

Sustainability Performance Statistics

Economic Performance

Revenue (million THB) (Disclosure 201-1)	2016	2017	2018	2019
Total revenue from selling of goods and services	144,705.29	172,138.24	192,025.32	190,488.59
Total Revenue	145,232.40	173,378.94	193,340.41	190,983.67
Net profit	4,729.41	6,163.00	3,234.70	2,488.49
EBITDA	11,363.00	13,420.00	10,201.00	8,709.00

Expenditure for income distribution to stakeholders (million THB) (Disclosure 201-1)	2016	2017	2018	2019
Operating expenses	132,809.35	158,595.55	180,594.37	180,256.90
Interest expenses paid to financial institution creditors	1,489.61	1,502.30	1,559.06	1,839.24
Tax payment to government and local authorities	822.32	544.16	194.45	258.46
Financial supports for encouraging public policies	3.64	3.63	3.34	3.75
Community and social development	38.88	32.98	36.00	34.00
Donation to society and schools	37.82	73.61	62.94	64.60
Dividend payment to shareholders (THB)	2,753.52	3,310.75	3,090.52	1,759.84
Dividend payment to shareholders (THB/Share)	1.80	2.15	1.35	0.80
Wages and employee benefits	2,903.82	3,277.33	3,310.33	3,609.11

Corporate Income Tax (BCP) (million THB)												
Tax Jurisdiction	Revenue						Profit / (Loss) before Income Tax		Income Tax Paid (on a Cash Basis)		Income Tax Accrued - Current Year	
	Related Party		Unrelated Party		Total		2018	2019	2018	2019	2018	2019
	2018	2019	2018	2019	2018	2019						
Thailand	50,442	53,977	175,951	159,877	226,393	213,854	5,309	4,711	1,107	210	13	110
Singapore	22,890	23,995	14,995	31,314	37,885	55,309	(103)	91	4	17	17	34
Philippines	-	-	1,002	6	1,002	6	443	(117)	12	2	98	-
Japan	327	21	1,383	230	1,710	251	701	(177)	2	298	-	-
Australia	9	-	-	-	9	-	(521)	-	-	-	-	-
Laos	-	-	-	550	-	550	-	109	-	-	-	-

Supply chain management (Disclosure 204-1)	2016	2017	2018	2019
Local purchases of goods and services*	4,351	5,749	4,424	2,764
Percentage of Local purchases of goods and services*	98%	84%	98%	98%

* Local purchasing in Thailand, exclude raw materials and crude oil

Environmental Performance

Details	Refinery Business				Bio-based Product Business				Green Power Business			
	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
Material (ton)												
- Renewable Material	305,374	395,578	426,633	459,665	434,836	524,967	394,929	882,167	0	0	0	0
- Non- Renewable Material	5,358,267	6,731,065	6,093,537	6,468,825	5,681	27,029	26,625	152,336	3	4	2	3
Product (million L)	8,618	11,070	11,856	12,380	269	393	322	522				

	Refinery Business				Marketing Business				Bio-based Product Business				Green Power Business			
	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
Energy^{/1} (Terajoule: TJ) [Disclosure 302-1]	13,561.3	13,903.0	13,116.8	13,182.0	63.8	60.6	94.1	99.9	1,686.6	1,683.7	1,166.6	2,246.3	8.9	10.4	10.0	10.1
Non-Renewable Energy Consumption	13,561.3	13,903.0	13,116.8	13,182.0	63.8	60.6	94.1	99.9	386.1	613.0	551.4	1,410.8	8.9	10.4	10.0	10.1
Energy used in process :																
• Fuel gas and LPG	6,589.8	6,776.3	5,450.5	5,505.9	-	-	-	-	-	-	-	-	-	-	-	-
• Natural gas	3,227.1	3,457.0	3,770.8	3,796.3	-	-	-	-	208.5	386.2	419.8	414.0	-	-	-	-
• Natural gas for cogeneration	2,719.6	2,814.5	3,783.6	3,794.6	-	-	-	-	-	-	-	-	-	-	-	-
• Fuel oil	913.4	744.0	-	-	-	-	-	-	-	-	-	41.3	-	-	-	-
Electricity and steam used in process																
• Electricity	102.8	103.1	101.7	78.2	63.8	60.6	94.1	99.9	162.7	195.3	117.6	241.3	8.0	9.5	8.8	8.8
• Steam	-	-	-	-	-	-	-	-	-	-	-	700.8	-	-	-	-
Other :																
• Mobile fuels	8.4	8.0	10.1	7.0	-	-	-	-	14.9	31.6	14.1	13.3	0.9	0.9	1.2	1.3
Renewable Energy	0.1	0.0	0.0	0.0	-	-	-	-	1,300.5	1,070.7	615.2	835.5	-	-	-	-
• Wind and Solar	0.1	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-
• Biomass ² and Biogas	-	-	-	-	-	-	-	-	1,300.5	1,070.7	615.2	835.5	-	-	-	-
Sold Energy													914.4	949.0	969.8	1,025.7
• Non-Renewable Energy Sale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
• Renewable Energy: Electricity generated by PV cells	-	-	-	-	-	-	-	-	-	-	-	-	914.4	949.0	969.8	1,025.7
Energy Intensity Index (EII) [Disclosure 302-3]	103.1	103.1	100.5	97.9												
Total Energy Consumption within the Organization^{/3} (Terajoule: TJ) [Disclosure 302-1]	14,406.2	14,708.7	13,417.7	14,512.6												

^{/1} Calculated by multiplying fuel volumes with the conversion factor provided by the Department of Alternative Energy Development and Efficiency

^{/2} Calculated energy consumption of biomass (rice husk and wood chip) by using wet weight multiply by Net Calorific Value (NCV) since percentages of moisture content of biomass are not available.

^{/3} Calculated from the difference of total energy consumption from every business and sold electricity and steam

	Refinery Business				Marketing Business				Bio-based Product Business				Green Power Business				
	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019	
Operational Control Approach	Greenhouse gas (GHG) emissions (tCO₂e) (Disclosure 305-1), (Disclosure 305-2)																
	Direct GHG emission from production processes (SCOPE 1)	989,258	972,926	900,683	898,292					101,943	121,638	58,504	173,475	66	61	86	94
	• Carbon dioxide (CO ₂)	987,722	972,012	899,955	897,563					101,913	121,579	58,456	173,419	65	60	84	93
	Biogenic CO ₂	25	40	52	31					94,623	77,181	55,054	70,716	2	2	4	4
	• Methane (CH ₄)	990	385	329	331					7	13	12	15	0	0	0	0
	• Nitrous oxide (N ₂ O)	546	530	399	398					23	47	36	42	1	1	2	2
	Other Biogenic (CH ₄ & N ₂ O)	-	-	-	0					-	-	-	890	-	-	-	0
	Indirect GHG emission from power and biogas purchased (SCOPE 2)	15,540	23,554	14,129	10,750	9,649	8,716	13,071	13,655	24,589	28,099	16,328	77,330	1,219	1,370	1,220	1,205
	• Carbon dioxide (CO ₂)	15,540	23,554	14,129	10,750	9,649	8,716	13,071	13,655	24,589	28,099	16,328	77,284	1,219	1,370	1,220	1,205
	Biogenic CO ₂	-	-	-	-	-	-	-	-	10,933	8,135	-	-	-	-	-	-
	• Methane (CH ₄)	-	-	-	-	-	-	-	-	-	-	-	21	-	-	-	-
	• Nitrous oxide (N ₂ O)	-	-	-	-	-	-	-	-	-	-	-	25	-	-	-	-
	Other Biogenic (CH ₄ & N ₂ O)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1,004,798	996,480	914,812	909,042	9,649	8,716	13,071	13,655	126,532	149,737	74,833	250,805	1,285	1,431	1,305	1,300	
Equity Share Approach	Direct GHG emission from production processes (SCOPE 1)	989,258	972,926	900,683	898,292					27,421	21,927	27,696	96,630	47	43	60	66
	• Carbon dioxide (CO ₂)	987,722	972,012	899,955	897,563					27,409	21,912	27,674	96,603	46	42	59	65
	Biogenic CO ₂	25	40	52	31					20,137	9,856	28,077	37,071	2	2	2	2
	• Methane (CH ₄)	990	385	329	331					4	5	5	7	0	0	0	0
	• Nitrous oxide (N ₂ O)	546	530	399	398					8	10	17	21	1	1	1	1
	Other Biogenic (CH ₄ & N ₂ O)	-	-	-	0					-	-	-	455	-	-	-	0
	Indirect GHG emission from power and biogas purchased (SCOPE 2)	15,540	23,554	14,129	10,750	4,728	4,271	8,803	9,141	7,676	6,082	7,585	44,165	853	964	857	845
	• Carbon dioxide (CO ₂)	15,540	23,554	14,129	10,750	4,728	4,271	8,803	9,141	7,676	6,082	7,585	44,138	853	964	857	845
	Biogenic CO ₂	-	-	-	-	-	-	-	-	2,327	1,039	-	-	-	-	-	-
	• Methane (CH ₄)	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-
	• Nitrous oxide (N ₂ O)	-	-	-	-	-	-	-	-	-	-	-	15	-	-	-	-
	Other Biogenic (CH ₄ & N ₂ O)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total	1,004,798	996,480	914,812	909,042	4,728	4,271	8,803	9,141	35,097	28,008	35,282	140,795	900	1,007	917	911
GHGs Intensity (tco₂e per ton raw material)	0.21	0.14	0.14	0.14													

* The report of direct and indirect GHG emissions data are calculated by using the BCP GHGs calculation tool in accordance with IPCC 2006

Air emissions (Disclosure 305-7), [0G6]	Units	2016	2017	2018	2019	Targets
NOx (Combustion) ¹	ton	349	426	644	236	1,000
Intensity NO _x	ton per thousand tons crude	0.07	0.08	0.12	0.04	
SO ₂ (Combustion & SRU/TGTU Stack) ¹	ton	35	75	24	32	1,000
Intensity SO ₂	ton per thousand tons crude	0.01	0.01	0.00	0.01	
TSP PM10 (Combustion) ¹	ton	17	48	5	11	200
Intensity TSP	ton per thousand tons crude	0.00	0.00	0.00	0.00	
H ₂ S (SRU/TGTU Stack) ¹	ton	0.36	0.50	14.3	0.7	20
Intensity H ₂ S	ton per thousand tons crude	0	0	0	0	
VOCs Inventory ^{2/3}	ton			520.84	371.51	
Fugitive VOCs ⁴	ton	2.99	2.60	2.50	2.50	126
Intensity VOCs	ton/barrel	0	0	0	0.0	
Flared hydrocarbon ⁵	kl	1,892.1	2,809.1	1,777.0	2,472.9	N/A
Flared hydrocarbon ⁵	ton cu.m. (Gas)	0.20	0.43	0.25	0.37	
Flared hydrocarbon per total product produced	ton cu.m. (Gas) / million barrel oil equivalent	0.0053	0.0104	0.0063	0.0085	
Vented hydrocarbon	ton cu.m. (Gas)	N/A	N/A	N/A	N/A	
Vented hydrocarbon per total product produced	ton cu.m. (Gas) / million barrel oil equivalent	N/A	N/A	N/A	N/A	

¹ Calculated from production capacity using a third-party entity ² Include VOC Inventory from combustion, flare, tank, marketing and terminal, and wastewater ³ Use emission factors from AP 42-US EPA, for VOC inventory calculation from combustion, flare, and marketing and terminal. Tank 4 program and Water 9 program are used as tools for VOC inventory calculation from tank and wastewater respectively. ⁴ Calibrated measurement tools ⁵ Including Flared hydrocarbon from Plant 2, 3, 4

Water (million m ³)	Refinery Business			
	2016	2017	2018	2019
Tap Water used in production ¹ (Disclosure 303-1)	2.36	2.43	2.27	2.47
Ground water used (Disclosure 303-1)	0.05	0.11	0.10	0.03
River water used (Disclosure 303-1)	-	0.00	0.01	0.20
Reused water ^{2/5} (Disclosure 303-3)	1.10	1.15	1.10	1.16
Percentage of water recycled and reused to total water withdrawal (Disclosure 303-3)	45.65	45.30	46.21	43.12
Water discharged in Bang Ao Canel (Disclosure 306-1)	0.84	0.90	0.90	0.77
Ratio of water used per barrel of oil produced (m ³ /BOE) ³	0.061	0.061	0.062	0.065
COD (ton) ⁴	42.00	39.23	39.02	53.31
BOD (ton) ⁴	5.96	4.43	4.76	7.32
Oil and Grease (ton) ⁴	1.68	1.36	4.52	2.22
TSS (ton) ⁴	10.92	9.04	11.15	8.23
TDS (ton) ⁴	1,321.23	1,105.00	791.03	1,125.09
Sulfide (ton) ⁴	0.29	0.18	0.90	0.34
Mercury (ton) ⁴	0.00	0.00	0.00	0.00

¹ Volume from water usage invoices ² Volume from water meters

³ Volume from water balance and measuring values by laboratory that is licensed by department of Industry work

⁴ Calibrated measurement tools

⁵ 2016 Total volume of recycled water combines condensate water, which is of high quality collected from the boiler and plant 4, and water from wastewater treating unit which is further treated with reverse osmosis.

Waste [Disclosure 306-2]	2016	2017	2018	2019	Percentage 2019
Routine wastes (ton : percentage)					
Hazardous waste ¹	1,573 (20.2)	1,571 (80.69)	2,808 (17.99)	2,023	33.81
Non-hazardous waste ¹	179 (2.3)	332 (17.07)	220 (1.41)	158	2.64
Non-routine wastes (ton : percentage)					
Hazardous waste from oil and chemical spill clean-up ² (Disclosure 306-3)	0	1 (0.05)	0	0	0
Construction waste ²	1,204 (15.5)	43 (2.19)	10,583 (67.80)	3,696	61.77
Hazardous waste from Turnaround Maintenance	4,745 (61)	0	1,916 (12.27)	106	1.77
Non-Hazardous waste from Turnaround Maintenance ²	84 (1)	0	82 (0.52)	1	0.02
Total	7,785 [100]	1,947 [100]	15,609 [100]	5,984	100

¹ Weight from waste manifest

² Estimate from volume of waste sent to disposal based on calculation of number of bags per container and average weight per bag /container"

Waste Management Method ¹ (ton) [Disclosure 306-2]	2016		2017		2018		2019	
	Hazardous Waste	Non-Hazardous Waste	Hazardous Waste	Non-Hazardous Waste	Hazardous Waste	Non-Hazardous Waste	Hazardous Waste	Non-Hazardous Waste
- Reuse	0	0	0	0	0	0	0	0
- Recycle	1,137	16	564	28	4,321	302	571	6
- Recovery, including consumption as fuel	4,281	235	1,006	233	360	0	1,543	154
- Incineration	901	0	0	28	44	0	0	0
- Sent to secure landfill	0	11	0	0	0	0	15	0
- On site storage	318	0	0	0	0	0	0	0
- Other (Land Reclamation)	0	1,204	0	43	0	10,583	0	3,696
Total	6,637	1,466	1,571	332	4,725	10,884	2,129	3,856

¹ Disposal methods and quantity from DIW waste disposal permit documents and manifests

Oil and chemical spills (case) [Disclosure 306-3]	2016	2017	2018	2019
- Number of significant oil and chemical spills (more than 100 Barrels each)	0	0	0	0

Supply Chain Management (Percentage)	2016	2017	2018	2019
New Supplier/ Critical Supplier were self assess on SCOC criteria	62. ¹	31	29	24

¹ 2016 Number of Critical suppliers were self assessed on Bangchak's Supplier Code of Conduct covering 5 assessment topics

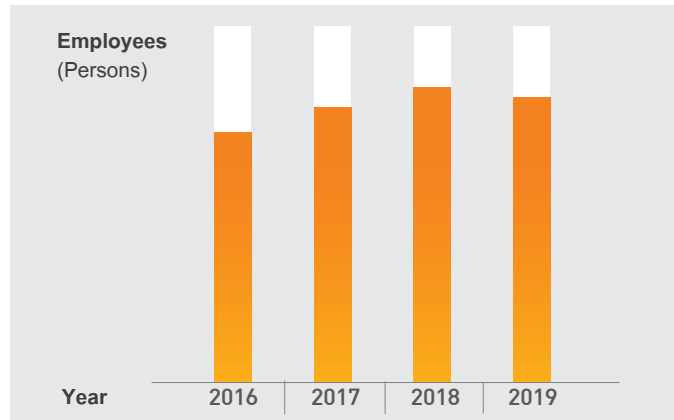
Environment Compliance [Disclosure 307-1]	2016	2017	2018	2019
Number/Monetary Value of significant fines associated with environmental law violation (Disclosure 307-1)	0	0	0	0

Social Performance

Employment

Employees* (Persons)

* The company has an exclusive full-time employment policy. There are no temporary, part-time, or self-employment and no seasonal difference in manpower



Employees (Disclosure 102-8), (Disclosure 401-1)	2016		2017		2018		2019		
	Persons	%	Persons	%	Persons	%	Persons	%	
By gender									
• Male	847	70.82	866	69.84	881	70.26	868	69.38	
• Female	349	29.18	374	30.16	373	29.74	383	30.62	
Total	1,196	100	1,240	100	1,254	100	1,251	100	
By Religion									
• Buddhism	1,162	97.16	1,189	95.89	1,205	96.09	1,204	96.24	
• Christian - Catholic	17	1.42	23	1.85	27	2.15	22	1.76	
• Islam	16	1.34	27	2.18	21	1.67	23	1.84	
• Others	1	0.08	1	0.08	1	0.08	2	0.16	
Total	1,196	100	1,240	100	1,254	100	1,251	100	
By Generation									
• Baby Boom	55	4.60	47	3.79	42	3.35	36	2.88	
• Generation X	544	45.48	546	44.03	550	43.86	541	43.25	
• Generation Y	586	49.00	627	50.56	632	50.40	625	49.96	
• Generation Z	11	0.92	20	1.61	30	2.39	49	3.92	
Total	1,196	100.00	1,240	100.00	1,254	100.00	1,251	100.00	
By Level									
• Level 10-14: Executive up	135	11.29	134	11.20	151	12.04	158	12.63	
- Male	91	67.41	89	66.42	103	68.21	103	8.23	
- Female	44	32.59	45	33.58	48	31.79	55	4.40	
• Level 5-9: Manager up	616	51.51	669	55.94	685	54.63	697	55.72	
- Male	373	60.55	401	59.94	416	60.73	417	33.33	
- Female	243	39.45	268	40.06	269	39.27	280	22.38	
• Level 1-4 : Practitioner	445	37.21	437	36.54	418	33.33	396	31.65	
- Male	382	85.84	376	86.04	362	86.60	348	27.82	
- Female	63	14.16	61	13.96	56	13.40	48	3.84	

Employees (Disclosure 102-8), (Disclosure 401-1)	2016		2017		2018		2019	
	Persons	%	Persons	%	Persons	%	Persons	%
By Age								
• Less than 30	303	25.33	308	25.75	328	26.16	287	22.94
• Between 30-50	791	66.14	811	67.81	810	64.59	827	66.11
• More than 50	102	8.53	121	10.12	116	9.25	137	10.95
By Area								
• Head office	159	13.29	530	44.31	544	43.38	545	43.57
• Refinery	972	81.27	642	53.68	634	50.56	630	50.36
• North District	39	3.26	10	0.84	9	0.72	10	0.80
• Central District	9	0.75	41	3.43	49	3.91	49	3.92
• North-East District	10	0.84	10	0.84	10	0.80	9	0.72
• South District	7	0.59	7	0.59	8	0.64	8	0.64

Ratio of Salary by gender (Female : Male)	Female	Male	Female	Male	Female	Male	Female	Male
By Level								
• Level 10-14: Executive up	0.88	1.00	1.00	1.00	0.98	1.00	0.89	1.00
• Level 5-9: Manager up	0.92	1.00	0.93	1.00	0.95	1.00	0.97	1.00
• Level 1-4 : Practitioner	1.00	0.78	1.00	0.77	1.00	0.84	1.00	0.99

Employees Turnover (Disclosure 401-1)	2016		2017		2018		2019	
	Persons	%	Persons	%	Persons	%	Persons	%
Turnover rate		4.2		4.00		3.55		5.63
By Gender								
• Male	35	67.31	31	63.27	27	58.70	52	74.29
• Female	17	32.69	18	36.73	19	41.30	18	25.71
By Age								
• Less than 30	32	61.54	28	57.14	20	43.48	39	55.71
• Between 30-50	18	34.62	21	42.86	25	54.35	27	38.57
• More than 50	2	3.85	0	0.00	1	2.17	4	5.71

New Employee (Disclosure 401-1)	2016		2017		2018		2019	
	Persons	%	Persons	%	Persons	%	Persons	%
By Gender								
• Male	64	52.89	61	59.80	46	68.66	45	60.81
• Female	57	47.11	43	42.16	21	31.34	29	39.19
By Age								
• Less than 30	99	81.82	86	84.31	37	55.22	55	74.32
• Between 30-50	21	17.36	18	17.65	27	40.30	16	21.62
• More than 50	1	0.83	0	0.00	3	4.48	3	4.05

Parental leave	2016		2017		2018		2019	
	Persons	%	Persons	%	Persons	%	Persons	%
Parental leave	5	0.42	4	0.32	5	0.40	7	0.56
Employee back to work after parental leave	5	0.42	4	0.32	5	0.40	7	0.56

Average Training hours (hours/person/year) (Disclosure 404-1)	2016	2017	2018	2019
	Persons	Persons	Persons	Persons
Total training hour	53,741	55,926	57,487	56,449
Total average training hour	44.92	45.10	45.88	45.12
By gender				
• Male	41.10	42.66	43.07	42.82
• Female	53.90	50.76	52.65	50.35
By Level				
• Level 10-14: Executive up	62.00	63.91	56.66	52.33
• Level 5-9: Manager up	59.20	56.31	58.09	56.35
• Level 1-4 : Practitioner	20.10	22.39	22.34	22.48
By Business Category				
• President & Chief Executive Officer (PS)	52.90	56.00	104.29	56.45
• Corporate Strategic Planning and Sustainability Development Group (CG)			73.56	102.23
• Corporate Management and Organization Development Group (MD)	58.20	53.45	73.22	71.68
• Accounting and Finance Group (AF)	53.90	64.28	71.06	67.65
• Marketing Business Group (MKBG)	43.67	43.53	43.83	44.35
• Refinery Business Group (RFBG)	39.80	39.23	30.47	30.63
• Natural Resource (NT)			86.00	-
Best Employer (Percentage)	68.00	61.00	67.00	56.00
Employee Engagement (Percentage)	69.00	61.00	69.00	62.00
Labour and Human Rights Complaint (Case)	0.00	0.00	0.00	0.00

Safety and Occupational Health

Injury*, Illness, Fatality, Safety in Production Processes (Disclosure 403-9:2018)	2016		2017		2018		2019	
	Male	Female	Male	Female	Male	Female	Male	Female
Total work hour (hours)								
• Employees	1,630,207.80	443,448.30	1,352,215.40	210,360.90	1,806,814.30	662,860.50	1,736,499.30	658,555.50
• Contractors	4,490,917.00	1,012,761.50	4,253,591.00	1,255,606.90	4,250,297.90	1,209,490.90	4,714,105.12	1,850,478.40
Near miss report (cases)								
• Employees	6		25		15		19	
• Contractors	7		3		2		16	
Total Recordable Injury Case (TRIC)								
• Employees	3	2	1	0	3	0	0	0
• Contractors	3	1	0	0	6	0	5	0

Injury*, Illness, Fatality, Safety in Production Processes (Disclosure 403-9:2018)	2016		2017		2018		2019	
	Male	Female	Male	Female	Male	Female	Male	Female
LWC								
• Employees	0	0	0	0	1	0	0	0
• Contractors	1	0	0	0	3	0	2	0
Fatalities								
• Employees	0	0	0	0	0	0	0	0
• Contractors	0	0	0	0	0	0	0	0
Total Recordable Injury Rate (TRIR) (Person per 1 million working hours)								
• Employees	1.8	0.00	0.74	0.00	1.66	0	0.00	0.00
• Contractors	0.67	2.96	0.00	0.00	1.41	0	1.06	0.00
Injury Frequency Rate (IFR) (Person per 1 million working hours)								
• Employees	0	0	0	0	0.55	0	0.00	0
• Contractors	0.22	0	0.00	0	0.71	0	0.42	0
Injury Severity Rate (ISR) (Day per 1 million working hours)								
• Employees	0	0	0	0	7.75	0	0.00	0
• Contractors	10.24	0	0.00	0	9.18	0	1.27	0
Rate of work-related illness								
• Employees	N/A	N/A	N/A	N/A	N/A	N/A	0	0
• Contractors	N/A	N/A	N/A	N/A	N/A	N/A	0	0
High-consequence work-related injuries								
• Employees	N/A	N/A	N/A	N/A	N/A	N/A	0	0
• Contractors	N/A	N/A	N/A	N/A	N/A	N/A	0	0
Absentee rate (Percentage)								
• Employees	0.83		1.05		0.85	0.97	0.78	1.13
Tier 1 Process Safety Event	0		0		0		0	
Tier 2 Process Safety Event	0		0		0		0	
Dupont Assessment Score (2020 Target : 3.3)	1.6		2.3		2.7		3.1	

* Injuries are excluded first aid in the injury rate (IR) and lost days count begins the scheduled work day after the accident.

Customer Responsibility	Unit	2016	2017	2018	2019
Customer Satisfaction : Customers (Disclosure 102-43), (Disclosure 102-44)	Percentage	79.4	80.5	85.8	86.6
Customer Satisfaction : Industrial customers	Percentage	90.3	88.9	82	87
Net Promoter Score (NPS)	Ranking	2 nd ranking	2 nd ranking	1 st ranking (Joint)	1 st ranking (Joint)
Total number of substantiated complaints regarding breaches of customer privacy	Case	0	0	0	0
Significant Case of Non compliance in marketing communication laws (Disclosure 417-3)	Case	0	0	0	0

Socio-Economic Compliance	2016	2017	2018	2019
Number/Monetary Value of significant fines associated with economic and social law violation (Disclosure 419-1)	0	0	0	0