.e. Prize of Wood Green Energy Co., Ltd., Safe Biomass Co., Ltd., C A B Woodchip Co., Ltd., Rungtiva Biomass Co., Ltd., Saraburi Solar Co., Ltd., Sawasdee Energy Holding Co., Ltd., Steem Inc Co., Ltd., Wood Solution Co., Ltd., and Khonkaen Innovation Center Co., Ltd

During 2020 to 2022, Ratchasima Green Starch Co., Ltd. (RGS) was categorized under the Energy Business. In 2023, RGS was reclassified to be included in Other Business.

**Greenhouse Gas (GHG) Emission**

Business Unit	Data	Unit	2020*	2021*	2022**	2023**
<b>GRI 305-1 (2016)/ CSA 2.6.1 Direct GHG Emissions (Scope 1)</b>						
<b>Mitr Phol Group</b>	Direct GHG emissions (Scope 1)	Tons CO <sub>2</sub> e	342,482	382,318	793,166.89	349,568.60
	Biogenic CO <sub>2</sub> emissions	Tons CO <sub>2</sub>	5,597,886	11,376,682	7,908,479.27	8,777,378.23
	Target of direct GHG emissions (Scope 1)	Tons CO <sub>2</sub> e				761,440 (Reduced 4% from 2022)
	Data coverage	% of revenue	100	100	100	100
<b>Farming business</b>	Direct GHG emissions (Scope 1)	Tons CO <sub>2</sub> e	1,486	2,437	2,303.85	2,404.20
	Biogenic CO <sub>2</sub> emissions	Tons CO <sub>2</sub>	0	0	0	0
<b>Sugar business</b>	Direct GHG emissions (Scope 1)	Tons CO <sub>2</sub> e	163,863	98,394	65,068.11	72,662.61
	Biogenic CO <sub>2</sub> emissions	Tons CO <sub>2</sub>	210,771	212,263	337,820.99	403,385.41
<b>Energy business</b>	Direct GHG emissions (Scope 1)	Tons CO <sub>2</sub> e	152,801	252,916	698,994.57	221,333.90
	Biogenic CO <sub>2</sub> emissions	Tons CO <sub>2</sub>	4,862,722	10,583,344	6,997,827.02	7,866,072.41
<b>Wood substitute materials business</b>	Direct GHG emissions (Scope 1)	Tons CO <sub>2</sub> e	18,878	19,219	20,313.43	17,565.38
	Biogenic CO <sub>2</sub> emissions	Tons CO <sub>2</sub>	516,299	575,357	569,729.05	493,517.57
	Direct GHG emissions (Scope 1)	Tons CO <sub>2</sub> e	1,989	6,486	3,032.21	14,345.82



Business Unit	Data	Unit	2020*	2021*	2022**	2023**
<b>Fertilizer business</b>	Biogenic CO <sub>2</sub> emissions	Tons CO <sub>2</sub>	8,095	5,718	3,102.22	3,343.81
<b>Logistics and warehouse business</b>	Direct GHG emissions (Scope 1)	Tons CO <sub>2</sub> e	1,048	819	1,389.25	308.64
	Biogenic CO <sub>2</sub> emissions	Tons CO <sub>2</sub>	0	0	0	0
<b>Other business</b>	Direct GHG emissions (Scope 1)	Tons CO <sub>2</sub> e	2,421	2,047	2,065.46	21,048.05
	Biogenic CO <sub>2</sub> emissions	Tons CO <sub>2</sub>	0	0	0	11,059.04
<b>GRI 305-2 (2016)/ CSA 2.6.2 Energy Indirect GHG Emissions (Scope 2)</b>						
<b>Mitr Phol Group</b>	Market-based energy indirect GHG emissions (Scope 2)	Tons CO <sub>2</sub> e	78,322	77,988	81,182.59	83,017.38
	Target of market-based energy indirect GHG emissions (Scope 2)	Tons CO <sub>2</sub> e				77,935 (Reduced 4% from 2022)
	Location-based energy indirect GHG emissions (Scope 2)	Tons CO <sub>2</sub> e	78,322	77,988	81,182.59	83,017.38
	Target of location-based energy indirect GHG emissions (Scope 2)	Tons CO <sub>2</sub> e				77,935 (Reduced 4% from 2022)

Business Unit	Data	Unit	2020*	2021*	2022**	2023**
	Data coverage for location-based and market based	% of revenue	100	100	100	100
<b>Farming business</b>	Energy indirect GHG emissions (Scope 2)	Tons CO <sub>2</sub> e	137	333	274.82	470.47
<b>Sugar business</b>	Energy indirect GHG emissions (Scope 2)	Tons CO <sub>2</sub> e	25,795	86,510	110,902.62	104,686.65
<b>Energy business</b>	Energy indirect GHG emissions (Scope 2)	Tons CO <sub>2</sub> e	12,803	13,935	13,594.59	6,212.93
<b>Wood substitute materials business</b>	Energy indirect GHG emissions (Scope 2)	Tons CO <sub>2</sub> e	55,586	56,047	64,183.21	59,973.37
<b>Fertilizer business</b>	Energy indirect GHG emissions (Scope 2)	Tons CO <sub>2</sub> e	539	2,224	2,123.65	1,437.08
<b>Logistics and warehouse business</b>	Energy indirect GHG emissions (Scope 2)	Tons CO <sub>2</sub> e	583	904	1,238.29	1,269.46
<b>Other business</b>	Energy indirect GHG emissions (Scope 2)	Tons CO <sub>2</sub> e	519	615	656.56	10,840.95
<b>GRI 305-3 (2016) / CSA 2.6.3 Other Indirect GHG Emissions (Scope 3)</b>						
<b>Mitr Phol Group</b>	Other indirect GHG emissions (Scope 3)	Tons CO <sub>2</sub> e	105,227 <sup>A</sup>	1,193,123	1,428,355.05	1,806,612.68

Business Unit	Data	Unit	2020*	2021*	2022**	2023**
	Target of other indirect GHG emissions (Scope 3)	Tons CO <sub>2</sub> e				1,399,788 (Reduced 2% from 2022)
	1. Purchased goods and services	Tons CO <sub>2</sub> e	-	807,493	988,301.45	1,339,971.05
	2. Capital goods <sup>B</sup>	Tons CO <sub>2</sub> e	-	-	-	-
	3. Fuel and energy related activities (not included in Scope 1 or 2)	Tons CO <sub>2</sub> e	-	24,959	11,907.06	21,596.94
	4. Upstream transportation and distribution	Tons CO <sub>2</sub> e	35,143	106,497	136,402.65	150,855.61
	5. Waste generated in operations	Tons CO <sub>2</sub> e	-	1,503	1,017.04	1,140.49
	6. Business travel	Tons CO <sub>2</sub> e	44,607	97	269.91	502.94
	7. Employee commuting	Tons CO <sub>2</sub> e	-	13,830	8,968.52	6,713.55
	8. Upstream leased assets	Tons CO <sub>2</sub> e	NR	NR	NR	NR
	9. Downstream transportation and distribution	Tons CO <sub>2</sub> e	25,477	103,527	169,047.04	121,242.93
	10. Processing of sold products	Tons CO <sub>2</sub> e	NR	NR	NR	NR
	11. Use of sold products	Tons CO <sub>2</sub> e	-	132,719	110,001.46	163,356.49
	12. End of life treatment of sold products	Tons CO <sub>2</sub> e	-	2,320	2,156.25	1,232.68
	13. Downstream leased assets	Tons CO <sub>2</sub> e	-	178	283.72	NR
	14. Franchises	Tons CO <sub>2</sub> e	NR	NR	NR	NR

Business Unit	Data	Unit	2020*	2021*	2022**	2023**
	15. Investments	Tons CO <sub>2</sub> e	NR	NR	NR	NR
<b>Farming business</b>	Other indirect GHG emissions (Scope 3)	Tons CO <sub>2</sub> e	121 <sup>A</sup>	5,981	3,639.83	3,514.80
<b>Sugar business</b>	Other indirect GHG emissions (Scope 3)	Tons CO <sub>2</sub> e	27,620 <sup>A</sup>	590,103	789,968.92	1,065,932.65
<b>Energy business</b>	Other indirect GHG emissions (Scope 3)	Tons CO <sub>2</sub> e	22,122 <sup>A</sup>	406,006	177,142.12	194,270.59
<b>Wood substitute business</b>	Other indirect GHG emissions (Scope 3)	Tons CO <sub>2</sub> e	11,061 <sup>A</sup>	219,845	280,861.64	253,522.63
<b>Fertilizer business</b>	Other indirect GHG emissions (Scope 3)	Tons CO <sub>2</sub> e	93 <sup>A</sup>	424,630	231,572.12	305,617.56
<b>Logistics and warehouse business</b>	Other indirect GHG emissions (Scope 3)	Tons CO <sub>2</sub> e	0 <sup>A</sup>	2,448	31,337.66	37,580.76
<b>Other business</b>	Other indirect GHG emissions (Scope 3)	Tons CO <sub>2</sub> e	44,210 <sup>A</sup>	4,431	6,815.74	27,767.78
<b>GHG Emissions Intensity</b>						
<b>Mitr Phol Group</b>	Direct GHG emissions (Scope 1) per revenue	Tons CO <sub>2</sub> e/Million baht	5.65	6.39	7.67	2.37

Business Unit	Data	Unit	2020*	2021*	2022**	2023**
	Energy indirect GHG emissions (Scope 2) per revenue	Tons CO <sub>2</sub> e/Million baht	1.51	1.29	0.79	0.56
	Other indirect GHG emissions (Scope 3) per revenue	Tons CO <sub>2</sub> e/Million baht	1.736 <sup>A</sup>	19.93	13.82	12.26
<b>Sugar Business</b>	Direct GHG emissions (Scope 1) per ton of raw sugar production	Tons CO <sub>2</sub> e/ton of raw sugar production	-	-	-	0.0301
	Energy indirect GHG emissions (Scope 2) per ton of raw sugar production	Tons CO <sub>2</sub> e/ton of raw sugar production	-	-	-	0.0433
	Other indirect GHG emissions (Scope 3) per ton of raw sugar production	Tons CO <sub>2</sub> e/ton of raw sugar production	-	-	-	0.4610

Remarks: \* refer to data collected from 1 November of the previous year to 31 October of the reporting year.

\*\* refer to data collected from 1 January to 31 December of the reporting year.

NA refers to not available or no data was collected.

NR refers to not relevant.

All greenhouse gases are included in the report.

Emission factors of GHG emissions refer to the data of Thailand Greenhouse Gas Management Organization (Public Organization), IPCC 2006 and Thai National LCI database. The data of GWP refers to IPCC, AR5

Reporting scope of GHG emissions is operational control.

Reporting of indirect GHG emissions (scope 2) for Mitr Phol Group is the location-based method which the data is as same as the data of market-based method.

<sup>A</sup> Other indirect GHG emissions (Scope 3) in 2020 include GHG emissions from raw material transportation by third-party organization, product transportation by third-party organization, and employee's ground transportation and air travel.

<sup>B</sup> Other indirect GHG emissions (Scope 3), category 2 capital goods cannot be calculated since our suppliers are unable to provide the information of emission factor, and Thailand's databases are limited.

For 2021-2023, Mitr Phol Group has collected and calculated other indirect GHG emissions (Scope 3) in line with the Corporate Value Chain (Scope 3) Accounting & Reporting Standard, Greenhouse Gas Protocol.

Due to the new acquisition, the environmental performance was expanded to include in the reporting scope as follows:

- In 2021, the new 2 companies were included i.e. Betong Green Power Co., Ltd. and Productivity Plus Co., Ltd., (Saraburi).
- In 2022, the new 10 companies were included i.e. Green Pharmahol Co., Ltd., Bangkok Alcohol Industrial Co., Ltd., Kampaengpetch Green Energy Co., Ltd, Apcon Renewable Energy Co., Ltd., MP Apcon Operations Co., Ltd, Panel Design Lab Co., Ltd, Fair Fast Co., Ltd, Thai Environmental and Energy Development Co., Ltd, Health Innotech Co., Ltd, and Eto-Huay Kasain Valley CO., Ltd.
- In 2023, the new 9 companies were included i.e. Prize of Wood Green Energy Co., Ltd., Safe Biomass Co., Ltd., C A B Woodchip Co., Ltd., Rungtiva Biomass Co., Ltd., Saraburi Solar Co.,Ltd., Sawasdee Energy Holding Co., Ltd., Steem Inc Co., Ltd., Wood Solution Co., Ltd., and Khonkaen Innovation Center Co.,Ltd

During 2020 to 2022, Ratchasima Green Starch Co., Ltd. (RGS) was categorized under the Energy Business. In 2023, RGS was reclassified to be included in Other Business.

## Air Emissions

Business Unit	Data	Unit	2020*	2021*	2022**	2023**
<b>GRI 305-7 (2016) Nitrogen Oxides (NO<sub>x</sub>), Sulfur Oxides (SO<sub>x</sub>), and Other Significant Air Emissions</b>						
<b>Mitr Phol Group</b>	NO <sub>x</sub>	Tons	NA	NA	NA	572.32
	SO <sub>x</sub>	Tons	NA	NA	NA	82.44
	CO	Tons	NA	NA	NA	313.28
	TSP	Tons	NA	NA	NA	425.92
	VOCs	Tons	NA	NA	NA	0.52
<b>Sugar business</b>	NO <sub>x</sub>	Tons	NA	NA	NA	25.98
	SO <sub>x</sub>	Tons	NA	NA	NA	1.55
	CO	Tons	NA	NA	NA	25.09
	TSP	Tons	NA	NA	NA	30.96
<b>Energy business</b>	NO <sub>x</sub>	Tons	NA	NA	NA	222.70
	SO <sub>x</sub>	Tons	NA	NA	NA	6.51
	CO	Tons	NA	NA	NA	247.63
	TSP	Tons	NA	NA	NA	176.50
	VOCs	Tons	NA	NA	NA	0.52
<b>Wood substitute materials business</b>	NO <sub>x</sub>	Tons	NA	NA	NA	322.65
	SO <sub>x</sub>	Tons	NA	NA	NA	70.07

Business Unit	Data	Unit	2020*	2021*	2022**	2023**
	CO	Tons	NA	NA	NA	39.70
	TSP	Tons	NA	NA	NA	215.31
<b>Fertilizer business</b>	NO <sub>x</sub>	Tons	NA	NA	NA	0.68
	SO <sub>x</sub>	Tons	NA	NA	NA	4.26
	CO	Tons	NA	NA	NA	0.77
	TSP	Tons	NA	NA	NA	2.63
<b>Other business</b>	NO <sub>x</sub>	Tons	NA	NA	NA	0.31
	SO <sub>x</sub>	Tons	NA	NA	NA	0.06
	CO	Tons	NA	NA	NA	0.09
	TSP	Tons	NA	NA	NA	0.53

Remarks: \* refer to data collected from 1 November of the previous year to 31 October of the reporting year

\*\* refer to data collected from 1 January to 31 December of the reporting year.

NA refers to not available or no data was collected.

NR refers to not relevant.

Farming, logistics and warehouse don't have air emission stacks.

Due to the new acquisition, the environmental performance was expanded to include in the reporting scope as follows:

- In 2021, the new 2 companies were included i.e. Betong Green Power Co., Ltd. and Productivity Plus Co., Ltd., (Saraburi).
- In 2022, the new 10 companies were included i.e. Green Pharmahol Co., Ltd., Bangkok Alcohol Industrial Co., Ltd., Kampaengpetch Green Energy Co., Ltd, Apcon Renewable Energy Co., Ltd., MP Apcon Operations Co., Ltd, Panel Design Lab Co., Ltd, Fair Fast Co., Ltd, Thai Environmental and Energy Development Co., Ltd, Health Innotech Co., Ltd, and Eto-Huay Kasain Valley CO., Ltd.



- In 2023, the new 9 companies were included i.e. Prize of Wood Green Energy Co., Ltd., Safe Biomass Co., Ltd., C A B Woodchip Co., Ltd., Rungtiva Biomass Co., Ltd., Saraburi Solar Co., Ltd., Sawasdee Energy Holding Co., Ltd., Steem Inc Co., Ltd., Wood Solution Co., Ltd., and Khonkaen Innovation Center Co., Ltd

**Mitr Phol Group's Waste Management**

Business Unit	Waste to Disposal	Unit	2020*	2021*	2022**	2023**
<b>GRI 306-3 (2020) Waste Generated</b>						
<b>Mitr Phol Group</b>	<b>Total weight of waste generated</b>	<b>Tons</b>	<b>3,103,779.08</b>	<b>3,179,774.70</b>	<b>3,090,052.18</b>	<b>2,549,167.73</b>
	Total weight of hazardous waste generated	Tons	1,079.46	725.88	7,603.70	13,597.27
	Total weight of non-hazardous waste generated	Tons	3,102,699.63	3,179,048.82	3,082,448.49	2,535,570.45
<b>Farming business</b>	<b>Total weight of waste generated</b>	<b>Tons</b>	<b>NA</b>	<b>4.36</b>	<b>33,595.30</b>	<b>19.50</b>
	Total weight of hazardous waste generated	Tons	NA	0	3.63	3.79
	Total weight of non-hazardous waste generated	Tons	NA	4.36	33,591.67	15.71
<b>Sugar business</b>	<b>Total weight of waste generated</b>	<b>Tons</b>	<b>3,973,618.22</b>	<b>3,706,609.91</b>	<b>5,110,065.97</b>	<b>5,544,015.70</b>
	Total weight of hazardous waste generated	Tons	337.76	257.08	4,377.34	404.84
	Total weight of non-hazardous waste generated	Tons	3,973,280.46	3,706,352.83	5,105,688.64	5,543,610.86
<b>Energy business</b>	<b>Total weight of waste generated</b>	<b>Tons</b>	<b>2,154,133.94</b>	<b>2,466,188.34</b>	<b>2,656,608.12</b>	<b>3,083,156.81</b>
	Total weight of hazardous waste generated	Tons	170.26	100.45	2,832.83	12,751.70
	Total weight of non-hazardous waste generated	Tons	2,153,963.68	2,466,087.90	2,653,775.29	3,070,405.10
<b>Wood substitute materials business</b>	<b>Total weight of waste generated</b>	<b>Tons</b>	<b>13,456.70</b>	<b>30,749.09</b>	<b>23,659.07</b>	<b>12,923.32</b>
	Total weight of hazardous waste generated	Tons	272.59	366.20	368.56	389.72
	Total weight of non-hazardous waste generated	Tons	13,184.11	30,382.89	23,290.51	12,533.60
<b>Fertilizer business</b>	<b>Total weight of waste generated</b>	<b>Tons</b>	<b>16.96</b>	<b>44.88</b>	<b>114.41</b>	<b>104.21</b>
	Total weight of hazardous waste generated	Tons	0	0.55	14.21	3.06

Business Unit	Waste to Disposal	Unit	2020*	2021*	2022**	2023**
	Total weight of non-hazardous waste generated	Tons	16.96	44.33	100.20	101.15
<b>Logistics and warehouse business</b>	<b>Total weight of waste generated</b>	<b>Tons</b>	<b>360.73</b>	<b>457.02</b>	<b>224.33</b>	<b>103.40</b>
	Total weight of hazardous waste generated	Tons	296.84	0.61	7.13	34.42
	Total weight of non-hazardous waste generated	Tons	63.89	456.40	217.20	68.98
<b>Other business</b>	<b>Total weight of waste generated</b>	<b>Tons</b>	<b>48.40</b>	<b>51.00</b>	<b>217.58</b>	<b>145,510.19</b>
	Total weight of hazardous waste generated	Tons	2.00	1.00	0	9.75
	Total weight of non-hazardous waste generated	Tons	46.40	50.00	217.58	145,500.44
<b>GRI 306-4 (2020) Waste Diverted from Disposal</b>						
<b>Mitr Phol Group</b>	<b>Total weight of waste diverted from disposal</b>	<b>Tons</b>	<b>2,391,468.61</b>	<b>3,062,560.96</b>	<b>2,089,874.73</b>	<b>2,308,402.94</b>
	<b>Total weight of hazardous waste diverted from disposal</b>	<b>Tons</b>	<b>288.46</b>	<b>99.98</b>	<b>3,692.33</b>	<b>1,589.81</b>
	<b>Onsite</b>					
	- Reuse	Tons	5.25	5.83	1.80	0
	- Recycling	Tons	0	0	0	0
	- Other recovery operations	Tons	0	0	0	0
	<b>Offsite</b>					
	- Reuse	Tons	18.9	0.86	3.80	3.48
	- Recycling	Tons	252.87	85.85	2,881.86	677.33
- Other recovery operations	Tons	11.44	7.44	804.87	909	

Business Unit	Waste to Disposal	Unit	2020*	2021*	2022**	2023**
	<b>Total weight of non-hazardous waste diverted from disposal</b>	<b>Tons</b>	<b>2,391,180.15</b>	<b>3,062,460.98</b>	<b>2,086,182.40</b>	<b>2,306,813.13</b>
	<b>Onsite</b>					
	- Reuse	Tons	68.15	39.68	0	1,966.68
	- Recycling	Tons	0	0	0	0
	- Composting	Tons	3,650.14	8,312.03	146,644.04	331,768.36
	- Other recovery operations	Tons	31,306.70	0	26.80	0
	<b>Offsite</b>					
	- Reuse	Tons	3.5	2.75	0	19.02
	- Recycling	Tons	570,549.67	75,095.53	629,249.83	294,950.07
	- Composting	Tons	1,719,110.35	2,502,169.18	914,024.99	1,621,889.18
	- Other recovery operations	Tons	66,491.64	476,841.82	396,236.74	56,219.82
<b>Farming business</b>	<b>Total weight of waste diverted from disposal</b>	<b>Tons</b>	<b>NA</b>	<b>4.36</b>	<b>0</b>	<b>6.70</b>
	<b>Total weight of hazardous waste diverted from disposal</b>	<b>Tons</b>	<b>NA</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Onsite</b>					
	- Reuse	Tons	NA	0	0	0
	- Recycling	Tons	NA	0	0	0
	- Other recovery operations	Tons	NA	0	0	0
	<b>Offsite</b>					

Business Unit	Waste to Disposal	Unit	2020*	2021*	2022**	2023**
	- Reuse	Tons	NA	0	0	0
	- Recycling	Tons	NA	0	0	0
	- Other recovery operations	Tons	NA	0	0	0
	<b>Total weight of non-hazardous waste diverted from disposal</b>	<b>Tons</b>	<b>NA</b>	<b>4.36</b>	<b>0</b>	<b>6.70</b>
	<b>Onsite</b>					
	- Reuse	Tons	NA	0	0	0
	- Recycling	Tons	NA	0	0	0
	- Composting	Tons	NA	0	0	0
	- Other recovery operations	Tons	NA	0	0	0
	<b>Offsite</b>					
	- Reuse	Tons	NA	0	0	0
	- Recycling	Tons	NA	0	0	6.70
	- Composting	Tons	NA	0	0	0
	- Other recovery operations	Tons	NA	4.36	0	0
<b>Sugar business</b>	<b>Total weight of waste diverted from disposal</b>	<b>Tons</b>	<b>718,627.76</b>	<b>640,293.65</b>	<b>1,357,872.03</b>	<b>724,139.02</b>
	<b>Total weight of hazardous waste diverted from disposal</b>	<b>Tons</b>	<b>23.61</b>	<b>65.64</b>	<b>303.11</b>	<b>271.65</b>
	<b>Onsite</b>					
	- Reuse	Tons	1.82	1.73	0	0

Business Unit	Waste to Disposal	Unit	2020*	2021*	2022**	2023**
	- Recycling	Tons	0	0	0	0
	- Other recovery operations	Tons	0	0	0	0
	<b>Offsite</b>					
	- Reuse	Tons	0	0.86	3.80	3.48
	- Recycling	Tons	10.35	63.05	286.67	268.17
	- Other recovery operations	Tons	11.44	0	12.64	0
	<b>Total weight of non-hazardous waste diverted from disposal</b>	<b>Tons</b>	<b>718,604.15</b>	<b>640,228.01</b>	<b>1,357,568.93</b>	<b>723,867.37</b>
	<b>Onsite</b>					
	- Reuse	Tons	36.08	22.55	0	0
	- Recycling	Tons	0	0	0	0
	- Composting	Tons	0	500	137,295.71	113,213.05
	- Other recovery operations	Tons	0	0	19.80	0
	<b>Offsite</b>					
	- Reuse	Tons	0	0	0	0
	- Recycling	Tons	49,061.61	65,738.77	628,648.94	282,347.38
	- Composting	Tons	655,157.56	572,778.62	590,221.47	327,507.76
	- Other recovery operations	Tons	14,348.90	1,188.07	1,383.01	799.18
	<b>Total weight of waste diverted from disposal</b>	<b>Tons</b>	<b>1,975,052.13</b>	<b>2,448,217.41</b>	<b>1,713,362.98</b>	<b>2,070,878.92</b>

Business Unit	Waste to Disposal	Unit	2020*	2021*	2022**	2023**
<b>Energy business</b>	<b>Total weight of hazardous waste diverted from disposal</b>	<b>Tons</b>	<b>6.13</b>	<b>29.61</b>	<b>3,295.38</b>	<b>922.59</b>
	<b>Onsite</b>					
	- Reuse	Tons	3.43	4.10	1.80	0
	- Recycling	Tons	0	0	0	0
	- Other recovery operations	Tons	0	0	0	0
	<b>Offsite</b>					
	- Reuse	Tons	0	0	0	0
	- Recycling	Tons	2.70	22.80	2,505.14	22.59
	- Other recovery operations	Tons	0	2.71	788.44	900
	<b>Total weight of non-hazardous waste diverted from disposal</b>	<b>Tons</b>	<b>1,975,046.00</b>	<b>2,448,187.80</b>	<b>1,710,067.60</b>	<b>2,069,956.33</b>
	<b>Onsite</b>					
	- Reuse	Tons	32.07	17.13	0	0
	- Recycling	Tons	0	0	0	0
	- Composting	Tons	3,656.84	7,812.03	71,771.65	218,555.31
	- Other recovery operations	Tons	0	0	7	0
	<b>Offsite</b>					
	- Reuse	Tons	3.50	2.75	0	19.02
- Recycling	Tons	521,4806	9,291.27	582.65	12,165.23	

Business Unit	Waste to Disposal	Unit	2020*	2021*	2022**	2023**
	- Composting	Tons	1,366,966.22	1,955,919.47	1,243,382.72	1,784,311.67
	- Other recovery operations	Tons	51,606.01	475,145.15	394,323.58	54,905.10
<b>Wood substitute materials business</b>	<b>Total weight of waste diverted from disposal</b>	<b>Tons</b>	<b>13,366.36</b>	<b>30,331.60</b>	<b>23,287.53</b>	<b>12,770.01</b>
	<b>Total weight of hazardous waste diverted from disposal</b>	<b>Tons</b>	<b>238.88</b>	<b>4.12</b>	<b>86.72</b>	<b>389.71</b>
	<b>Onsite</b>					
	- Reuse	Tons	0	0	0	0
	- Recycling	Tons	0	0	0	0
	- Other recovery operations	Tons	0	0	0	0
	<b>Offsite</b>					
	- Reuse	Tons	0	0	0	0
	- Recycling	Tons	238.88	0	82.93	386.06
	- Other recovery operations	Tons	0	4.12	3.79	3.66
	<b>Total weight of non-hazardous waste diverted from disposal</b>	<b>Tons</b>	<b>13,127.48</b>	<b>30,327.48</b>	<b>23,200.81</b>	<b>12,380.29</b>
	<b>Onsite</b>					
	- Reuse	Tons	0	0	0	1,966.68
	- Recycling	Tons	0	0	0	0
	- Composting	Tons	0	0	0	0
	- Other recovery operations	Tons	0	0	0	0



Business Unit	Waste to Disposal	Unit	2020*	2021*	2022**	2023**
	<b>Offsite</b>					
	- Reuse	Tons	0	0	0	0
	- Recycling	Tons	0	65.49	8.8	380.70
	- Composting	Tons	12,584.05	29,805.93	22,725.15	9,690.34
	- Other recovery operations	Tons	543.43	456.07	466.86	342.56
<b>Fertilizer business</b>	<b>Total weight of waste diverted from disposal</b>	<b>Tons</b>	<b>0</b>	<b>23.98</b>	<b>62.29</b>	<b>71.19</b>
	<b>Total weight of hazardous waste diverted from disposal</b>	<b>Tons</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.52</b>
	<b>Onsite</b>					
	- Reuse	Tons	0	0	0	0
	- Recycling	Tons	0	0	0	0
	- Other recovery operations	Tons	0	0	0	0
	<b>Offsite</b>					
	- Reuse	Tons	0	0	0	0
	- Recycling	Tons	0	0	0	0.52
	- Other recovery operations	Tons	0	0	0	0
	<b>Total weight of non-hazardous waste diverted from disposal</b>	<b>Tons</b>	<b>0</b>	<b>23.98</b>	<b>62.29</b>	<b>70.67</b>
	<b>Onsite</b>					
	- Reuse	Tons	0	0	0	0

Business Unit	Waste to Disposal	Unit	2020*	2021*	2022**	2023**
	- Recycling	Tons	0	0	0	0
	- Composting	Tons	0	0	0	0
	- Other recovery operations	Tons	0	0	0	0
	<b>Offsite</b>					
	- Reuse	Tons	0	0	0	0
	- Recycling	Tons	0	0	0	0
	- Composting	Tons	0	0	0	0
	- Other recovery operations	Tons	0	23.98	62.29	70.67
<b>Logistics and warehouse business</b>	<b>Total weight of waste diverted from disposal</b>	<b>Tons</b>	<b>19.84</b>	<b>24.81</b>	<b>7.12</b>	<b>48.23</b>
	<b>Total weight of hazardous waste diverted from disposal</b>	<b>Tons</b>	<b>19.84</b>	<b>0.61</b>	<b>7.12</b>	<b>0.82</b>
	<b>Onsite</b>					
	- Reuse	Tons	0	0	0	0
	- Recycling	Tons	0	0	0	0
	- Other recovery operations	Tons	0	0	0	0
	<b>Offsite</b>					
	- Reuse	Tons	18.90	0	0	0
	- Recycling	Tons	0.94	0	7.12	0
- Other recovery operations	Tons	0	0.61	0	0.82	

Business Unit	Waste to Disposal	Unit	2020*	2021*	2022**	2023**
	<b>Total weight of non-hazardous waste diverted from disposal</b>	<b>Tons</b>	<b>0</b>	<b>24.20</b>	<b>0</b>	<b>47.41</b>
	<b>Onsite</b>					
	- Reuse	Tons	0	0	0	0
	- Recycling	Tons	0	0	0	0
	- Composting	Tons	0	0	0	0
	- Other recovery operations	Tons	0	0	0	0
	<b>Offsite</b>					
	- Reuse	Tons	0	0	0	0
	- Recycling	Tons	0	0	0	0
	- Composting	Tons	0	0	0	0
	- Other recovery operations	Tons	0	24.20	0	47.41
<b>Other business</b>	<b>Total weight of waste diverted from disposal</b>	<b>Tons</b>	<b>0</b>	<b>0</b>	<b>10.44</b>	<b>109.47</b>
	<b>Total weight of hazardous waste diverted from disposal</b>	<b>Tons</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4.52</b>
	<b>Onsite</b>					
	- Reuse	Tons	0	0	0	0
	- Recycling	Tons	0	0	0	0
	- Other recovery operations	Tons	0	0	0	0
	<b>Offsite</b>					

Business Unit	Waste to Disposal	Unit	2020*	2021*	2022**	2023**
	- Reuse	Tons	0	0	0	0
	- Recycling	Tons	0	0	0	0
	- Other recovery operations	Tons	0	0	0	4.52
	<b>Total weight of non-hazardous waste diverted from disposal</b>	<b>Tons</b>	<b>0</b>	<b>0</b>	<b>10.44</b>	<b>104.95</b>
	<b>Onsite</b>					
	- Reuse	Tons	0	0	0	0
	- Recycling	Tons	0	0	0	0
	- Composting	Tons	0	0	0	0
	- Other recovery operations	Tons	0	0	0	0
	<b>Offsite</b>					
	- Reuse	Tons	0	0	0	0
	- Recycling	Tons	0	0	9.44	50.05
	- Composting	Tons	0	0	0	0
	- Other recovery operations	Tons	0	0	1	54.90
<b>GRI 306-5 (2020) Waste Directed to Disposal</b>						
<b>Mitr Phol Group</b>	<b>Total weight of waste directed to disposal</b>	<b>Tons</b>	<b>136,056.42</b>	<b>53,252.39</b>	<b>27,130.96</b>	<b>13,986.02</b>
	<b>Total weight of hazardous waste directed to disposal</b>	<b>Tons</b>	<b>20,422.60</b>	<b>587.45</b>	<b>4,724.79</b>	<b>274.42</b>
	<b>Onsite</b>					

Business Unit	Waste to Disposal	Unit	2020*	2021*	2022**	2023**
	- Incineration with energy recovery	Tons	0	0	0.30	0
	- Incineration without energy recovery	Tons	0	1	0.93	0
	- Landfilling	Tons	0	0	5.56	0
	- Other disposal operations	Tons	0	0	0.50	0
	<b>Offsite</b>					
	- Incineration with energy recovery	Tons	9,204.43	318.53	282.43	18.18
	- Incineration without energy recovery	Tons	296.56	34.79	3,979.15	18.41
	- Landfilling	Tons	10,597.10	109.48	369.55	231.27
	- Other disposal operations	Tons	324.51	123.65	86.37	6.55
	<b>Total weight of non-hazardous waste directed to disposal</b>	<b>Tons</b>	<b>289,243.82</b>	<b>52,664.94</b>	<b>22,406.17</b>	<b>13,711.61</b>
	<b>Onsite</b>					
	- Incineration with energy recovery	Tons	0	0	0	45
	- Incineration without energy recovery	Tons	0	0	0	0
	- Landfilling	Tons	109.23	1,468.61	1,829.71	12,441.88
	- Other disposal operations	Tons	0	0.5	11.36	0
	<b>Offsite</b>					
	- Incineration with energy recovery	Tons	0	0	0	0
	- Incineration without energy recovery	Tons	0	6.37	0.80	0.36
	- Landfilling	Tons	115,482.17	51,176.99	20,564.30	1,213.36

Business Unit	Waste to Disposal	Unit	2020*	2021*	2022**	2023**
	- Other disposal operations	Tons	42.42	12.47	0	11.00
<b>Farming business</b>	<b>Total weight of waste directed to disposal</b>	<b>Tons</b>	<b>NA</b>	<b>0</b>	<b>8.12</b>	<b>9.01</b>
	<b>Total weight of hazardous waste directed to disposal</b>	<b>Tons</b>	<b>NA</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Onsite</b>					
	- Incineration with energy recovery	Tons	NA	0	0	0
	- Incineration without energy recovery	Tons	NA	0	0	0
	- Landfilling	Tons	NA	0	0	0
	- Other disposal operations	Tons	NA	0	0	0
	<b>Offsite</b>					
	- Incineration with energy recovery	Tons	NA	0	0	0
	- Incineration without energy recovery	Tons	NA	0	0	0
	- Landfilling	Tons	NA	0	0	0
		- Other disposal operations	Tons	NA	0	0
	<b>Total weight of non-hazardous waste directed to disposal</b>	<b>Tons</b>	<b>NA</b>	<b>0</b>	<b>8.12</b>	<b>9.01</b>
	<b>Onsite</b>					
	- Incineration with energy recovery	Tons	NA	0	0	0
	- Incineration without energy recovery	Tons	NA	0	0	0
	- Landfilling	Tons	NA	0	0	0
	- Other disposal operations	Tons	NA	0	0	0

Business Unit	Waste to Disposal	Unit	2020*	2021*	2022**	2023**
	<b>Offsite</b>					
	- Incineration with energy recovery	Tons	NA	0	0	0
	- Incineration without energy recovery	Tons	NA	0	0	0
	- Landfilling	Tons	NA	0	8.12	9.01
	- Other disposal operations	Tons	NA	0	0	0
<b>Sugar business</b>	<b>Total weight of waste directed to disposal</b>	<b>Tons</b>	<b>2,138,19.53</b>	<b>3,020,000.74</b>	<b>3,735,953.45</b>	<b>4,144,121.51</b>
	<b>Total weight of hazardous waste directed to disposal</b>	<b>Tons</b>	<b>11,992.28</b>	<b>175.00</b>	<b>4,054.77</b>	<b>169.50</b>
	<b>Onsite</b>					
	- Incineration with energy recovery	Tons	0	0	0	0
	- Incineration without energy recovery	Tons	0	1	0.93	0
	- Landfilling	Tons	0	0	1.33	0
	- Other disposal operations	Tons	0	0	0	0
	<b>Offsite</b>					
	- Incineration with energy recovery	Tons	2,326.23	74.41	282.43	16.80
	- Incineration without energy recovery	Tons	13.19	31.18	3,979.15	15.82
	- Landfilling	Tons	9,652.86	68.40	369.55	135.08
	- Other disposal operations	Tons	0	0	86.37	1.80
	<b>Total weight of non-hazardous waste directed to disposal</b>	<b>Tons</b>	<b>2,126,527.25</b>	<b>3,019,825.75</b>	<b>3,731,898.68</b>	<b>4,143,952.01</b>
	<b>Onsite</b>					

Business Unit	Waste to Disposal	Unit	2020*	2021*	2022**	2023**
	- Incineration with energy recovery	Tons	0	0	0	0
	- Incineration without energy recovery	Tons	0	0	0	0
	- Landfilling	Tons	109.23	1,457.23	1,679.00	387.27
	- Other disposal operations	Tons	0	0.50	0	0
	<b>Offsite</b>					
	- Incineration with energy recovery	Tons	2,092,528.08	2,967,995.05	3,729,704.93	4,142,943.51
	- Incineration without energy recovery	Tons	0	0	0.80	0.36
	- Landfilling	Tons	33,889.94	50,372.95	513.95	620.87
	- Other disposal operations	Tons	0	0.02	0	0
<b>Energy business</b>	<b>Total weight of waste directed to disposal</b>	<b>Tons</b>	<b>89,544.42</b>	<b>323.64</b>	<b>19,997.11</b>	<b>324,998.51</b>
	<b>Total weight of hazardous waste directed to disposal</b>	<b>Tons</b>	<b>8,090.61</b>	<b>49.86</b>	<b>301.63</b>	<b>68.99</b>
	<b>Onsite</b>					
	- Incineration with energy recovery	Tons	0	0	0	0
	- Incineration without energy recovery	Tons	0	0	0	0
	- Landfilling	Tons	0	0	4.23	0
	- Other disposal operations	Tons	7.53	0	0.50	0
	<b>Offsite</b>					
	- Incineration with energy recovery	Tons	6,878.20	5.39	3.59	1.38
	- Incineration without energy recovery	Tons	256.37	3.61	0	2.59



Business Unit	Waste to Disposal	Unit	2020*	2021*	2022**	2023**
	- Landfilling	Tons	944.24	40.87	290.89	60.26
	- Other disposal operations	Tons	4.27	0	2.42	4.75
	<b>Total weight of non-hazardous waste directed to disposal</b>	<b>Tons</b>	<b>81,453.81</b>	<b>273.78</b>	<b>19,695.48</b>	<b>324,929.53</b>
	<b>Onsite</b>					
	- Incineration with energy recovery	Tons	0	0	0	312,578.29
	- Incineration without energy recovery	Tons	0	0	0	0
	- Landfilling	Tons	0	11.39	4.54	12,030.02
	- Other disposal operations	Tons	0	0	11.36	0
	<b>Offsite</b>					
	- Incineration with energy recovery	Tons	0	0	0	0
	- Incineration without energy recovery	Tons	0	6.37	0	0
	- Landfilling	Tons	81,453.39	243.57	19,679.58	310.21
	- Other disposal operations	Tons	0.42	12.45	0	11.00
<b>Wood substitute materials business</b>	<b>Total weight of waste directed to disposal</b>	<b>Tons</b>	<b>90.34</b>	<b>416.56</b>	<b>452.49</b>	<b>144.12</b>
	<b>Total weight of hazardous waste directed to disposal</b>	<b>Tons</b>	<b>33.71</b>	<b>361.15</b>	<b>362.79</b>	<b>0</b>
	<b>Onsite</b>					
	- Incineration with energy recovery	Tons	0	0	0	0
	- Incineration without energy recovery	Tons	0	0	0	0
	- Landfilling	Tons	0	0	0	0

<b>Business Unit</b>	<b>Waste to Disposal</b>	<b>Unit</b>	<b>2020*</b>	<b>2021*</b>	<b>2022**</b>	<b>2023**</b>
	- Other disposal operations	Tons	0	0	0	0
	<b>Offsite</b>					
	- Incineration with energy recovery	Tons	0	238.74	278.84	0
	- Incineration without energy recovery	Tons	0	0	0	0
	- Landfilling	Tons	0	0	0	0
	- Other disposal operations	Tons	33.71	122.41	83.95	0
	<b>Total weight of non-hazardous waste directed to disposal</b>	<b>Tons</b>	<b>56.63</b>	<b>55.41</b>	<b>89.70</b>	<b>144.12</b>
	<b>Onsite</b>					
	- Incineration with energy recovery	Tons	0	0	0	0
	- Incineration without energy recovery	Tons	0	0	0	0
	- Landfilling	Tons	0	0	0	0
	- Other disposal operations	Tons	0	0	0	0
	<b>Offsite</b>					
	- Incineration with energy recovery	Tons	0	0	0	0
	- Incineration without energy recovery	Tons	0	0	0	0
	- Landfilling	Tons	56.63	55.41	89.70	144.12
	- Other disposal operations	Tons	0	0	0	0
<b>Fertilizer</b>	<b>Total weight of waste directed to disposal</b>	<b>Tons</b>	<b>13.92</b>	<b>19.10</b>	<b>28.52</b>	<b>40.01</b>
<b>business</b>	<b>Total weight of hazardous waste directed to disposal</b>	<b>Tons</b>	<b>0</b>	<b>0.45</b>	<b>5.61</b>	<b>3.43</b>

Business Unit	Waste to Disposal	Unit	2020*	2021*	2022**	2023**
	<b>Onsite</b>					
	- Incineration with energy recovery	Tons	0	0	0.3	0
	- Incineration without energy recovery	Tons	0	0	0	0
	- Landfilling	Tons	0	0	0	0
	- Other disposal operations	Tons	0	0	0	0
	<b>Offsite</b>					
	- Incineration with energy recovery	Tons	0	0	0	0
	- Incineration without energy recovery	Tons	0	0	0	0
	- Landfilling	Tons	0	0.21	5.31	3.43
	- Other disposal operations	Tons	0	0.24	0	0
	<b>Total weight of non-hazardous waste directed to disposal</b>	<b>Tons</b>	<b>13.92</b>	<b>18.65</b>	<b>22.91</b>	<b>36.58</b>
	<b>Onsite</b>					
	- Incineration with energy recovery	Tons	0	0	0	0
	- Incineration without energy recovery	Tons	0	0	0	0
	- Landfilling	Tons	0	0	0	15.59
	- Other disposal operations	Tons	0	0	0	0
	<b>Offsite</b>					
	- Incineration with energy recovery	Tons	0	0	0	0
	- Incineration without energy recovery	Tons	0	0	0	0

Business Unit	Waste to Disposal	Unit	2020*	2021*	2022**	2023**
	- Landfilling	Tons	13.92	18.65	22.91	20.99
	- Other disposal operations	Tons	0	0	0	0
<b>Logistics and warehouse business</b>	<b>Total weight of waste directed to disposal</b>	<b>Tons</b>	<b>340.89</b>	<b>436.40</b>	<b>189.07</b>	<b>53.97</b>
	<b>Total weight of hazardous waste directed to disposal</b>	<b>Tons</b>	<b>277.00</b>	<b>0</b>	<b>0</b>	<b>32.40</b>
	<b>Onsite</b>					
	- Incineration with energy recovery	Tons	0	0	0	0
	- Incineration without energy recovery	Tons	0	0	0	0
	- Landfilling	Tons	0	0	0	0
	- Other disposal operations	Tons	0	0	0	0
	<b>Offsite</b>					
	- Incineration with energy recovery	Tons	0	0	0	0
	- Incineration without energy recovery	Tons	0	0	0	0
	- Landfilling	Tons	0	0	0	32.40
	- Other disposal operations	Tons	277.00	0	0	0
	<b>Total weight of non-hazardous waste directed to disposal</b>	<b>Tons</b>	<b>63.89</b>	<b>436.40</b>	<b>189.07</b>	<b>21.57</b>
	<b>Onsite</b>					
	- Incineration with energy recovery	Tons	0	0	0	0
	- Incineration without energy recovery	Tons	0	0	0	0
- Landfilling	Tons	0	0	0	0	

Business Unit	Waste to Disposal	Unit	2020*	2021*	2022**	2023**
	- Other disposal operations	Tons	0	0	0	0
	<b>Offsite</b>					
	- Incineration with energy recovery	Tons	0	0	0	0
	- Incineration without energy recovery	Tons	0	0	0	0
	- Landfilling	Tons	21.89	436.40	189.07	21.57
	- Other disposal operations	Tons	42.00	0	0	0
<b>Other business</b>	<b>Total weight of waste directed to disposal</b>	<b>Tons</b>	<b>48.40</b>	<b>51.00</b>	<b>207.14</b>	<b>140.69</b>
	<b>Total weight of hazardous waste directed to disposal</b>	<b>Tons</b>	<b>2.00</b>	<b>1.00</b>	<b>0</b>	<b>0.10</b>
	<b>Onsite</b>					
	- Incineration with energy recovery	Tons	0	0	0	0
	- Incineration without energy recovery	Tons	0	0	0	0
	- Landfilling	Tons	0	0	0	0
	- Other disposal operations	Tons	0	0	0	0
	<b>Offsite</b>					
	- Incineration with energy recovery	Tons	0	0	0	0
	- Incineration without energy recovery	Tons	0	0	0	0
	- Landfilling	Tons	0	0	0	0.10
	- Other disposal operations	Tons	2.00	1.00	0	0
	<b>Total weight of non-hazardous waste directed to disposal</b>	<b>Tons</b>	<b>46.40</b>	<b>50.00</b>	<b>207.14</b>	<b>140.59</b>

Business Unit	Waste to Disposal	Unit	2020*	2021*	2022**	2023**
	<b>Onsite</b>					
	- Incineration with energy recovery	Tons	0	0	0	45.00
	- Incineration without energy recovery	Tons	0	0	0	0
	- Landfilling	Tons	0	0	146.17	9
	- Other disposal operations	Tons	0	0	0	0
	<b>Offsite</b>					
	- Incineration with energy recovery	Tons	0	0	0	0
	- Incineration without energy recovery	Tons	0	0	0	0
	- Landfilling	Tons	46.40	50.00	60.97	86.59
	- Other disposal operations	Tons	0	0	0	0
<b>CSA 2.4.2 Waste Disposal</b>						
Mitr Phol	Total waste recycled/reused	Tons	2,391,468.61	3,062,560.96	2,089,874.73	2,308,402.94
	Total waste disposed	Tons	136,056.42	53,252.39	27,130.96	13,986.01
	- Waste landfilled	Tons	126,188.50	52,755.08	22,769.12	13,886.51
	- Waste incinerated with energy recovery	Tons	9,204.43	318.53	282.73	63.18
	- Waste incinerated without energy recovery	Tons	296.56	42.16	3,980.88	18.77
	- Waste otherwise disposed	Tons	366.93	136.62	98.23	17.55
	Target of total waste disposed	Tons				26,045.72

Business Unit	Waste to Disposal	Unit	2020*	2021*	2022**	2023**
						(Reduced 4% from 2022)
	Data coverage	% of revenue	100	100	100	100

Remarks: \* refer to data collected from 1 November of the previous year to 31 October of the reporting year.

\*\* refer to data collected from 1 January to 31 December of the reporting year.

NA refers to not available or no data was collected.

NR refers to not relevant.

The data of wastes disposal was referred to the data provided by the waste disposers and the waste disposal report submitted to government authorities.

Other recovery operations include repurposing, sorting for sale and anaerobic digestion treatment.

Other disposal methods include waste stabilization and other treatment.

Total waste disposal of Mitr Phol Group excluded bagasses generated in sugar business since the bagasses are used as biomass energy in Mitr Phol's power plant.

In 2020 – 2023, remaining bagasses from power plant were sent to another power plant in Mitr Phol Group for incineration with energy recovery which power plants are in energy business unit.

Due to the new acquisition, the environmental performance was expanded to include in the reporting scope as follows:

- In 2021, the new 2 companies were included i.e. Betong Green Power Co., Ltd. and Productivity Plus Co., Ltd., (Saraburi).
- In 2022, the new 10 companies were included i.e. Green Pharmahol Co., Ltd., Bangkok Alcohol Industrial Co., Ltd., Kampaengpetch Green Energy Co., Ltd, Apcon Renewable Energy Co., Ltd., MP Apcon Operations Co., Ltd, Panel Design Lab Co., Ltd, Fair Fast Co., Ltd, Thai Environmental and Energy Development Co., Ltd, Health Innotech Co., Ltd, and Eto-Huay Kasain Valley CO., Ltd.
- In 2023, the new 9 companies were included i.e. Prize of Wood Green Energy Co., Ltd., Safe Biomass Co., Ltd., C A B Woodchip Co., Ltd., Rungtiva Biomass Co., Ltd., Saraburi Solar Co., Ltd., Sawasdee Energy Holding Co., Ltd., Steem Inc Co., Ltd., Wood Solution Co., Ltd., and Khonkaen Innovation Center Co., Ltd

During 2020 to 2022, Ratchasima Green Starch Co., Ltd. (RGS) was categorized under the Energy Business. In 2023, RGS was reclassified to be included in Other Business.

### Non-compliance with Environmental Laws and Regulations

Business Unit	Non-compliance with Environmental Laws and Regulations	Unit	2020*	2021*	2022**	2023**
<b>GRI 2-27 (2021) Compliance with Laws and Regulations/ CSA 2.2.4 Environmental Violations/ CSA 2.5.4 Business Impacts of Water Related Incidents</b>						
<b>Mitr Phol Group</b>	Number of cases for significant fines for non-compliance with laws and regulations (> 10,000 USD)	Cases	0	0	0	0
	Significant fines for non-compliance with laws and regulations (> 10,000 USD)	Baht	0	0	0	0
	Number of non-monetary sanctions	Cases	0	0	0	0
	Number of cases brought through dispute resolution mechanism	Cases	0	0	0	0

Remark: \* refer to data collected from 1 November of the previous year to 31 October of the reporting year.

\*\* refer to data collected from 1 January to 31 December in the reporting year.



## Packaging

Business Unit	Packaging	Unit	2020*	2021*	2022**	2023**	Target for 2023
<b>CSA 2.3.2 Packaging Materials</b>							
<b>Mitr Phol Group</b>	Recycled and/or certified paper packaging	% of total weight of paper packaging				93.84	93
	Data coverage	% of cost of goods sold				100	
<b>CSA 2.3.3 Plastic Packaging</b>							
<b>Mitr Phol Group</b>	Total weight of all plastic packaging	Tons	4,935.35	5,500	6,599	7,272	7,000
	Recyclable plastic packaging	% of total weight of all plastic packaging	95.913	94.50	94.50	94.73	94.5
	Compostable plastic packaging	% of total weight of all plastic packaging	0.003	0.007	0.001	0.003	0.002
	Recycled content within plastic packaging	% of total weight of all plastic packaging	0	0	0	0	0
	Data coverage	% of cost of goods sold	100	100	100	100	

Remarks: \* refer to data collected from 1 November of the previous year to 31 October of the reporting year.

\*\* refer to data collected from 1 January to 31 December of the reporting year.

## Food Loss & Waste

Business Unit	Food Loss & Waste	Unit	2020*	2021*	2022**	2023**	Target for 2023
<b>Mitr Phol Group</b>	Total food loss & waste	Tonnes	411,981.48	372,299.32	460,521.68	424,690.27	
	Total food loss & waste used for alternative purposes	Tonnes	267,572.04	264,025.65	312,469.71	266,206.82	
	Total food loss & waste, which is undetermined loss	Tonnes	144,409.44	108,273.66	148,051.97	158,483.45	
	Total food loss & waste per weight of sugar sales	Tonnes/ Tonnes sugar sales	0.263	0.222	0.196	0.180	0.170
	Data coverage	Total weight of sugar sales	100	100	100	100	

Remarks: \* refer to data collected from 1 November of the previous year to 31 October of the reporting year.

\*\* refer to data collected from 1 January to 31 December of the reporting year.

Food loss & waste used for alternative purposes includes sugar loss in bagasses used for biomass energy, sugar loss in molasses used for ethanol production, sugar loss in filter cake used for fertilizer, and deteriorated sugar that are reprocessed.

Food loss & waste, which is undetermined loss e.g., loss into condensate, inversion loss by microorganisms or heat, etc.