Performance Summary

Economic Performance [1]	Unit	2022	2023	2024	2025
Economic Value Generated					
Sales Revenue	Million THB	505,703	459,402	455,857	394,336
Economic Value Distributed					
Cost of Sales of Goods and Services [2]	Million THB	481,137	436,164	450,010	382,005
Economic Value Retained					
EBITDA	Million THB	37,187	35,453	22,026	17,619
Net Profit/ (Loss)	Million THB	32,668	19,443	9,959	14,548[3]
Financial Position					
Total Assets	Million THB	444,581	419,993	409,010	427,284
Total Liabilities	Million THB	285,924	251,681	242,825	234,252
Equity	Million THB	158,657	168,312	166,185	193,032
Financial Ratio					
Interest Coverage Ratio	Times	9.6	8.7	5.5	5.0
Current Ratio	Times	1.5	1.7	1.7	1.4
Net Debt to Equity Ratio	Times	1.0	0.9	0.8	0.3
Return on Equity [4]	Percent	23.5	12.0	6.0	8.2
Return on Total Asset	Percent	8.2	4.5	2.4	3.5
Stock Data					
Net Profit/ (Loss) per Share	THB/ Share	15.63	8.70	4.46	6.53
Annual Average of Daily Closing Stock Price [5]	THB/ Share	53.93	50.40	50.69	30.19
Market Capitalization [6]	Million THB	114,752	120,069	63,106	80,418
Dividend Payment	THB/ Share	3.70	3.40	1.90	1.80[7]
Dividend Yield [5]	Percent	6.9	6.7	3.7	6.0
Book Value	THB/ Share	69.85	74.12	73.17	76.98

Remarks:
(1) Economic performance reporting scope is aligned with the Financial Statements 2025.
(2) Expenses related to business operations or equipment, including components, and parts of equipment or facilities.
(3) Including gains from bargain purchases arising from the acquisition of businesses in Singapore amounting to Bath 7,371 million
(4) The calculation method has been adjusted according to the criteria of the Securities and Exchange Commission.
(5) Calculated from average closing price for the year 2025.
(6) Calculated from the annual average of the daily closing stock price.
(7) Include the interim dividend for 2025 half-year results at the rate of 0.80 baht per share paid on September 25, 2025 and the remaining dividend of 1.00 baht per share which is to the 2026 Annual General Meeting of Shareholders for approval.

Contributions to Organizations and External Associations [1]

Type of Organization	Topic	Name of the Organization	Unit	2022	2023	2024	2025
Trade Associations	Support responsible oil spill management for the environment and society	International Fund for Compensation for Oil Pollution Damage	THB	6,691,436 [4]	8,022,619	7,700,000	27,101,408
		Oil Spill Response Limited (OSRL)	THB	2,012,460	2,255,153	2,512,806	2,759,815
		Oil Industry Environmental Safety Group Association (IESG)	THB	1,693,000	1,834,000	1,887,000	1,919,000
	Support the enhancement of competitiveness with peer industry groups through operational excellence	Petroleum Institute of Thailand (PTIT)	THB	886,553	1,075,058	1,154,190	1,010,472
		Federation of Thai Industries [5], [6]	THB	203,300	203,300	203,300	203,300
		Thai National Shippers' Council (TNSC)	THB	53,500	53,500	53,500	53,500
		Association of Private Power Producers	THB	42,800	42,800	42,800	42,800
		Thai Chamber of Commerce	THB	24,610	24,610	24,610	24,610
		Investor Club Association [3]	THB	0	6,420	0	0
		Board of Trade of Thailand	THB	25,680	0 [2]	0 [2]	38,520
	Support the promotion of sustainable development topics in line with international standards	Thailand Business Council for Sustainable Development (TBCSD)	THB	250,000	250,000	250,000	250,000
		Water and Environment Institute for Sustainability	THB	0	0	0	0
		Thailand Carbon Neutral Network (TCNN) [7]	THB	0	0	0	0
Tax Exemption Group		Global Compact Network Thailand	THB	35,000	35,000	35,000	35,000
Lobbying, interest representatives, or similar	-	-	THB	0	0	0	0
Local, regional, or national political campaigns/ candidates	-	-	THB	0	0	0	0
Others (e.g., spending related to ballot measures or referendums)	-	-	THB	0	0	0	0
Total			**THB**	**11,918,339**	**13,802,459**	**13,863,206**	**33,438,425**

Remarks:
(1) The contribution collected from subsidiaries in Thaioil Group, covering 96% of sales revenue.
(2) Membership fee exemption.
(3) Membership renewal every 5 years.
(4) Additional financial support due to a spill case occurrence overseas.
(5) Membership fees depend on corporate total revenue in financial statements of the past two years.
(6) Membership fee for the Federation of Thai Industries has been waived for Thai Oil Power Co., Ltd. since 2021 due to termination of business, however it includes membership fee as an associate member of subsidiaries within Thaioil Group.
(7) Network for promoting cooperation in reducing Thailand's greenhouse gas emission. No membership fee.

Occupational Health and Safety Performance [1], [2]	Unit	2022		2023		2024		2025	
		Male	Female	Male	Female	Male	Female	Male	Female
Total hours worked	Hour	2,952,468		3,341,350		6,013,225		5,624,265	
• Employees		2,516,078	436,390	2,871,663	469,686	5,612,430	400,795	4,783,553	840,712
Total hours worked [6]	Hour	18,890,846		21,888,660		17,755,449		9,131,280	
• Contractors		8,470,709	10,420,137	10,870,903	11,017,757	5,146,143	12,609,306	2,991,359	6,139,921
Work-related Injuries [3]									
Fatality as a result of work-related injury	Case	0		0		0		0	
• Employees		0	0	0	0	0	0	0	0
	Case/ Million hours worked	0		0		0		0	
		0	0	0	0	0	0	0	0
Fatality as a result of work-related injury	Case	0		1		0		0	
• Contractors		0	0	1	0	0	0	0	0
	Case/ Million hours worked	0		0.05		0		0	
		0	0	0.09	0	0	0	0	0
Total recordable work-related injury rate (TRIR)	Case	1		4		1		2	
• Employees		1	0	4	0	1	0	2	0
	Case/ Million hours worked	0.34		1.20		0.17		0.36	
		0.4	0	1.39	0	0.18	0	0.42	0
Total recordable work-related injury rate (TRIR)	Case	6		4		5		7	
• Contractors		5	1	4	0	5	0	7	0
	Case/ Million hours worked	0.32		0.18		0.28		0.77	
		0.59	0.096	0.37	0	0.97	0	2.34	0
Lost-time injury frequency rate (LTIFR)	Case	0		0		0		1	
• Employees		0	0	0	0	0	0	1	0
	Case/ Million hours worked	0		0		0		0.18	
		0	0	0	0	0	0	0.21	0
Lost-time injury frequency rate (LTIFR)	Case	3		0		2		1	
• Contractors		2	1	0	0	2	0	1	0
	Case/ Million hours worked	0.16		0		0.11		0.11	
		0.24	0.1	0	0	0.39	0	0.33	0
Near misses [4]	Case	7,601		4,650		6,380		5,619	
• Employees and Contractors									
Work-related Illnesses									
Fatality as a result of work-related ill health	Case	0		0		0		0	
• Employees		0	0	0	0	0	0	0	0
Fatality as a result of work-related ill health	Case	0		0		0		0	
• Contractors		0	0	0	0	0	0	0	0
Occupational illness frequency rate (OFR)	Case	0		0		0		0	
• Employees		0	0	0	0	0	0	0	0

Occupational Health and Safety Performance [1], [2]	Unit	2022		2023		2024		2025	
		Male	Female	Male	Female	Male	Female	Male	Female
	Case/ Million hours worked	0		0		0		0	
		0	0	0	0	0	0	0	0
Occupational illness frequency rate (OFR)	Case	0		0		0		0	
		0	0	0	0	0	0	0	0
• Contractors	Case/ Million hours worked	0		0		0		0	
		0	0	0	0	0	0	0	0
Process Safety [5]									
Process safety events: Tier-1	Event	1		1		0		1	
	Event/ Million hours worked	0.05		0.04		0		0.07	
Process safety events: Tier-2	Event	2		4		4		4	
	Event/ Million hours worked	0.09		0.16		0.17		0.27	

Remarks:
(1) Thaioil Group applies statistical reporting standard of the PTT Group in line with Occupational Safety and Health Administration (OSHA).
(2) Thaioil Group presents occupational health and safety statistics with a breakdown of employees and contractors to indicate the Group's social responsibility towards operational contractors.
(3) First aid injuries are excluded in the accident record.
(4) Thaioil Group combines 'Potential Incident Report (PRI)' together with the Near Misses (Please see additional information in Human Health and Safety chapter).
(5) Thaioil Group reports process safety in accordance with API RP 754.

People [6]	Unit	2022		2023		2024		2025	
		Male	Female	Male	Female	Male	Female	Male	Female
GRI 405-1 Employees [1]									
Total number of employees	Person	1,851		1,936		2,052		2,108	
		1,369	482	1,412	524	1,487	565	1,509	599
	Percent	74	26	73	27	72	28	72	28
Number of Employees by Level									
All Employees									
• Executives [3]	Person	11	2	9	2	7	3	8	3
	Percent	85	15	82	18	70	30	73	27
• Management [4]	Person	102	77	101	84	108	87	107	93
	Percent	57	43	55	45	55	45	54	46
• Non-management	Person	1,256	403	1,302	438	1,372	475	1,394	503
	Percent	76	24	75	25	74	26	73	27
Permanent Contract									
• Executives [3]	Person	9	1	7	1	6	2	7	2
• Management [4]	Person	101	75	101	82	108	86	107	92
• Non-management	Person	1,256	402	1,301	436	1,372	474	1,394	503
Temporary Contract [7]									
• Executives [3]	Person	2	1	2	1	1	1	1	1
• Management [4]	Person	1	2	0	2	0	1	0	1
• Non-management	Person	0	1	1	2	0	1	0	0

People [6]	Unit	2022		2023		2024		2025	
		Male	Female	Male	Female	Male	Female	Male	Female
Number of Employees by Age Group [1]									
• Below 30 years old	Person	438	81	459	112	500	128	506	131
• 30-50 years old	Person	591	338	611	347	647	368	669	398
• Over 50 years old	Person	340	63	342	65	340	69	334	70
Number of Employees by Area of work									
Permanent Contract									
• Depot	Person	2	1	3	2	2	2	2	2
• Bangkok office	Person	82	185	88	197	101	207	108	224
• Sriracha office (Thaioil refinery)	Person	1,285	296	1,321	325	1,383	353	1,398	371
Temporary Contract									
• Depot	Person	0	0	0	0	0	0	0	0
• Bangkok office	Person	3	4	3	5	1	3	1	2
• Sriracha office (Thaioil refinery)	Person	0	0	0	0	0	0	0	0
Attraction									
GRI 401-1 New Employees Hired [1]									
Total number of new employees hired	Person	114		158		176		130	
		51	63	95	63	116	60	77	53
Number of New Employees by Level									
• Executives [3]	Person	0	0	0	0	0	0	1	0
• Management [4]	Person	0	0	0	0	0	1	0	0
• Non-management	Person	41	48	95	63	116	59	76	53
Number of New Employees by Age Group									
• Below 30 years old	Person	41	31	85	45	100	42	65	37
• 30-50 years old	Person	10	17	10	18	16	18	11	16
• Over 50 years old	Person	0	0	0	0	0	0	1	0
Number of Employees by Religion [10]									
• Buddhism	Percent	95.73		94.47		91.81		88.24	
• Christianity	Percent	1.19		1.19		1.12		1.04	
• Islam	Percent	1.03		0.98		0.93		0.90	
• Atheism	Percent	0.05		0.05		0.05		0.05	
• Not specified	Percent	2.00		3.31		6.09		9.77	
Total new hire rate	Percent of total number of employees	5.35		8.16		8.59		6.17	
		3.73	6.73	6.73	12.02	7.80	10.62	5.10	8.85
Internal Hires	Percent of total number of employees	97.00		97.26		97.67		97.44	
Ability to recruit employees	Percent of total number of open positions	97.00		97.26		97.67		88.00	
Cost of new employee recruitment	THB/ FTE	54,000		47,000		35,217		38,095	

People [6]	Unit	2022		2023		2024		2025	
		Male	Female	Male	Female	Male	Female	Male	Female
Retention									
GRI 401-1 Employee Turnover [1], [5]									
Total employee turnover	Person	92		70		72		60	
		60	32	47	23	54	18	44	16
• Below 30 years old	Person	19	10	12	8	2	4	6	2
• 30-50 years old	Person	6	15	7	10	8	8	3	7
• Over 50 years old	Person	35	7	28	5	44	6	35	7
Turnover rate	Percent of number of total employees	4.97		3.62		3.51		2.85	
		4.38	6.64	3.33	4.39	3.63	3.19	2.92	2.67
Voluntary resignation rate	Percent of number of total employees	2.81		2.01		1.17		0.95	
		1.9	5.39	1.49	3.44	0.74	3.19	0.66	1.67
DJSI 3.5.8 Employee Engagement									
Employee engagement score	Percent	89		92		98		77	
		81	89	92	92	99	93	79	70
Employee Engagement by Level									
• Executives [3]	Percent	100		100		100		100	
• Management [4]	Percent	83		95		97		84	
• Non-management	Percent	92		91		98		76	
Employee Engagement by Age Group									
• Below 30 years old	Percent	66		75		89		74	
• 30-50 years old	Percent	91		87		97		73	
• Over 50 years old	Percent	92		96		99		90	
GRI 401-3 Parental Leave [8]									
Total number of employees that took parental leave	Person	43		46		41		46	
		26	17	35	11	33	8	31	15
Total number of employees that returned to work after taking parental leave	Person	43		43		41		46	
		26	17	35	11	33	8	31	15
Rate of employees that returned to work after parental leave ended	Percent of employees who took parental leave	100		100		100		100	
		100	100	100	100	100	100	100	100
Employee Development									
GRI 404-1 Average Training Hours [1], [2], [10]									
Total training hours	Hour	124,421		136,655		156,090		186,135	
		103,117	21,303	115,138	21,516	123,157	32,933	142,737	43,398
Average training hours of all employees	Hour/ FTE/ Year	68	45	75	42	74	59	84	74
• Executives [3]	Hour/ FTE/ Year	83	47	34	18	61	59	134	99
• Management [4]	Hour/ FTE/ Year	74	74	59	46	67	36	59	67
• Non-management	Hour/ FTE/ Year	67	39	76	41	79	62	86	75

People [6]	Unit	2022		2023		2024		2025	
		Male	Female	Male	Female	Male	Female	Male	Female
Average Training & Development by Hours and Costs [10]									
Average training hours and costs by all types of training	Hour	316		351		361		374	
	THB/ FTE	296,488		349,984		369,865		385,181	
Average Training & Development hours and costs by Type of Training [10]									
• Classroom Training	Hour	62		67		70		81	
	THB/ FTE	15,288		29,538		32,772		42,518	
• Coaching and On the Job Training (OJT)	Hour	233		262		270		271	
	THB/ FTE	275,540		313,876		323,460		335,498	
• Online Training	Hour	21		22		22		22	
	THB/ FTE	5,660		5,740		3,017		2,524	
Average Training Hours and Costs by Age Group [10]									
• Below 30 years old	Hour	294		338		339		352	
	THB/ FTE	298,760		360,473		371,243		401,719	
• 30-50 years old	Hour	302		331		343		356	
	THB/ FTE	301,386		357,237		378,583		394,554	
• Over 50 years old	Hour	281		312		330		343	
	THB/ FTE	284,828		343,414		356,232		378,016	
Average Training Hours and Costs by Employee Level [10]									
• Executives [3]	Hour	331		335		371		394	
	THB/ FTE	301,287		347,101		357,603		385,181	
• Management [4]	Hour	278		327		306		334	
	THB/ FTE	277,644		343,414		356,232		378,016	
• Non-management	Hour	281		309		343		354	
	THB/ FTE	298,495		350,682		371,235		385,906	
Individual Development Plan									
Employees who developed Individual Development Plan (IDP)	Percent	100		100		100		100	
IDP Progress	Percent	100		100		100		100	
Employees with plans on career path	Percent	99		99		99		99	
Human Rights									
GRI 405-2: Gender Pay Ratio between Women and Men [9]									
Executives [3] (Base salary only)	Average THB/ Person	6,674,000	6,048,000	6,658,000	5,857,000	7,233,000	5,497,000	6,319,000	6,064,000
Executives [3] (Base salary and other cash incentives)	Average THB/ Person	10,787,000	10,180,000	11,224,000	9,981,000	12,349,000	9,234,000	10,825,000	9,911,000
Management [4] (Base salary only)	Average THB/ Person	2,227,000	1,937,000	2,269,000	1,991,000	2,268,000	1,974,000	2,258,000	1,879,000
Management [4] (Base salary and other cash incentives)	Average THB/ Person	3,743,000	3,231,000	3,824,000	3,327,000	3,847,000	3,306,000	3,848,000	3,166,000
Non-management (Base salary only)	Average THB/ Person	582,000	612,000	574,000	598,000	561,000	609,000	556,000	605,000

People [6]	Unit	2022		2023		2024		2025	
		Male	Female	Male	Female	Male	Female	Male	Female
Non-management (Base salary and other cash incentives)	Average THB/ Person	1,095,000	1,117,000	1,085,000	1,099,000	1,068,000	1,124,000	1,066,000	1,125,000
Executives [3] (Base salary only)	Ratio of average salary of women to men	0.91		0.88		0.76		0.96	
Executives [3] (Base salary and other cash incentives)	Ratio of average salary of women to men	0.94		0.89		0.75		0.92	
Management [4] (Base salary only)	Ratio of average salary of women to men	0.87		0.88		0.87		0.83	
Management [4] (Base salary and other cash incentives)	Ratio of average salary of women to men	0.86		0.87		0.86		0.82	
Non-management (Base salary only)	Ratio of average salary of women to men	1.05		1.04		1.09		1.09	
Non-management (Base salary and other cash incentives)	Ratio of average salary of women to men	1.02		1.01		1.05		1.06	
Employee Grievance									
Number of human rights grievances	Case	0		0		0		0	
• Resolved grievances	Case	0		0		0		0	
• Grievances under investigation	Case	0		0		0		0	
Number of labor practice grievances	Case	0		0		0		0	
• Resolved grievances	Case	0		0		0		0	
• Grievances under investigation	Case	0		0		0		0	
Labor Union									
Number of employees in the Labor Union	ร้อยละ	75		75		75		74	

Remarks:
(1) Included data of the employees assigned from external organizations, both permanent contract and temporary contract.
(2) Excluded data from the educational scholarship funded by Thaioil Group.
(3) The executives consist of CEO, President, and Executive Vice President.
(4) The management consists of Vice President and Section Manager.
(5) The turnover rate includes voluntary resignation, retirement, asked to resignation, employee laid off, and fatality.
(6) The scope of reporting includes only Thai Oil Public Company Limited.
(7) Employees on temporary contract are full-time employees as Thaioil Group does not hire part-time employees.
(8) Female employees are entitled to 120 days of maternity leave, with pay for 60 days. They may also take an additional 15 consecutive days of leave in the case of a child's illness, with 50% of their salary paid. In addition, employees are entitled to up to 15 days of paternity leave to care for a spouse who has given birth, with full pay, in accordance with Thai labor law.
(9) Ratio of average salary of women to men is verified by an independent third party according to GRI Standard 405-2 (Details of Assurance Statement on page 112-113).
(10) FTE or Full Time Equivalent is the number of working hours per full-time employee per year.

Society and Community Development	Unit	2022	2023	2024	2025
Percentage of operations with employee engagement activities, impact assessments, and/or community development programs	Percent	100	100	100	100
Number of visits at Thaioil Group's Health and Learning Center	Visit	32,114	42,430	45,760	41,891
Community engagement score	Percent	95.85	95.19	95.54	95.71
Number of employee volunteer hours	Hour	6,450	7,488	7,880	13,376
Value of employee volunteering during paid hours	Million THB	4.61	4.66	5.14	8.88
Cost of management	Million THB	36	38.73	42.78	38.39

Supply Chain Management [1]	Unit	2022	2023	2024	2025
Supplier Screening					
Total number of Tier-1 suppliers	Number of Suppliers	1,025	1,015	1,167	1,189
Total number of significant suppliers in Tier-1	Number of Suppliers	41	37	48	41
Total spend on significant suppliers in Tier-1	Percent	23	11	52	74
Total number of significant suppliers in Non Tier-1	Number of Suppliers	10	0	2	3
Total number of significant suppliers (Tier-1 and Non Tier-1)	Number of Suppliers	51	37	50	44
Supplier Assessment					
Total number of significant suppliers assessed via desk assessments/ on-site assessments	Number of Suppliers	45	32	46	43
Significant suppliers assessed	Percent	88	86	92	98
Target of significant suppliers assessed	Percent	80	85	90	95
Number of significant suppliers assessed with substantial actual/ potential negative impacts	Number of Suppliers	7	0	0	2
Significant suppliers with substantial actual/ potential negative impacts with agreed corrective action/ improvement plan	Percent	100	100	100	100
Number of significant suppliers with substantial actual/ potential negative impacts that were resolved	Number of Suppliers	0	0	0	0
Corrective Action Plan Support					
Total number of significant suppliers supported in corrective action plan implementation	Number of Suppliers	7	0	0	2
Significant suppliers assessed with substantial actual/ potential negative impacts supported in corrective action plan implementation	Percent	100	100	100	100
Target of significant suppliers assessed with substantial actual/ potential negative impacts supported in corrective action plan implementation	Percent	100	100	100	100
Capacity Building Programs					
Total number of significant suppliers in capacity building programs	Number of Suppliers	24	30	39	41
Significant suppliers in capacity building programs	Percent	47	81	78	93
Target of significant suppliers in capacity building programs	Percent	50	50	50	80
GRI 308-1 and GRI 414-1 Suppliers					
New suppliers acknowledged SCOC	Percent	100	100	100	100
Supplier satisfaction score	Percent	98	98	97	95

Remarks:
(1) Data covers all suppliers in the Company's database system, however crude oil suppliers are excluded.

Customer Responsibility Management	Unit	2022	2023	2024	2025
GRI 308-1 and GRI 414-8 Customers					
Customer engagement index [1]	Percent	95	94	93	98

Remarks:
(1) Customer engagement index includes Thai Oil Public Company Limited, Thai Lube Base Public Company Limited, and Thai Paraxylene Company Limited. The survey was conducted by a third-party company that provides service on the customer satisfaction surveys.

Environmental Performance	Unit	2022	2023	2024	2025
Refinery throughput [1]	Metric Ton	14,294,851	14,938,285	14,876,755	13,810,010
Energy and chemicals production	Million barrels of crude oil equivalent (MBOE) [12]	104	109	109	103
Environment-Related Expenditure					
Total Environment-Related Expenditure	Million THB	98.93	242.98	259.64	181.93
• Capital investment on energy efficiency improvement	Million THB	13.14	108.86	189.62	67.76
• Expenses to operate environmental management system	Million THB	85.79	134.12	70.02	114.17
Investment benefits [11]	Million THB	74	215	223	269.8
Energy Management and Greenhouse Gases [2], [4]					
Total energy consumption [2]	Million GJ	47.34	49.76	50.09	46.70
Refinery energy intensity	GJ/ BOE [12]	0.45	0.46	0.46	0.45
Non-renewable energy consumption	Million GJ	47.34	49.76	50.09	46.70
	Megawatt-Hour	13,149,763	13,820,127	13,912,052	12,971,343
Renewable energy consumption	GJ	0	5,060	5,008	4,598
	Megawatt-Hour	0	1,406	1,391	1,277
Total fuel consumption [2]	Million GJ	52.74	54.52	54.5	50.82
Refinery fuel consumption intensity	GJ/ BOE [12]	0.51	0.5	0.5	0.49
• Natural gas	Million GJ	34.43	34.38	34.03	32.32
• Fuel oil	Million GJ	4.27	4.94	4.69	5.00
• Fuel gas	Million GJ	13.04	14.34	14.55	12.20
• Coke	Million GJ	0.98	0.84	0.89	0.92
• LPG	Million GJ	less than 0.01	less than 0.01	0.33	0.36
• Diesel	Million GJ	0.019	0.016	0.021	0.024
• Benzene	Million GJ	less than 0.01	less than 0.01	less than 0.01	less than 0.01
• Ethanol	Million GJ	less than 0.01	less than 0.01	less than 0.01	less than 0.01
Electricity consumption	Megawatt-Hour	1,059,335	1,123,932	1,167,269	1,135,950
	Million GJ	3.81	4.05	4.2	4.09
Electricity purchased from external source	Megawatt-Hour	0	21,561	78,082	88,065
Electricity sold [4]	Megawatt-Hour	1,499,678	1,324,051	1,228,181	1,234,223
Energy consumption reduction	GJ	138,473	464,839	494,794	525,226
Investments in renewable energy	Million THB	1,624	1,831	1,676	1,021
Direct greenhouse gas emissions (Scope 1) [3]	Million tons of CO_2 equivalent	3.26	3.38	3.45	3.23
• Stationary combustion	Tons of CO_2 equivalent	3,262,488	3,215,700	3,216,504	2,999,929
• Mobile combustion	Tons of CO_2 equivalent	1,516	1,377	1,711	1,944
• Fugitive emission	Tons of CO_2 equivalent	0	0	0	0
• Process (Electricity distributions system/ Refrigerant-Cooling system/ Fire extinguisher)	Tons of CO_2 equivalent		159,086	229,069	228,024
• Biogenic emission	Tons of CO_2 equivalent				11
Indirect greenhouse gas emissions (Scope 2) [3]	Tons of CO_2 equivalent	0	8,244	30,753	34,628

Environmental Performance	Unit	2022	2023	2024	2025
• Location based	Tons of CO_2 equivalent		8,244	31,311	35,138
• Market based	Tons of CO_2 equivalent		NAP	30,753	34,628
Greenhouse gas emissions intensity (Scope 1 and 2)	Tons of CO_2 equivalent per barrel of crude oil equivalent [12]	0.031	0.031	0.032	0.032
Greenhouse gas emissions reduction (Scope 1) as a result of energy efficiency improvement projects	Tons of CO_2 equivalent	16,759	28,003	28,985	36,115
Methane emission	Ton	63.39	63.97	63.46	60.00
	Percent of gross direct GHG emissions (Scope 1)	0.058	0.06	0.05	0.05
Other Indirect greenhouse gas emissions (Scope 3) [3]	Tons of CO_2 equivalent	44,810,959	45,610,062	46,857,662	42,607,525
• Category 1: Purchased goods and services	Tons of CO_2 equivalent	1,705,128	1,769,700	1,718,085	1,644,875
• Category 2: Capital goods	Tons of CO_2 equivalent	43,003	63,884	58,509	67,708
• Category 3: Fuel and energy	Tons of CO_2 equivalent	293,525	371,852	389,747	398,092
• Category 4: Upstream transportation and distribution	Tons of CO_2 equivalent	147,575	647,250	563,121	602,272
• Category 5: Waste generated in operations	Tons of CO_2 equivalent	0	0	0	0
• Category 6: Business travel	Tons of CO_2 equivalent	123	276	198	175
• Category 7: Employee commuting	Tons of CO_2 equivalent	1,987	2,079	2,203	2,237
• Category 8: Upstream leased assets	Tons of CO_2 equivalent	124	152	172	172
• Category 9: Downstream transportation and distribution	Tons of CO_2 equivalent	671,234	683,072	766,887	743,301
• Category 10: Processing of sold products	Tons of CO_2 equivalent	2,296,944	2,311,040	2,796,079	2,407,363
• Category 11: Use of sold products	Tons of CO_2 equivalent	38,380,311	38,903,415	39,705,271	35,582,561
• Category 12: End-of-life treatment of sold products	Tons of CO_2 equivalent	0	0	0	0
• Category 13: Downstream leased assets	Tons of CO_2 equivalent	Not Applicable	Not Applicable	Not Applicable	Not Applicable
• Category 14: Franchises	Tons of CO_2 equivalent	Not Applicable	Not Applicable	Not Applicable	Not Applicable
• Category 15: Investments	Tons of CO_2 equivalent	1,271,004	857,342	857,390	1,158,768
Air Emission [5], [6]					
• Nitrogen Oxides emissions (NO_x)	Ton	4,426	4,461	4,243	4,201
• Sulphur Oxides emissions (SO_x)	Ton	6,542	6,889	6,568	6,682
• Volatile Organic Compounds emissions (VOCs)	Ton	1,275	1,137	1,023	1,359
Waste Management					
Total waste generated	**Ton**	**11,278**	**14,273**	**8,485**	**15,406**
Total waste generated and managed	Ton	10,950	10,311	7,197	14,001
• Hazardous waste generated	Ton	9,586	9,750	7,108	12,531
• Non-hazardous waste generated	Ton	1,364	561	88	1,470
Total waste leftover onsite at the end of the year	Ton	327	3,962	1,288	1,405
• Total hazardous waste leftover onsite at the end of the year	Ton	68	2,411	379	1,157
• Non-hazardous waste leftover onsite at the end of the year	Ton	259	1,551	908	249
Total waste diverted from disposal	**Ton**	**10,950**	**10,639**	**9,871**	**13,883**
Onsite	**Ton**	**0**	**0**	**0**	**0**
Total hazardous waste utilized	Ton	0	0	0	0
• By reusing	Ton	0	0	0	0
• By recycling	Ton	0	0	0	0
• Others [7]	Ton	0	0	0	0

Environmental Performance	Unit	2022	2023	2024	2025
Total non-hazardous waste utilized	Ton	0	0	0	0
• By reusing	Ton	0	0	0	0
• By recycling	Ton	0	0	0	0
• Others [7]	Ton	0	0	0	0
Offsite	**Ton**	**1,525**	**718**	**2,272**	**3,325**
Total hazardous waste utilized	Ton	1,084	676	1,852	1,722
• By reusing	Ton	0	0	0	0
• By recycling	Ton	1,084	411	1,850	1,722
• Others [7]	Ton	0	0	0	0
Total non-hazardous waste utilized	Ton	441	42	420	1,603
• By reusing	Ton	0	0	0	0
• By recycling	Ton	441	42	420	1,603
• By recycling as alternative energy	Ton	0	0	0	0
• Others [7]	Ton	0	0	0	0
Total waste disposed	**Ton**	**9,426**	**9,921**	**7,599**	**10,559**
Onsite	**Ton**	**0**	**0**	**0**	**0**
Total hazardous waste disposed	Ton	0	0	0	0
• By incineration with energy recovery	Ton	0	0	0	0
• By incineration without energy recovery	Ton	0	0	0	0
• By landfill	Ton	0	0	0	0
• Others [7]	Ton	0	0	0	0
Total non-hazardous waste disposed	Ton	0	0	0	0
• By incineration with energy recovery	Ton	0	0	0	0
• By incineration without energy recovery	Ton	0	0	0	0
• By landfill	Ton	0	0	0	0
• Others [7]	Ton	0	0	0	0
Offsite	**Ton**	**9,426**	**9,921**	**7,599**	**10,559**
Total hazardous waste disposed	Ton	8,502	9,143	7,288	10,032
• By incineration with energy recovery	Ton	8,502	9,143	7,288	10,032
• By incineration without energy recovery	Ton	0	0	0	0
• By landfill	Ton	0	0	0	0
• Others [7]	Ton	0	0	0	0
Total non-hazardous waste disposed	Ton	923	778	311	527
• By incineration with energy recovery	Ton	923	778	311	122
• By incineration without energy recovery	Ton	0	0	0	0
• By landfill	Ton	0	0	0	0
• Others [7]	Ton	0	0	0	405
Oil and Chemical Spill [8]					
Significant oil and chemical spills on land	Case	0	0	0	0
Significant oil and chemical spills in the sea	Case	0	1	0	1
Environmental Laws and Regulations Compliance					
Fines for non-compliance with environmental laws and regulations	Million THB	0	0	0	0
Number of non-compliance with environmental laws and regulations incidents	Incident	0	0	0	0

Environmental Performance			Unit	Water				Water in water-stressed areas
				2022	2023	2024	2025	2025
Water [9]								
Water withdrawal by source	Total seawater [10]		Million m^3	18.19	19.74	19.36	18.70	0
	• Freshwater (< 1,000 mg/L Total Dissolve Solids)		Million m^3	0	0	0	0	0
	• Other water (> 1,000 mg/L Total Dissolve Solids)		Million m^3	18.19	19.74	19.36	18.70	0
	Total water withdrawal from other sources		Million m^3	3.67	4.16	4.92	4.57	0
	• Freshwater (< 1,000 mg/L Total Dissolve Solids)		Million m^3	3.67	4.16	4.92	4.57	0
	• Other water (> 1,000 mg/L Total Dissolve Solids)		Million m^3	0	0	0	0	0
	Total third-party water withdrawal by source	Surface water	Million m^3	3.67	4.16	4.92	4.57	0
		Groundwater	Million m^3	0	0	0	0	0
		Seawater	Million m^3	0	0	0	0	0
		Produced water	Million m^3	0	0	0	0	0
Water withdrawal	From all water sources		Million m^3	21.86	23.9	24.28	23.27	0
Water discharge by destination	Discharged into the sea		Million m^3	18.74	20.05	19.71	19.35	0
Total water discharge [7]	All discharge destinations		Million m^3	18.74	20.05	19.71	19.35	0
Total water discharge by treatment level	Freshwater (≤ 1,000 mg/L Total Dissolve Solids)		Million m^3	0	0	0	0	0
	Other water (> 1,000 mg/L Total Dissolve Solids)		Million m^3	18.74	20.05	19.71	19.35	0
Water consumption for industrial purposes	Total water consumption		Million m^3	3.11	3.84	4.57	3.92	0
	Total net freshwater consumption in water-stressed areas [13]		Million m^3	0	0	0	0	0

Remarks:
(1) Refinery Throughput includes crude oil and other refinery feedstock.
(2) Energy consumption covers TOP, TPX, TLB, LABIX, and TOPSPP. The amount of fuel, steam, and electricity is calculated in accordance with GRI 302 (2016). The energy conversion factors are specific values gathered from Thaioil Group and subsidiaries' laboratory.
(3) Thaioil Group follows the PTT Group's statistical reporting standard that is in line with the WBCSD Greenhouse Gas Protocol, which covers carbon dioxide, methane, and nitrous oxide.
(4) There is no steam sold to external organization.
(5) Thaioil Group operates, evaluates, and monitors occupational health and safety and environmental performance by following Shell International Practice Standard (2007).
(6) Thaioil Group does not purchase ozone-depleting chemicals, such as CFCs, HCFCs, Halons, and Methyl Bromide.
(7) The other waste disposal methods cover incineration in industrial incinerators and external wastewater treatment.
(8) Oil and chemical spills that are greater than 1 Barrel to sea and leak over 100 Barrels to land are considered significant.
(9) Data excludes water consumption in the office building as the amount is very small compared to water consumed in the production process. Therefore, it can be considered insignificant.
(10) The amount of seawater withdrawal and water discharge covers excess seawater that has been discharged as freshwater by desalination process from the desalination unit.
(11) Investment benefits include cost saving from environmental-related activities and tax benefits.
(12) Barrel Oil Equivalent means the production amount of petroleum and petrochemical product equivalent to 1 Barrel of crude oil.
(13) Thaioil Group has not consumed fresh water in the production process from water-stressed areas.