

Sustainability Performance

This sustainability report of Central Pattana PCL. Is including economic social and environmental aspects according to the company's sustainable development strategy. The contents and details in this report disclose the performance outcomes of the Company and its subsidiaries and associates.

- **Economic:** This report discloses the performance outcomes of the Company and its subsidiaries and associates in Thailand and other country as mentioned in the Annual Report 2020.
- **Social and Environmental:** This report discloses the performance outcomes of the Company and its subsidiaries and associates in Thailand only and any property that has a significant social and environmental impacts.

Boundary of Sustainability Performance Reporting

No.	Property	Social (Employee and Safety)					Environmental (Energy, GHG, Water and Waste)				
		2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
Shopping Center		30	32	32	34	34	30	32	32	34	34
1	Central Ladprao	●	●	●	●	●	●	●	●	●	●
2	Central Ramindra	●	●	●	●	●	●	●	●	●	●
3	Central Pinklao	●	●	●	●	●	●	●	●	●	●
4	Central Marina	●	●	●	●	●	●	●	●	●	●
5	Central Chiangmai Airport	●	●	●	●	●	●	●	●	●	●
6	Central Rama 3	●	●	●	●	●	●	●	●	●	●
7	Central Bangna	●	●	●	●	●	●	●	●	●	●
8	Central Rama 2	●	●	●	●	●	●	●	●	●	●
9	Central World	●	●	●	●	●	●	●	●	●	●
10	Central Rattanathibet	●	●	●	●	●	●	●	●	●	●
11	Central Chaengwattana	●	●	●	●	●	●	●	●	●	●
12	Central Pattaya beach	●	●	●	●	●	●	●	●	●	●
13	Central Udon	●	●	●	●	●	●	●	●	●	●
14	Central Chonburi	●	●	●	●	●	●	●	●	●	●
15	Central Khonkaen	●	●	●	●	●	●	●	●	●	●
16	Central Chiangrai	●	●	●	●	●	●	●	●	●	●
17	Central Phitsanulok	●	●	●	●	●	●	●	●	●	●
18	Central Rama 9	●	●	●	●	●	●	●	●	●	●
19	Central Suratthani	●	●	●	●	●	●	●	●	●	●
20	Central Lampang	●	●	●	●	●	●	●	●	●	●
21	Central Ubon	●	●	●	●	●	●	●	●	●	●
22	Central Chiangmai	●	●	●	●	●	●	●	●	●	●
23	Central Hatyai	●	●	●	●	●	●	●	●	●	●
24	Central Samui	●	●	●	●	●	●	●	●	●	●
25	Central Salaya	●	●	●	●	●	●	●	●	●	●
26	Central Rayong	●	●	●	●	●	●	●	●	●	●
27	Central Phuket Festival	●	●	●	●	●	●	●	●	●	●
28	Central Phuket Floresta				●	●				●	●
29	Central WestGate	●	●	●	●	●	●	●	●	●	●
30	Central EastVille	●	●	●	●	●	●	●	●	●	●
31	Central Nakhon Si	●	●	●	●	●	●	●	●	●	●
32	Central Korat		●	●	●	●		●	●	●	●
33	Central Mahachai		●	●	●	●		●	●	●	●
34	Central Village				●	●				●	●
35	Central i-City										

No.	Property	Social (Employee and Safety)					Environmental (Energy, GHG, Water and Waste)				
		2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
Office Properties		7	7	7	7	7	7	7	7	7	7
1	Ladprao	●	●	●	●	●	●	●	●	●	●
2	Pinklao Tower A	●	●	●	●	●	●	●	●	●	●
3	Bangna	●	●	●	●	●	●	●	●	●	●
4	Central World	●	●	●	●	●	●	●	●	●	●
5	Pinklao Tower B	●	●	●	●	●	●	●	●	●	●
6	Chaengwattana	●	●	●	●	●	●	●	●	●	●
7	Rama 9	●	●	●	●	●	●	●	●	●	●
8	The Ninth Towers Grand Rama 9										
9	Unilever House Grand Rama 9										
10	G Tower Grand Rama 9										
Hotel Properties		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1	Centara Hotel & Convention Centre Udon Thani										
2	Hilton Pattaya										
Residential Properties		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1	Central City Residence										
2	ESCENT CHIANGMAI										
3	ESCENT KHONKAEN										
4	ESCENT RAYONG										
5	ESCENT VILLE CHIANGMAI										
6	ESCENT VILLE CHIANGRAI										
7	ESCENT NAKHONRATCHASIMA										
8	PHYLL PHAHOL 34										
9	ESCENT UBONRATCHATHANI										
10	ESCENT PARK CHIANGMAI										
11	ESCENT RAYONG II										
12	ESCENT KORAT										
13	ESCENT HATYAI										
14	Belle Grand Rama 9										
15	NIYAM BOROMRATCHACHONNANI										
16	NINYA KALLAPAPRUEK										
17	EASCENT TOWN PHITSANULOK										
18	NIRATI CHIANGRAI										
19	NIRATI BANGNA										
Central Pattana Head Office		3	3	3	3	3	3	3	3	3	3
1	Central World	●	●	●	●	●	●	●	●	●	●
2	Pinklao	●	●	●	●	●	●	●	●	●	●
3	Jewelry Trade Center	●	●	●	●	●	●	●	●	●	●

Remarks

NR = Non-Relevance or not significant to Central Pattana PCL.

Financial

GRI Standards	Data	Unit	2016	2017	2018	2019	2020
201-I	Revenue from rental & Service, Food Center, Hotel and Real Estate Sales	Baht	27,633,700,452	28,785,006,197	33,887,063,383	36,719,391,517	27,862,029,895
	Cost from rental & Service, Food Center, Hotel and Real Estate Sales	Baht	14,040,598,219	14,518,159,734	17,579,005,654	18,086,342,013	15,037,054,727
	Net profit	Baht	9,347,027,531	13,669,509,295	11,383,353,146	11,738,404,950	9,557,096,859
	Employee Wages and Benefits	Baht	2,800,655,000	3,211,986,000	3,643,533,000	4,279,652,000	3,601,000,000
	Payment to Governments	Baht	633,460,339	363,859,110	426,332,773	811,468,750	1,864,971,756
	Taxes paid to the government and local authorities	Baht	1,686,336,102	1,794,526,413	2,056,902,384	2,336,357,717	2,148,442,833
	Dividend per Share (pay in the following year)	Baht /Share	0.83	1.40	1.10	1.30	0.80

Corporate Governance

GRI Standards	Data	Unit	2016	2017	2018	2019	2020
102-22, 405-1	Governance Structure						
	Executive directors	Person	1	1	1	1	1
	Independent directors	Person	4	4	4	4	4
	Other non-executive directors	Person	7	6	6	6	7
	Board Meeting Attendance						
	Average board meeting attendance	% per year	86.46	89.77	98.86	90.90	95.87
205-2	Communication about Code of Business Conduct with Stakeholder						
	Employee	%	100.00	100.00	100.00	100.00	100.00
	Contractor/Supplier/Services Provider	%	100.00	100.00	100.00	100.00	100.00
	Subsidiaries	%	100.00	100.00	100.00	100.00	100.00
	Joint venture inc. stakes below 51%	%	100.00	100.00	100.00	100.00	100.00
205-3	Codes of Business Conduct: Reporting on breaches						
	Number of codes of conduct (Breaches)	Case	None	None	None	None	None
206-1	Number of legal actions pending or completed and in which the organization has been identifies as a participant regarding						
	Anti-competitive behavior	Case	None	None	None	None	None
	Anti-trust and monopoly legislation	Case	None	None	None	None	None

Tenant Management and Development

GRI Standards	Data	Unit	2016	2017	2018	2019	2020
102-43	Satisfaction Index						
	Overall shopping satisfaction index	%	82	83	82	80	
	Shopper satisfaction index on convenience aspect	%		80	85	86	
	Shopper satisfaction index on safety aspect	%		79	79	79	
	Tenant satisfaction index	%	77	78	80	83	
	Data Coverage of tenant satisfaction index	%	100	84.4	100	100	
416-2	Complaints						
	Incidents of non-compliance concerning the health and safety impacts of products and service	Case	0	0	0	0	0
417-3	Incidents of non-compliance concerning marketing communications	Case	0	0	0	0	0
418-1	Number of substantiated complaints received concerning breaches of customer privacy	Case	0	0	0	0	0
	Total number of identified leaks, thefts, or losses of customer data	Case	0	0	0	0	0
419-1	Non-compliance with laws and regulations in the social and economic area	Case	0	0	0	0	0

Note

- With the ongoing pandemic, there were external factors that could affect customer satisfaction. For this reason, “Shopper and Tenant Satisfaction” was removed from our 2020 performance indicators.

Employee Management and Engagement

GRI Standard	Data	Unit	2016		2017		2018		2019		2020	
			Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Workforce												
102-8	Workforce											
	Total workforce	Person	4,313		4,666		11,717		11,144		8,778	
	Employee	Person	4,313		4,666		4,911		5,093		4,863	
			2,185	2,128	2,344	2,322	2,464	2,447	2,562	2,531	2,459	2,404
	Sub-contractor	Person					6,806		6,051		3,915	
	Employee by employee status											
	Permanent	Person	2,182	2,119	2,341	2,314	2,461	2,441	2,558	2,524	2,455	2,369
Contract	Person	3	9	3	8	3	6	4	7	4	35	
405-1	Employee by level (include new employee)											
	Top management	Person	9	4	11	3	15	3	15	4	13	6
	Middle management	Person	247	265	254	291	271	310	296	349	303	347
	Junior management	Person	366	437	377	457	401	468	435	517	428	507
	Non-management	Person	1,563	1,422	1,702	1,571	1,777	1,666	1,816	1,661	1,715	1,544
	Employee by age (include new employee)											
	Less than 30 years old	Person	1,058	775	1,096	806	1,093	806	585	782	442	631
	Between 30-50 years old	Person	595	642	614	677	639	699	1,791	1,628	1,816	1,634
	More than 50 years old	Person	532	711	634	839	732	942	186	121	201	139
	Employee by work area (include new employee)											
	Bangkok Metropolitan Region	Person	1,332	1,477	1,442	1,596	1,492	1,661	1,571	1,739	1,520	1,669
	Central	Person										
	Northeast	Person	190	121	222	158	228	162	230	162	217	148
	South	Person	235	182	236	206	289	267	292	267	277	239
	North	Person	227	174	231	181	235	174	237	180	231	176
	East	Person	201	174	213	181	220	183	232	183	214	172
	West	Person										
	Employee by cultural background (exclude new employee)											
	Bangkok Metropolitan Region	Person	1,013	1,079	1,062	1,129	1,102	1,194	952	1,063	1032	1215

GRI Standard	Data	Unit	2016		2017		2018		2019		2020	
			Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
	Central	Person	51	26	51	31	45	24	159	136	157	132
	Northeast	Person	176	110	176	103	196	135	405	313	406	291
	South	Person	155	103	207	138	201	146	297	243	302	267
	North	Person	213	150	208	160	215	160	242	186	268	192
	East	Person	155	123	170	122	185	150	149	150	165	156
	West	Person	13	9	4	6	33	17	40	30	37	30
	Employee by nationality											
	Thai	Person									4,856	
	Australia	Person									1	
	Canada	Person									1	
	Iceland	Person									1	
	India	Person									1	
	Singapore	Person									2	
	Taiwan	Person									1	
	Employee by function group											
	Science, Technology, Engineering and Mathematics (STEM) function	Person									805	296
	Revenue generating functions	Person	1,930	1,540	2,052	1,701	2,168	1,791	2,269	1,955	2,174	1,875
Equality												
405-2	Ratio of basic salary of male and female employees											
	Middle and Junior management	Female: Male	1.00	0.96	1.00	1.03	1.00	0.99	1.00	0.99	1.00	0.99
	Non-management	Female: Male	1.00	1.05	1.00	1.04	1.00	1.03	1.00	1.01	1.00	1.00
	Gender pay gap (hourly rate)											
	Mean gender pay gap	%									7.28	
	Median gender pay gap	%									7.31	
	Mean bonus gap	%									13.82	
	Median bonus gap	%									4.61	

GRI Standard	Data	Unit	2016		2017		2018		2019		2020	
			Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Employment												
	New employee											
	Total new employee	Person	937		1,099		1,108		728		213	
			409	528	466	633	487	621	318	410	92	121
	New employee by age											
	Less than 30 years old	Person	224	335	266	413	302	413	180	238	35	73
	Between 30-50 years old	Person	177	189	190	217	175	205	132	172	57	45
	More than 50 years old	Person	8	4	10	3	10	3	6	0	0	3
	New employee by level											
	Top management	Person									0	
	Middle management	Person									4	
	Junior management	Person									5	
	Non-management	Person									204	
	New employee by nationality											
	Thai	Person									95	
	Others	Person									-	
	New employee by work area											
	Bangkok Metropolitan Region	Person	255	363	325	430	312	426	226	291	80	102
	Central	Person										
	Northeast	Person	14	11	46	55	32	27	21	15	3	0
	South	Person	80	79	29	68	88	121	30	52	2	2
	North	Person	14	24	23	21	20	14	14	19	3	7
	East	Person	46	51	43	59	35	33	27	33	4	10
	West	Person										
	New employee hired											
	Ratio of new employee hired	% of total employee	21.73		23.5		22.56		14.29		4.38	
			18.72	24.81	19.88	27.26	19.76	25.38	12.41	16.20	3.74	5.03
	Hiring cost /FTE	Baht							1,395.82		2,899	
	Internal mobility											
	Employee transferred to homeland	Person	28		76		19		11		16	

GRI Standard	Data	Unit	2016		2017		2018		2019		2020	
			Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Employee Engagement & Retention												
	Employee Engagement											
	Employee Engagement by gender	%	73.00	77.00	73.00		73.00		83.00			
					80.00	66.00	79.00	67.00				
	Employee Engagement by level											
	Executive level (President, Senior Executive Vice President, Executive Vice President)	%	74.00	64.00	60.00		65.00		77.00			
	Management level (Senior Vice President, Vice President, Vice President)	%	68.00	63.00	57.00		62.00		75.00			
	Manager level (Assistant Manager, Manager, Senior Manager)	%	63.00	60.00	57.00		57.00		72.00			
	Team Leader level (Senior Officer and Supervisor)	%	72.00	75.00	71.00		71.00		84.00			
	Operation level (Staff)	%	76.00	79.00	80.00		80.00		87.00			
	Employee Engagement by work allocation											
	Head office	%	60.00	49.00	45.00		51.00		66.00			
	Branch	%	77.00	83.00	82.00		80.00		90.00			
	401-3	Initiated turnover by age (include resignation or due to dismissal, retirement, or death in service)	Person	707	744	860		805		538		
		Less than 30 years old	Person	168	245	158	271	189	297	154	265	87
Between 30-50 years old		Person	128	150	132	161	163	189	151	208	130	145
More than 50 years old		Person	10	6	17	5	15	7	15	12	17	7
Initiated turnover by work allocation (include resignation or due to dismissal, retirement, or death in service)		Person	306	401	307	437	367	493	320	485	234	304
Head office		Person	44	115	67	139	59	135	65	126	57	77
Branch		Person	262	286	240	298	308	358	255	359	177	227
Voluntary turnover by age (resignation)		Person	598	611	725		790		426			
Less than 30 years old		Person	137	200	120	219	146	245	154	265	65	119
Between 30-50 years old		Person	108	137	118	137	144	169	148	208	108	129
More than 50 years old		Person	10	6	14	3	14	7	9	6	4	1
Voluntary turnover by work allocation (resignation)		Person	598	611	725		790		426			
Head office		Person	37	109	59	130	58	128	64	125	48	72
Branch		Person	218	234	193	229	246	293	247	354	129	177

GRI Standard	Data	Unit	2016		2017		2018		2019		2020	
			Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
	Voluntary turnover by tenure group (resignation)	Person	598		611		725		790		426	
	Less than 4 months	Person	72	131	88	135	102	158	81	122	57	80
	4 months - 1 year	Person	60	61	37	53	34	63	53	84	0	0
	1-3 years	Person	60	65	66	100	74	105	94	147	60	90
	3-5 year	Person	48	69	42	55	67	76	37	61	28	39
	5-10 year	Person							32	41	22	34
	More than 10 year	Person	15	17	19	16	27	19	14	24	10	6
	Turnover rate by nationality											
	Thai	Person									246	
	Others	Person									294	
	Turnover rate by level											
	Top management	Person									1	
	Middle management	Person									13	
	Junior management	Person									58	
	Non-management	Person									354	
	Lay-off	Person	0	0	0	0	0	0	0	0	0	0
	Head office	Person	0	0	0	0	0	0	0	0	0	0
	Branch	Person	0	0	0	0	0	0	0	0	0	0
	Turnover rate											
	Voluntary turnover	% of total employee	15.57		13.09		14.76		15.51		8.76	
	Regrettable loss Rate	% of total employee	6.30		4.90		6.60		8.10		0.95	
	Parental leave											
	Number of employees having the right of maternity/parental leave	Person	2,185	2,128	2,344	2,322	2,464	2,447	2,562	2,531	2460	2404
	Number of employees using the right of maternity/parental leave	Person	0	61	0	67	0	81	0	103	0	76
	Number of employees returning to work after of maternity/parental leave	Person	0	59	0	66	0	73	0	92	0	71
	Percentage of employees returning to work and remaining at work after of maternity/parental leave	%	N/A	96.72	N/A	98.51	N/A	90.12	N/A	89.32	N/A	93.42

GRI Standard	Data	Unit	2016		2017		2018		2019		2020		
			Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Employee Development													
	Training Course	Course	73		378		477		540		310		
	Training Cost / FTE	Baht									1,388		
	Number of employees training in various course	Person					5,010		5,086		4,838		
									2,374	2,464			
	Number of employees training by age												
	<30 year	Person									429		
	30-50 year	Person									4,190		
	>50 year	Person									219		
	Number of employees training by level												
	Top management	Person									12		
	Middle management	Person									668		
	Junior management	Person									951		
	Non-management	Person									3,207		
	Percentage of employees training in various course	%					94.00		97.48		96.81		
	Training hour	Hour	21.00		25.41		26.70		24.00		11.00		
	Employee satisfaction from training	%	85.89		92.00		91.90		91.70		92.07		
Employee promotion rate	%	45.00	55.00	54.00	46.00	41.00	59.00	44.63	55.37	0.00	0.00		
Employee complains													
	Number of employees' complaints in relation to labor practices	case	0		0		0		0		0		
	Number of resolved complaints	case	0		0		0		0		0		
	Number of pending complaints	case	0		0		0		0		0		
Promoting employment among various types of people													
	Disabled person												
	Employment of disabled	Person									1		
	Area for people with disabilities to sell product	Person			45		46		46		48		

GRI Standard	Data	Unit	2016		2017		2018		2019		2020	
			Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
	Area for people with disabilities to sell product	Shopping center			20		21		21		21	
	Student											
	Work Integrated Learning program	Person	15		14		14		14		14	

Definition

Central Pattana's employees are workers under employment contracts with CENTRAL PATTANA PUBLIC COMPANY LIMITED; they are classified into four groups, as Top Management, Middle Management, Junior Management and Non-Management

- **Top Management** includes those from the level of President, Senior Executive Vice President (SEVP) and Executive Vice President (EVP)
- **Middle Management** includes those from the level of Senior Vice President (SVP), Vice President (VP), Vice President (AVP), Senior Manager and Manager
- **Junior Management** includes those from the level of Assistant Manager and Supervisor
- **Non-Management** includes those from the level of Senior Officer, Officer and Consultant

The above employees are also classified in accordance with the employment contracts, i.e., permanent and contract employees.

Note

- In 2020, Cancel the employee engagement question by gender.

Occupational Health and Safety

GRI Standard	Data	Unit	2016		2017		2018		2019		2020	
			Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Occupational Health and Safety												
	Ratio of employee represent in OHS Committee per total employee (Exclude contract employee)	Person			8.06		7.55		6.69		7.17	
403-9 (2018) Employee	Injury of employee											
	Number of Fatalities as a result of work-related injury	Person			0		0		2		0	
	Number of recordable work-related injuries	Person			6		7		15		7	
	Number of high-consequence work-related injuries	Person			5		5		13		6	
	Man hour	Hour			10,313,576		10,935,644		11,399,797		10,903,670	
	Rate of Fatalities											
	Rate of fatalities as a result of work-related injury per 200,000 hours worked	Person			0		0		0.04		0	
	Rate of fatalities as a result of work-related injury per 1,000,000 hours worked	Person			0		0		0.18		0	
	Rate of recordable work-related injuries or Lost-time injuries frequency rate (LTIFR)											
	Lost-time injuries frequency rate per 200,000 hours worked	Person			0.12		0.13		0.26		0.13	
	Lost-time injuries frequency rate per 1,000,000 hours worked	Person			0.58		0.64		1.32		0.64	
	Rate of high-consequence work-related injuries (excluding fatalities) or Days away/restricted or transfer rate (DART)											
	DART per 200,000 hours worked	Person			0.10		0.07		0.23		0.11	
	DART per 1,000,000 hours worked	Person			0.48		0.37		1.14		0.55	
	Lost workday rate (LWD)											
	Lost workday rate per 200,000 hours worked	Lost Day			0.74		1.23		3.82		2.02	
	Lost workday rate per 1,000,000 hours worked	Lost Day			3.68		6.13		19.12		10.09	
	Absentee Rate (AR)	%		2.16	1.08	1.36	1.10	0.58				
403-9 (2018) Contractor	Injury of contractor											
	Number of Fatalities as a result of work-related injury	Person									0	
	Number of recordable work-related injuries	Person									1	
	Number of high-consequence work-related injuries	Person									1	

GRI Standard	Data	Unit	2016		2017		2018		2019		2020	
			Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
	Man hour	Hour									4,107,982	
	Rate of Fatalities											
	Rate of fatalities as a result of work-related injury per 200,000 hours worked	Person									0	
	Rate of fatalities as a result of work-related injury per 1,000,000 hours worked	Person									0	
	Rate of recordable work-related injuries or Lost-time injuries frequency rate (LTIFR)											
	Lost-time injuries frequency rate per 200,000 hours worked	Person									0.05	
	Lost-time injuries frequency rate per 1,000,000 hours worked	Person									0.24	
	Rate of high-consequence work-related injuries (excluding fatalities) or Days away/restricted or transfer rate (DART)											
	DART per 200,000 hours worked	Person									0.05	
	DART per 1,000,000 hours worked	Person									0.24	
	Lost workday rate (LWD)											
	Lost workday rate per 200,000 hours worked	Lost Day									0.15	
	Lost workday rate per 1,000,000 hours worked	Lost Day									0.73	
	Absentee Rate (AR)	%										

Definition and calculation guidelines

Calculation of Working Hours

Calculate working hour by dividing employees into 2 groups: office workers (working 5 days a week) and shifts workers (working 6 days a week), each employee having different working hours according to position and responsibility. By using the following formula:

$$\text{Working hours (hour)} = \text{Number of worker} \times \text{scheduled workday} \times \text{working hour}$$

Safety Data Recording

Central Pattana records safety data from work by calculating and collecting occupational and health information as follows:

- **Day** means scheduled workday.
- **Recordable work-related injury** is that results in any of the following: death, days away from work, restricted work or transfer to another job, medical treatment beyond first aid, or loss of consciousness; or significant injury or ill health diagnosed by a physician or other licensed healthcare professional, even if it does not result in death, days away from work, restricted work or job transfer, medical treatment beyond first aid, or loss of consciousness.
- **DART (Day Away/Restricted or Transfer)** number of recordable injuries per 100 full-time employee that resulted in days away from work, restricted work activity, and/or job transfer.
- **Work-related Fatalities** are accident due to work or the activities of the company that cause injury or sickness until death.

Calculation of OHS**Rate of fatalities as a result of work-related injury**

$$= \frac{\text{number of fatalities as a result of work – related injury} \times [200,000 \text{ or } 1,000,000]}{\text{number of hour worked}}$$

Rate of recordable work-related injuries or Lost-time injuries frequency rate: LTIFR

$$= \frac{\text{number of recordable work – related injuries} \times [200,000 \text{ or } 1,000,000]}{\text{number of hour worked}}$$

Rate of high-consequence work-related injuries (excluding fatalities) or Days away/restricted or transfer rate (DART)

$$= \frac{\text{number of high – consequence work – related injuries that resulted in days away from work, restricted work activity, and/or job transfer} \times [200,000 \text{ or } 1,000,000]}{\text{number of hour worked}}$$

Lost Workday Rate: LWR

$$= \frac{\text{Total Number of Lost Days} \times [200,000 \text{ or } 1,000,000]}{\text{number of hour worked}}$$

Note information refer to the report of accident, illness or injury and request for compensation. According to the Workmen's Compensation Act, BE 2537 (Form 16: Occupational Injury Notification from employer and injured employee and Claim form)

Absentee Rate: AR

$$= \frac{\text{Number of lost day injuries and other occupational diseases that are not excused} \times 100}{\text{Total number of operating day in a year}}$$

Note

- Information refers to the record of Human Resource Information System based on the number of sick days leave and sick day leave without pay.
- Information of contractor reported only contractor at construction and reconstruction sites.
- Work-related injuries recorded in 2020 were primarily due to carelessness and included personal injuries sustained by employees while trying to mitigate an impending accident. One site accident reported by our contractor was also caused by carelessness.

Corporate Responsibility and Community Development

GRI Standard	Data	Unit	2016	2017	2018	2019	2020
403-8	Ratio Contribution by type						
	Charitable donations	%	1.39	45.13	8.43	8.98	17.66
	Community Investment	%	16.50	6.96	66.00	60.32	27.82
	Commercial initiative	%	82.11	47.91	25.57	30.70	54.52
	Contribution by type						
	Charitable donations	Baht	1,000,000.00	32,400,000.00	28,500,000.00	15,800,000.00	17,400,000
	Community Investment	Baht	11,900,000.00	5,000,000.00	233,400,000.00	106,100,000.00	27,400,000
	Commercial initiative	Baht	299,200,000.00	177,400,000.00	167,600,000.00	54,000,000.00	53,700,000
	Time Contribution						
	Volunteer hour	hour	318	4,500	8,508	18,040	10,037
	Volunteering activity	activity	53	54	51	134	84
	Employees participate in volunteering activity	person	318	1,774	2,115	3,927	2,526

Environmental Resource Management

GRI Standards	Data	Unit	2016	2017	2018	2019	2020
Energy Consumption							
302-1(a)	Non-renewable fuel	GJ	24,997.24	15,207.78	18,955.03	19,695.57	14,185.56
	Diesel	GJ	6,918.13	6,087.91	8,032.85	8,259.75	6,382.03
	Benzene	GJ	17,467.81	7,740.91	9,552.61	10,389.28	7,332.17
	LPG	GJ	611.31	1,349.04	1,327.46	995.14	436.29
	Oil	GJ		29.92	42.11	51.40	35.07
302-1(b)	Renewable energy						
	Solar energy	GJ	460.80	3,236.40	22,231.17	32,562.92	45,239.31
		MWh	128.00	899.00	6,175.33	9,045.25	12,566.48
302-1(c)	Electricity purchased from outside						
	Electricity purchased from grid (Metropolitan Electricity Authority and Provincial Electricity Authority)	GJ	3,321,118.80	3,252,508.95	3,401,379.74	3,499,749.63	2,856,352.72
		MWh	922,533.00	903,474.71	944,827.71	972,152.68	793,431.31
302-1(d)	Electricity sold to tenant						
	Electricity sold to tenants	GJ	1,746,802.80	1,706,791.91	1,806,557.22	1,779,754.91	1,494,051.29
		MWh	485,223.00	474,108.86	501,821.45	494,376.36	415,014.25
302-1(e)	Total energy consumption within organization						
	Total non-renewable energy consumption within organization (Fuel+Electricity)	GJ	1,599,313.24	1,560,924.82	1,613,777.55	1,739,690.27	1,376,486.99
		MWh	444,253.68	433,590.23	448,271.54	483,247.31	382,357.50
	Total Energy consumption (Renewable + Non-Renewable)	GJ	1,599,774.04	1,564,161.22	1,636,008.72	1,772,253.18	1,421,726.30
		MWh	444,381.68	434,489.23	454,446.87	492,292.56	394,923.97
	Ratio of energy consumption within organization						
	Ratio of renewable energy per total energy	%	0.00	0.00	0.01	0.02	0.03
302-3	Total energy intensity (renewable + non-renewable energy) per unit area	kWh/sq.m.	166.65	153.50	152.10	162.69	130.34
	Total electricity intensity per unit area	kWh/sq.m.	164.05	152.00	150.34	160.88	129.04

Definition and calculation guidelines

Energy

Total Energy consumption is including energy from fuel combustion, electricity and renewable energy

- Total fuel consumption = the sum of all types of fuel resource consumption x its heating value (in each) – Unit in GJ
- Conversion Factor are referred from to the Annual Thailand Energy Report, Department of Alternative Energy Development and Efficiency
- Electricity consumption = The sum of electricity used (in kWh) x 3.6 (Unit: GJ)
- Total Energy consumption within organization = Fuel consumption from non-renewable + renewable energy + Electricity purchased – Electricity sold to tenants

Intensity

- Emission intensity calculate per gross leasable area (GLA). The GLA is including leasable area and common areas.

Base Year

- The base year for calculation on environmental aspect is FY2015.

GRI Standards	Data	Unit	2016	2017	2018	2019	2020
Water Consumption							
303-3 (2018)	Water withdrawal from all areas (TDS ≤ 1,000 mg/L)	m ³	10,144,326.00	9,955,206.00	10,540,083.00	10,906,424.10	7,966,321.88
	Municipal water	m ³	10,144,326.00	9,955,206.00	10,328,177.00	10,628,213.00	7,753,702.99
	Ground water	m ³			211,906.00	278,211.10	206,070.22
	Rainwater	m ³	-	-	-	-	6,548.67
	Water withdrawal from all areas (TDS > 1,000 mg/L)	m ³	-	-	-	-	-
	Water withdrawal from all areas with water stress (TDS ≤ 1,000 mg/L)	m ³	7,854,819.00	7,512,004.00	8,062,458.00	8,212,658.00	6,064,675.71
	Municipal water	m ³	7,854,819.00	7,512,004.00	7,887,875.00	8,011,966.00	5,858,605.49
	Ground water	m ³			174,583.00	200,692.00	206,070.22
	Rainwater	m ³	-	-	-	-	-
	Water withdrawal from all areas with water stress (TDS > 1,000 mg/L)	m ³	-	-	-	-	-
303-4 (2018)	Water discharge by destination to all areas (TDS ≤ 1,000 mg/L)	m ³	7,608,244.50	7,466,404.50	7,966,804.35	7,835,359.00	5,491,670.05
	Surface water	m ³	7,608,244.50	7,466,404.50	7,966,804.35	7,835,359.00	5,491,670.05
	Seawater	m ³	-	-	-	-	-
	Groundwater	m ³	-	-	-	-	-
	Water discharge by destination to all areas (TDS > 1,000 mg/L)	m ³	-	-	-	-	-
	Water discharge by destination to all areas with water stress (TDS ≤ 1,000 mg/L)	m ³	5,891,114.25	5,599,803.38	5,929,577.69	5,704,904.80	3,998,294.81
	Surface water	m ³	5,891,114.25	5,599,803.38	5,929,577.69	5,704,904.80	3,998,294.81
	Seawater	m ³	-	-	-	-	-
	Groundwater	m ³	-	-	-	-	-
	Water discharge by destination to all areas with water stress (TDS > 1,000 mg/L)	m ³	-	-	-	-	-
	Water discharge level of treatment	m ³	7,608,244.50	7,466,404.50	7,966,804.35	7,835,359.00	5,491,670.05
	No Treatment	m ³	7,608,244.50	7,466,404.50	1,902,117.00	1,924,595.70	1,754.00
	Primary Treatment	m ³					1,332,767.20
	Secondary Treatment	m ³					4,157,148.85

GRI Standards	Data	Unit	2016	2017	2018	2019	2020
303-5 (2018)	Total Water Consumption from all areas	m ³	2,536,081.50	2,488,801.50	2,573,278.65	3,071,065.09	2,474,651.84
	Total Water Consumption from all areas with water stress	m ³	1,963,704.75	1,912,200.63	2,132,880.31	2,507,753.20	2,066,380.90
	Total water intensity						
	Total water consumption intensity per unit area	m ³ / m ²	0.95	0.88	0.86	1.01	0.82
	Total recycled water						
	Total recycled water	m ³	205,157.00	233,417.00	310,052.99	520,299.85	446,662.76
	Percentage recycled water per total water withdrawal	%	2.02	2.34	2.94	4.77	5.61

Definition and calculation guidelines

Water management involves water from external sources, water treatment, discharge water and recycled water. Evaluation of water utilization efficiency and risks from difference water sources is in place

Water withdrawal sum of all water drawn from surface water, groundwater, seawater, or a third party for any use over the course of the reporting period

Water consumption sum of all water that has been withdrawn and incorporated into products, used in the shopping center or generated as waste, has evaporated, transpired, or been consumed or is polluted to the point of being unusable by other users, and is therefore not released back to surface water, groundwater, seawater, or a third party over the course of the reporting period

Recycled water refers to the amount of reused water consumption after wastewater is treated through the wastewater management processes. Water management is in place at the Company's shopping center and offices buildings.

Water discharge sum of effluents, used water, and unused water released to surface water, groundwater, seawater, or a third party, for which the organization has no further use, over the course of the reporting period

Level of wastewater treatment

- **No treatment** including bleed off from cooling tower of Central Chaengwattana.
- **Primary treatment** including physical treatment before flow to Bangkok wastewater treatment plant (centralwOrld, Central Lardprao) and Pattaya wastewater treatment plant (Central Pattaya Beach, Central Marina)
- **Secondary treatment** including physical and biological wastewater treatment which shopping center uses Sequence Batch Reactor (SBR) or Deep shaft.

Water stress area ability, or lack thereof, to meet the demand for water which shopping center are in water stress high and highest.

Water Intensity calculated from water consumption per gross leasable area (GLA). The GLA is including leasable area and common areas.

Base Year

- The base year for calculation on environmental aspect is FY2015.

Note Calculation of water discharge in 2016-2017 equal 75% of water withdrawal.

GRI Standards	Data	Unit	2016	2017	2018	2019	2020
Greenhouse Gas							
305-1	Direct emission of greenhouse gas (Scope 1)	Ton CO ₂ e	4,302.52	3,789.15	4,103.52	6,077.46	6,824.11
305-2	Indirect emission of greenhouse gas (Scope 2)	Ton CO ₂ e	254,797.05	249,933.86	257,873.94	278,113.59	220,276.57
305-3	Other indirect emission of greenhouse gas (Scope 3)	Ton CO ₂ e	270,231.21	283,575.89	299,733.37	295,372.58	246,101.94
	Electricity sold to tenants	Ton CO ₂ e			292,110.27	297,506.62	241,579.79
	Municipal water	Ton CO ₂ e			5,235.60	5,400.20	3,936.73
	Business travel	Ton CO ₂ e			2,388.03	2,195.90	585.42
305-4	Greenhouse gas emission intensity						
	Direct emission of greenhouse gas (Scope 1) per unit area	Ton CO ₂ e / m ²	1.61	1.34	1.37	2.01	2.25
	Indirect emission of greenhouse gas (Scope 2) per unit area	Ton CO ₂ e / m ²	95.55	88.30	86.31	91.91	72.70
	Other indirect emission of greenhouse gas (Scope 3) per unit area	Ton CO ₂ e / m ²	101.34	100.18	100.32	97.61	81.22
	Direct and indirect emission of greenhouse gas (Scope 1 & 2) per unit area	Ton CO ₂ e / m ²	97.17	89.63	87.68	93.92	74.95
	Direct, indirect and other indirect emission of greenhouse gas (Scope 1 & 2 & 3) per unit area	Ton CO ₂ e / m ²	198.51	189.82	188.01	191.53	156.18

Definition and calculation guidelines

Greenhouse Gas

Reporting scope of GHG emissions covers CO₂, CH₄, and N₂O which are calculated and shown in the form of CO₂ equivalent that generates Global Warming Potential (GWP) specified by Intergovernmental Panel on Climate Change 2006 (IPCC) Meanwhile, the figure of emission factors is referred from IPCC and Thailand Greenhouse Gas Management Organization (TGO).

1. Scope Boundaries

- 1.1 Direct emission (Scope 1) occur from fuel or natural gas combustion and the leakage of methane gas from wastewater treatment, septic tank, refrigerant, fire extinguisher (CO₂) and Sulfur Hexafluoride (SF₆) through operating processes and activities under the Company's monitoring, control and management.
- 1.2 Indirect emission (Scope 2) occurs mainly from electricity, bought from external sources for Central Pattana's operations only.
- 1.3 Other indirect emission (Scope 3) occurs from water usage, electricity usage by tenants and fuel by business travel (staff travels by taxis, airplanes, train, boat and car rent).

2. Report on Emission

- 2.1 Direct emission (Scope 1) is based on fuel consumption (by weight or quality), e.g. the quality of oil or natural gas x GHG emission rate, as suggested in the 2006 IPCC guidelines.
 - 2.2 Indirect emission (Scope 2) occurs mainly from electricity, bought from external sources for Central Pattana's operations only.
 - 2.3 Other indirect emission (Scope 3) occurs from water usage, electricity usage by tenants and fuel by business travel (staff travels by taxis, airplanes, train, boat and car rent).
3. **Assessment Method** according to The Greenhouse Gas Protocol: A corporate accounting and Reporting Standard Revised Edition and Thailand Greenhouse Gas Management Organization (TGO) guideline for carbon footprint assessment.

Intensity

- Emission intensity calculate per gross leasable area (GLA). The GLA is including leasable area and common areas.

Base Year

- The base year for calculation on environmental aspect is FY2015.

GRI Standards	Data	Unit	2016	2017	2018	2019	2020
Solid waste (Garbage)							
306-3 (2020) Waste generated	Waste generated	metric tons	76,611.00	107,390.00	84,312.00	70,246.16	51,894.98
	Hazardous waste	metric tons					7.67
	Electronic waste (E-waste)	metric tons					1.14
	Infectious waste	metric tons					19.61
	General waste	metric tons	76,597.00	107,323.00	84,273.00	68,070.86	49,186.06
	Recycle waste (plastic, paper, metal, can, glass)	metric tons	14.00	67.00	39.00	1,987.90	2,185.96
	Preparation food	metric tons				175.31	494.54
306-4 (2020) Waste diverted from disposal	Waste diverted from disposal (offsite)	metric tons	14.00	67.00	39.00	2,167.44	2,645.02
	Hazardous waste	metric tons				4.23	8.80
	Recycling/ Reclaim (Hazardous waste, E-waste)	metric tons				4.23	8.80
	Non-hazardous waste	metric tons	14.00	67.00	39.00	2,163.21	2,636.21
	Recycling	metric tons	14.00	67.00	39.00	1,987.90	2,185.67
	Composting	metric tons				175.31	450.25
	Reuse (waste for art)	metric tons					0.29
306-5 (2020) Waste directed to disposal	Waste directed to disposal (offsite)	metric tons	76,597.00	107,323.00	84,273.00	68,078.72	49,249.96
	Hazardous waste	metric tons				7.86	19.61
	Incineration (Infectious waste)	metric tons				7.86	19.61
	Non-hazardous waste	metric tons	76,597.00	107,323.00	84,273.00	68,070.86	49,230.35
	Landfill (General waste)	metric tons	76,597.00	107,323.00	84,273.00	68,070.86	49,230.35
	Waste generated rate	kg/person	0.24	0.27	0.16	0.12	0.17
	Diversion rate	%	0.02	0.06	0.05	3.08	5.10

Definition and calculation guidelines

Waste covers total waste generated through Central Pattana's operations and activities. The quantity of waste is based on valid estimation.

Waste diverted from disposal refers waste is taken for preparation for reuse, recycling and composting offsite.

Waste directed to disposal refers waste is taken for incineration (with/without energy recovery), landfill offsite.

Waste generated rate calculated from waste generated per customer visits.

Waste diversion rate calculated from waste diverted from disposal per waste generated.