

56-1 One Report
(Financial Report)

2024



*Together for
Sustainable Thailand,
Sustainable World*



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Report of Board of Directors' Responsibilities for the Financial Reporting

To Shareholders,

The Board of Directors is responsible for the consolidated financial statements of PTT Public Company Limited and its subsidiaries and the separate financial statements of PTT Public Company Limited. The aforementioned financial statements are prepared in accordance with Thai Financial Reporting Standards. The financial statements are prepared under appropriated accounting policies and applied consistently by using careful judgment and the best estimation. Important information is adequately and transparently disclosed in the notes to financial statements for the company's shareholders and investors.

The Board of Directors provides good corporate governance and maintains the risk management system and internal controls to ensure that accounting records are accurate, reliable, free from material misstatement, timely and adequate to protect the company's assets as well as to prevent fraud and significant irregular operations.

The Board of Directors has appointed an Audit Committee comprising independent directors to be responsible for reviewing the reliability and correctness of financial reports, evaluating the effectiveness and efficiency of internal control process and governing the effectiveness of internal audit function. The audit committee's comments on these issues are presented in the audit committee report included in this annual report.

The Board of Directors considers that the internal control system and the internal audit of the company provide credibility and reliability to the consolidated financial statements of PTT Public Company Limited and its subsidiaries and the separate financial statements of PTT Public Company Limited for the year ended December 31, 2024. The Board of Directors also believes that the financial position, financial results, and cash flows, audited by the independent auditors (EY Office Limited), are fairly and accurately presented in all material respects with Thai Financial Reporting Standards. The auditors' opinion is presented in the auditors' report as part of this annual report.

Mr. Chatchai Phromlert
Chairman

Dr. Kongkrapan Intarajang
CEO & President



Independent Auditor's Report

To the Shareholders of PTT Public Company Limited

Opinion

I have audited the accompanying consolidated financial statements of PTT Public Company Limited and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2024, and the related consolidated statements of income, comprehensive income, changes in shareholders' equity and cash flows for the year then ended, and notes to the consolidated financial statements, including material accounting policy information, and have also audited the separate financial statements of PTT Public Company Limited for the same period (collectively "the financial statements").

In my opinion, the financial statements referred to above present fairly, in all material respects, the financial position of PTT Public Company Limited and its subsidiaries and of PTT Public Company Limited as at 31 December 2024, their financial performance and cash flows for the year then ended in accordance with Thai Financial Reporting Standards.

Basis for Opinion

I conducted my audit in accordance with the State Audit Standards and Thai Standards on Auditing. My responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of my report. I am independent of the Company and its subsidiaries in accordance with the *State Audit Standards* issued by the State Audit Commission and the *Code of Ethics for Professional Accountants including Independence Standards* issued by the Federation of Accounting Professions (Code of Ethics for Professional Accountants) that are relevant to my audit of the financial statements, and I have fulfilled my other ethical responsibilities in accordance with the State Audit Standards and the Code of Ethics for Professional Accountants. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Key Audit Matters

Key audit matters are those matters that, in my professional judgement, were of most significance in my audit of the financial statements of the current period. These matters were addressed in the context of my audit of the financial statements as a whole, and in forming my opinion thereon, and I do not provide a separate opinion on these matters.

I have fulfilled the responsibilities described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of my report, including in relation to these matters. Accordingly, my audit included the performance of procedures designed to respond to my assessment of the risks of material misstatement of the financial statements. The results of my audit procedures, including the procedures performed to address the matters below, provide the basis for my audit opinion on the accompanying financial statements as a whole.

Key audit matters and how audit procedures respond to each matter are described below.

Use of accounting judgments and estimates during oil price volatility caused by the global energy crisis

The economic fluctuations in 2024 had a substantial impact on energy supply and demand, as well as global oil price. In addition, this has contributed to volatility in the overall domestic economy and across various business sectors, including energy industry. This situation may bring uncertainty and affect the environment in which the Group operates. As a result, I focused on considering the impairment of goodwill, since impairment assessments of goodwill constitute significant accounting estimates, which require management to exercise judgment and make accounting estimates, particularly with respect to the identification of cash-generating units, the estimates of future cash flows that the Group expects to receive from those groups of assets and determination of an appropriate discount rate. The circumstances described above affect these judgments and estimates.

I have gained an understanding of the Group's business environment and of the process for assessing the impact of the oil price volatility on considerations regarding the impairment testing of goodwill, including the recording of relevant accounting transactions, by making inquiries with the Group's management and examining supporting documents. I have assessed the identification of cash-generating units, having gained an understanding of and evaluated the key assumptions selected by management in making estimates of the expected future cash flows and determining the discount rate by making inquiry of the responsible persons and performing comparative analysis with different sources of information regarding both the Group and the industry. Moreover, I compared the cash flow projections for previous periods with actual operating results, including relevant variables, in order to assess management's use of judgment in estimating the expected future cash flows. For this purpose, I have been following the Group's assessment of the impact of these circumstances up to the date of this report. In addition, I reviewed the disclosure of the impact of the oil price volatility on the impairment testing of goodwill.

Other Matter

The State Audit standards as described in the *Basis for Opinion* section and the *Auditor's Responsibilities for the Audit of the Financial Statements* section are relevant only to the audit of the financial statements, which are prepared by management in accordance with Thai Financial Reporting Standards.

Other Information

Management is responsible for the other information. The other information comprise the information included in annual report of the Group, but does not include the financial statements and my auditor's report thereon. The annual report of the Group is expected to be made available to me after the date of this auditor's report.

My opinion on the financial statements does not cover the other information and I do not express any form of assurance conclusion thereon.

In connection with my audit of the financial statements, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit or otherwise appears to be materially misstated.

When I read the annual report of the Group, if I conclude that there is a material misstatement therein, I am required to communicate the matter to those charged with governance for correction of the misstatement.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Thai Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the State Audit Standards and Thai Standards on Auditing will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with the State Audit Standards and Thai Standards on Auditing, I exercise professional judgement and maintain professional skepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the consolidated financial statements. I am responsible for the direction, supervision and performance of the group audit. I remain solely responsible for my audit opinion.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

I also provide those charged with governance with a statement that I have complied with the State Audit Standards and relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on my independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, I determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. I describe these matters in my auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, I determine that a matter should not be communicated in my report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

I am responsible for the audit resulting in this independent auditor's report.



Kittiphun Kiatsomphob
Certified Public Accountant
(Thailand) No. 8050

EY Office Limited
Bangkok: 20 February 2025



Statement of Financial Position

PTT Public Company Limited and Its Subsidiaries
As at 31 December 2024

Unit: Baht

	Notes	Consolidated financial statements		Separate financial statements	
		31 December 2024	31 December 2023	31 December 2024	31 December 2023
Assets					
Current assets					
Cash and cash equivalents	4	405,138,726,787	417,133,806,030	78,861,923,355	87,570,265,246
Short-term investments in financial assets	5	45,992,000,082	32,391,687,023	23,734,441,229	7,253,799,697
Trade receivables	6	251,390,816,498	259,812,941,241	162,012,020,322	164,396,639,591
Other current receivables	7	62,768,556,295	77,425,088,404	8,569,823,849	14,404,349,282
Short-term lending	8.1	2,206,562,698	2,216,448,581	3,127,251,157	35,911,427,586
Inventories	10	187,332,524,029	210,998,887,158	25,628,744,194	25,860,502,540
Supplies	11	54,206,291,305	52,499,741,288	5,896,625,377	5,756,215,875
Current derivative assets		8,951,954,802	8,789,069,042	1,207,216,066	1,094,275,319
Other current financial assets		728,543,259	878,470,903	298,500,879	297,266,749
Other current assets	12	9,913,704,658	12,555,510,627	2,146,072,855	2,585,661,430
Assets held for sale		1,106,070,898	7,037,087,436	-	-
Total current assets		1,029,735,751,311	1,081,738,737,733	311,482,619,283	345,130,403,315
Non-current assets					
Other long-term investments in financial assets	13	52,293,061,765	45,731,813,255	8,353,363,876	6,572,148,032
Investments in subsidiaries	14.1, 14.4	-	-	430,851,544,384	456,480,548,540
Investments in joint ventures	14.2, 14.5	62,637,720,822	62,257,698,552	4,979,465,773	4,979,465,773
Investments in associates	14.3	108,637,521,158	110,064,700,457	-	-
Long-term lending	8.2	43,666,412,101	6,942,728,134	36,482,878,649	21,122,682,866
Investment properties	15	11,617,814,085	11,233,561,947	4,037,684,476	4,075,966,962
Property, plant and equipment	16	1,534,657,527,441	1,541,209,163,515	249,639,984,101	248,057,048,807
Right-of-use assets	17	116,477,849,633	116,099,084,852	24,159,445,172	23,422,826,073
Goodwill	18	178,907,442,816	183,730,773,538	-	-
Other intangible assets other than goodwill	19	124,538,376,389	130,311,569,781	2,080,267,063	2,591,564,344
Exploration and evaluation assets	20	90,383,689,365	94,330,965,080	-	-
Deferred tax assets	22.3	46,823,429,469	42,477,564,169	3,701,244,762	3,384,646,490
Non-current derivative assets		1,768,578,606	813,281,470	132,742,091	266,564,746
Other non-current financial assets		17,155,736,635	15,632,743,220	245,609,338	208,677,207
Other non-current assets	23	19,483,364,741	17,887,510,657	1,139,750,223	1,098,419,274
Total non-current assets		2,409,048,525,026	2,378,723,158,627	765,803,979,908	772,260,559,114
Total assets		3,438,784,276,337	3,460,461,896,360	1,077,286,599,191	1,117,390,962,429

The accompanying notes are an integral part of these financial statements.



Statement of Financial Position (Continued)

PTT Public Company Limited and Its Subsidiaries
As at 31 December 2024

Unit: Baht

	Notes	Consolidated financial statements		Separate financial statements	
		31 December 2024	31 December 2023	31 December 2024	31 December 2023
Liabilities and shareholders' equity					
Current liabilities					
Bank overdrafts and short-term loans from financial institutions	27	102,774,110,123	96,511,469,339	-	-
Trade payables	24	240,193,417,147	243,384,549,126	135,908,375,523	149,327,338,219
Other current payables	25	67,466,201,365	80,097,334,648	17,436,282,745	22,724,182,590
Current portion of long-term borrowings	27	77,280,763,479	97,399,050,676	19,989,328,364	39,351,394,973
Current portion of lease liabilities	27	20,601,256,630	16,076,557,254	2,030,647,612	1,511,122,775
Short-term borrowings	27	8,147,000,000	6,500,000,000	16,819,255,739	18,296,900,877
Income tax payable		27,171,959,471	26,264,225,327	1,799,079,223	1,405,370,245
Short-term provision for decommissioning costs	29	3,457,679,662	2,107,376,664	25,695,843	-
Current derivative liabilities		6,434,361,865	5,731,674,969	1,175,946,204	1,516,823,712
Other current financial liabilities		1,721,234,776	523,720,119	1,041,115,717	211,399,392
Other current liabilities	26	13,817,369,014	11,226,197,391	3,424,157,820	3,773,394,646
Liabilities directly associated with assets held for sale		22,878,897	2,887,602,463	-	-
Total current liabilities		569,088,232,429	588,709,757,976	199,649,884,790	238,117,927,429
Non-current liabilities					
Long-term borrowings	27	814,719,216,992	863,303,142,247	172,289,858,531	192,727,722,780
Lease liabilities	27	82,673,811,197	81,652,219,254	8,627,879,196	7,560,567,997
Deferred tax liabilities	22.3	76,418,918,772	82,694,578,159	-	-
Provision for employee benefits	28	36,449,965,636	33,815,506,957	7,918,798,332	6,791,664,086
Long-term provision for decommissioning costs	29	148,640,823,635	134,277,903,113	112,010,228	25,257,398
Deposits on LPG cylinders		13,186,814,112	12,951,851,352	-	-
Non-current derivative liabilities		6,180,654,273	4,229,382,581	3,312,537,146	2,841,022,982
Other non-current financial liabilities		4,467,855,083	4,991,841,829	1,425,299,016	1,487,181,799
Other non-current liabilities	30	30,080,899,549	28,860,307,823	6,165,939,029	5,049,634,701
Total non-current liabilities		1,212,818,959,249	1,246,776,733,315	199,852,321,478	216,483,051,743
Total liabilities		1,781,907,191,678	1,835,486,491,291	399,502,206,268	454,600,979,172



Statement of Financial Position (Continued)

PTT Public Company Limited and Its Subsidiaries
As at 31 December 2024

Unit: Baht

	Notes	Consolidated financial statements		Separate financial statements	
		31 December 2024	31 December 2023	31 December 2024	31 December 2023
Liabilities and shareholders' equity (Continued)					
Shareholders' equity					
Share capital					
Registered share capital					
		28,562,996,250 ordinary shares of Baht 1 each	28,562,996,250	28,562,996,250	28,562,996,250
Issued and fully paid-up share capital					
		28,562,996,250 ordinary shares of Baht 1 each	28,562,996,250	28,562,996,250	28,562,996,250
Share premium					
			29,211,131,966	29,211,131,966	29,211,131,966
Surplus from the change in the ownership interests					
in subsidiaries					
			41,009,841,135	39,461,080,386	-
Retained earnings					
	31	Appropriated - legal reserve	2,857,245,725	2,857,245,725	2,857,245,725
	31	Appropriated - self-insurance fund reserve	1,370,128,692	1,330,420,740	1,330,420,740
		Unappropriated	1,035,610,421,327	1,003,378,317,116	614,647,951,904
		Other components of shareholders' equity	11,030,406,156	16,396,692,627	1,134,938,386
		Equity attributable to owners of the Company	1,149,652,171,251	1,121,197,884,810	677,784,392,923
		Non-controlling interests of the subsidiaries	507,224,913,408	503,777,520,259	-
		Total shareholders' equity	1,656,877,084,659	1,624,975,405,069	662,789,983,257
		Total liabilities and shareholders' equity	3,438,784,276,337	3,460,461,896,360	1,117,390,962,429

Pattaralada Sa-Ngasang
Chief Financial Officer



Statement of Income

PTT Public Company Limited and Its Subsidiaries
For the year ended 31 December 2024

Unit: Baht

	Notes	Consolidated financial statements		Separate financial statements	
		2024	2023	2024	2023
Sales and service income	33	3,090,453,391,180	3,144,883,584,066	1,768,847,156,211	1,890,654,384,044
Cost of sales and services	35	2,755,319,565,107	2,769,496,972,049	1,727,991,916,145	1,845,325,866,893
Gross profit		335,133,826,073	375,386,612,017	40,855,240,066	45,328,517,151
Other income	34	47,924,622,893	38,636,471,668	73,640,098,371	70,311,569,997
Loss on derivatives		(6,932,566,700)	(13,194,035,415)	(10,346,900,870)	(5,865,627,527)
Gain on foreign exchange rates		15,234,553,714	22,284,818,507	16,288,542,137	17,083,565,651
Profit before expenses		391,360,435,980	423,113,866,777	120,436,979,704	126,858,025,272
Selling and distribution expenses	35	46,398,390,865	46,118,325,029	11,094,381,616	9,954,180,012
Administrative expenses	35	96,783,324,462	82,044,073,803	22,557,382,429	22,815,020,021
Petroleum royalties		14,012,561,702	15,987,300,914	-	-
Operating profit		234,166,158,951	278,964,167,031	86,785,215,659	94,088,825,239
Share of profit (loss) from investments in joint ventures and associates	14.6	(6,667,675,091)	3,012,624,956	-	-
Profit before finance costs and income taxes		227,498,483,860	281,976,791,987	86,785,215,659	94,088,825,239
Finance costs	36	46,820,921,145	45,383,423,008	8,751,175,479	9,482,053,425
Profit before income taxes		180,677,562,715	236,593,368,979	78,034,040,180	84,606,771,814
Income tax expenses	22.1	67,209,979,354	81,313,167,804	4,179,455,822	6,222,907,267
Profit for the year		113,467,583,361	155,280,201,175	73,854,584,358	78,383,864,547
Profit attributable to					
Equity holders of the Company		90,072,026,202	112,023,880,947	73,854,584,358	78,383,864,547
Non-controlling interests of the subsidiaries		23,395,557,159	43,256,320,228	-	-
		113,467,583,361	155,280,201,175	73,854,584,358	78,383,864,547
Basic earnings per share		3.15	3.92	2.59	2.74



Statement of Comprehensive Income

PTT Public Company Limited and Its Subsidiaries
For the year ended 31 December 2024

Unit: Baht

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Profit for the year	113,467,583,361	155,280,201,175	73,854,584,358	78,383,864,547
Other comprehensive income (loss)				
Other comprehensive income to be reclassified to profit or loss in subsequent periods				
Exchange differences on translation of financial statements in foreign currency	(14,145,359,360)	(6,394,033,596)	-	-
Gain (loss) on debt investments measured at fair value through other comprehensive income	16,748,461	(553,092)	-	-
Income taxes related to debt investments measured at fair value through other comprehensive income	(2,979,728)	(1,989,381)	-	-
Gain (loss) on cash flow hedges	(600,388,628)	137,421,887	-	-
Income taxes related to cash flow hedges	225,919,685	42,717,064	-	-
Share of other comprehensive loss from joint ventures and associates	(1,780,925,605)	(470,706,027)	-	-
Other comprehensive income not to be reclassified to profit or loss in subsequent periods				
Loss on remeasurements of defined benefits plans	(1,608,284,579)	(492,310,853)	(720,626,271)	(460,678,896)
Income taxes related to remeasurements of defined benefits plans	293,089,871	157,481,076	144,125,254	92,150,922
Gain (loss) on equity investments designated at fair value through other comprehensive income	2,880,163,608	(2,624,546,930)	(1,151,233,566)	(1,524,009,148)
Income taxes related to equity investments designated at fair value through other comprehensive income	1,605,288,525	3,374,613,301	230,246,713	339,649,095
Share of other comprehensive loss from joint ventures and associates	(392,737,029)	(1,031,979,142)	-	-
Other comprehensive loss for the year, net of income taxes	(13,509,464,779)	(7,303,885,693)	(1,497,487,870)	(1,552,888,027)
Total comprehensive income for the year	99,958,118,582	147,976,315,482	72,357,096,488	76,830,976,520
Total comprehensive income attributable to				
Equity holders of the Company	83,743,794,633	103,986,347,737	72,357,096,488	76,830,976,520
Non-controlling interests of the subsidiaries	16,214,323,949	43,989,967,745	-	-
	99,958,118,582	147,976,315,482	72,357,096,488	76,830,976,520

The accompanying notes are an integral part of these financial statements.

Statement of Changes in Shareholders' Equity

PTT Public Company Limited and Its Subsidiaries
For the year ended 31 December 2024



Unit: Baht

Notes	Consolidated financial statements													Total shareholders' equity
	Equity attributable to owners of the Company											Total equity attributable to owners of the Company	Equity attributable to non-controlling interests of the subsidiaries	
	Other components of shareholders' equity											Total other components of shareholders' equity		
	Retained earnings			Exchange differences on translation of financial statements in foreign currency		Investments in other long-term financial assets		Cash flow hedges		Share of other comprehensive income (loss) from joint ventures and associates				
Issued and fully paid-up share capital	Share premium	Surplus from the change in the ownership interests in subsidiaries	Legal reserve	Self-insurance fund reserve	Unappropriated	Share of other comprehensive income (loss) from joint ventures and associates	Investments in other long-term financial assets	Cash flow hedges	Share of other comprehensive income (loss) from joint ventures and associates	Total other components of shareholders' equity	Total equity attributable to owners of the Company	Equity attributable to non-controlling interests of the subsidiaries		
	28,562,996,250	29,211,131,966	10,068,142,437	2,857,245,725	1,283,274,044	957,167,125,835	18,661,950,083	5,122,533,482	(76,287,897)	(277,234,150)	23,430,961,528	1,052,590,877,785	481,101,887,148	1,533,692,764,933
31	-	-	-	-	37,146,696	(37,146,696)	-	-	-	-	-	-	-	-
Reserve for self-insurance fund	-	-	-	-	-	(1,126,041,097)	-	-	-	-	(1,126,041,097)	(1,126,041,097)	(598,710,400)	(1,724,751,497)
Foreign exchange difference from repayment of subordinated perpetual loan	-	-	-	-	-	(42,844,232,880)	-	-	-	-	(42,844,232,880)	(42,844,232,880)	-	(42,844,232,880)
Dividends paid	-	-	-	-	-	-	-	-	-	-	-	-	(19,449,171,784)	(19,449,171,784)
Dividends paid of subsidiaries	-	-	-	-	-	(21,390,884,515)	-	-	-	-	(21,390,884,515)	(21,390,884,515)	(1,477,372,303)	(22,868,256,818)
Change in the ownership interests in subsidiaries	-	-	29,392,937,949	-	-	-	-	-	-	-	29,392,937,949	29,392,937,949	210,919,853	30,605,857,802
Increase in share capital of subsidiaries	-	-	-	-	-	112,023,880,947	-	-	-	-	112,023,880,947	112,023,880,947	43,256,320,228	155,280,201,175
Profit for the year	-	-	-	-	-	(414,384,478)	(5,454,484,246)	(421,866,471)	(15,908,460)	(1,141,995,724)	(7,034,268,901)	(7,448,653,379)	733,647,517	(6,715,005,862)
Other comprehensive income (loss) for the year	-	-	-	-	-	(414,384,478)	(5,454,484,246)	(421,866,471)	(15,908,460)	(1,141,995,724)	(7,034,268,901)	(7,448,653,379)	733,647,517	(6,715,005,862)
Balance as at 31 December 2023	28,562,996,250	29,211,131,966	39,461,080,386	2,857,245,725	1,330,420,740	1,003,378,317,116	13,207,465,837	4,700,647,021	(92,196,357)	(1,419,223,874)	16,396,692,627	1,121,197,884,810	503,777,520,259	1,624,975,405,069
	28,562,996,250	29,211,131,966	39,461,080,386	2,857,245,725	1,330,420,740	1,003,378,317,116	13,207,465,837	4,700,647,021	(92,196,357)	(1,419,223,874)	16,396,692,627	1,121,197,884,810	503,777,520,259	1,624,975,405,069
31	-	-	-	-	39,707,952	(39,707,952)	-	-	-	-	-	-	-	-
Reserve for self-insurance fund	-	-	-	-	-	(38,707,952)	-	-	-	-	(38,707,952)	(38,707,952)	(16,927,213,828)	(17,315,211,780)
Issuance of subordinated perpetual debentures	-	-	-	-	-	(57,124,692,486)	-	-	-	-	(57,124,692,486)	(57,124,692,486)	(24,947,462,688)	(82,072,155,174)
Dividends paid	-	-	-	-	-	-	-	-	-	-	-	-	(24,947,462,688)	(25,396,929,376)
Dividends paid of subsidiaries	-	-	-	-	-	-	-	-	-	-	-	-	(5,078,031,323)	(5,078,031,323)
Change in the ownership interests in subsidiaries	-	-	1,548,760,749	-	-	-	-	-	-	-	1,548,760,749	1,548,760,749	156,174,383	1,704,935,132
Increase in share capital of subsidiaries	-	-	-	-	-	90,072,026,202	-	-	-	-	90,072,026,202	90,072,026,202	23,395,557,159	113,467,583,361
Profit for the year	-	-	-	-	-	(67,521,553)	(7,978,091,040)	4,051,802,719	(44,953,495)	(1,395,044,655)	(5,366,286,471)	(6,041,809,024)	(7,006,058,210)	(13,047,866,234)
Other comprehensive income (loss) for the year	-	-	-	-	-	(67,521,553)	(7,978,091,040)	4,051,802,719	(44,953,495)	(1,395,044,655)	(5,366,286,471)	(6,041,809,024)	(7,006,058,210)	(13,047,866,234)
Balance as at 31 December 2024	28,562,996,250	29,211,131,966	41,009,841,135	2,857,245,725	1,370,128,692	1,035,610,421,327	5,229,374,797	8,752,449,740	(137,149,852)	(2,814,268,529)	11,030,406,156	1,149,652,171,251	507,224,913,408	1,656,877,084,659

The accompanying notes are an integral part of these financial statements.

Statement of Changes in Shareholders' Equity (Continued)

PTT Public Company Limited and Its Subsidiaries
For the year ended 31 December 2024



	Notes	Separate financial statements							Total shareholders' equity	
		Retained earnings			Other components of shareholders' equity					
		Issued and fully paid-up share capital	Share premium	Legal reserve	Appropriated		Unappropriated	Other comprehensive income (loss)		Investments in other long-term financial assets
					Self-insurance fund reserve	Self-insurance fund reserve				
Balance as at 1 January 2023		28,562,996,250	29,211,131,966	2,857,245,725	1,293,274,044	563,628,611,939	3,240,285,292	628,793,545,216		
Changes in shareholders' equity for the year		-	-	-	37,146,696	(37,146,696)	-	-		
Reserve for self-insurance fund	31	-	-	-	-	(42,844,232,880)	-	(42,844,232,880)		
Dividends paid		-	-	-	-	78,383,864,547	-	78,383,864,547		
Profit for the year		-	-	-	-	(358,833,573)	(1,184,360,053)	(1,543,193,626)		
Other comprehensive loss for the year		-	-	-	-	598,772,263,337	2,055,925,239	662,789,983,257		
Balance as at 31 December 2023		28,562,996,250	29,211,131,966	2,857,245,725	1,330,420,740	598,772,263,337	2,055,925,239	662,789,983,257		
Balance as at 1 January 2024		28,562,996,250	29,211,131,966	2,857,245,725	1,330,420,740	598,772,263,337	2,055,925,239	662,789,983,257		
Changes in shareholders' equity for the year		-	-	-	39,707,952	(39,707,952)	-	-		
Reserve for self-insurance fund	31	-	-	-	-	(57,124,692,486)	-	(57,124,692,486)		
Dividends paid	39	-	-	-	-	73,854,584,358	-	73,854,584,358		
Profit for the year		-	-	-	-	(814,495,353)	(920,986,853)	(1,735,482,206)		
Other comprehensive loss for the year		-	-	-	-	614,647,951,904	1,134,938,386	677,784,392,923		
Balance as at 31 December 2024		28,562,996,250	29,211,131,966	2,857,245,725	1,370,128,692	614,647,951,904	1,134,938,386	677,784,392,923		

The accompanying notes are an integral part of these financial statements.



Statement of Cash Flows

PTT Public Company Limited and Its Subsidiaries
For the year ended 31 December 2024

Unit: Baht

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Cash flows from operating activities				
Profit before income taxes	180,677,562,715	236,593,368,979	78,034,040,180	84,606,771,814
Adjustment of profit before income taxes to net cash provided by (used in) operating activities				
Depreciation and amortization expenses	185,917,889,515	173,065,107,955	19,794,134,951	19,458,750,362
(Gain) loss on disposal of assets	(4,661,325,184)	(4,614,440,135)	(7,434,280)	32,776,399
Gain on disposal of investments	(5,723,127,069)	(1,495,778,296)	-	-
Loss on capital decrement of subsidiary	-	-	26,375,098,690	-
Gain on change in status of investments	-	(2,443,353,174)	-	-
Gain on repurchase of debentures	(3,958,524,259)	(2,159,784,892)	-	-
Loss on impairment of assets	8,470,348,269	4,942,291,326	-	142,647,292
(Reversal of) loss on impairment of investment	1,016,284,074	-	(20,931,565,844)	(18,040,273,315)
Share of (profit) loss from investments in joint ventures and associates	6,667,675,091	(3,012,624,956)	-	-
Provision for employee benefits	3,459,635,747	3,171,836,456	716,442,198	578,788,530
(Gain) loss on exchange rates	2,732,540,059	(1,320,417,021)	1,382,126,817	(1,776,702,281)
(Gain) loss on derivatives	7,406,087,230	(5,479,263,746)	620,224,717	(604,461,797)
Unrealized (gain) loss on fair value of commodity contracts	(4,487,126,015)	(7,015,057,249)	(31,230,031)	274,793,802
(Gain) loss on investments measured at fair value through profit and loss	(543,528,686)	(355,496,916)	33,106,353	143,373,642
(Reversal of) expected credit loss of accounts receivable and other assets	24,042,950	401,017,699	(33,300,782)	(62,837,308)
Write-off exploration assets	3,362,433,697	2,070,459,400	-	-
(Reversal of) allowance for changes in value of inventories	(2,866,812,996)	(2,380,872,405)	(1,156,825,933)	224,840,513
(Reversal of) allowance for obsolete supplies	191,265,237	(2,075,657,346)	61,295,359	3,964,202
Dividend income	(1,864,410,692)	(2,189,933,632)	(60,924,570,047)	(36,251,431,619)
Interest income	(18,171,937,152)	(12,219,394,219)	(4,322,442,602)	(3,143,805,410)
Finance costs	46,820,921,145	45,383,423,008	8,751,175,479	9,482,053,425
Others	72,460,191	133,588,961	(384,730,758)	(504,915,629)
Profit from operating activities before changes in operating assets and liabilities	404,542,353,867	418,999,019,797	47,975,544,467	54,564,332,622



Statement of Cash Flows (Continued)

PTT Public Company Limited and Its Subsidiaries
For the year ended 31 December 2024

Unit: Baht

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Operating assets (increase) decrease				
Trade receivables	9,593,049,288	(41,080,162,013)	2,489,634,584	(3,374,702,675)
Other current receivables	18,152,310,951	65,904,510,775	6,514,912,450	20,580,529,175
Inventories and supplies	24,922,090,915	13,413,635,693	1,299,282,418	824,293,389
Other current assets	20,742,819,761	3,995,794,250	463,694,420	(232,360,401)
Other non-current assets	(3,567,209,483)	(4,709,239,314)	(45,492,433)	(20,310,550)
Operating liabilities increase (decrease)				
Trade payables	(5,710,444,342)	13,778,494,050	(14,829,622,595)	5,569,143,758
Other current payables	(15,528,259,506)	23,111,840,720	(3,823,793,278)	3,624,060,356
Other current liabilities	4,717,128,094	(19,954,539,586)	506,175,342	(4,180,585,159)
Other non-current liabilities	(10,830,118,902)	(8,213,633,334)	820,833,988	(557,476,958)
	42,491,366,776	46,246,701,241	(6,604,375,104)	22,232,590,935
Cash received from operating activities	447,033,720,643	465,245,721,038	41,371,169,363	76,796,923,557
Income taxes paid	(73,793,813,584)	(83,200,557,966)	(3,760,999,959)	(9,584,103,564)
Net cash provided by operating activities	373,239,907,059	382,045,163,072	37,610,169,404	67,212,819,993



Statement of Cash Flows (Continued)

PTT Public Company Limited and Its Subsidiaries
For the year ended 31 December 2024

Unit: Baht

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Cash flows from investing activities				
Cash payment of property, plant and equipment and investment properties	(160,459,939,381)	(163,734,257,811)	(17,640,724,914)	(16,513,907,762)
Cash payment of other intangible assets other than goodwill	(5,607,298,948)	(7,880,907,987)	(128,031,221)	(163,684,278)
Cash payment of exploration and evaluation assets	(3,956,856,963)	(5,514,324,433)	-	-
Cash payment of right-of-use assets	(306,272,895)	(428,904,399)	(4,736,777)	(2,608,941)
Net cash payment for acquisition of assets	(18,727,552,661)	-	-	-
Cash payment for other long-term investments in financial assets	(8,951,070,445)	(2,534,042,926)	(6,263,152,475)	(1,137,552,584)
Net cash payment for business acquisitions	(1,331,028,354)	-	-	-
Cash payment for contingent considerations from business acquisition	-	(24,925,374)	-	-
Cash payment of investments in subsidiaries	-	-	(25,000,000)	(4,298,645,500)
Decrease in cash from loss of control in a subsidiary	-	(334,168,185)	-	-
Cash payment of investments in joint ventures and associates	(4,470,941,359)	(8,863,789,437)	-	(20,000,000)
Cash payment of long-term lending	(22,836,842,655)	(2,436,197,906)	(19,173,784,776)	(30,000,000)
Cash payment for derivatives	(437,476,122)	(1,075,480,196)	(437,476,122)	(1,075,480,196)
Cash proceeds from disposals of property, plant and equipment, investment properties, other intangible assets other than goodwill and right-of-use assets	15,004,593,917	4,669,649,945	22,420,034	58,707,960
Net cash received from disposal of participating interests	-	7,243,583,449	-	-
Cash proceeds from disposals of other long-term investments in financial assets	9,268,229,956	3,915,881,476	6,238,981,695	2,090,502,923
Cash proceeds from disposals of investments in subsidiaries	7,591,156,548	10,301,388,493	-	-
Cash proceed from capital decrement of subsidiary	-	-	20,210,471,310	1,562,000,000
Cash proceeds from devaluing of an investment in a joint venture	46,876,000	-	-	-
Cash proceeds from disposals of investments in associates	5,000,000	-	-	-
Cash proceeds from long-term lending	2,661,293,508	931,628,811	39,102,387,559	1,074,844,400
Cash proceeds from lease installments	1,826,410	-	71,536,033	35,773,288
Cash proceeds from derivatives	31,754,018	-	-	-
(Increase) decrease in short-term lending	97,881,315	(228,897,870)	(2,723,743,553)	192,403,279
(Increase) decrease in short-term investments in financial assets	(18,193,746,338)	(14,555,468,810)	(20,570,812,496)	791,071,138
Interests received	14,691,846,638	10,092,900,771	3,811,416,180	3,186,271,635
Dividends received	7,115,323,291	9,211,576,993	60,876,493,794	36,251,431,619
Net cash provided by (used in) investing activities	(188,763,244,520)	(161,244,755,396)	63,366,244,271	22,001,126,981



Statement of Cash Flows (Continued)

PTT Public Company Limited and Its Subsidiaries
For the year ended 31 December 2024

Unit: Baht

	Notes	Consolidated financial statements		Separate financial statements	
		2024	2023	2024	2023
Cash flows from financing activities					
Cash proceeds from issuance of ordinary shares of subsidiaries		171,652,535	246,288,051	-	-
Cash proceeds from long-term borrowings		72,134,562,934	99,624,080,307	499,365,500	13,478,230,000
Cash proceeds from derivatives		-	177,031,490	-	-
Net cash proceeds from issuance of subordinated perpetual debentures		16,927,213,828	-	-	-
Cash proceeds from change in ownership in subsidiaries		-	8,477,054,983	-	-
Cash payment for decrease in ordinary shares of subsidiaries		(3,884,562,763)	(39,265,070)	-	-
Cash repayment of long-term borrowings		(133,634,982,493)	(130,292,891,236)	(39,353,700,000)	(16,016,076,886)
Cash payment for lease installments		(21,240,690,478)	(18,219,626,556)	(1,771,622,430)	(1,162,747,354)
Cash payment for derivatives		(118,694,182)	(95,812,221)	(93,758,004)	(95,812,221)
Cash payment for change in ownership in subsidiaries		-	(3,430,623,776)	-	-
Increase (decrease) in short-term borrowings		1,619,500,885	6,272,591,000	(1,477,645,139)	8,849,423,318
Increase in bank overdrafts and short-term loans from financial institutions		6,700,296,460	5,984,753,469	-	-
Finance costs paid		(42,851,088,588)	(48,494,490,958)	(10,180,615,469)	(16,143,373,744)
Dividends paid		(82,233,838,485)	(62,368,307,948)	(57,122,036,926)	(42,847,021,907)
Net cash used in financing activities		(186,410,630,347)	(142,159,218,465)	(109,500,012,468)	(53,937,378,794)
Effects of exchange rates on cash and cash equivalents		(635,714,697)	(3,279,610,457)	(184,743,098)	(494,286,610)
Exchange differences on translation		(9,425,396,738)	2,018,940,120	-	-
Cash and cash equivalents classified as held for sale		-	(300,971,062)	-	-
Net increase (decrease) in cash and cash equivalents		(11,995,079,243)	77,079,547,812	(8,708,341,891)	34,782,281,570
Cash and cash equivalents at beginning of year		417,133,806,030	340,054,258,218	87,570,265,246	52,787,983,676
Cash and cash equivalents at end of year	4	405,138,726,787	417,133,806,030	78,861,923,355	87,570,265,246
Non-cash items					
Accounts payable from purchases of fixed assets		28,169,539,454	29,721,930,065	1,464,977,463	1,987,320,967
Accounts payable from purchases of other intangible assets other than goodwill		350,356,825	287,880,999	29,419,758	70,284,196



Notes to Financial Statements

PTT Public Company Limited and Its Subsidiaries
For the year ended 31 December 2024

1. General information

PTT Public Company Limited (the Company) is incorporated as a public limited company in Thailand, and is listed on the Stock Exchange of Thailand.

The Head Office of the Company is located at 555 Vibhavadi-Rangsit Road, Chatuchak, Bangkok, Thailand.

The Company has a status of a state enterprise while the Ministry of Finance is the largest shareholder and is under the supervision of Ministry of Energy.

The Company's principal activity is the operation of its petroleum business. The Company has invested in subsidiaries, joint arrangements and associates (the Group), which are engaged in upstream petroleum and natural gas, downstream petroleum, new business and sustainability, and other related businesses as described in Note 37 Operating segments.

2. Basis for the preparation of financial statements

The consolidated and the separate financial statements have been prepared in accordance with Thai Financial Reporting Standards under the Accounting Act, B.E. 2543. These are Thai Financial Reporting Standards under the Accounting Profession Act, B.E. 2547, including guidelines promulgated by the Federation of Accounting Professions (TFAC), and the financial reporting requirements of the Securities and Exchange Commission under the Securities and Exchange Act, B.E. 2535.

The presentation of the financial statements has been made in compliance with the stipulations of the Notification of the Department of Business Development, issued under the Accounting Act B.E. 2543

The consolidated and the separate financial statements have been prepared under the historical cost convention with the exception of certain amounts, which are accounted for using the fair value method as disclosed in Note 3.3 Accounting policies.

The financial statements of subsidiaries have been prepared using the same accounting policies of the Company. The significant transactions arising between the Company and its subsidiaries have been eliminated from the consolidated financial statements.

The consolidated and the separate financial statements are prepared and presented in Thai Baht and are rounded in the notes to financial statements to the nearest million Baht unless otherwise stated.

2. Basis for the preparation of financial statements (Continued)

This English translation of the financial statements has been prepared from the statutory financial statements that were issued in Thai language. In the event of a conflict or a difference in interpretation between the two languages, the Thai language statutory financial statements shall prevail.

3. Accounting policies

3.1 Financial reporting standards that became effective in current year

During the year, the Group has adopted the revised financial reporting standards which are effective for fiscal years beginning on or after 1 January 2024. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards with most of the changes directed towards clarifying accounting treatment and providing accounting guidance for users of the standards. The amendments address four matters:

- The definition of accounting estimates to distinguish between "changes in accounting estimates" and "changes in accounting policies"
- Disclosure of accounting policies
- Deferred tax related to assets and liabilities arising from a single transaction
- Other amendments resulting from changes in Thai Financial Reporting Standard No. 17 Insurance Contracts

The adoption of these financial reporting standards does not have any significant impact on the Group's financial statements.

3.2 Financial reporting standards that will become effective for fiscal years beginning on or after 1 January 2025

The Federation of Accounting Professions issued new and a number of revised financial reporting standards, which are effective for fiscal years beginning on or after 1 January 2025. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards with most of the changes directed towards clarifying accounting treatment and providing accounting guidance for users of the standards.

The new financial reporting standard effective for fiscal years beginning on or after 1 January 2025 is Thai Financial Reporting Standard No. 17 Insurance Contracts. The amendments made to this financial reporting standard address four matters as detailed below:

- Classification of liabilities as non-current in accordance with the criteria for the entity entitled to extend payment for at least 12 months after the reporting period
- Non-current liabilities subject to covenants that must be maintained
- Disclosure requirements for supplier finance arrangements
- Subsequent measurement requirements for lease liabilities in sale and leaseback transactions

The management of the Group believes that adoption of these amendments will not have any significant impact on the Group's financial statements.

3. Accounting policies (Continued)

3.3 Accounting policies (Continued)

3.3.1 Cash and cash equivalents

Cash and cash equivalents comprise cash on hand, deposits held at call with banks and other short-term highly liquid investments which have original maturities within three months and without withdrawal restrictions. Bank overdrafts and short-term loans from financial institutions are included in current liabilities in the statements of financial position.

3.3.2 Inventories

Inventories are stated at the lower of cost and net realizable value. The cost is calculated by using the weighted average cost method. The cost of inventory comprises total purchasing costs, direct payments related to inventories, discounts, quantity discounts, as well as contributions to or compensation from taxes and several funds. Net realizable value is calculated from estimated selling price in the ordinary course of business, less the costs of completion and related selling expenses. When net realizable value of inventories is lower than cost of acquisition, it is presented under cost of goods sold in profit or loss. An allowance for obsolescence of inventories will be recognized when inventories are obsoleted or defected.

Inventories using the commodity broker-traders' method are presented at fair value less costs to sell through profit or loss.

3.3.3 Supplies

Supplies are stated at cost calculated by using the weighted average cost method, less allowance for obsolescence of supplies when there are obsolete, defective or unserviceable items, and shall be accounted as part of production cost upon withdrawal.

3.3.4 Investments in subsidiaries

Subsidiaries are those companies which directly or indirectly controlled by the parent company. Control exists when the parent company has the power over the subsidiaries so as to obtain variable returns from the involvement with the subsidiaries and has the ability to affect those returns through the power over the subsidiaries. In case of the parent company has voting rights less than half of total voting rights in subsidiaries, the parent company will reconsider the related facts and circumstances in order to determine whether the parent company has the power to control over such subsidiaries or not.

The financial statements of subsidiaries are included in the consolidated financial statements from the date that the control commences until the date that the control ceases.

3. Accounting policies (Continued)

3.3 Accounting policies (Continued)

3.3.4 Investments in subsidiaries (Continued)

The parent company allocates profit or loss and each component of other comprehensive income or loss to the equity attributable to owners of the parent and the non-controlling interests even if this results in a deficit non-controlling interest balance.

The purchase method of accounting is used to account for business combinations, except the business combination under common control. The cost of a business combination is measured as the sum of fair value of any consideration transferred, the recognized amount of any non-controlling interest in the acquiree, and the fair value of the existing equity interest as of the purchasing date (if the business combination is achieved in stages).

- For each business combination, the Group measures the recognized amount of any non-controlling interest in the acquiree at either the fair value or the non-controlling interest's proportionate share of the net of identifiable assets of the acquiree.
- In the case of a business combination achieved in stages, the Group measures the acquisition-date fair value of the acquirer's previously-held equity interest in the acquiree and recognized gains or losses profit or loss.
- Costs related to the acquisition, including professional fees, appraisal fees and other consulting fees, are recognized as expenses in profit or loss.

The Group measures the identifiable assets and liabilities acquired at fair value as of the acquisition date.

Any changes in the equity interest in subsidiaries of the Group while control is retained are recorded as surplus (deficit) from the changes in the interests in subsidiaries in equity.

Upon the disposal of investments, the difference between the net disposal proceeds and the carrying amount of the investments is recorded in profit or loss.

Investments in subsidiaries have been presented in the separate financial statements under the cost method.

The list of investments in subsidiaries of the Group and proportion of ownership interests have been set out in Note 14.

3.3.5 Investments in joint ventures and associates

Joint ventures are joint arrangement whereby the Group has joint control of the arrangement and has rights to the net assets of the arrangement. The joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control.

Associates are those companies whereby the Group has significant influence, but not control or joint control, over the financial and operating policies.

3. Accounting policies (Continued)

3.3 Accounting policies (Continued)

3.3.5 Investments in joint ventures and associates (Continued)

The Group uses the purchase method to record the acquisition of joint ventures and associates, except for business combinations under common control. Cost includes the purchase price and other costs directly attributable to the acquisition as of the acquisition date. Any difference between the cost of the investment and the entity's share of the net fair value of the investee's identifiable assets and liabilities is accounted for as follows:

- Goodwill related to an associate or a joint venture is included in the carrying amount of the investment. Goodwill is not amortised.
- Any excess of the entity's share of the net fair value of the investee's identifiable assets and liabilities over the cost of the investment is treated as income in determining the entity's share of the associate or joint venture's profit or loss.

The consolidated financial statements of the Group include the share of profit and loss from joint ventures and associates under equity method, from the date that significant influence commences until the date that significant influence ceases. Unrealized gains or losses on transactions between the Group and its joint ventures and associates are eliminated to the extent of the Group's interest in the joint ventures and associates unless the transactions provide evidence of impairment of the transferred assets.

The Group records share of profit or loss from joint ventures and associates in proportion to the Group's equity interest in those gains and losses. Any dividends received from joint ventures and associates are deducted from the book value of the investments.

When the Group's share of loss in joint ventures and associates equals or exceeds its interest in the joint ventures and associates, the Group does not recognize further losses, unless the Group has incurred collateral or constructive obligations or made payments on behalf of the joint ventures and associates.

Upon the disposal of investments, the difference between the net disposal proceeds and the carrying amount of the investments is recorded in profit or loss.

Investments in joint ventures and associates have been presented under the cost method in the separate financial statements and under the equity method in the consolidated financial statements.

The list of investments in joint ventures and associates of the Group and proportion of ownership interests have been set out in Note 14.

3. Accounting policies (Continued)

3.3 Accounting policies (Continued)

3.3.6 Joint operations

Joint operations are joint arrangement whereby the Group has rights to assets and obligations relating to the joint arrangement. The Group has recognized assets, liabilities, revenues and expenses by the portion of joint operations in the consolidated financial statements from the date that joint control commences until the date that joint control ceases.

The list of joint operations of the Group and transactions relating to its involvements have been set out in Note 14.

3.3.7 Related parties

Related parties of the Company are those enterprises or individuals that control or are controlled by the Company, or are under common control with the Company, including holding companies of subsidiaries and fellow Group subsidiaries, as well as those that have equity interests in the Company that result in significant influence or joint control over the Company. In addition, related parties include associates, joint ventures, the management and directors of the Company, and entities which the management or directors of the Company, directly or indirectly, control, jointly controlled, or have significant influence.

In considering each possible related party relationship, attention is directed more to the substance of the relationship than to the legal form.

3.3.8 Foreign currency translation

The consolidated financial statements and the separate financial statements have been presented in Thai Baht, which is the Company's functional currency. Transactions of each company included in the consolidated financial statements are recorded in their own functional currencies.

Foreign currency transactions are translated into functional currency at the exchange rates prevailing at the transaction date. Monetary assets and liabilities at the statements of financial position date denominated in foreign currencies are translated into functional currency at the exchange rate prevailing at that date. Gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies are recognized in profit or loss.

3. Accounting policies (Continued)

3.3 Accounting policies (Continued)

3.3.8 Foreign currency translation (Continued)

Assets and liabilities of foreign operations, that presentation currencies are foreign currencies, are translated into Thai Baht using the closing rate at the statements of financial position date. Revenues and expenses are translated into Thai Baht using the average rate during the period. Differences arising from currency translation are included in other comprehensive income and accumulated differences are presented in other components of equity under equity.

Upon the disposal of self-sustaining foreign entities, accumulated currency translation differences under shareholders' equity are recognized as gains or losses on disposal.

3.3.9 Borrowing costs

Borrowing costs comprise interest and other costs associated with the borrowings. Borrowing costs incurred on qualifying assets are capitalized as a cost of the qualifying property until all the activities necessary to prepare the property for its intended use are substantially completed. When funds are specifically borrowed for the construction or the production of asset, the amount of borrowing costs capitalized is determined from the actual borrowing costs during the year less any income on the temporary investment of those borrowings. When funds are borrowed for general purpose, the Group multiplies the capitalization rate by the capital expenditure in allocating borrowing costs to costs of assets.

All other borrowing costs are expensed in the period they incurred.

3.3.10 Investment properties

Investment properties are initially recognized at cost, including expenses directly associated with the asset acquisition, less accumulated depreciation and allowance for impairment.

The Group has selected the cost model for accounting for its investment properties. This model is in accordance with that described in the accounting policy for property, plant and equipment.

Depreciation is recorded as expenses in profit or loss and is calculated using the straight-line method over the estimated useful lives of the assets, which range from 2 to 32 years. Land and construction in progress are not depreciated.

The Group recognizes the difference between the net disposal proceeds and the carrying amount of the asset in profit or loss in the period of the disposal.

3. Accounting policies (Continued)

3.3 Accounting policies (Continued)

3.3.11 Property, plant and equipment

Property, plant and equipment are initially recognized at cost less accumulated depreciation and accumulated impairment losses (if any). The costs comprise any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating. These include decommissioning costs, delivery and restoration costs, and any obligation associated with either its acquisition or a consequence of having used the items.

Repair and maintenance costs are recognized in profit or loss during the financial period in which they are incurred. The costs of significant asset improvements, major turnarounds and inspections are included in the carrying amount of the asset. In case of replacement, the Group writes off carrying value of replaced items.

The Group depreciates each significant component of property, plant and equipment separately.

The Group estimates the residual value of the property, plant and equipment based on current assessment of the amount that would currently obtain from disposal of the assets, after deducting the estimated costs of disposal, if the assets were already of the age and in the condition expected at the end of its useful life.

The Group reviews the residual value, the useful lives and depreciation methods of assets at least once a year.

Depreciation is recorded as expenses in profit or loss and is calculated using the straight-line method or unit of production method over the estimated useful lives of the assets, which are as follows:

Buildings and building improvements	2 - 53 years
Machinery and equipment	2 - 50 years or unit of production
Petroleum exploration and production properties	5 - 30 years or unit of production
Other assets	2 - 25 years

Land and construction in progress are not depreciated.

Gains or losses on disposal of property, plant and equipment are determined by comparing the proceeds from sales with the carrying amounts on the disposal dates, and are recorded in profit or loss when incurred.

3. Accounting policies (Continued)

3.3 Accounting policies (Continued)

3.3.11 Property, plant and equipment (Continued)

Petroleum exploration and production properties

The petroleum exploration and production business accounts for its petroleum exploration and production properties in accordance with the successful efforts method for which the accounting policies are as follows:

Cost of properties

The cost of properties comprises the total acquisition costs of petroleum rights or the acquisition costs of the portion of properties, decommissioning costs, as well as support equipment and facilities.

Exploratory drilling costs are capitalized as petroleum exploration and evaluation assets, and will be classified as petroleum exploration and production properties of the projects if their exploratory wells have identified proved reserves that have been found to be commercially producible. However, if the exploratory wells have not identified proved reserves or have identified proved reserves but have not been found to be commercially producible, such drilling costs will be expensed in the statements of income.

Exploratory costs, comprising geological and geophysical costs as well as area reservation fees during the exploration stage, are charged as expenses in profit or loss when incurred.

Development costs, whether relating to successful or unsuccessful development wells, are capitalized and classified as assets.

Depreciation

The capitalized acquisition costs of petroleum rights are depreciated using the unit of production method based on proved reserves. Depreciation of exploratory wells, development costs as well as decommissioning costs, except unsuccessful projects, are calculated using the unit of production method based on proved reserves or proved developed reserves. The Group recognizes changes in reserve estimates prospectively.

Proved reserves and proved developed reserves are calculated by the Group's own engineers and are based on the information received from the joint operators.

Depreciation of support equipment, facilities and others are determined using the straight-line method over the useful lives of assets.

3. Accounting policies (Continued)

3.3 Accounting policies (Continued)

3.3.12 Goodwill

The Group initially records goodwill at cost, which equals to the excess of the acquisition costs over the fair value of the net assets acquired, and carries out a test for impairment of goodwill at least once a year or when there are circumstances indicate that an investment might be impaired. Where the fair value of the net assets exceeds the cost of acquisition at the acquisition date, the excess is recognized as a gain in profit or loss.

To test for impairment, the Group allocates goodwill from business combinations to each cash-generating unit (or group of cash-generating units) that is expected to receive benefit from the synergies of the combination. The Group evaluates the recoverable amount of each cash-generating unit (or group of cash-generating units) and if it is lower than the carrying amount of the unit, the Group recognizes impairment losses in profit or loss. Impairment losses of goodwill will not be reversed.

3.3.13 Other intangible assets other than goodwill

Intangible assets are initially recognized at cost less accumulated amortization and accumulated impairment losses (if any).

The Group records the initial costs of intangible assets from business combination at the acquisition-date fair value of the assets. Intangible assets from other sources are initially recognized at costs.

Intangible assets include computer software licenses, customer contracts, copyrights and trademarks and other intangible assets such as other operating rights.

Intangible assets are amortized and recorded as expenses in profit or loss using the straight-line method over the useful lives of the assets which range from 2 to 35 years.

The Group reviews the residual value, useful lives and amortization methods of intangible assets at least once a year.

3. Accounting policies (Continued)

3.3 Accounting policies (Continued)

3.3.14 Exploration and evaluation assets

Petroleum exploration and evaluation assets

Petroleum exploration and evaluation expenditures are capitalized at cost as exploration and evaluation assets. If the projects have identified the proved reserves that have been found to be commercially producible, the capitalized exploration and evaluation expenditures under these projects will be transferred to petroleum exploration and production properties under property, plant and equipment, which are subsequently measured as stated in Note 3.3.11.

The capitalized exploration and evaluation expenditure is charged to profit or loss in the period in which the projects have not identified proved reserves or have identified proved reserves, but have not been found to be commercially producible.

3.3.15 Impairment of non-financial assets

At the end of each reporting period, the Group performs impairment reviews in respect of the investment in subsidiaries, joint ventures and associates, property, plant and equipment, right-of-use asset, investment properties or other intangible assets, whenever events or changes in circumstances indicate that an asset may be impaired. The Group also carries out annual impairment reviews in respect of goodwill and intangible assets with indefinite useful lives. An impairment loss is recognized when the recoverable amount of an asset, which is the higher of the asset's fair value less costs to sell and its value in use, is less than the carrying amount. In determining value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs to sell, an appropriate valuation model is used. These calculations are corroborated by a valuation model that, based on information available, reflects the amount that the Group could obtain from the disposal of the asset in an arm's length transaction between knowledgeable, willing parties, after deducting the costs of disposal.

The impairment losses are recognized in profit or loss.

In the assessment of asset impairment (except for goodwill), if there is any indication that previously recognized impairment losses may no longer exist or may have decreased, the Group estimates the asset's recoverable amount. A previously recognized impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognized. The increased carrying amount of the asset attributable to a reversal of an impairment loss shall not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset in prior years. Such reversal is recognized in profit or loss.

3. Accounting policies (Continued)

3.3 Accounting policies (Continued)

3.3.16 Leases

At inception of contract, the Group assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

The Group as a lessee

The Group applied a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. At the commencement date of the lease (i.e. the date the underlying asset is available for use), the Group recognizes right-of-use assets representing the right to use underlying assets and lease liabilities based on lease payments.

Right-of-use assets

Right-of-use assets are measured at cost, less accumulated depreciation, any accumulated impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities initially recognized, initial direct costs incurred, and lease payments made at or before the commencement date of the lease less any lease incentives received.

Depreciation of right-of-use assets are calculated by reference to their costs, on the straight-line basis over the shorter of their estimated useful lives and the lease term.

Land	2 - 96 years
Buildings	2 - 99 years
Machinery and equipment	2 - 26 years
Motor vehicles	2 - 51 years
Others	2 - 58 years

If ownership of the leased asset is transferred to the Group at the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

Right-of-use assets which are classified as investment properties are presented as part of investment properties in the statement of financial position.

3. Accounting policies (Continued)

3.3 Accounting policies (Continued)

3.3.16 Leases (Continued)

The Group as a lessee (Continued)

Lease liabilities

Lease liabilities are measured at the present value of the lease payments to be made over the lease term. The lease payments include fixed payments less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be payable under residual value guarantees. Moreover, the lease payments include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for terminating the lease, if the lease term reflects the Group exercising an option to terminate. Variable lease payments that do not depend on an index or a rate are recognized as expenses in the period in which the event or condition that triggers the payment occurs.

The Group discounted the present value of the lease payments by the interest rate implicit in the lease or the Group's incremental borrowing rate. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a change in the lease term, a change in the lease payments or a change in the assessment of an option to purchase the underlying asset.

Short-term leases and leases of low-value assets

A lease that has a lease term less than or equal to 12 months from commencement date or a lease of low-value assets is recognized as expenses on a straight-line basis over the lease term.

The Group as a lessor

Finance leases

A lease that transfers substantially all the risks and rewards incidental to ownership of an underlying asset to a lessee is classified as finance leases. As at the commencement date, an asset held under a finance lease is recognized as a receivable at an amount equal to the net investment in the lease or the present value of the lease payments receivable and any unguaranteed residual value. Subsequently, finance income is recognized over the lease term to reflect a constant periodic rate of return on the net investment in the lease.

3. Accounting policies (Continued)

3.3 Accounting policies (Continued)

3.3.16 Leases (Continued)

The Group as a lessor (Continued)

Operating leases

A lease is classified as an operating lease if it does not transfer substantially all the risks and rewards incidental to ownership of an underlying asset to a lessee. Lease receivables from operating leases is recognized as income in profit or loss on a straight-line basis over the lease term. Initial direct costs incurred in obtaining an operating lease are added to the carrying amount of the underlying assets and recognized as an expense over the lease term on the same basis as the lease income.

3.3.17 Income taxes

Income taxes comprise of current tax and deferred tax.

Current tax

The Group calculates income tax on its non-promoted businesses pursuant to the Revenue Code of Thailand, the Petroleum Income Tax Act, B.E. 2514 Amendment, B.E. 2532 and B.E. 2560 and other laws and regulations related to corporate income tax of other countries in which the Group has invested.

Current tax is the expected tax payable on the taxable profit for the year, using tax rates enacted at the statements of financial position date in the taxable period, and any adjustment to tax payable in respect of previous years.

Deferred tax

Deferred tax is recognized in the statements of financial position using the liability method for temporary differences between tax base of assets and liabilities and the carrying amounts in the financial statements. The principal temporary differences in consolidated financial statements arise from property, plant and equipment, provisions for employee benefit, provision for decommissioning costs, and cumulative loss carried forward.

Deferred tax is measured using the tax rates enacted at the statements of financial position date.

The Group recognizes deferred tax liabilities for all taxable temporary differences. However, deferred tax assets are recognized for all deductible temporary differences and unused tax losses to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilized. The Group reviews the carrying amounts of deferred tax assets at the end of each reporting period and they are reduced to the extent that the tax benefits can be utilized.

3. Accounting policies (Continued)

3.3 Accounting policies (Continued)

3.3.17 Income taxes (Continued)

Deferred tax (Continued)

The Group recognized deferred tax as income or an expense and included in profit or loss for the year, except to the extent that the tax arises from a transaction or event which is recognized outside profit or loss, either in other comprehensive income or directly in equity, or a business combination.

Deferred tax assets and liabilities can only be offset if the entity has the legal right to settle on a net basis and the deferred tax balances relate to the same taxation authority.

The Group offsets deferred tax assets and deferred tax liabilities for presentation in the statement of financial position.

3.3.18 Advance payments for gas purchase under take-or-pay agreements

The Company has entered into gas purchase agreements with natural gas producers, under which the Company is required to take delivery of natural gas at annual minimum quantities. During each contract year, if the Company cannot accept natural gas according to the minimum quantities under the agreements, it is required to pay for the volume of natural gas which it cannot actually take (Take-or-Pay). After the end of each contract year, the Company and the natural gas producers have to agree on and accept the volume of gas that should be taken into the calculation of Take-or-Pay for that contract year, which is subject to the basis and conditions in the agreements. Under the agreements, the Company can take certain volumes of prepaid gas (Make-up) in subsequent years after taking delivery of natural gas at the minimum quantities for that given contract year. The Company recognizes its obligations under the agreements as advance payments for gas purchase.

3.3.19 Provision for decommissioning costs

The Group records a provision for decommissioning costs whenever it is highly probable that an obligation will arise as a result of a past event and the amount of the obligation can be reliably estimated.

The Group recognizes a provision for decommissioning costs based on an estimate of the eventual costs relate to the removal of petroleum exploration and production properties and plant and equipment. These costs are included as part of the cost of the assets and are amortized based on proved reserves using the unit of production method or the proved developed reserve and the straight-line method over the estimated useful lives of the assets, respectively. The estimates of decommissioning costs are determined based on reviews and estimates by the Group's engineers and management's judgment.

3. Accounting policies (Continued)

3.3 Accounting policies (Continued)

3.3.20 Provisions for employee benefits

Provisions for employee benefits of the Group are measured and recognized as follows:

- Short-term employee benefits are recognized in profit or loss as expenses when incurred.
- Post-employment benefits - defined contribution plans
The Group and its employees have jointly established a provident fund. The fund is monthly contributed by employees and by the Group. The fund's assets are held in a separate trust fund and the Group's contributions are recognized as expenses in profit or loss when incurred.
- Post-employment benefits - defined benefit plans
The provisions under the defined benefit plan is determined based on actuarial techniques, using the projected unit credit method, in order to determine present value of the provisions and be recognized as a liability in the statements of financial position. Current service cost, past service cost, net interest on the net defined benefit liability are recognized as expenses in profit or loss. Remeasurements of the net defined benefit liability or asset, including actuarial gains and losses are recognized in other comprehensive income and accumulated amounts are recognized as retained earnings in equity.
- Other long-term employment benefits
The provisions under the defined benefit plan is determined based on actuarial techniques, using the projected unit credit method, in order to determine present value of the provisions and be recognized as a liability in the statements of financial position. Current service cost, past service cost, net interest on the net defined benefit liability are recognized as expenses in profit or loss. Remeasurements of the net other long-term benefit liability or asset, including actuarial gains and losses are recognized in profit or loss immediately.
- Termination benefits are recognized as a liability and an expense when, and only when, the Company is demonstrably committed to either:
 - Terminate the employment of an employee or a group of employees before the normal retirement date; or
 - Provide termination benefits as a result of an offer made in order to encourage voluntary redundancy.

3. Accounting policies (Continued)

3.3 Accounting policies (Continued)

3.3.21 Revenue and expense recognition

Sales and service income

The Group recognizes revenue upon completion and the delivery of promised goods or services to customers at the transaction price which is entitled in exchange for transferring goods or services. Service income shall be recognized throughout the service duration with consideration to percentage of completion.

Interest income

Interest income is recognized using the effective interest rate ("EIR") method by multiplying initial carrying amount of the financial asset with EIR, except subsequently credit-impaired financial assets in which net carrying amount of such assets (net of allowance for expected credit loss) shall be multiplied by EIR.

Finance cost

Interest expenses arising from financial liabilities measured at amortized cost is calculated using the effective interest rate method.

Dividend income

Dividend income is recognized as revenue when rights on such dividend is obtained by the Group.

3.3.22 Government grants

Government grants, including non-monetary grants, are recognized where there is reasonable assurance that the recipient will comply with all attached conditions and that the grant will be received. The Group recognizes the grants as income on a systematic basis over the periods for which the costs that the government grants are compensating. The Group recognizes the grants as a part of income in profit or loss.

3. Accounting policies (Continued)

3.3 Accounting policies (Continued)

3.3.23 Financial instruments

The Group initially measures financial assets at its fair value plus, in the case of financial assets that are not measured at fair value through profit or loss, transaction costs. However, trade receivables, that do not contain a significant financing component, are measured at the transaction price as disclosed in the accounting policy relating to revenue recognition.

Classification and measurement of financial assets

Financial assets are classified, at initial recognition, as to be subsequently measured at amortized cost, fair value through other comprehensive income ("FVOCI"), or fair value through profit or loss ("FVTPL"). The classification of financial assets at initial recognition is driven by the Group's business model for managing the financial assets and the contractual cash flows characteristics of the financial assets.

Financial assets at amortized cost

The Group measures financial assets at amortized cost if the financial asset is held in order to collect contractual cash flows and the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets at amortized cost are subsequently measured using the effective interest rate ("EIR") method and are subject to impairment. Gains and losses are recognized in profit or loss when the asset is derecognized, modified, or impaired.

3. Accounting policies (Continued)

3.3 Accounting policies (Continued)

3.3.23 Financial instruments (Continued)

Classification and measurement of financial assets (Continued)

Financial assets at FVOCI (debt instruments)

The Group measures financial assets at FVOCI if the financial asset is held to collect contractual cash flows and selling and the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Interest income, gain or loss from foreign exchange revaluation and impairment losses or reversals are recognized in profit or loss and computed in the same manner as for financial assets measured at amortized cost. The remaining fair value changes are recognized in other comprehensive income. Upon derecognition, the cumulative fair value change recognized in other comprehensive income is recycled to profit or loss.

Financial assets designated at FVOCI (equity instruments)

Upon initial recognition, the Group can elect to irrevocably classify its equity investments which are not held for trading as equity instruments designated at FVOCI. The classification is determined on an instrument-by-instrument basis.

Gains and losses recognized in other comprehensive income on these financial assets are never recycled to profit or loss.

Dividends are recognized as other income in profit or loss, except when the dividends clearly represent a recovery of part of the cost of the financial asset, in which case, the gains are recognized in other comprehensive income.

Equity instruments designated at FVOCI are not subject to impairment assessment.

Financial assets at FVTPL

Financial assets measured at FVTPL are carried in the statement of financial position at fair value with net changes in fair value recognized in profit or loss.

These financial assets include derivatives, security investments held for trading, equity investments which the Group has not irrevocably elected to classify at FVOCI and financial assets with cash flows that are not solely payments of principal and interest.

Dividends on listed equity investments are recognized as other income in profit or loss.

3. Accounting policies (Continued)

3.3 Accounting policies (Continued)

3.3.23 Financial instruments (Continued)

Classification and measurement of financial liabilities

Except for derivative liabilities, at initial recognition the Group's financial liabilities are recognized at fair value net of transaction costs and classified as liabilities to be subsequently measured at amortized cost using the EIR method. Gains and losses are recognized in profit or loss when the liabilities are derecognized as well as through the EIR amortization process. In determining amortized cost, the Group takes into account any discounts or premiums on acquisition and fees or costs that are an integral part of the EIR. The EIR amortization is included in finance costs in profit or loss.

Recognition and derecognition of financial instruments

Regular way purchases and sales of financial assets are recognized or derecognized on the trade date, i.e., the date on which the Group becomes a party to contractual provisions of the instrument

A financial asset is primarily derecognized when the rights to receive cash flows from the asset have expired or have been transferred and either the Group has transferred substantially all the risks and rewards of the asset, or the Group has transferred control of the asset.

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognized in profit or loss.

Impairment of financial assets

The Group recognizes an allowance for expected credit losses ("ECLs") for all debt instruments not held at FVTPL. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate.

For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure (a lifetime ECL).

3. Accounting policies (Continued)

3.3 Accounting policies (Continued)

3.3.23 Financial instruments (Continued)

Impairment of financial assets (Continued)

The Group considers a significant increase in credit risk to have occurred when contractual payments are more than 30 days past due and considers a financial asset as credit impaired or default when contractual payments are 90 days past due. However, in certain cases, the Group may also consider a financial asset to have a significant increase in credit risk and to be in default using other internal or external information, such as credit rating of issuers.

For trade receivables, the Group applies a simplified approach in calculating ECLs. Therefore, the Group does not track changes in credit risk, but instead recognizes a loss allowance based on lifetime ECLs at each reporting date. ECLs are calculated based on its historical credit loss experience and adjusted for forward-looking factors specific to the debtors and the economic environment.

A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

Offsetting of financial instruments

Financial assets and financial liabilities are offset, and the net amount is reported in the statement of financial position if there is a currently enforceable legal right to offset the recognized amounts and there is an intention to settle on a net basis, to realize the assets and settle the liabilities simultaneously.

3.3.24 Derivatives and hedge accounting

The Group uses derivatives, such as forward currency contracts, cross currency swaps, interest rate swaps and commodity forward contracts, to hedge its foreign currency risks, interest rate risks and commodity price risks, respectively.

Derivatives are initially recognized at fair value on the date on which a derivative contract is entered into and are subsequently remeasured at fair value. The subsequent changes including interest income are recognized in profit or loss unless the derivative is designated and effective as a hedging instrument under cash flow hedge. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

3. Accounting policies (Continued)

3.3 Accounting policies (Continued)

3.3.25 Fair value measurement

The Group has measured fair value and disclosed the information relating to fair value measurement in accordance with TFRS 13 “Fair Value Measurement”. The guidance under this standard will be applied when the Group requires to measure any assets and liabilities at fair value under relevant standards.

Fair value is the price that would be received to sell an asset or paid to transfer liability in an orderly transaction between buyer and seller (market participants) at the measurement date. The Group applies a quoted market price in an active market to measure their assets and liabilities that are required to be measured at fair value by relevant financial reporting standards. Except in case of no active market of an identical asset or liability or when a quoted market price is not available, the Group measures fair value using valuation technique that are appropriate in the circumstances and maximises the use of relevant observable inputs related to assets and liabilities that are required to be measured at fair value.

Fair value hierarchy

In applying the above-mentioned valuation techniques, the Group endeavors to use relevant observable inputs as much as possible by determining a fair value hierarchy that categorizes inputs into three levels as follows:

- Level 1 Use of quoted market prices in an observable active market for such assets or liabilities
- Level 2 Use of other observable inputs for such assets or liabilities, whether directly or indirectly
- Level 3 Used of unobservable inputs for such assets or liabilities such as the Group's estimates of future cash flows

At the end of each reporting period, the Group determines whether transfers have occurred between levels within the fair value hierarchy for assets and liabilities held at the end of the reporting period that are measured at fair value on recurring basis.

3. Accounting policies (Continued)

3.4 Use of significant estimates and assumptions

The preparation of financial statements in conformity with Thai Financial Reporting Standards requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, income and expenses.

The estimates and underlying assumptions used in the preparation of financial statements are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

Information about significant estimates and assumptions are as follows:

3.4.1 Provisions

The Group recognizes a provision in the statements of financial position if, as a result of a past event, the Group has a present obligation that can be estimated reliably and it is probable that an outflow of economic benefits will be required to settle the obligation.

The Group records provisions for decommissioning costs when it is highly probable that a commitment will arise as a result of past circumstances and the amount can be estimated reliably. The Group recognizes the provisions for decommissioning costs based on estimated cost of decommissioning of completed construction that is ready for its intended use. These costs are recorded as assets and are amortized using the units of production method based on estimated proved reserves and the straight-line method over the estimated useful lives of the assets. The provision for decommissioning costs is determined based on reviews and estimates by the Group's engineers, together with the management's judgment.

The provisions are based on the current situation such as regulations, technologies and prices. The actual results could differ from these estimates as future confirming events occur.

3.4.2 Income tax

The Group is responsible for the payment of tax in various countries. In estimating income tax payable, the Group uses significant judgment since numerous transactions and calculations occur as a result of the Group's operations.

The Group recognizes income tax payable based on estimated incremental tax payments. Differences between the actual tax payments and the estimates affects income tax and deferred tax in the period the difference occurs.

A deferred tax asset is recognized when it is highly probable that the Group will have sufficient net income against which to utilize a temporary difference. Assumptions related to future taxable income are uncertain and may change, affecting the recognition of deferred tax assets.

3. Accounting policies (Continued)

3.4 Use of significant estimates and assumptions (Continued)

3.4.3 Estimates of petroleum reserves

Petroleum reserves are key elements in the petroleum exploration and production businesses' investment decision-making process. They are also important elements in testing for impairment. Changes in proved reserves will also affect the present value of the net cash flows and depreciation calculated using the unit-of-production method.

Proved reserves are the quantities of petroleum that are demonstrated with reasonable certainty to be commercially producible in future years from known reservoirs under existing economic and operating conditions including government rules and regulations. The proved reserves have to be examined and assessed annually by the Group's geologists and reservoir engineers.

3.4.4 Impairment of non-financial assets

The Group considers recording allowance for impairment of assets when events or circumstances indicate that the carrying amount of an asset is higher than its recoverable amount, which is the higher of the anticipated discounted cash flows from the continuing use of the asset or the fair value of the asset less any costs of disposal. The carrying amount of the asset is then written down immediately to its recoverable amount, with the decrease recorded in profit or loss. Losses on impairment of assets other than goodwill recognized in a prior period may be reversed if the estimate of an asset's recoverable amount changes.

The Group estimates future cash flows used in the evaluation for impairment of assets which relate to petroleum production are made with consideration of the risk assessment on field and reservoir performance which includes the estimate of proved and unproved reserves.

Estimates of discounted future cash flows used in considering asset impairment are dependent on various factors such as the expected amount of future production, future selling prices, demand and supply in the market, risk factors and gross margins. The discount rates used in calculating the present value of future cash flows depend on the cost of capital of the asset unit.

3.4.5 Consolidation of subsidiaries that Company holds less than half of shares

The management of the Company determined that the Company has control over many subsidiaries, even though the Company holds shares and voting rights that is less than half of shares and voting rights. This is because the Company is a major shareholder and has the ability to direct the significant activities, while other shareholders are only minor shareholders. Therefore, such companies are deemed to be subsidiaries of the Company and have to be included in the consolidated financial statements from the date on which the Company assumed control.

3. Accounting policies (Continued)

3.4 Use of significant estimates and assumptions (Continued)

3.4.6 Use of significant estimates and assumptions related to leases

Determining the lease term with extension and termination options - The Group as lessee

In determining the lease term, the management is required to exercise judgement in assessing whether the Group is reasonably certain to exercise the option to extend or terminate the lease considering all relevant facts and circumstances that create an economic incentive for the Group to exercise either the extension or termination option.

Estimating the incremental borrowing rate - The Group as lessee

The Group cannot readily determine the interest rate implicit in the lease, therefore, the management is required to exercise judgement in estimating its incremental borrowing rate to discount lease liabilities. The incremental borrowing rate is the rate of interest that the Group would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment.

Lease classification - The Group as lessor

In determining whether a lease is to be classified as an operating lease or finance lease, the management is required to exercise judgement as to whether significant risk and rewards of ownership of the leased asset has been transferred, taking into consideration terms and conditions of the arrangement.

4. Cash and cash equivalents

Cash and cash equivalents as at 31 December 2024 and 2023 are as follows:

	Unit: Million Baht			
	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Cash	122	142	11	12
Bank deposits	270,583	292,715	47,384	56,373
Fixed deposits within 3 months	101,426	110,799	24,376	25,797
Treasury bills	-	1,200	-	-
Bonds	18,766	5,388	7,091	5,388
Other investments	14,242	6,890	-	-
Total	405,139	417,134	78,862	87,570

Bank deposits, fixed deposits within 3 months, treasury bills, bonds and other investments as at 31 December 2024 bear the interest at rates ranging from 0.00% - 7.14% per annum (31 December 2023: interest rates ranging from 0.00% - 10.00% per annum). As at 31 December 2024, cash and cash equivalents are comprised of financial instruments which are rated as investment grade level (31 December 2023: rated as investment grade level).

During the years 2023 and 2024, the Group participated in the Green Deposit Project, under which the bank allocates the deposits to projects with a positive environmental impact. The Project also provides financial returns from the bank upon achieving the Group's agreed-upon ESG targets and includes an interest rate adjustment mechanism associated with the Group's performance in achieving these targets.

5. Short-term investments in financial assets

Short-term investments in financial assets as at 31 December 2024 and 2023 are as follows:

	Unit: Million Baht			
	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Fixed deposits	37,783	20,855	16,904	1,000
Bonds	3,161	6,707	2,808	5,910
Treasury bills	-	450	-	-
Other investments	5,048	4,380	4,022	344
Total	45,992	32,392	23,734	7,254

Short-term investments in financial assets as at 31 December 2024 bear the interest at rates ranging from 0.15% - 8.00% per annum (31 December 2023: interest at rates ranging from 0.00% - 6.37% per annum). As at 31 December 2024, short-term investments in financial assets are comprised of financial instruments which are rated as investment grade level (31 December 2023: rated as investment grade level).

6. Trade receivables

Trade receivables as at 31 December 2024 and 2023 are as follows:

Unit: Million Baht

	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Trade receivables - non-related parties	248,916	255,390	90,385	77,497
<u>Less</u> Allowance for expected credit loss	(3,150)	(3,168)	(174)	(167)
Trade receivables - non-related parties - net	245,766	252,222	90,211	77,330
Trade receivables - related parties (Note 9.1)	5,625	7,591	71,801	87,067
Total	251,391	259,813	162,012	164,397

Classified by aging as at 31 December 2024 and 2023 are as follows:

Unit: Million Baht

	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Within credit terms	233,085	249,587	152,391	162,268
Overdue				
- Within 1 month	13,651	6,575	9,422	1,876
- Over 1 - 2 months	2,503	1,319	70	250
- Over 2 - 3 months	1,535	1,334	166	36
- Over 3 - 12 months	939	1,140	34	82
- Over 12 months	2,828	3,026	103	52
Total	254,541	262,981	162,186	164,564
<u>Less</u> Allowance for expected credit loss	(3,150)	(3,168)	(174)	(167)
Total - net	251,391	259,813	162,012	164,397

Trade receivables - non-related parties - net as at 31 December 2024 include receivables from government agencies and state enterprises in the consolidated financial statements amounting to Baht 29,168 million (31 December 2023: Baht 17,255 million), and in the separate financial statements amounting to Baht 21,112 million (31 December 2023: Baht 15,359 million).

6. Trade receivables (Continued)

Trade receivables as at 31 December 2024 and 2023 are as follows: (Continued)

Movements in trade receivables - allowance for expected credit loss for the year ended 31 December 2024 and 2023 are as follows:

	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Balance as at 1 January	3,168	2,783	167	227
- Net increase (decrease)	44	415	7	(60)
- Gain on exchange rates	(10)	(7)	-	-
- Classified as assets held for sale	-	(22)	-	-
- Exchange differences on translation of financial statements	(52)	(1)	-	-
Balance as at 31 December	3,150	3,168	174	167

7. Other current receivables

Other current receivables as at 31 December 2024 and 2023 are as follows:

	Unit: Million Baht			
	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Other current receivables	43,464	53,053	5,086	6,928
<u>Less</u> Allowance for expected credit loss	(960)	(522)	(377)	(418)
Other current receivables	42,504	52,531	4,709	6,510
Advance payments	10,220	8,463	641	763
Refund receivable from the Oil Stabilization Fund	1,895	7,737	1,674	4,321
Current withholding tax receivable	7,728	7,338	-	-
Other current receivables - non-related parties - net	62,347	76,069	7,024	11,594
Other current receivables - related parties (Note 9.2)	215	1,219	1,522	2,776
Advance payments - related parties (Note 9.2)	207	137	24	34
Total	62,769	77,425	8,570	14,404

The refund receivable from the Oil Stabilization Fund mostly comprised of compensation for locally manufactured oil and liquefied petroleum gas (LPG) or imported LPG for local uses, as well as compensation for Natural Gas for Vehicles (NGV) prices. The compensation rates are determined by the Committee of Energy Policy Administration.

8. Lending

8.1 Short-term lending as at 31 December 2024 and 2023 are as follows:

Unit: Million Baht

	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Current portion of finance lease receivable - non-related parties	1,193	1,886	-	-
Current portion of finance lease receivable - related parties (Note 9.2)	-	1	68	67
Short-term lending - non-related parties	85	17	-	-
Short-term lending - related parties (Note 9.2)	929	312	3,059	35,844
Total	2,207	2,216	3,127	35,911

8.2 Long-term lending as at 31 December 2024 and 2023 are as follows:

Unit: Million Baht

	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Long-term finance lease receivable - non-related parties	1,173	2,164	-	-
Long-term finance lease receivable - related parties (Note 9.3)	-	2	34	103
Long-term lending - related parties (Note 9.3)	42,493	4,777	36,449	21,020
Total	43,666	6,943	36,483	21,123

As at 31 December 2024, lendings are mostly comprised of financial instruments with high credit rating (31 December 2023: comprised of financial instruments with high credit rating).

8. Lending (Continued)

8.3 Lending as at 31 December 2024 and 2023 including finance lease receivables are as follows:

Unit: Million Baht

	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Due date				
- Within 1 year	1,366	2,257	70	72
- Over 1 and up to 5 years	1,301	2,470	34	105
	2,667	4,727	104	177
<u>Less</u> Deferred interest	(301)	(674)	(2)	(7)
Total	2,366	4,053	102	170

9. Related party transactions

Significant transactions carried out with related parties are as follows:

9.1 Trade receivables - related parties as at 31 December 2024 and 2023

Unit: Million Baht

	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Subsidiaries	-	-	70,581	84,653
Joint ventures	3,290	4,409	669	1,613
Associates	2,333	2,940	551	561
Other related parties	2	242	-	240
Total (Note 6)	5,625	7,591	71,801	87,067

9. Related party transactions (Continued)

9.2 Other current receivables, advance payments, current portion of finance lease receivable, and short-term lending - related parties as at 31 December 2024 and 2023

Unit: Million Baht

	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
<u>Other current receivables</u>				
Subsidiaries	-	-	1,456	2,761
Joint ventures	199	1,207	66	15
Associates	16	12	-	-
Total (Note 7)	215	1,219	1,522	2,776
<u>Advance payments</u>				
Subsidiaries	-	-	24	34
Joint ventures	207	137	-	-
Total (Note 7)	207	137	24	34
<u>Current portion of finance lease receivable</u>				
Subsidiaries	-	-	68	67
Joint ventures	-	1	-	-
Total (Note 8.1)	-	1	68	67
<u>Short-term lending</u>				
Subsidiaries	-	-	3,059	35,844
Joint ventures	929	312	-	-
Total (Note 8.1)	929	312	3,059	35,844

9. Related party transactions (Continued)

9.2 Other current receivables, advance payments, current portion of finance lease receivable, and short-term lending - related parties as at 31 December 2024 and 2023 (Continued)

Movements in short-term lending - related parties are as follows:

	Unit: Million Baht			
	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Balance as at 1 January	258	45	481	682
- Increase (decrease)	620	212	2,724	(192)
- Reclassification	15	-	-	-
- Gain (loss) on exchange rates	(5)	5	(152)	(9)
- Exchange differences on translation of financial statements	(26)	(4)	-	-
Balance as at 31 December	862	258	3,053	481
<u>Add</u> Current portion (Note 9.3)	67	54	6	35,363
Balance as at 31 December - net	929	312	3,059	35,844

Short-term lending - related parties as at 31 December 2024 in the consolidated financial statements bear interest rates ranging from 1.20% - 8.10% per annum (31 December 2023: 1.20% - 7.25% per annum), and in the separate financial statements bear interest rate at 3.98% per annum (31 December 2023: 4.78% per annum).

9.3 Long-term finance lease receivable and long-term lending - related parties as at 31 December 2024 and 2023

	Unit: Million Baht			
	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
<u>Long-term finance lease receivable</u>				
Subsidiaries	-	-	34	103
Joint ventures	-	2	-	-
Total (Note 8.2)	-	2	34	103

9. Related party transactions (Continued)

9.3 Long-term finance lease receivable and long-term lending - related parties as at 31 December 2024 and 2023
(Continued)

Unit: Million Baht

	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
<u>Long-term lending</u>				
Subsidiaries	-	-	36,449	21,020
Joint ventures	37,201	262	-	-
Associates	5,292	4,515	-	-
Total (Note 8.2)	42,493	4,777	36,449	21,020

Movements in long-term lending - related parties are as follows:

Unit: Million Baht

	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Balance as at 1 January	4,831	4,771	56,383	57,428
- Loans granted	22,053	1,907	19,174	30
- Repayment received	(2,658)	(932)	(39,102)	(1,075)
- Gain (loss) on exchange rates	1,333	(35)	-	-
- Disposal of a subsidiary	19,051	-	-	-
- Exchange differences on translation of financial statements	(2,050)	(880)	-	-
Balance as at 31 December	42,560	4,831	36,455	56,383
<u>Less Current portion (Note 9.2)</u>	(67)	(54)	(6)	(35,363)
Balance as at 31 December - net	42,493	4,777	36,449	21,020

Long-term lending - related parties as at 31 December 2024 in the consolidated financial statements bear interest rates ranging from 3.90% - 11.72% per annum (31 December 2023: 3.90% - 11.72% per annum), and in the separate financial statements bear interest rates ranging from 3.17% - 4.43% per annum (31 December 2023: 1.42% - 4.43% per annum).

9. Related party transactions (Continued)

9.4 Trade payables - related parties as at 31 December 2024 and 2023

Unit: Million Baht

	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Subsidiaries	-	-	42,995	57,847
Joint ventures	1,191	601	719	290
Associates	328	347	-	-
Other related parties	7	43	-	-
Total (Note 24)	1,526	991	43,714	58,137

9.5 Other current payables, current portion of lease liabilities and short-term borrowings - related parties as at 31 December 2024 and 2023

Unit: Million Baht

	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
<u>Other current payables</u>				
Subsidiaries	-	-	6,860	7,353
Joint ventures	1,382	1,028	32	37
Associates	150	177	9	9
Other related parties	1	33	-	32
Total (Note 25)	1,533	1,238	6,901	7,431
<u>Current portion of lease liabilities</u>				
Subsidiaries	-	-	217	120
Joint ventures	2,144	2,116	464	453
Total	2,144	2,116	681	573

9. Related party transactions (Continued)

9.5 Other current payables, current portion of lease liabilities and short-term borrowings - related parties as at 31 December 2024 and 2023 (Continued)

Unit: Million Baht

	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
<u>Short-term borrowings*</u>				
Subsidiaries	-	-	16,819	18,297
Joint ventures	8,147	6,500	-	-
Total (Note 27.1)	8,147	6,500	16,819	18,297

* The Company has liquidity management policies within the Group include the use of the cash pooling method. Inter-company borrowings were used for short-term financial management of cash surpluses or deficits of each affiliate. Interests on these were calculated by using market interest rates.

9.6 Lease liabilities and long-term borrowings - related parties as at 31 December 2024 and 2023

Unit: Million Baht

	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
<u>Lease liabilities</u>				
Subsidiaries	-	-	2,839	546
Joint ventures	20,046	21,798	1,603	1,860
Total	20,046	21,798	4,442	2,406
<u>Long-term borrowings</u>				
Subsidiaries	-	-	48,457	49,379

9. Related party transactions (Continued)

9.6 Lease liabilities and long-term borrowings - related parties as at 31 December 2024 and 2023 (Continued)

Movements in long-term borrowings - related parties are as follows:

	Unit: Million Baht	
	Separate	
	financial statements	
	2024	2023
Balance as at 1 January	49,379	50,260
- Repayments	-	(16)
- Amortized discount	3	6
- Gain on exchange rates	(925)	(871)
Balance as at 31 December	48,457	49,379
<u>Less</u> Current portion	-	-
Balance as at 31 December - net	48,457	49,379

Long-term borrowings - related parties as at 31 December 2024 in the separate financial statements bear interest rates ranging from 4.20% - 6.38% per annum (31 December 2023: 4.20% - 6.38% per annum).

9. Related party transactions (Continued)

9.7 Revenue and expense transactions carried out with related parties

For the years ended 31 December 2024 and 2023

Unit: Million Baht

	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Revenue				
<u>Sales and service income</u>				
Subsidiaries	-	-	1,068,727	1,142,099
Joint ventures	34,549	34,293	13,782	14,420
Associates	24,261	24,920	4,254	5,145
Other related parties	27	2,621	-	2,595
<u>Interest income</u>				
Subsidiaries	-	-	1,629	1,657
Joint ventures	1,406	88	-	-
Associates	565	384	-	-
<u>Other income</u>				
Subsidiaries	-	-	11,133	10,275
Joint ventures	659	365	80	63
Associates	243	242	21	19
Other related parties	4	37	4	37

9. Related party transactions (Continued)

9.7 Revenue and expense transactions carried out with related parties (Continued)

For the years ended 31 December 2024 and 2023

	Unit: Million Baht			
	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Expenses				
<u>Cost of goods purchased and services</u>				
Subsidiaries	-	-	525,779	568,749
Joint ventures	10,324	6,676	4,752	1,652
Associates	4,006	2,431	15	6
Other related parties	121	178	-	-
<u>Interest expenses</u>				
Subsidiaries	-	-	2,713	2,331
Joint ventures	820	677	28	33
<u>Other expenses</u>				
Subsidiaries	-	-	3,938	4,088
Joint ventures	2,857	311	3	4
Associates	618	112	-	-
Other related parties	114	267	10	16

9. Related party transactions (Continued)

9.8 Significant purchases and sales of investment properties, property, plant and equipment, right-of-use assets and other intangible assets other than goodwill transactions carried out with related parties

For the years ended 31 December 2024 and 2023

Unit: Million Baht

	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
<u>Purchases</u>				
Subsidiaries	-	-	-	43
Joint ventures	471	428	-	-
Other related parties	1	-	-	-
<u>Sales</u>				
Subsidiaries	-	-	1	55

The aforementioned related party transactions exclude transactions carried out with government agencies and state enterprises.

Stipulation prices between the Company and its related parties are based on normal prices for the same types of business transactions carried out with non-related parties.

9.9 Details of commitments to related parties are stated in Note 41.1.

9. Related party transactions (Continued)

9.10 Executive remunerations

For the years ended 31 December 2024 and 2023

Unit: Million Baht

	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
<u>Directors remuneration</u>				
Meeting remuneration and bonuses	462	424	77	69
<u>Managements remuneration</u>				
Salaries, bonuses, and other employee				
benefits	1,193	1,338	100	95
Post-employment benefits	37	25	2	2
Total	1,692	1,787	179	166

Managements are those persons who have authority and responsibility for planning, directing and controlling the activities of an entity, directly or indirectly.

10. Inventories

Inventories as at 31 December 2024 and 2023 are as follows:

	Unit: Million Baht			
	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Oil products	123,363	144,530	19,796	20,424
Gas products	5,821	6,030	5,365	5,550
Petrochemicals products	48,548	50,207	243	819
Others	11,517	14,999	585	585
	189,249	215,766	25,989	27,378
<u>Less</u> Allowance for decline in value of inventories and obsolescence	(1,916)	(4,767)	(360)	(1,517)
Total	187,333	210,999	25,629	25,861

The Fuel Oil Trading Act B.E. 2543 was amended by The Fuel Oil Trading Act (No.2) B.E. 2550 in accordance with Notification of the Department of Energy Business “Determination of Types, Rates, Criteria, Methods, and Conditions for Calculation of Oil Reserves B.E. 2558”. This Act prescribes that oil traders under section 7 must reserve crude oil and petroleum products at rates ranging from 1% - 20% of the total production output or imported volume. Inventories - legal reserves as at 31 December 2024 in the consolidated financial statements amounting to Baht 33,796 million (31 December 2023: Baht 33,176 million), and in the separate financial statements amounting to Baht 1,111 million (31 December 2023: Baht 1,106 million). These amounts were net of allowance for net realizable value.

Inventories that are measured at fair value less costs to sell through profit or loss as at 31 December 2024 in the consolidated financial statements amounting to Baht 27,846 million (31 December 2023: Baht 19,139 million) and in the separate financial statements amounting to Baht 18,742 million (31 December 2023: Baht 18,756 million).

11. Supplies

Supplies as at 31 December 2024 and 2023 are as follows:

	Unit: Million Baht			
	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Spare parts, equipment and others	55,605	53,724	6,090	5,888
<u>Less</u> Allowance for obsolescence	(1,399)	(1,224)	(193)	(132)
Total	54,206	52,500	5,897	5,756

12. Other current assets

Other current assets as at 31 December 2024 and 2023 are as follows:

	Unit: Million Baht			
	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Retention & refundable deposits - non-financial assets	1,577	795	-	-
Deferred input VAT	5,355	6,829	2,146	2,585
Other - non-financial assets	2,982	4,931	-	1
Total	9,914	12,555	2,146	2,586

13. Other long-term investments in financial assets

13.1 Details of other long-term investments in financial assets as at 31 December 2024 and 2023 :

	Consolidated financial statements				Separate financial statements			Unit: Million Baht
	Other long-term investments in financial assets after changes in value of investments		Dividend income		Other long-term investments in financial assets after changes in value of investments		Dividend income	
	2024	2023	2024	2023	2024	2023	2024	
Investment at fair value through profit or loss								
Other Equity securities	3,558	3,099	4	4	-	-	-	-
Foreign unit trust in mutual funds	219	426	-	-	-	120	-	-
Domestic unit trust in mutual funds	826	970	20	24	275	328	7	8
Other debt securities	223	180	-	-	-	-	-	-
Total investment at fair value through profit or loss	4,826	4,675	24	28	275	448	7	8
Investment at fair value through other comprehensive income								
Foreign unit trust in Corporate Venture Capital funds (CVC)	3,950	3,448	3	19	2,213	2,260	2	19
Listed equity instruments	2,550	3,819	149	126	1,664	2,320	128	101
Non-listed equity instruments	37,458	32,948	1,688	2,017	1,215	1,544	-	-
Domestic private debt securities	523	842	-	-	-	-	-	-
Total investment at fair value through other comprehensive income	44,481	41,057	1,840	2,162	5,092	6,124	130	120
Investment at amortized cost								
Domestic private debt securities	2,986	-	-	-	2,986	-	-	-
Total investment at amortized cost	2,986	-	-	-	2,986	-	-	-
Total other long-term investments in financial assets	52,293	45,732	1,864	2,190	8,353	6,572	137	128

Equity instruments designated at FVOCI include listed and non-listed equity investments which the Group considers these investments to be strategic in nature.

As at 31 December 2024, investment at fair value through other comprehensive income - debt securities are rated in investment grade level.

13. Other long-term investments in financial assets (Continued)

13.2 Movements in investment at fair value through profit or loss during the year ended 31 December 2024 and 2023 are as follows:

	Unit: Million Baht			
	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Book value at the beginning of year	4,675	4,034	448	395
- Additional investments	66	266	-	124
- Disposals of investments	(179)	-	(135)	-
- Fair value adjustment of investments	532	392	(38)	(71)
- Reclassifications	(70)	-	-	-
- Exchange differences on translation of financial statements	(198)	(17)	-	-
Total investment at fair value through profit or loss at 31 December	4,826	4,675	275	448

13. Other long-term investments in financial assets (Continued)

13.3 Movements in investment at fair value through other comprehensive income during the year ended 31 December 2024 and 2023 are as follows:

Unit: Million Baht

	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Book value at the beginning of year	41,057	44,441	6,124	7,016
- Additional investments	2,878	1,887	352	644
- Disposals of investments	(2,741)	(1,785)	(233)	(12)
- Fair value adjustment of investments	3,470	(3,319)	(1,151)	(1,524)
- Reclassifications	97	-	-	-
- Exchange differences on translation of financial statements	(280)	(167)	-	-
Total investment at fair value through other comprehensive income at 31 December	44,481	41,057	5,092	6,124

13.4 Movements in investment at amortized cost during the year ended 31 December 2024 and 2023 are as follows:

Unit: Million Baht

	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Book value at the beginning of year	-	5,618	-	5,618
- Additional investments	5,790	350	5,790	350
- Loss on exchange rates	-	(50)	-	(50)
- Amortized (premium) discount	4	(8)	4	(8)
- Reclassifications	(2,808)	(5,910)	(2,808)	(5,910)
Total investment at amortized cost at 31 December	2,986	-	2,986	-

14. Investments in subsidiaries, joint ventures and associates

14.1 Details of subsidiaries and joint operations of the subsidiaries

Company name	Country of Incorporation	Business	Ownership interest (%)	
			2024	2023
<u>Subsidiaries of PTTEP Group:</u>				
PTTEP International Limited (PTTEPI)	Thailand	Petroleum	100.00	100.00
PTTEP Offshore Investment Company Limited (PTTEPO)	Cayman Islands	Petroleum	100.00	100.00
PTTEP Southwest Vietnam Company Limited (PTTEP SV)	Cayman Islands	Petroleum	100.00	100.00
PTTEP Kim Long Vietnam Company Limited (PTTEP KV)	Cayman Islands	Petroleum	100.00	100.00
PTTEP Hoang-Long Company Limited (PTTEP HL)	Cayman Islands	Petroleum	100.00	100.00
PTTEP Hoan-Vu Company Limited (PTTEP HV)	Cayman Islands	Petroleum	100.00	100.00
PTTEP Algeria Company Limited (PTTEP AG)	Cayman Islands	Petroleum	100.00	100.00
PTTEP Services Limited (PTTEP Services)	Thailand	Human resource support	100.00	100.00
PTTEP Siam Limited (PTTEPS)	Thailand	Petroleum	100.00	100.00
PTTEP Holding Company Limited (PTTEPH)	Cayman Islands	Petroleum	100.00	100.00
PTTEP Indonesia Company Limited (PTTEP ID)	Cayman Islands	Petroleum	100.00	100.00
PTTEP Africa Investment Limited (PTTEP AI)	Cayman Islands	Petroleum	100.00	100.00
PTTEP South Asia Limited (PTTEP SA)	Cayman Islands	Petroleum	100.00	100.00
PTTEP Australia Perth Pty Limited (PTTEP AP)	Australia	Petroleum	100.00	100.00
PTTEP International Holding Company Limited (PTTEP IH)	Cayman Islands	Petroleum	100.00	100.00

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.1 Details of subsidiaries and joint operations of the subsidiaries (Continued)

Company name	Country of Incorporation	Business	Ownership interest (%)	
			2024	2023
<u>Subsidiaries of PTTEP Group: (Continued)</u>				
PTTEP Southwest Vietnam Pipeline Company Limited (PTTEP SVPC)	Cayman Islands	Gas transmission pipelines	100.00	100.00
PTTEP Netherland Holding Limited (PTTEP NL)	Cayman Islands	Petroleum	100.00	100.00
JV Marine Limited (JV Marine)	Cayman Islands	Petroleum	100.00	100.00
PTTEP Malunda Limited (PTTEP ML)	Cayman Islands	Petroleum	100.00	100.00
PTTEP Netherlands Coöperatie U.A. (PTTEP NC)	Netherlands	Petroleum	100.00	100.00
PTTEP Canada Limited (PTTEP CA)	Canada	Petroleum	100.00	100.00
PTTEP HK Holding Limited (PTTEP HK)	Hong Kong	Petroleum	100.00	100.00
PTTEP Netherlands Holding Coöperatie U.A. (PTTEP NH)	Netherlands	Petroleum	100.00	100.00
PTTEP Brazil Investment B.V. (PTTEP BI)	Netherlands	Petroleum	100.00	100.00
PTTEP Australia Browse Basin Pty Ltd (PTTEP AB)	Australia	Petroleum	100.00	100.00
PTTEP Australia Timor Sea Pty Ltd (PTTEP AT)*	Australia	Petroleum	100.00	100.00
PTTEP Australasia (Operations) Pty Ltd (PTTEP AAO)	Australia	Petroleum	100.00	100.00
PTTEP Australasia (Ashmore Cartier) Pty Ltd (PTTEP AAA)	Australia	Petroleum	100.00	100.00
PTTEP Australasia (Staff) Pty Ltd (PTTEP AAS)**	Australia	Petroleum	-	100.00
Cove Energy Limited (Cove)	England	Petroleum	100.00	100.00
Cove Energy East Africa Limited (CEEAL)***	Cyprus	Petroleum	100.00	100.00
PTTEP Mozambique Area 1 Limited (PTTEP MZA1)***	Cyprus	Petroleum	100.00	100.00

* On 1 April 2024, PTTEP AT was approved for deregistration and is currently in the process of dissolution.

** On 2 March 2024, PTTEP AAS has registered its dissolution and the liquidation process has been completed.

*** As at 31 December 2024, CEEAL has pledged all of its 0.21 million shares in PTTEP MZA1 as collateral with a financial institution.

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.1 Details of subsidiaries and joint operations of the subsidiaries (Continued)

Company name	Country of Incorporation	Business	Ownership interest (%)	
			2024	2023
<u>Subsidiaries of PTTEP Group:</u> (Continued)				
Sinphuhorm Holdings Limited (SHL)	Cayman Islands	Petroleum	100.00	100.00
PTTEP SP Limited (PTTEP SP)	England	Petroleum	100.00	100.00
PTTEP HK Offshore Limited (PTTEP HKO)	Hong Kong	Petroleum	100.00	100.00
PTTEP Treasury Center Company Limited (PTTEP TC)	Thailand	Treasury center for the Group's business	100.00	100.00
PTTEP Business Center Company Limited (PTTEP BC)	Thailand	Petroleum	100.00	100.00
PTTEP Mexico E&P Limited, S. de R.L. de C.V. (PTTEP MEP)	Mexico	Petroleum	100.00	100.00
PTTEP Energy Holding (Thailand) Company Limited (PTTEP EH)	Thailand	Petroleum	100.00	100.00
PTTEP Energy Development Company Limited (PTTEP ED)	Thailand	Petroleum	100.00	100.00
EP-Tech Ventures Holding Company Limited (EP-Tech)	Thailand	Petroleum related Technology	100.00	100.00
AI and Robotics Ventures Company Limited (ARV)	Thailand	Technology	100.00	100.00
PTTEP MENA Limited (PTTEP MENA)	Hong Kong	Petroleum	100.00	100.00
PTTEP Sabah Oil Limited (PTTEP SBO)	Bahamas	Petroleum	100.00	100.00
PTTEP Sarawak Oil Limited (PTTEP SKO)	Bahamas	Petroleum	100.00	100.00
PTTEP Group Holding B.V. (PGH)	Netherlands	Petroleum	100.00	100.00
PTTEP (Kazakhstan) Corporation (PKC)	Cayman Islands	Petroleum	100.00	100.00
PTTEP (Angola) Corporation (PANG)*	Cayman Islands	Petroleum	100.00	100.00
PTTEP Gas Corporation (PGC)	Panama	Petroleum	100.00	100.00
Partex Services Corporation (PSC)	Panama	Human resource support	100.00	100.00
PTTEP Oman E&P Corporation (POC)	Panama	Petroleum	100.00	100.00
Asia Power and Transportation SG Holding Pte. Ltd. (APT)	Singapore	Petroleum related business	100.00	100.00

* On 24 April 2024, PANG was approved for deregistration and is currently in the process of dissolution.

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.1 Details of subsidiaries and joint operations of the subsidiaries (Continued)

Company name	Country of Incorporation	Business	Ownership interest (%)	
			2024	2023
<u>Subsidiaries of PTTEP Group: (Continued)</u>				
Cariva (Thailand) Company Limited (CARIVA)*	Thailand	Technology	85.00	100.00
Delta Gas Transportation SG Holding Pte. Ltd. (DGH)	Singapore	Gas pipeline service	100.00	100.00
Rovula (Thailand) Company Limited (ROVULA)	Thailand	Technology	100.00	100.00
Skyller Solutions Company Limited (SKYLLER)	Thailand	Technology	100.00	100.00
Varuna (Thailand) Company Limited (VARUNA)**	Thailand	Technology	81.82	90.00
Delta Gas Transportation Limited (DGT)	Myanmar	Gas pipeline service	100.00	100.00
FutureTech Energy Ventures Company Limited (FTEV)	Thailand	Renewable energy business and new related business	100.00	100.00
FutureTech Solar (Thailand) Company Limited (FST)	Thailand	Solar energy business	100.00	100.00
Xplor Ventures Company Limited (XPV)	Thailand	Technology and innovation	100.00	100.00
Bedrock Analytics Company Limited (BEDROCK)	Thailand	Technology	100.00	100.00
Bind Systems Company Limited (BIND)	Thailand	Technology	100.00	100.00
S2 Robotics Co., Ltd. (S2)	Thailand	Technology	85.13	85.13
FutureTech SG Pte. Ltd. (FSG)	Singapore	Renewable energy business and new related business	100.00	100.00
PTTEP Joint Ventures Company Limited (PTTEP JV)	Thailand	Petroleum	100.00	-
PTTEP Joint Development Company Limited (PTTEP JD)	Thailand	Petroleum	100.00	-
PTTEP SG HOLDING PTE. LTD. (PTTEP SH)	Singapore	Petroleum	100.00	-
<u>Subsidiaries of PTTNGD Group:</u>				
Amata Natural Gas Distribution Co., Ltd. (AMATA NGD)	Thailand	Natural gas	80.00	80.00

* On 9 April 2024, CARIVA issued additional ordinary shares with other investors participating. As a result, the Group's shareholding in CARIVA decreased from 100% to 85%. However, CARIVA remains a subsidiary of the Group.

** On 29 March 2024, VARUNA issued additional ordinary shares with other investors participating. As a result, the Group's shareholding in VARUNA decreased from 90% to 81.82%. However, VARUNA remains a subsidiary of the Group.

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.1 Details of subsidiaries and joint operations of the subsidiaries (Continued)

Company name	Country of Incorporation	Business	Ownership interest (%)	
			2024	2023
<u>Subsidiaries of PTTLNG Group:</u>				
PE LNG Co.,Ltd. (PE LNG)*	Thailand	Provide management and maintenance services of port, LNG storage and LNG station. Cooling management and other related businesses.	-	100.00
<u>Subsidiaries of GPSC Group:</u>				
Combined Heat and Power Producing Co., Ltd. (CHPP)	Thailand	Production and distribution of electricity and chilled water/construction and installation of electricity generating system	100.00	100.00
Natee Synergy Co., Ltd. (NSC)	Thailand	Investing in other business	100.00	100.00
IRPC Clean power Co.,Ltd. (IRPCCP) (The Group holds 100% shareholding)	Thailand	Production and distribution of electricity, steam and water for industrial purpose	51.00	51.00
Houay Ho Power Company Limited (HHPC)**	Lao	Production and distribution of electricity power to EGAT and EDL	67.25	67.25
Glow Energy Public Company Limited (GEN)	Thailand	Production and distribution of electricity	99.83	99.83
GPSC Holding (Thailand) Co., Ltd. (GHT)	Thailand	Investing in other business	100.00	100.00
Energy Recovery Unit Co., Ltd. (ERU)	Thailand	Production and distribution of electricity	100.00	100.00

* On 30 April 2024, PTTLNG sold a 50% shares in its investment in PE LNG to EGAT and reclassified the investment from a subsidiary to a joint venture.

** During 2024, HHPC has repaid the final installment of its long-term loan to the financial institution and completed the process of releasing the collateral.

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.1 Details of subsidiaries and joint operations of the subsidiaries (Continued)

Company name	Country of Incorporation	Business	Ownership interest (%)	
			2024	2023
<u>Subsidiaries of GPSC Group: (Continued)</u>				
Glow Company Limited (GCO)	Thailand	Consultant management service for related companies	100.00	100.00
Glow SPP 2 Company Limited (GSPP2)	Thailand	Production and distribution of electricity power and steam for industrial	100.00	100.00
Glow SPP 3 Company Limited (GSPP3)	Thailand	Production and distribution of electricity power, steam and water for industrial	100.00	100.00
Glow SPP 11 Company Limited (GSPP11)	Thailand	Production and distribution of electricity power and water for industrial	100.00	100.00
Glow IPP 3 Company Limited (GIPP3)	Thailand	Production and distribution of electricity power, steam and water for industrial	100.00	100.00
Glow IPP 2 Holding Company Limited (GIPP2)	Thailand	Investing in other business	100.00	100.00
Houay Ho Thai Company Limited (HHTC)	Thailand	Investing in other business	49.00	49.00
Glow IPP Company Limited (GIPP)	Thailand	Production and distribution of electricity to EGAT	95.00	95.00
GHECO-One Company Limited (GHECO1)*	Thailand	Production and distribution of electricity power to EGAT	65.00	65.00
Glow Energy Myanmar Company Limited (GEMM)**	Myanmar	Technical consultants for electricity businesses	100.00	100.00
GPSC Treasury Center Company Limited (GPSTC)	Thailand	Financial service	100.00	100.00
Global Renewable Synergy Company Limited (GRSC)	Thailand	Investing in other business	100.00	100.00
Global Renewable Synergy Company Limited Taiwan (GRSCTW)	Taiwan	Investing in other business	100.00	100.00
BoreePlus Company Limited (BOREEPLUS)	Thailand	Wind power project development	51.00	51.00
EurusPlus Company Limited (EURUSPLUS)	Thailand	Wind power project development	51.00	51.00

* On 31 December 2024 and 2023, GPSC group had pledged the ordinary shares certificate of GHECO1 as collateral for their long term loans.

** During the fourth quarter of 2022, GEMM has registered its dissolution and currently on the process of liquidation.

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.1 Details of subsidiaries and joint operations of the subsidiaries (Continued)

Company name	Country of Incorporation	Business	Ownership interest (%)	
			2024	2023
<u>Subsidiaries of GPSC Group:</u> (Continued)				
Helios 1 Company Limited (HELIOS1)	Thailand	Production and distribution of electricity	50.00	50.00
Helios 2 Company Limited (HELIOS2)	Thailand	Production and distribution of electricity	50.00	50.00
Helios 3 Company Limited (HELIOS3)	Thailand	Production and distribution of electricity	50.00	50.00
Helios 4 Company Limited (HELIOS4)	Thailand	Production and distribution of electricity	50.00	50.00
Helios 5 Company Limited (HELIOS5)*	Thailand	Production and distribution of electricity	-	50.00
WindPower Development Co.,Ltd. (WPD)	Thailand	Develop electrical energy production projects	51.00	51.00
CoolConnex Company Limited (CCN)	Thailand	Refrigeration and Cooling Business and Supporting Services	51.00	-
Global Renewable Power Co., Ltd. (GRP)**	Thailand	Production, distribution of electricity and management	100.00	-
Global Renewable Power 1 Co.,Ltd. (GRP1)**	Thailand	Investing in other business	100.00	-
Global Renewable Power Operating Co., Ltd. (GRPO)**	Thailand	Provides management and consultancy services for solar power projects.	100.00	-
World X Change Asia Company Limited (WXA)**	Thailand	Production and distribution of electricity	100.00	-
P.P. Solar Company Limited (PPS)**	Thailand	Production and distribution of electricity	100.00	-
N.P.S. Stargroup Company Limited (NPS)**	Thailand	Production and distribution of electricity	100.00	-
Sheng Yang Energy Co., Ltd. (SYE)**	Taiwan	Solar power plant	90.00	-
Global Renewable Power China (Shanghai) Co.,Ltd. (GRPCHINA)**	China	Renewable energy	100.00	-

* On 26 March 2024, HELIOS5 has registered its dissolution and the liquidation process has been completed.

** On 16 October 2024, PTTGM sold its common shares of GRP (including the subsidiaries of GRP) to the GPSC group.

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.1 Details of subsidiaries and joint operations of the subsidiaries (Continued)

Company name	Country of Incorporation	Business	Ownership interest (%)	
			2024	2023
<u>Subsidiaries of OR Group:</u>				
PTT Retail Management Co., Ltd. (PTTRM)	Thailand	Petrol station and convenience store management	100.00	100.00
PTT Retail Service Co., Ltd. (PTTRS)	Thailand	Human resource management	100.00	100.00
Thai Lube Blending Co., Ltd. (TLBC)	Thailand	Blending and bottling of lube oil	100.00	100.00
PTT Philippines Trading Corporation (PTTTC)	Philippines	Oil marketing	100.00	100.00
PTT Philippines Corporation (PTTPC)	Philippines	Oil marketing	100.00	100.00
PTT (Cambodia) Limited (PTTCL)	Cambodia	Oil marketing	100.00	100.00
PTT (Lao) Co., Ltd. (PTT Lao)	Lao	Oil marketing	100.00	100.00
PTTOR China (Shanghai) Co., Ltd. (PTTOR China)	China	Lube products	100.00	100.00
PTTOR Singapore Pte. Ltd. (PTTORSG)	Singapore	Retail business	100.00	100.00
PTTOR Holdings Company Limited (ORHOLDCO)	Thailand	Holding company	100.00	100.00
PTTOR International Holdings (Singapore) Pte. Ltd. (SGHOLDCO)	Singapore	Holding company	100.00	100.00
Modulus Venture Company Limited (MODULUS)	Thailand	Holding company	100.00	100.00
Peaberry Thai Company Limited (PEABERRYTHAI)	Thailand	Coffee and beverage business	81.00	81.00
Care For Car Co., Ltd. (CFC)	Thailand	Online car services	100.00	100.00
ORZON VENTURES, L.P. (ORZON)	United States of America	Holding company	99.00	99.00
Blue Wealth Land 1 Company Limited (BWL1)	Cambodia	Real estate	49.00	49.00
Blue Wealth Land 2 Company Limited (BWL2)	Cambodia	Real estate	49.00	49.00

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.1 Details of subsidiaries and joint operations of the subsidiaries (Continued)

Company name	Country of Incorporation	Business	Ownership interest (%)	
			2024	2023
<u>Subsidiaries of OR Group: (Continued)</u>				
PTTOR LAO IMPORT AND EXPORT CO., LTD (LAOIMEXCO)	Laos	Oil marketing	100.00	100.00
Happy Nest Space Co., Ltd. (HNS)	Thailand	Human resources management	100.00	-
OR Health & Wellness Co., Ltd. (ORHW)	Thailand	Health and beauty business	100.00	-
OR Vietnam Limited Liability Company (ORVN)	Vietnam	Management consulting services	100.00	-
<u>Subsidiaries of PTTT Group:</u>				
PTT MEA Ltd. (PTTMEA)	United Arab Emirates	International trading	100.00	100.00
<u>Subsidiaries of PTTGC Group:</u>				
PTT Phenol Co., Ltd. (PPCL)*	Thailand	Manufacturing and distributing petrochemical products	100.00	100.00
GC Maintenance & Engineering Co., Ltd. (GCME)	Thailand	Factory maintenance and engineering services	100.00	100.00
NPC Safety and Environmental Service Co., Ltd. (NPC)	Thailand	Safety and environmental services	100.00	100.00
GC Styrenics Co., Ltd. (GCS)**	Thailand	Manufacturing and distributing petrochemical products	100.00	100.00
PTTGC International (Netherlands) B.V. (GCINTERNL)	Netherlands	Holding and operating international business	100.00	100.00
GC Glycol Co., Ltd. (Glycol)**	Thailand	Manufacturing and distributing petrochemical products	100.00	100.00

* During the year ended 31 December 2024, PPCL has been in the process of liquidation.

** During the year ended 31 December 2022, PTTGC acquired the entire business transfer of GCS and Glycol, both subsidiaries are in the process of liquidation.

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.1 Details of subsidiaries and joint operations of the subsidiaries (Continued)

Company name	Country of Incorporation	Business	Ownership interest (%)	
			2024	2023
<u>Subsidiaries of PTTGC Group: (Continued)</u>				
Global Green Chemicals Plc. (GGC)	Thailand	Manufacturing, distributing and transport oleochemical products	72.29	72.29
Solution Creation Co., Ltd. (SOLUTIONCRE)	Thailand	Manufacturing and distributing petrochemical products and health and nutrition products	100.00	100.00
PTTGC International Private Limited (GC Inter)	Singapore	Holding and operating international business	100.00	100.00
GC Oxirane Co., Ltd. (GCO)*	Thailand	Manufacturing and distributing petrochemicals products	100.00	100.00
GC Polyols Co., Ltd. (GCP)	Thailand	Manufacturing and distributing petrochemicals products	82.10	82.10
GC Treasury Co., Ltd. (GCTC)	Thailand	Financial service management for the group	100.00	100.00
GC Marketing Solutions Co., Ltd. (GCM)	Thailand	Investing in international business	100.00	100.00
GC International Corporation (GCI)	United States of America	Holding and operating international business	100.00	100.00
Thai Fatty Alcohols Co., Ltd. (TFA)	Thailand	Manufacturing and distributing biochemical products	100.00	100.00

* During the year ended 31 December 2024, GCO has been in the process of liquidation.

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.1 Details of subsidiaries and joint operations of the subsidiaries (Continued)

Company name	Country of Incorporation	Business	Ownership interest (%)	
			2024	2023
<u>Subsidiaries of PTTGC Group: (Continued)</u>				
GC America Sustainability Corporation (GCAS)	United States of America	Research and development of bio-based chemicals	100.00	100.00
PTTGC America Corporation (AMERICACORP)	United States of America	Holding and operating international business	100.00	100.00
PTTGC America LLC (AMERICALLC)	United States of America	Petrochemical	100.00	100.00
NPC S&E Security Guard Co., Ltd. (NPCSG)	Thailand	Safety services	100.00	100.00
Vencorex (Thailand) Co., Ltd. (VENCOREXTH)	Thailand	Manufacturing and distributing chemical specialties	100.00	100.00
Vencorex France S.A.S. (VCF)	France	Manufacturing and distributing chemical specialties	100.00	100.00
Vencorex Holding (VCR)	France	Manufacturing and distributing chemical specialties	100.00	100.00
GCM Polymer Trading DMCC (GCM DMCC)	United Arab Emirates	Distributing polymer products and other polymers-related products	100.00	100.00
GC Marketing Solutions Vietnam Company Ltd. (GCM Vietnam)	Vietnam	Distributing polymer products and other polymers-related products	100.00	100.00
GC Estate Co., Ltd. (GCEC)	Thailand	Real estate development for rent and to invest in petrochemical and related industries	100.00	100.00

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.1 Details of subsidiaries and joint operations of the subsidiaries (Continued)

Company name	Country of Incorporation	Business	Ownership interest (%)	
			2024	2023
<u>Subsidiaries of PTTGC Group: (Continued)</u>				
GC Ventures Co., Ltd. (GCV)	Thailand	Invest in form of Corporate Venture Capital (CVC)	100.00	100.00
GC Ventures America Corporation (GCVA)	United States of America	Invest in form of Corporate Venture Capital (CVC) outside Thailand	100.00	100.00
GC Marketing Solutions Myanmar Company Limited (GCM Myanmar)	Myanmar	Distributing polymer products and other polymers-related products	100.00	100.00
GC-M PTA Company Limited (GCMPTA)	Thailand	Manufacturing and distributing petrochemical products	74.00	74.00
Thai PET Resin Co., Ltd. (TPRC)	Thailand	Manufacturing and distributing petrochemical products	84.40	84.40
GGC Biochemicals Co., Ltd. (GGC Biochemicals)	Thailand	Holding and operating in Thailand	100.00	100.00
PT GCM Marketing Solutions Indonesia (GCMINDONESIA)	Indonesia	Distribution of polymers products and other polymers-related products	100.00	100.00
ENVICCO Limited (ENVICCO)	Thailand	Production, Distribution and development of Recycle Polyethylene terephthalate	70.00	70.00
GC Marketing Solutions (Shanghai) Company Limited (GCM CHINA)	China	Retail business	100.00	100.00

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.1 Details of subsidiaries and joint operations of the subsidiaries (Continued)

Company name	Country of Incorporation	Business	Ownership interest (%)	
			2024	2023
<u>Subsidiaries of PTTGC Group: (Continued)</u>				
Allnex Holding GmbH (ALLNEX)	Germany	Manufacturing and sales of industrial coatings and additives	100.00	100.00
Allnex (Thailand) Ltd. (ALLNEXTH)	Thailand	Chemical	94.96	94.96
Allnex Austria GmbH (ALLNEXAUSTRIA)	Austria	Chemical	100.00	100.00
Allnex Belgium SA/NV (ALLNEXBELGIUM)	Belgium	Chemical	100.00	100.00
Allnex Malaysia Sdn Bhd (ALLNEXMALAYSIA)	Malaysia	Chemical	100.00	100.00
Allnex Australia Pty. Ltd (ALLNEXAUSTRALIA)	Australia	Chemical	100.00	100.00
PT Allnex Resins Indonesia (PTALLNEXRESINS)	Indonesia	Chemical	80.00	80.00
<u>Subsidiaries of TOP Group:</u>				
Thai Paraxylene Co., Ltd. (TPX)	Thailand	Paraxylene manufacturing and distribution	100.00	100.00
Thai Lube Base Public Company Limited (TLB)	Thailand	Lube base oil refining and distribution	100.00	100.00
Thaioil Ethanol Co., Ltd. (TET)	Thailand	Investment in ethanol business and alternative energy products	100.00	100.00
Thaioil Energy Services Co., Ltd. (TES)	Thailand	Providing human resource management	100.00	100.00
Thaioil Solvent Co., Ltd. (TOS)	Thailand	Investment in solvent and chemical businesses	100.00	100.00
TOP SPP Co., Ltd. (TOPSPP)	Thailand	Power and steam generation and distribution	100.00	100.00
Thaioil Treasury Center Co., Ltd. (TTC)	Thailand	Treasury center for the Group's business	100.00	100.00
Sapthip Co., Ltd. (SAPTHIP)	Thailand	Ethanol products manufacturing and distribution	50.00	50.00
TOPNEXT International Company Limited (TX)	Thailand	Distribution of solvent and chemical products	100.00	100.00

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.1 Details of subsidiaries and joint operations of the subsidiaries (Continued)

Company name	Country of Incorporation	Business	Ownership interest (%)	
			2024	2023
<u>Subsidiaries of TOP Group: (Continued)</u>				
Sak Chaisidhi Co., Ltd. (SAKC)	Thailand	Solvent and chemical products manufacturing and distribution	80.52	80.52
TOP Solvent (Vietnam) LLC. (TSV)	Vietnam	Distribution of solvent and chemical products	100.00	100.00
LABIX Co., Ltd. (LABIX)	Thailand	Linear Alkyl Benzene manufacturing and distribution	75.00	75.00
Sapthip Green Energy Co., Ltd. (SGE)	Thailand	Biogas power generation and distribution	100.00	100.00
PT.Tirta Surya Raya (PTSR)	Indonesia	Distribution of solvent and chemical products	77.71	77.71
TOP Venture Company Limited (TVT)	Thailand	Invest in Corporate Venture Capital (CVC) and/or Startups business	100.00	100.00
TOP Ventures Hong Kong Limited (TVHK)	Hongkong	Invest in Corporate Venture Capital (CVC) and/or Startups business	100.00	100.00
TOP Ventures America LLC (TVUSLLC)	United States of America	Invest in Corporate Venture Capital (CVC) and/or Startups business	100.00	100.00
PT TOP Investment Indonesia (TII)	Indonesia	Invest in petrochemicals and olefins products	100.00	100.00
TOPNEXT India Private Limited (TXIN)	India	Distribution of solvent and chemical products	100.00	100.00
JSKEM Private Limited (JSKEM)	Singapore	Distribution of solvent and chemical products	60.00	60.00
<u>Subsidiaries of IRPC Group:</u>				
IRPC A&L Company Limited (IRPCAL)	Thailand	Distributing petrochemical products	57.48	57.48
IRPC Oil Company Limited (OIRPC)	Thailand	Sales of oil products and gas	100.00	100.00
Rak Phasak Company Limited (RAKPHASAK)	Thailand	Oil vessel renting and fertilizer manufacturing and distribution	100.00	100.00

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.1 Details of subsidiaries and joint operations of the subsidiaries (Continued)

Company name	Country of Incorporation	Business	Ownership interest (%)	
			2024	2023
<u>Subsidiaries of IRPC Group:</u> (Continued)				
IRPC Technology Company Limited (TECHIRPC)	Thailand	Vocational school	100.00	100.00
I-polymer Company Limited (IPOL)	Thailand	Distributing plastic resin and chemical products via E- Commerce system	55.00	55.00
Innopolymed Company Limited (IMD) (The Group holds 100% shareholding)	Thailand	Manufacturing and trading of non-woven fabrics and medical consumables	60.00	60.00
<u>Subsidiaries of PTTGM Group:</u>				
PTT International Holding Limited (PTTIH)	Hong Kong	Holding company	100.00	100.00
PTT International Investment Limited (PTTII)*	Hong Kong	Holding company	-	100.00
Global Management Holding Co., Ltd. (GMH)	Thailand	Holding company	100.00	100.00
Siam Management Holding Co., Ltd. (SMH)	Thailand	Holding company	100.00	100.00
ExpresSo NB Co.,Ltd. (EXPRESSONB) (Former : Alpha Com Co., Ltd. (ALPHACOM))	Thailand	Develop prototype	100.00	100.00
Swap and Go Co., Ltd. (SWAPANDGO)	Thailand	Battery swap	100.00	100.00
Innobic (Asia) Company Limited (INBA)	Thailand	Life science	100.00	100.00
Innobic LL Holding Company Limited (INBL)	Thailand	Holding company	100.00	100.00
Global Renewable Power Co., Ltd. (GRP)**	Thailand	Holding company	-	50.00
Global Renewable Power 1 Co.,Ltd. (GRP1)**	Thailand	Holding company	-	100.00
Global Renewable Power Operating Co., Ltd. (GRPO)**	Thailand	Operation service and solar power plant consultant	-	100.00
World X Change Asia Company Limited (WXA)**	Thailand	Production and distribution of electricity	-	100.00
P.P. Solar Company Limited (PPS)**	Thailand	Production and distribution of electricity	-	100.00

* On 21 June 2024, PTTII was liquidated and closed.

** On 16 October 2024, PTTGM sold its common shares of GRP (including the subsidiaries of GRP) to the GPSC group.

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.1 Details of subsidiaries and joint operations of the subsidiaries (Continued)

Company name	Country of Incorporation	Business	Ownership interest (%)	
			2024	2023
<u>Subsidiaries of PTTGM Group: (Continued)</u>				
N.P.S. Stargroup Company Limited (NPS)*	Thailand	Production and distribution of electricity	-	100.00
MEKHA V Co., Ltd. (MEKHAV)	Thailand	Public Cloud, Migration service and Maintenance	100.00	100.00
ARUN PLUS Co., Ltd. (ARUNPLUS)	Thailand	Stations and chargers for electric vehicles.	100.00	100.00
Sheng Yang Energy Co., Ltd. (SYE)*	Taiwan	Solar power plant	-	90.00
EVME PLUS CO., LTD (EVME)	Thailand	Dealer, rent and sell electric vehicles	100.00	100.00
NEW VERSAL CO., LTD. (NEWVERSAL) (Former : REACC Co., Ltd. (REACC))	Thailand	Clean energy and climate neutrality services	100.00	100.00
T-ECOSYS Company Limited(T-ECOSYS)	Thailand	Industrial Digital Platform	100.00	100.00
Nuovo Plus Co., Ltd. (NUOVOPLUS) (The Group holds 100% shareholding)	Thailand	Manufacture and sale of Lithium Ion batteries	51.00	51.00
Aztiq II HoldCo Limited (AZTIQIIHOLDCO)	Hongkong	Generic Drug Manufacturers and Traders of Drugs and Patents	100.00	77.08
Aztiq II Bidco Limited (AZTIQIIBIDCO)	Hong Kong	Holding company	100.00	100.00
Alvogen Emerging Markets Holdings Limited (ALVEMH)	Hong Kong	Holding company	100.00	100.00
Lotus Pharmaceutical Co., Ltd. (LOTUSTW)**	Taiwan	Holding company	37.69	47.83
Avos Pharma Science Co., Ltd. (AVOSTW)	Taiwan	R&D, manufacturing and sales of generic pharmaceutical products	100.00	100.00
Lotus Japan Holdings Co., Ltd. (LOTUSJP)	Japan	R&D, manufacturing and sales of generic pharmaceutical products	100.00	100.00
Lotus International Pte. Ltd. (LOTUSSG)	Singapore	Holding company	100.00	100.00
Alvogen (Thailand) Ltd. (ALVTH)	Thailand	Holding company and sale of medicine	100.00	100.00

* On 16 October 2024, PTTGM sold its common shares of GRP (including the subsidiaries of GRP) to the GPSC group.

** On 17 July 2024, ALVEMH sold its investment in LOTUSTW to the Aztiq HK Group, resulting in a change in the ownership interest from 47.83% to 37.69%.

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.1 Details of subsidiaries and joint operations of the subsidiaries (Continued)

Company name	Country of Incorporation	Business	Ownership interest (%)	
			2024	2023
<u>Subsidiaries of PTTGM Group: (Continued)</u>				
Lotus Healthcare Philippines Corp. (LOTUSPH)	Philippines	Holding company and sale of medicine	100.00	100.00
Lotus Healthcare Malaysia Sdn. Bhd. (LOTUSMY)	Malaysia	Holding company and sale of medicine	100.00	100.00
Lotus Pharmaceutical, HK Limited (LOTUSHK)	Hong Kong	Holding company and sale of medicine	100.00	100.00
Lotus Pharmaceutical (Shanghai) Health Management Consulting Limited (LOTUSSH)	China	Data collection and agent services in Hong Kong	100.00	100.00
Lotus Pharma ehf (LOTUSIS)	Iceland	Holding company and sale of medicine	100.00	100.00
Lotus Pharma Bulgaria EOOD (LOTUSBG)	Bulgaria	Holding company and sale of medicine	100.00	100.00
Lotus Alvogen Malta Ltd. (LOTUSMT)	Malta	Holding company and sale of medicine	100.00	100.00
Lotus Support Services SRL (LOTUSRO)	Romania	Holding company and sale of medicine	100.00	100.00
Alvogen Korea Holdings Ltd. (ALVKRH)	South Korea	Holding company and sale of medicine	100.00	100.00
Alvogen Korea Co. Ltd. (ALVKR)	South Korea	Holding company	100.00	100.00
Alvogen Pharma (India) Pvt. Ltd. (ALVIN)	India	Holding company	100.00	100.00
Norwich Clinical Services Pvt. Ltd. (NCSIN)	India	Holding company	100.00	100.00
Alvogen Malta (Out-Licensing) Holding Ltd. (ALVOLH)*	Malta	Holding company	-	100.00
Alvogen Malta Shared Services Limited (AMSS)*	Malta	Holding company	-	100.00
Adalvo Limited (ADALVOMT)*	Malta	Holding company	-	100.00
Adalvo Competence Center SRL (ADALVORO)*	Romania	Acquisition and licencing of pharmaceutical intellectual property and sale of pharmaceuticals and medicinal chemical products	-	100.00

* The Group's sale of its investment in ALVOLH was completed on 17 January 2024.

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.1 Details of subsidiaries and joint operations of the subsidiaries (Continued)

Company name	Country of Incorporation	Business	Ownership interest (%)	
			2024	2023
<u>Subsidiaries of PTTGM Group:</u> (Continued)				
Adalvo EOOD (ADALVOBG)*	Bulgaria	Acquisition and licencing of pharmaceutical intellectual property and sale of pharmaceuticals and medicinal chemical products	-	100.00
Alvogen Spain SL (ALVES)*	Spain	Holding company	-	100.00
Adalvo UK Ltd. (ADALVOUK)*	England	Holding company	-	100.00
Alvogen Austria GmbH (ALVAT)*	Austria	Holding company	-	100.00
Adalvo India Private Limited (ADALVOIN)*	India	Holding company	-	100.00
Alvogen Holding (Thailand) Ltd. (ALVTHH)	Thailand	Holding company	100.00	100.00
Alvogen Hong Kong Limited (ALVHK)	Hong Kong	Holding company	100.00	100.00
P-DICTOR Co., Ltd. (P-DICTOR)	Thailand	Predictive Maintenance and Machine Monitoring AI for Industrial Solution	100.00	100.00
Innobic Nutrition Co., Ltd. (INNT)	Thailand	Nutrition	100.00	100.00
Global Multimodal Logistics Company Limited (GML)	Thailand	Logistics	100.00	100.00
PTT Global LNG Company Limited (PTTGL)	Thailand	LNG business	100.00	100.00
PTTGL Investment Limited (PTTGLI)	Hong Kong	Investing in LNG business	100.00	100.00
GPSC Singapore PTE. LTD (GPSCSG)	Singapore	Holding company	100.00	100.00
MEISHI PHARMA SERVICES PRIVATE LIMITED (MEISHIIN)	India	R&D, manufacture and sale of pharmaceutical products	100.00	100.00
Meishi Pharma Service Pte. Ltd. (MEISHISG)	Singapore	R&D, manufacture and sale of pharmaceutical products	100.00	100.00
Global Renewable Power China (Shanghai) Co.,Ltd. (GRPCHINA)**	China	Renewable energy	-	100.00

* The Group's sale of its investment in ALVOLH was completed on 17 January 2024.

** On 16 October 2024, PTTGM sold its common shares of GRP (including the subsidiary's GRP) to the GPSC group.

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.1 Details of subsidiaries and joint operations of the subsidiaries (Continued)

Company name	Country of Incorporation	Business	Ownership interest (%)	
			2024	2023
<u>Subsidiaries of PTTGM Group: (Continued)</u>				
A C Energy Solution Co., Ltd. (ACE)	Thailand	Assembling batteries using technology	100.00	-
FT1 Corporation Co., Ltd. (FT1)	Thailand	The business of manufacturing electronic circuit boards	51.00	-
Arun Plus Mobility Holding Co., Ltd. (AMH)	Thailand	A holding company to engage in the electric vehicle distribution business	100.00	-
Neo Mobility Asia Co., Ltd. (NMA)	Thailand	Electric vehicle distribution	50.00	-
ZE MOBILITY PLUS CO., LTD. (ZMP)	Thailand	Authorized dealer of Zeekr electric vehicles	100.00	-
X MOBILITY (THAILAND) CO., LTD. (XM)	Thailand	An importer of XPENG electric vehicles	100.00	-
X Mobility Plus Co., Ltd. (XMP)	Thailand	Authorized dealer of XPENG electric vehicles	100.00	-
EXPRESSO NB SG PTE.LTD. (EXPRESSONB SG)	Singapore	Holding company	100.00	-
Teva Pharma (Thailand) Co. LTd (TEVAPHARMATH)	Thailand	Sale of pharmaceutical products	100.00	-
<u>Subsidiaries of PTTGE Group:</u>				
PTT Green Energy (Thailand) Co., Ltd. (PTTGE TH)	Thailand	Management services for PTTGE Group	100.00	100.00
<u>Subsidiaries of BSA Group:</u>				
Sport Services Alliance Co., Ltd. (SSS)	Thailand	Football club management	100.00	100.00
Business Professional Solutions Recruitments Co., Ltd. (BPS)	Thailand	Business management	100.00	100.00

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.1 Details of subsidiaries and joint operations of the subsidiaries (Continued)

Company name	Country of Incorporation	Business	Ownership interest (%)	
			2024	2023
<u>Joint operations of PTTEP Group:</u>				
Carigali - PTTEPI Operating Company Sdn. Bhd. (CPOC)	Malaysia	Petroleum	50.00	50.00
Moattama Gas Transportation Company (MGTC)*	Bermuda	Gas pipeline transportation	62.96	37.08
Orange Energy Limited (Orange)	Thailand	Petroleum	53.95	53.95
B8/32 Partners Limited (B8/32 Partners)	Thailand	Petroleum	25.00	25.00
Andaman Transportation Limited (ATL)	Cayman Islands	Gas pipeline transportation	80.00	80.00
Groupement Bir Seba (GBRS)	Algeria	Petroleum	35.00	35.00
Natuna 2 B.V. (Natuna)	Netherlands	Petroleum	50.00	50.00
Hoang-Long Joint Operating Company (HL JOC)	Vietnam	Petroleum	28.50	28.50
Hoan-Vu Joint Operating Company (HV JOC)	Vietnam	Petroleum	25.00	25.00
Petroleum Development Oman LLC (PDO)	Oman	Petroleum	2.00	2.00
Abu Dhabi Gas Industries Limited (AGP)	United Arab Emirates	Petroleum	2.00	2.00
Private Oil Holdings Oman Limited (POHOL)	England	Petroleum	5.00	5.00
Petroleum Development Oman Services LLC (PDOS)	Oman	Petroleum	2.00	2.00
Groupement Hassi Bir Rekaiz (GHBR)	Algeria	Petroleum	49.00	49.00

* Chevron Global Ventures, Ltd., a shareholder of MGTC with a participating interest of 41.10%, decided to withdraw all investments. As a result, from 1 April 2024 onwards, PTTEPO, an operator increased the participating interest to 62.96% in MGTC. The withdrawal processes were subsequently fulfilled on 5 April 2024.

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.2 Details of investments in joint ventures in the consolidated financial statements as at 31 December 2024 and 2023

	Company name	Country of Incorporation	Business	Ownership interest (%)		Consolidated financial statements				Unit: Million Baht		
				2024	2023	Cost method		Equity method		2024	2023	Dividends income
						2024	2023	2024	2023			
<u>Joint Ventures</u>												
<i>The Company</i>												
	Trans Thai-Malaysia (Thailand) Co., Ltd. (TTM(T))	Thailand	Natural gas	50.00	50.00	3,172	3,172	3,893	3,818	772	771	
	Trans Thai-Malaysia (Malaysia) Sdn. Bhd. (TTM(M))	Malaysia	Natural gas	50.00	50.00	1,001	1,001	914	901	48	83	
	District Cooling System and Power Plant Co., Ltd. (DCAP)	Thailand	Generation and supply of electricity and chilled water	35.00	35.00	585	585	781	767	70	70	
	Veolia Sustainable Solution (Thailand) Co.,Ltd. (VSS)	Thailand	Hazardous waste management plant	40.00	40.00	23	23	5	5	-	-	
<i>PTTEP Group</i>												
	Erawan 2 FSO Bahamas Limited (Erawan 2)	Singapore	FSO rental services	13.11	13.11	517	520	865	997	166	178	
	APICO LLC (APICOLLC)	United States of America	Petroleum	72.82	72.82	3,103	4,570	3,150	3,326	770	405	
	Oman LNG LLC (OLNG)	Oman	Petroleum	2.00	2.00	2,850	2,865	163	560	937	1,151	
	ATI Technologies Co., Ltd. (ATI)	Thailand	Technology	50.00	50.00	10	10	-	-	-	-	
	Zeaquest Co., Ltd. (ZEAQUEST)	Thailand	Technology	50.00	50.00	77	77	19	61	-	-	
	AeroSky (Thailand) Company Limited (AEROSKY)	Thailand	Technology	33.00	33.00	10	10	1	1	-	-	
	B-MED X Company Limited (BMEDX)	Thailand	Technology	50.00	50.00	10	10	3	5	-	-	
	SkyVIV Company Limited (SKYVIV)	Thailand	Technology	23.20	23.20	20	20	14	17	-	-	
	NILA Solutions Company Limited (NILA)	Thailand	Technology	50.00	50.00	10	10	6	10	-	-	
	Green Aranya Co., Ltd. (GARY)	Thailand	Technology	10.00	10.00	200	200	195	200	-	-	
	Renewable Energy Seagreen Holdco Limited (RESH)	England	Renewable energy and new business	50.00	-	3,202	-	2,626	-	53	-	

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.2 Details of investments in joint ventures in the consolidated financial statements as at 31 December 2024 and 2023 (Continued)

	Company name	Country of Incorporation	Business	Ownership interest (%)		Consolidated financial statements				Unit: Million Baht	
				2024	2023	Cost method		Equity method		2024	2023
				2024	2023	2024	2023	2024	2023	2024	2023
<i>Joint Ventures (Continued)</i>											
<i>PTTLNG Group</i>											
	PE LNG Co., Ltd. (PE LNG)*	Thailand	Provide management and maintenance services of port, LNG storage and LNG station. Cooling management and other related businesses.	50.00	-	14,399	-	11,306	-	-	-
<i>GPSC Group</i>											
	Thai Solar Renewable Co., Ltd. (TSR)	Thailand	Holding company	40.00	40.00	1,697	1,697	1,366	1,394	139	414
	Nam Lik 1 Power Co., Ltd. (NL1PC)	Laos	Generate and supply electricity	40.00	40.00	494	494	818	839	-	-
	Nava Nakorn Electricity Generating Co., Ltd. (NNEG)	Thailand	Generate and supply electricity	30.00	30.00	638	638	853	734	-	-
<i>PTTGC Group</i>											
	Thai Ethoxylate Co., Ltd. (TEX)	Thailand	Manufacturing and distributing of chemical	50.00	50.00	210	210	802	687	11	32
	NatureWorks LLC (NTR)	United States of America	Manufacturing and distributing of bioplastic products	50.00	50.00	4,793	4,793	4,049	4,518	-	-
	PTT MCC Biochem Co., Ltd. (PTTMCC)	Thailand	Manufacturing and distributing of bioplastic	50.00	50.00	1,836	1,836	640	849	-	-
	PTT Asahi Chemicals Co., Ltd. (PTTAC)	Thailand	Petrochemicals	50.00	50.00	6,909	6,909	-	9,450	-	-
	HMC Polymers Co., Ltd. (HMC)	Thailand	Petrochemicals	41.44	41.44	9,117	9,117	8,125	9,681	-	-
	GGC KTIS Bioindustrial Company Limited (GKBI)	Thailand	Manufacturing and distributing of electricity and ethanol from sugarcane	50.00	50.00	1,657	1,550	678	1,266	-	-
	Revolve Group Limited (RGL)	England	Manufacturing and distributing of chemical	49.00	49.00	270	270	199	270	-	-

* On 30 April 2024, PTTLNG sold a 50% shares in its investment in PE LNG to EGAT and reclassified the investment from a subsidiary to a joint venture.

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.2 Details of investments in joint ventures in the consolidated financial statements as at 31 December 2024 and 2023 (Continued)

Company name	Country of Incorporation	Business	Ownership interest (%)		Consolidated financial statements				Unit: Million Baht	
			2024	2023	Cost method		Equity method		2024	2023
					2024	2023	2024	2023		
<i>Joint Ventures (Continued)</i>										
<i>PTTGC Group (Continued)</i>										
Energy Oleochemicals UK Ltd. (EOMUK)	England	Manufacturing and distributing of biochemical	50.00	50.00	2,141	2,141	3,141	3,096	-	-
ENTIS Co., Ltd. (ENTIS)	South Korea	Manufacturing and distributing of industrial coating products and additives	50.00	50.00	203	203	199	174	-	-
Synthese (Thailand) Co., Ltd. (SYNTHESE)	Thailand	Manufacturing and distributing of industrial coating products and additives	47.50	47.50	519	519	482	494	47	29
Thai Tank Terminal Limited (TTT)	Thailand	Storage and loading Liquid chemicals, oil and gas	36.43	36.43	459	459	2,619	2,667	350	1,002
WHA GC Logistics Company Limited (WGCL) (Former : GC Logistics Solutions Co., Ltd. (GCL))	Thailand	Logistics, warehouse management and polyethylene resin containment	50.00	50.00	819	819	4,063	3,973	-	-
<i>IRPC Group</i>										
IRPC Polyol Co., Ltd. (IRPCP)	Thailand	Manufacturing and sales of chemical products for polyurethanes	50.00	50.00	185	185	102	89	-	-
WHA Industrial Estate Rayong Co., Ltd. (WHA IER)	Thailand	Industrial estate development	40.00	40.00	320	320	385	304	320	-
Mytex Polymers (Thailand) Co., Ltd. (MYTEX)	Thailand	Manufacturing and distributing of chemical	50.00	50.00	350	350	357	349	7	18
Vajira Lab for Society Co., Ltd. (VLS)	Thailand	Analysis and certify medical equipments services	50.00	50.00	14	14	11	11	-	-
Cleantech and Beyond Company Limited (CLEANTECH) (Subsidiary of VISUP)	Thailand	Manufacture chemical products	27.28	-	4	-	4	-	-	-

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.2 Details of investments in joint ventures in the consolidated financial statements as at 31 December 2024 and 2023 (Continued)

Company name	Country of Incorporation	Business	Ownership interest (%)				Consolidated financial statements				Unit: Million Baht	
			2024		2023		2024		2023			Dividends income
			2024	2023	Cost method	Equity method	2024	2023	2024	2023		
<i>Joint Ventures (Continued)</i>												
<i>PTTGM Group</i>												
OGP Energy Solutions Company Limited (OGPS)	Thailand	Energy management and energy-related services	40.00	40.00	60	60	51	43	-	-		
PTT RAISE Co., Ltd. (PTTRAISE)	Thailand	Robotics and AI engineering	50.00	50.00	50	25	35	15	-	-		
PTT and TGES Optec Company Limited (OPTEC)	Thailand	One-stop total improving efficiency technology solutions	51.00	51.00	31	31	12	18	-	-		
Nutra Regenerative Protein Co., Ltd. (NRPT)	Thailand	Production and distribution of alternative protein	50.00	50.00	169	169	110	148	-	-		
Horizon Plus Company Limited (HPLUS)	Thailand	Manufacture of parts and assemblies of electric vehicles	60.00	60.00	6,353	6,353	6,115	6,169	-	-		
B.GRIMM POWER LNG JV LIMITED (BGPLNGJV)	Thailand	LNG	50.00	50.00	13	13	6	6	-	-		
NV Gotion Company Limited (NVGOTION)	Thailand	Produce and sale of batteries	51.00	51.00	383	383	375	368	-	-		
Renex Technology Co., Ltd. (RENEX)	Thailand	Develop and provide an electricity trading platform	33.33	33.33	63	63	55	62	-	-		
Aionex Co., Ltd. (AIONEX)	Thailand	Distribute, produce and provide battery switching services for 2-wheel electric vehicles.	51.00	51.00	156	156	116	154	-	-		
FutureCycle Co., Ltd. (FTRC)	Thailand	The business involves the manufacturing, designing, and selling of products made from surplus materials.	50.00	-	10	-	9	-	-	-		

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.2 Details of investments in joint ventures in the consolidated financial statements as at 31 December 2024 and 2023 (Continued)

Company name	Country of Incorporation	Business	Unit: Million Baht							
			Ownership interest (%)		Consolidated financial statements		Dividends income			
			2024	2023	Cost method	Equity method	2024	2023		
<u>Joint Ventures (Continued)</u>										
<u>OR Group</u>										
Brighter-PTT Oil and Retail Business Company Limited (BOR)	Myanmar	Oil marketing and retail business	51.00	51.00	55	56	25	42	-	-
Brighter Energy Company Limited (BE)	Myanmar	Depot and wholesale of petroleum	35.00	35.00	988	995	300	727	-	-
ORC Coffee Passion Group Joint Stock Company (ORCG)	Vietnam	Retail business	60.00	60.00	283	226	111	116	-	-
Orbit Digital Company Limited (ORBIT)	Thailand	Information Technology and computer services and others	40.00	40.00	10	10	93	60	11	-
Global Aero Associates Company Limited (GAA)	Thailand	Aircraft refueling services	45.00	45.00	545	545	535	537	-	-
Phnom Penh Aviation Fuel Service Co., Ltd. (PPAFS)	Cambodia	Airport refueling services system	33.33	33.33	311	263	295	252	-	-
K-nex Corporation Co., Ltd (KNEX)	Thailand	Laundry business	40.00	40.00	1,058	1,105	1,140	1,172	-	-
Gowabi Thailand Co., Ltd. (GOWABI)	Thailand	Digital platform for health and beauty	18.18	18.18	142	142	122	126	-	-
Drink Enterprise Co., Ltd (RTD)	Thailand	Beverage business	50.00	50.00	210	150	128	104	-	-
Dusit Foods Co., Ltd. (DF)	Thailand	Food business	25.00	25.00	300	299	291	300	-	-
The Rest Village Co., Ltd. (TRV)	Thailand	Developing and managing rest areas	55.00	-	83	-	81	-	-	-
<u>ENCO Group</u>										
One Origin EnCo Company Limited (ORIGINENCO)	Thailand	Hotel business	50.00	50.00	169	169	147	163	-	-

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.2 Details of investments in joint ventures in the consolidated financial statements as at 31 December 2024 and 2023 (Continued)

Unit: Million Baht

	Company name	Country of Incorporation	Business	Consolidated financial statements							
				Ownership interest (%)		Cost method		Equity method		Dividends income	
				2024	2023	2024	2023	2024	2023	2024	2023
Joint Ventures (Continued)											
	The Group										
	Map Ta Phut Air Products Company Limited (MAP)	Thailand	Production and distribution of industrial gas	51.00	51.00	179	179	444	398	10	63
	(The Company holds 49.00% shareholding)										
	VISUP Company Limited (VISUP)	Thailand	Select research and researchers in VISTEC and invest in high-tech startup companies	55.55	55.55	50	50	29	50	-	-
	(The Company holds 22.22% shareholding)										
	Less Allowance for impairment					73,495	57,039	63,459	62,563		
	Total					(3,154)	(549)	(821)	(305)	3,711	4,216
						70,341	56,490	62,638	62,258		

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.3 Details of investments in associates in the consolidated financial statements as at 31 December 2024 and 2023

Company name	Country of Incorporation	Business	Ownership interest (%)						Consolidated financial statements				Dividends income
			2024		2023		2024		2023		2024	2023	
			2024	2023	2024	2023	Cost method	Equity method	Equity method	Equity method			
Unit: Million Baht													
Associates													
PTTEP Group													
PTTEP AP Group's associates*	Australia	Airbase services	50.00	50.00	51	51	189	189	189	-	-	-	-
Leismer Aerodrome Limited (LAL)	Canada	Air transportation	32.00	32.00	129	149	19	22	19	-	-	-	-
Moz LNG1 Holding Company Ltd. (HOLDCO)	United Arab Emirates	Petroleum	8.50	8.50	1,690	1,345	1,548	1,246	1,548	-	-	-	-
Hydrogen Duqm LLC (HYDUQM)	Oman	Renewable energy business and related new businesses	11.00	11.00	41	15	41	15	41	-	-	-	-
GPSC Group													
Bangpa-in Cogeneration Co., Ltd. (BIC)	Thailand	Generate and supply electricity	25.00	25.00	924	924	976	937	976	68	68	-	-
Xayaburi Power Co., Ltd. (XPCL)	Laos	Generate and supply electricity	25.00	25.00	6,994	6,994	8,944	8,751	8,944	187	187	123	123
Eastern Seaboard Clean Energy Company Limited (ESCE)	Thailand	Studying, generating and supply electricity for industrial use including generating electricity from renewable energy	33.33	33.33	339	339	358	356	358	17	17	8	8
Avaada Energy Private Limited (AEPL)	India	Generate and supply electricity	42.93	42.93	24,225	21,888	19,934	20,632	19,934	-	-	-	-
Ci Changfang Limited (CF)	Taiwan	Generate and supply electricity	25.00	25.00	14,565	14,565	13,101	13,821	13,101	-	-	-	-
Ci Xidao Limited (XD)	Taiwan	Generate and supply electricity	25.00	25.00	442	442	369	411	369	-	-	-	-
OR Group													
FST Aviation Services Limited (FST)	Hong Kong	Aircraft refuelling services	25.00	25.00	1	1	1	1	1	-	-	-	-

* Associates of PTTEP AP Group consist of North Kimberley Airport Pty Ltd and Troughton Island Pty Ltd.

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.3 Details of investments in associates in the consolidated financial statements as at 31 December 2024 and 2023 (Continued)

Company name	Country of Incorporation	Business	Ownership interest (%)				Consolidated financial statements				Unit: Million Baht	
			2024		2023		2024		2023		2024	2023
			2024	2023	2024	2023	Cost method	Equity method	2024	2023	Equity method	Dividends income
<u>Associates (Continued)</u>												
<i>OR Group (Continued)</i>												
Petro Asia (Thailand) Co., Ltd. (PAT)	Thailand	Oil marketing	35.00	35.00	131	131	10	10	-	-	-	-
Pluk Phak Praw Rak Mae Company Limited (OKJ)*	Thailand	Food and beverage	20.00	20.00	710	497	757	519	16	16	2	2
Insub Global Cuisine Co., Ltd. (ISGC)**	Thailand	Food and beverage	-	25.00	-	191	-	177	-	-	-	-
KAMU KAMU Co., Ltd. (KAMU)	Thailand	Beverage	25.00	25.00	468	468	478	472	4	4	5	5
Polar Bear Mission Company Limited (POLARBEAR)	Thailand	Food online	27.36	27.36	482	482	291	358	-	-	-	-
<i>PTTGC Group</i>												
S.P. Peipack Inter Group Co., Ltd. (SPPETPACK)	Thailand	Distribution of general products	25.00	25.00	50	50	53	47	-	-	-	-
Kuraray GC Advanced Materials Co., Ltd. (KGC)	Thailand	Petrochemicals	33.40	33.40	1,870	1,870	1,401	1,579	-	-	-	-
Dynachisso Thai Co., Ltd. (DYCT)	Thailand	Manufacturing and distributing of chemical	41.50	41.50	294	294	265	272	1	1	-	-
AGC Vinylthai Public Company Limited (AVT)	Thailand	Petrochemicals	32.72	32.72	11,375	11,375	17,739	17,409	571	571	1,266	1,266
<i>TOP Group</i>												
PT Chandra Asri Petrochemical Tbk (CAP)***	Indonesia	Manufacturing and distributing of chemicals	15.00	15.00	29,920	29,920	29,577	30,323	159	159	157	157

* The fair value of investment in OKJ as at 31 December 2024 is Baht 1,864 million.

** On 6 September 2024, the investment in ISGC was sold.

*** The fair value of investment in CAP which is listed on the Stock Exchange of the Republic of Indonesia as at 31 December 2024 amounted to IDR 97,325 billion, or equivalent to Baht 205,678 million (2023: IDR 68,128 billion, or equivalent to Baht 151,700 million).

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.3 Details of investments in associates in the consolidated financial statements as at 31 December 2024 and 2023 (Continued)

Company name	Country of Incorporation	Business	Unit: Million Baht						
			Ownership interest (%)		Consolidated financial statements		Dividends income		
			2024	2023	Cost method	Equity method	2024	2023	
<i>Associates (Continued)</i>									
<i>IRPC Group</i>									
UBE Chemicals (Asia) Public Co., Ltd. (UCHA)	Thailand	Petrochemicals	25.00	25.00	5,300	4,274	4,313	-	-
<i>PTTGM Group</i>									
Inter Pharma Public Company Limited (IP)*	Thailand	Import, manufacture and sale of drugs and dietary supplement for people and animals	20.00	20.00	1,043	1,056	1,069	26	13
<i>PTT TANK Group</i>									
Gulf MTP LNG Terminal Co., Ltd. (GMTP)	Thailand	Boat picking up service, Unloading and storage of liquefied natural gas, as well as transforming from liquid to gas	30.00	30.00	1,050	1,491	1,294	-	-
<i>The Group</i>									
GPC International Terminal Company Limited (GPC)	Thailand	Container port	30.00	30.00	1,200	1,219	1,208	-	-
Thai Petroleum Pipeline Co., Ltd. (THAPPLINE)	Thailand	Oil transmission pipelines	49.72	49.72	4,107	5,254	4,846	387	1,150
(OR Group holds 40.53% shareholding)									
<u>Less Allowance for impairment</u>					107,401	109,345	110,277		
					(1,766)	(707)	(212)		
Total					105,635	108,638	110,065	1,436	2,724

* The fair value of investment in IP as at 31 December 2024 is Baht 390 million. (2023: Baht 671 million).

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.4 Details of investments in subsidiaries in the separate financial statements as at 31 December 2024 and 2023

Subsidiaries	Company name	Country of Incorporation	Business	Separate financial statements				Unit: Million Baht	
				Ownership interest (%)		Cost method			Dividends income
				2024	2023	2024	2023		
PTT Exploration and Production Public Co., Ltd. (PTTEP) (The Group holds 65.29% shareholding)	Thailand	Petroleum exploration and production	63.79	63.79	69,751	69,751	24,690	23,424	
PTT LNG Co., Ltd. (PTTLNG)	Thailand	Natural gas	100.00	100.00	27,748	27,748	19,979	2,303	
PTT Natural Gas Distribution Co., Ltd. (PTTNGD)	Thailand	Natural gas	58.00	58.00	418	418	1,656	580	
Energy Complex Co., Ltd. (EnCo) (The Group holds 100% shareholding)	Thailand	Real estate development for rent	50.00	50.00	900	900	67	73	
PTT Energy Solutions Co., Ltd. (PTTES)* (The Group holds 100% shareholding)	Thailand	Technical and operational services	40.00	40.00	63	63	-	-	
Global Power Synergy Public Co., Ltd. (GPSC) (The Group holds 75.23% shareholding)	Thailand	Generation and supply of electricity, steam and water for industries	47.27	47.27	70,110	70,110	1,186	800	
PTT Oil and Retail Business Public Co., Ltd. (OR)	Thailand	Management services and oil marketing	75.00	75.00	90,000	90,000	4,860	3,600	
PTT Tank Terminal Co., Ltd. (PTT TANK)	Thailand	Terminal and warehouse	100.00	100.00	3,888	3,888	312	134	
PTT International Trading Pte. Ltd. (PTTT)	Singapore	International trading	100.00	100.00	3	3	919	253	
PTT International Trading London Limited (PTTT LDN)	England	International trading	100.00	100.00	348	348	138	130	
PTT Global Chemical Public Co., Ltd. (PTTGC) (The Group holds 48.18% shareholding)	Thailand	Petrochemicals and refining	45.18	45.18	44,473	44,473	1,528	510	
Thai Oil Public Co., Ltd. (TOP) (The Group holds 48.00% shareholding)	Thailand	Oil refining	45.03	45.03	15,110	15,110	3,973	2,364	

* On 29 December 2022, PTTEP has registered its dissolution and currently in the process of liquidation.

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.4 Details of investments in subsidiaries in the separate financial statements as at 31 December 2024 and 2023 (Continued)

Subsidiaries (Continued)	Company name	Country of Incorporation	Business	Unit: Million Baht					
				Ownership interest (%)		Separate financial statements		Dividends income	
				2024	2023	2024	2023	2024	2023
IRPC Public Co., Ltd. (IRPC)		Thailand	Petrochemicals and refining	45.05	45.05	39,696	39,696	276	276
(The Group holds 48.05% shareholding)									
PTT Energy Resources Co., Ltd. (PTTER)*		Thailand	Investment consulting in energy and mining business	100.00	100.00	32,141	32,141	-	-
PTT Global Management Co., Ltd. (PTTGM)		Thailand	Holding company	100.00	100.00	69,206	115,766	-	-
PTT Green Energy Pte. Ltd. (PTTGE)		Singapore	Investing in palm oil business	100.00	100.00	12,403	12,403	-	-
PTT Treasury Center Co., Ltd. (PTT TCC)		Thailand	Treasury services	100.00	100.00	20	20	79	-
Business Services Alliance Co., Ltd. (BSA)		Thailand	Management services	25.00	25.00	1	1	62	591
(The Group holds 100% shareholding)									
PTT Digital Solutions Co., Ltd. (PTT DIGITAL)		Thailand	Information technology and communication services	20.00	20.00	30	30	37	30
(The Group holds 100% shareholding)									
PTT International Trading USA Inc. (PTTT USA)		United States of America	International trading	100.00	100.00	155	155	125	72
Less Allowance for impairment						476,464	523,024		
Total						(45,612)	(66,543)	59,888	35,140

* On 28 December 2023, PTTER has registered its dissolution and currently in the process of liquidation.

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.5 Details of investments in joint ventures in the separate financial statements as at 31 December 2024 and 2023

	Company name	Country of Incorporation	Business	Unit: Million Baht					
				Ownership interest (%)		Separate financial statements		Dividends income	
				2024	2023	2024	2023	2024	2023
Joint Ventures									
	Trans Thai-Malaysia (Thailand) Co., Ltd. (TTM(T))	Thailand	Natural gas	50.00	50.00	3,172	3,172	772	771
	Trans Thai-Malaysia (Malaysia) Sdn. Bhd. (TTM(M))	Malaysia	Natural gas	50.00	50.00	1,001	1,001	48	83
	District Cooling System and Power Plant Co., Ltd. (DCAP)	Thailand	Generation and supply of electricity and chilled water	35.00	35.00	585	585	70	70
	Map Ta Phut Air Products Company Limited (MAP) (The Group holds 51.00% shareholding)	Thailand	Production and distribution of industrial gas	49.00	49.00	179	179	10	61
	Veolia Sustainable Solution (Thailand) Co.,Ltd. (VSS)	Thailand	Hazardous waste management plant	40.00	40.00	23	23	-	-
	VISUP Company Limited (VISUP) (The Group holds 55.55% shareholding)	Thailand	Select research and researchers in VISTEC and invest in high-tech startup companies	22.22	22.22	20	20	-	-
	Total					4,980	4,980	900	985

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.6 Movements in investments in the consolidated and the separate financial statements

14.6.1 Movements in investments in joint ventures under the equity method in the consolidated financial statements are as follows:

	Unit: Million Baht	
	2024	2023
As at 1 January	62,258	60,357
- Share of profit (loss) from investments in joint ventures	(8,091)	673
- Share of other comprehensive loss of joint ventures	(881)	(497)
- Dividend income	(3,711)	(4,216)
- Additional investments	3,727	5,964
- Capital reduction of investments	(47)	-
- Reclassifications	10,051	-
- Loss on impairment (Notes 21)	(516)	-
- Exchange differences on translation of financial statements	(152)	(23)
As at 31 December	62,638	62,258

14.6.2 Movements in investments in associates under the equity method in the consolidated financial statements are as follows:

	Unit: Million Baht	
	2024	2023
As at 1 January	110,065	104,658
- Share of profit from investments in associates	1,423	2,340
- Share of other comprehensive loss of associates	(58)	(343)
- Dividend income	(1,436)	(2,724)
- Additional investments	747	6,438
- Disposal and capital reduction of investments	(167)	-
- Loss on impairment (Notes 21)	(500)	-
- Exchange differences on translation of financial statements	(1,436)	(304)
As at 31 December	108,638	110,065

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.6 Movements in investments in the consolidated and the separate financial statements (Continued)

14.6.3 Movements in investments in subsidiaries and joint ventures under the cost method in the separate financial statements are as follows:

	Unit: Million Baht	
	2024	2023
As at 1 January	461,460	440,663
- Additional investments	25	4,319
- Capital reduction of investments	(46,586)	(1,562)
- Reversal of loss on impairment	20,932	18,040
As at 31 December	435,831	461,460

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.7 Summary financial information of the material joint ventures of the Group, adjusted for fair value adjustments and differences in accounting policies, are as follows:

Statements of financial position as at 31 December 2024 and 2023

	2024						2023					
	TTM(T)	TTM(M)	HPLUS	PTTAC	HMC		TTM(T)	TTM(M)	HPLUS	PTTAC	HMC	
Current assets	5,969	2,153	8,167	2,985	8,308		6,519	2,037	8,428	4,802	7,617	
Non-current assets	3,182	537	2,147	719	27,493		4,719	1,247	1,947	21,181	30,748	
Current liabilities	(988)	(773)	(95)	(2,795)	(9,418)		(1,743)	(590)	(71)	(2,516)	(5,109)	
Non-current liabilities	(378)	(88)	(27)	(5,328)	(14,107)		(1,860)	(893)	(23)	(4,568)	(17,226)	
Net assets (100%)	7,785	1,829	10,192	(4,419)	12,276		7,635	1,801	10,281	18,899	16,030	
Shareholding (%)	50.00	50.00	60.00	50.00	41.44		50.00	50.00	60.00	50.00	41.44	
The Group's share of net assets	3,893	915	6,115	(2,210)	5,087		3,818	901	6,169	9,450	6,643	
Adjustment	-	-	-	2,210	3,038		-	-	-	-	3,038	
Carrying amount of interest in joint ventures	3,893	915	6,115	-	8,125		3,818	901	6,169	9,450	9,681	

Unit: Million Baht

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.7 Summary financial information of the material joint ventures of the Group, adjusted for fair value adjustments and differences in accounting policies, are as follows: (Continued)

Statements of comprehensive income for the years ended 31 December 2024 and 2023

	2024				2023				Unit: Million Baht	
	TTM(T)	TTM(M)	HPLUS	PTTAC	HMC	TTM(T)	TTM(M)	HPLUS		PTTAC
Revenue*	3,923	488	181	13,515	26,361	3,537	333	110	10,773	25,833
Expenses	(1,724)	(373)	(270)	(36,837)	(29,052)	(1,786)	(293)	(236)	(12,810)	(30,138)
Profit (loss) before taxes	2,199	115	(89)	(23,322)	(2,691)	1,751	40	(126)	(2,037)	(4,305)
Income taxes	(417)	23	-	4	-	(369)	(156)	-	9	(27)
Net profit (loss)	1,782	138	(89)	(23,318)	(2,691)	1,382	(116)	(126)	(2,028)	(4,332)
Other comprehensive income (loss)	-	-	-	-	(1,063)	-	-	-	(7)	(761)
Total comprehensive income (loss)	1,782	138	(89)	(23,318)	(3,754)	1,382	(116)	(126)	(2,035)	(5,093)

During the year, the Group recognized share of profit (loss) from significant investments in joint ventures as follows:

Share of profit (loss) from investments in joint ventures during the year	891	69	(53)	(9,449)	(1,115)	691	(58)	(76)	(1,014)	(1,795)
Share of other comprehensive loss from investments in joint ventures during the year	-	-	-	-	(441)	-	-	-	(4)	(315)

* Including gain (loss) on foreign exchange rate and derivatives.

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.8 Summary financial information of the material associates of the Group, adjusted for fair value adjustments and differences in accounting policies, are as follows:

Statements of financial position as at 31 December 2024 and 2023

	2024							2023						
	AEPL	CAP	THAPPLINE	XPCL	UCHA	AVT	CF	AEPL	CAP	THAPPLINE	XPCL	UCHA	AVT	CF
Current assets	14,724	98,694	9,797	5,540	6,281	14,084	4,086	10,265	107,557	7,470	7,592	6,414	22,485	3,276
Non-current assets	83,394	90,441	15,528	122,007	6,404	36,331	135,248	74,237	80,473	16,208	123,361	6,745	26,298	94,640
Current liabilities	(10,922)	(25,150)	(1,482)	(9,291)	(999)	(4,604)	(6,838)	(5,307)	(23,524)	(1,393)	(5,359)	(1,455)	(4,333)	(2,088)
Non-current liabilities	(52,238)	(64,187)	(2,022)	(82,618)	(263)	(2,430)	(92,266)	(43,055)	(61,824)	(2,110)	(90,731)	(241)	(2,519)	(83,394)
Net assets (100%)	34,958	99,798	21,821	35,638	11,423	43,381	40,230	36,140	102,682	20,175	34,863	11,463	41,931	12,434
Shareholding (%)	42.93	15.00	49.72	25.00	25.00	32.72	25.00	42.93	15.00	49.72	25.00	25.00	32.72	25.00
The Group's share of net assets	15,007	14,970	10,849	8,910	2,856	14,194	10,058	15,515	15,402	10,031	8,716	2,866	13,720	3,109
Adjustment	4,927	14,607	(5,595)	34	918	3,545	3,043	5,117	14,921	(5,185)	35	1,447	3,689	10,712
Carrying amount of interest in associates	19,934	29,577	5,254	8,944	3,774	17,739	13,101	20,632	30,323	4,846	8,751	4,313	17,409	13,821

Unit: Million Baht

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.8 Summary financial information of the material associates of the Group, adjusted for fair value adjustments and differences in accounting policies, are as follows: (Continued)

Statements of comprehensive income for the years ended 31 December 2024 and 2023

	2024						2023						Unit: Million Baht	
	AEPL	CAP	THAPLINE	XPCL	UCHA	AVT	CF	AEPL	CAP	THAPLINE	XPCL	UCHA		AVT
Revenue*	8,091	67,971	6,832	13,478	12,517	34,277	5,089	7,966	79,911	7,234	13,922	10,416	34,370	783
Expenses	(7,914)	(70,566)	(2,828)	(12,343)	(12,565)	(30,051)	(6,361)	(6,931)	(81,319)	(2,910)	(11,793)	(11,628)	(29,832)	(677)
Profit (loss) before taxes	177	(2,595)	4,004	1,135	(48)	4,226	(1,272)	1,035	(1,408)	4,324	2,129	(1,212)	4,538	106
Income taxes	(37)	571	(797)	218	8	(746)	-	(324)	319	(856)	-	239	(820)	-
Net profit (loss)	140	(2,024)	3,207	1,353	(40)	3,480	(1,272)	711	(1,089)	3,468	2,129	(973)	3,718	106
Other comprehensive income (loss)	(1,322)	(151)	1,596	171	-	(190)	(969)	(292)	(56)	-	(100)	2	(23)	-
Total comprehensive income (loss)	(1,182)	(2,175)	4,803	1,524	(40)	3,290	(2,241)	419	(1,145)	3,468	2,029	(971)	3,695	106

During the year, the Group recognized share of profit (loss) from significant investments in associates as follows:

Share of profit (loss) from investments in associates during the year	60	(304)	1,595	338	(10)	1,139	(318)	305	(163)	1,724	532	(243)	1,217	27
Share of other comprehensive income (loss) from investments in associates during the year	(568)	(23)	794	43	-	(62)	(242)	(125)	(8)	-	(25)	1	(8)	-

* Including gain (loss) on foreign exchange rate and derivatives.

14. Investments in subsidiaries, joint ventures and associates (Continued)**14.9 Significant events during the year ended 31 December 2024****Significant events of subsidiaries of the Company****PTTGM**

On 17 October 2024, the Company's Board of Directors meeting No. 10/2024, the PTTGM's Board of Directors meeting No. 11/2024 dated 28 October 2024, and the Extraordinary General Meeting of Shareholders of PTTGM No. 2/2024 dated 14 November 2024, approved the reduction in the registered capital by Baht 46,586 million by decreasing the number of shares by 465.86 million shares, resulting in a remaining capital of Baht 76,159 million. PTTGM completed the registration of the capital reduction with the Department of Business Development, Ministry of Commerce. The Company received a return of Baht 20,210 million from the capital reduction and recognized a loss from the capital reduction (net of the reversal of the impairment of investments) amounting to Baht 5,443 million.

PTTLNG

On 21 March 2024, the Company's Board of Directors Meeting No.3/2024 passed a resolution approving a joint investment between PTT LNG Company Limited (PTTLNG) and the Electricity Generating Authority of Thailand (EGAT) to operate LNG Receiving Terminal 2 (LMPT2). Subsequently, PTTLNG established a joint venture company named PE LNG Company Limited (PE LNG), which was initially wholly owned by PTTLNG. On 30 April 2024, PTTLNG sold 50% of its investment in PE LNG to EGAT for a total amount of Baht 14,400 million. As a result, PTTLNG's investment in PE LNG has been reclassified from a subsidiary to a joint venture company.

PTTAC

During the year ended 31 December 2024, PTT Asahi Chemical Co., Ltd. ("PTTAC") recorded impairment losses on assets, mainly due to a market slowdown leading to a long-term oversupply and high feedstock costs. As a result, PTTAC announced the cessation of the business operations. PTTGC Group therefore recorded its share of losses in proportion to its joint venture of Baht 9,450 million in the consolidated statement of income. As of 31 December 2024, PTTGC Group has no outstanding investment balance in PTTAC and recognized estimated liabilities for future expenses amounting to Baht 3,035 million.

14. Investments in subsidiaries, joint ventures and associates (Continued)**14.9 Significant events during the year ended 31 December 2024 (Continued)****Significant events of subsidiaries of the Company (Continued)****Vencorex Group**

On 6 September 2024, Vencorex France S.A.S.U. (“Vencorex France”) and Vencorex TDI S.A.S.U. (“Vencorex TDI”), which are subsidiaries of PTTGC Group, filed petitions to enter into judicial reorganisation proceedings under Book VI of the French Commercial Code with the Commercial Court in Lyon. On 10 September 2024, the Commercial Court in Lyon issued an order accepting the petition for consideration and commencing a judicial collective proceeding in respect of Vencorex France and Vencorex TDI. The judicial reorganization proceedings are expected to be completed within 3 to 4 months. Subsequently, on 7 November 2024, the court extended the process until March 2025 because there have been only partial offers for the assets, and the unsold assets require sufficient time to clean the factory and equipment to ensure safety. However, the PTTGC Group has already recognized an estimated liability for the entire business restructuring process. As a result, this indicates that the PTTGC Group has indications of impairment as the recoverable amounts of the assets are less than their carrying amounts for Vencorex Group. Accordingly, the PTTGC Group has recognized impairment losses on assets amounting to Baht 7,898 million in the consolidated statements of income for the year ending 31 December 2024.

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.10 Material non-controlling interests

Financial information of subsidiaries that have material non-controlling interests are as follow:

Company name	Country of Incorporation	Non-controlling interests Shareholding (%)	
		2024	2023
PTT Exploration and Production Public Co., Ltd. (PTTEP)	Thailand	34.71	34.71
Thai Oil Public Co., Ltd. (TOP)	Thailand	52.00	52.00
IRPC Public Co., Ltd. (IRPC)	Thailand	51.95	51.95
PTT Global Chemical Public Co., Ltd. (PTTGC)	Thailand	51.82	51.82
Global Power Synergy Public Co., Ltd. (GPSC)	Thailand	24.77	24.77
PTT Oil and Retail Business Public Co., Ltd. (OR)	Thailand	25.00	25.00

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.10 Material non-controlling interests (Continued)

Financial information of subsidiaries that have material non-controlling interests, after accounting policy adjustment, before eliminations:

Summary of financial position as at 31 December 2024 and 2023

	2024						2023						Unit: Million Baht
	PTTEP	TOP	IRPC	PTTGC	GPSC	OR	PTTEP	TOP	IRPC	PTTGC	GPSC	OR	
Current assets	222,131	112,222	56,999	156,134	49,779	116,032	234,800	125,371	61,683	186,873	41,823	127,072	
Non-current assets	743,170	296,635	127,556	489,710	238,357	91,460	668,021	294,468	130,978	532,131	239,880	93,164	
Current liabilities	(105,502)	(67,663)	(53,844)	(114,131)	(23,126)	(60,673)	(88,590)	(73,501)	(68,944)	(125,841)	(38,667)	(67,679)	
Non-current liabilities	(323,923)	(175,163)	(60,603)	(263,120)	(145,868)	(37,858)	(314,788)	(178,180)	(57,595)	(296,982)	(125,511)	(43,049)	
Net assets	535,876	166,031	70,108	268,593	119,142	108,961	499,443	168,158	76,122	296,181	117,525	109,508	
The Group's share of net assets	349,675	78,386	33,622	117,905	80,918	81,673	325,996	79,405	36,479	139,197	79,893	82,082	
Non-controlling interests	186,201	87,645	36,486	150,688	38,224	27,288	173,447	88,753	39,643	156,984	37,632	27,426	

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.10 Material non-controlling interests (Continued)

Financial information of subsidiaries that have material non-controlling interests, after accounting policy adjustment, before eliminations: (Continued)

Summary of comprehensive income or loss for the years ended 31 December 2024 and 2023

Unit: Million Baht

	2024					2023						
	PTTEP	TOP	IRPC	PTTGC	GPSC	OR	PTTEP	TOP	IRPC	PTTGC	GPSC	OR
Revenue*	329,367	470,916	318,296	606,708	92,834	727,114	315,393	468,848	321,829	632,984	93,579	774,969
Expenses	(192,700)	(457,936)	(324,999)	(637,890)	(87,763)	(717,664)	(175,437)	(443,773)	(325,513)	(630,767)	(88,263)	(761,436)
Profit (loss) before income taxes	136,667	12,980	(6,703)	(31,182)	5,071	9,450	139,956	25,075	(3,684)	2,217	5,316	13,533
Income taxes	(57,436)	(2,366)	1,474	1,168	(300)	(1,801)	(63,530)	(4,790)	772	(1,352)	(507)	(2,437)
Net profit (loss)	79,231	10,613	(5,229)	(30,014)	4,770	7,649	76,426	20,285	(2,912)	865	4,809	11,096
Other comprehensive loss	(4,248)	(3,888)	(139)	(11,022)	(130)	(1,930)	(5,777)	(5,361)	(7)	(2,265)	(546)	(552)
Total comprehensive income (loss)	74,983	6,726	(5,368)	(41,036)	4,640	5,719	70,649	14,924	(2,919)	(1,400)	4,263	10,544
Net profit (loss) attributable to												
The Group	51,732	5,084	(2,495)	(14,363)	3,056	5,738	49,898	9,670	(1,405)	481	2,779	8,320
Non-controlling interests	27,499	5,529	(2,734)	(15,651)	1,714	1,911	26,528	10,615	(1,507)	384	2,030	2,776
Total dividend paid to non-controlling interests	13,434	4,617	350	1,873	812	1,620	12,745	2,747	343	726	596	1,200

* Including gain (loss) on foreign exchange rate and derivatives.

14. Investments in subsidiaries, joint ventures and associates (Continued)

14.10 Material non-controlling interests (Continued)

Financial information of subsidiaries that have material non-controlling interests, after accounting policy adjustment, before eliminations: (Continued)

Summary of cash flows for the years ended 31 December 2024 and 2023

	2024						2023					
	PTTEP	TOP	IRPC	PTTGC	GPSC	OR	PTTEP	TOP	IRPC	PTTGC	GPSC	OR
Net cash provided by operating activities	202,301	39,395	10,323	32,322	23,049	17,640	151,851	27,970	18,630	48,234	23,160	37,972
Net cash used in investing activities	(150,369)	(14,049)	(3,571)	(3,887)	(2,841)	(5,263)	(82,447)	(19,574)	(12,022)	(12,148)	(14,042)	(7,669)
Net cash used in financing activities	(54,367)	(24,627)	(3,048)	(33,739)	(8,108)	(16,275)	(51,416)	(23,072)	(3,618)	(25,123)	(10,195)	(16,802)
Others	(1,257)	(108)	-	731	25	(307)	(2,770)	(468)	-	416	38	25
Net increase (decrease) in cash and cash equivalents	(3,692)	611	3,704	(4,573)	12,125	(4,205)	15,218	(15,144)	2,990	11,379	(1,039)	13,526

Unit: Million Baht

15. Investment properties

Details of investment properties are as follows:

Unit: Million Baht

	Consolidated financial statements					
	Land	Buildings and building improvements	Other assets	Construction in progress	Right-of-use assets	Total
As at 1 January 2023						
Cost	8,233	3,995	14	268	128	12,638
<u>Less</u> Accumulated depreciation	-	(1,818)	(3)	-	(34)	(1,855)
Allowance for impairment of assets	(47)	-	-	-	-	(47)
Net book value	8,186	2,177	11	268	94	10,736
For the year ended 31 December 2023						
Beginning net book value	8,186	2,177	11	268	94	10,736
- Additions	-	29	-	463	-	492
- Reclassifications	1	611	2	(405)	-	209
- Depreciation for the year	-	(196)	(1)	-	(6)	(203)
Ending net book value	8,187	2,621	12	326	88	11,234
As at 31 December 2023						
Cost	8,234	4,644	16	326	128	13,348
<u>Less</u> Accumulated depreciation	-	(2,023)	(4)	-	(40)	(2,067)
Allowance for impairment of assets	(47)	-	-	-	-	(47)
Net book value	8,187	2,621	12	326	88	11,234

15. Investment properties (Continued)

Details of investment properties are as follows: (Continued)

Unit: Million Baht

	Consolidated financial statements					Total
	Land	Buildings and building improvements	Other assets	Construction in progress	Right-of-use assets	
For the year ended						
31 December 2024						
Beginning net book value	8,187	2,621	12	326	88	11,234
- Additions	-	59	12	169	15	255
- Disposal and write-off - net	-	(7)	-	-	-	(7)
- Reclassifications	178	635	54	(477)	-	390
- Reversal on impairment of assets	14	-	-	-	-	14
- Depreciation for the year	-	(258)	(5)	-	(5)	(268)
Ending net book value	<u>8,379</u>	<u>3,050</u>	<u>73</u>	<u>18</u>	<u>98</u>	<u>11,618</u>
As at 31 December 2024						
Cost	8,412	5,322	82	18	143	13,977
<u>Less</u> Accumulated depreciation	-	(2,272)	(9)	-	(45)	(2,326)
Allowance for impairment of assets	(33)	-	-	-	-	(33)
Net book value	<u>8,379</u>	<u>3,050</u>	<u>73</u>	<u>18</u>	<u>98</u>	<u>11,618</u>

As at 31 December 2024 and 2023, the Group did not have pledged assets.

15. Investment properties (Continued)

Details of investment properties are as follows: (Continued)

Unit: Million Baht

	Separate financial statements				Total
	Land	Buildings and building improvements	Construction in progress	Right-of-use assets	
As at 1 January 2023					
Cost	3,585	1,652	2	47	5,286
<u>Less</u> Accumulated depreciation	-	(1,344)	-	(15)	(1,359)
Net book value	3,585	308	2	32	3,927
For the year ended 31 December 2023					
Beginning net book value	3,585	308	2	32	3,927
- Disposal and write-off - net	-	(1)	-	-	(1)
- Reclassifications	-	188	-	15	203
- Depreciation for the year	-	(38)	-	(15)	(53)
Ending net book value	3,585	457	2	32	4,076
As at 31 December 2023					
Cost	3,585	1,633	2	65	5,285
<u>Less</u> Accumulated depreciation	-	(1,176)	-	(33)	(1,209)
Net book value	3,585	457	2	32	4,076
For the year ended 31 December 2024					
Beginning net book value	3,585	457	2	32	4,076
- Reclassifications	3	1	-	14	18
- Depreciation for the year	-	(46)	-	(10)	(56)
Ending net book value	3,588	412	2	36	4,038
As at 31 December 2024					
Cost	3,588	1,634	2	79	5,303
<u>Less</u> Accumulated depreciation	-	(1,222)	-	(43)	(1,265)
Net book value	3,588	412	2	36	4,038

15. Investment properties (Continued)

Fair value disclosed as at 31 December 2024 and 2023 using different levels of inputs as follows:

	Unit: Million Baht			
	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Fair value hierarchy				
Level 2	13,591	13,313	4,650	4,666
Level 3	14,151	14,000	398	292
Total	27,742	27,313	5,048	4,958

Fair value level 2

The fair values of land for rent categorized as investment property were determined by independent property appraisers under the market approach.

Fair value level 3

The fair values of land and buildings for rent categorized as investment property were determined by using the income approach. The inputs used for the valuation consisted of the rate of return and finance costs

16. Property, plant and equipment

Details of property, plant and equipment are as follows:

Unit: Million Baht

	Consolidated financial statements						Total
	Land	Buildings and building improvements	Machinery and equipment	Exploration and production properties	Other assets	Construction in progress	
As at 1 January 2023							
Cost	58,600	354,577	1,298,178	1,233,095	26,429	255,542	3,226,421
Less Accumulated depreciation	-	(202,118)	(663,980)	(823,510)	(19,456)	-	(1,709,064)
Allowance for impairment of assets	(73)	(2,054)	(3,539)	(9,630)	(65)	(2,666)	(18,027)
Net book value	58,527	150,405	630,659	399,955	6,908	252,876	1,499,330

16. Property, plant and equipment (Continued)

Details of property, plant and equipment are as follows: (Continued)

	Consolidated financial statements						Total
	Land	Buildings and building improvements	Machinery and equipment	Exploration and production properties	Other assets	Construction in progress	
For the year ended							
31 December 2023							
Beginning net book value	58,527	150,405	630,659	399,955	6,908	252,876	1,499,330
- Additions	669	1,720	5,378	104,693	929	76,154	189,543
- Borrowing costs	-	1	31	-	-	5,680	5,712
- Reclassifications	3,906	10,475	74,000	7,769	1,532	(90,590)	7,092
- Disposal and write-off - net	(2,616)	(1,152)	(2,775)	(508)	23	(1,312)	(8,340)
- Depreciation for the year	-	(12,520)	(52,961)	(78,575)	(1,935)	-	(145,991)
- Reversal of (loss on) impairment of assets	-	18	(215)	-	-	(68)	(265)
- Reclassified to assets held for sale	-	(318)	36	-	(2)	(1,555)	(1,839)
- Exchange differences on translation of financial statements	115	76	1,547	(4,400)	125	(1,496)	(4,033)
Ending net book value	60,601	148,705	655,700	428,934	7,580	239,689	1,541,209

Unit: Million Baht

16. Property, plant and equipment (Continued)

Details of property, plant and equipment are as follows: (Continued)

Unit: Million Baht

	Consolidated financial statements						Total
	Land	Buildings and building improvements	Machinery and equipment	Exploration and production properties	Other assets	Construction in progress	
As at 31 December 2023							
Cost	60,674	363,379	1,361,768	1,183,944	28,783	242,360	3,240,908
<u>Less</u> Accumulated depreciation	-	(212,729)	(702,995)	(745,474)	(21,138)	-	(1,682,336)
Allowance for impairment of assets	(73)	(1,945)	(3,073)	(9,536)	(65)	(2,671)	(17,363)
Net book value	60,601	148,705	655,700	428,934	7,580	239,689	1,541,209

16. Property, plant and equipment (Continued)

Details of property, plant and equipment are as follows: (Continued)

Unit: Million Baht

	Consolidated financial statements						Total
	Land	Buildings and building improvements	Machinery and equipment	Exploration and production properties	Other assets	Construction in progress	
For the year ended							
31 December 2024							
Beginning net book value	60,601	148,705	655,700	428,934	7,580	239,689	1,541,209
- Business acquisition	-	17	-	-	1	-	18
- Additions	223	1,814	6,309	140,083	1,619	50,997	201,045
- Borrowing costs	-	1	89	-	-	5,266	5,356
- Reclassifications	(139)	13,517	39,542	4,979	729	(58,919)	(291)
- Disposal and write-off - net	(1,397)	(673)	(35,784)	(1,202)	(101)	(377)	(39,534)
- Depreciation for the year	-	(13,404)	(53,791)	(89,340)	(2,101)	-	(158,636)
- Reversal of (loss on) impairment of assets (Note 21)	(229)	(1,294)	(4,607)	-	3	(761)	(6,888)
- Exchange differences on translation of financial statements	(395)	(655)	(1,587)	(4,705)	(32)	(248)	(7,622)
Ending net book value	58,664	148,028	605,871	478,749	7,698	235,647	1,534,657

16. Property, plant and equipment (Continued)

Details of property, plant and equipment are as follows: (Continued)

Unit: Million Baht

	Consolidated financial statements					Total
	Land	Buildings and building improvements	Machinery and equipment	Exploration and production properties	Other assets	
As at 31 December 2024						
Cost	58,957	376,167	1,361,922	1,300,017	30,072	239,024
<u>Less</u> Accumulated depreciation	-	(224,963)	(748,638)	(811,937)	(22,312)	-
Allowance for impairment of assets	(293)	(3,176)	(7,413)	(9,331)	(62)	(3,377)
Net book value	58,664	148,028	605,871	478,749	7,698	235,647

As at 31 December 2024, the Group had pledged assets amounting to Baht 53,652 million (31 December 2023: Baht 52,380 million)

16. Property, plant and equipment (Continued)

Details of property, plant and equipment are as follows: (Continued)

Unit: Million Baht

	Separate financial statements					Total
	Land	Buildings and building improvements	Machinery and equipment	Other assets	Construction in progress	
As at 1 January 2023						
Cost	6,194	41,681	385,119	19,246	29,605	481,845
<u>Less</u> Accumulated depreciation	-	(19,112)	(195,985)	(14,144)	-	(229,241)
Allowance for impairment of assets	-	(1,336)	(2,927)	(65)	-	(4,328)
Net book value	6,194	21,233	186,207	5,037	29,605	248,276
For the year ended 31 December 2023						
Beginning net book value	6,194	21,233	186,207	5,037	29,605	248,276
- Additions	17	152	291	77	15,378	15,915
- Borrowing costs	-	-	-	-	971	971
- Reclassifications	383	826	11,540	1,139	(14,848)	(960)
- Disposal and write-off - net	(6)	(53)	(195)	(2)	-	(256)
- Depreciation for the year	-	(1,574)	(13,075)	(1,345)	-	(15,994)
- Reversal on impairment of assets	-	39	65	1	-	105
Ending net book value	6,588	20,623	184,833	4,907	31,106	248,057
As at 31 December 2023						
Cost	6,588	41,895	392,915	19,902	31,106	492,406
<u>Less</u> Accumulated depreciation	-	(19,975)	(205,220)	(14,931)	-	(240,126)
Allowance for impairment of assets	-	(1,297)	(2,862)	(64)	-	(4,223)
Net book value	6,588	20,623	184,833	4,907	31,106	248,057

16. Property, plant and equipment (Continued)

Details of property, plant and equipment are as follows: (Continued)

Unit: Million Baht

	Separate financial statements					Total
	Land	Buildings and building improvements	Machinery and equipment	Other assets	Construction in progress	
For the year ended						
31 December 2024						
Beginning net book value	6,588	20,623	184,833	4,907	31,106	248,057
- Additions	-	111	148	59	16,647	16,965
- Borrowing costs	-	-	-	-	993	993
- Reclassifications	18	639	4,641	203	(5,878)	(377)
- Disposal and write-off - net	-	(16)	(5)	(2)	-	(23)
- Depreciation for the year	-	(1,578)	(13,214)	(1,291)	-	(16,083)
- Reversal on impairment of assets	-	57	48	3	-	108
Ending net book value	6,606	19,836	176,451	3,879	42,868	249,640
As at 31 December 2024						
Cost	6,606	42,309	396,707	19,365	42,868	507,855
<u>Less</u> Accumulated depreciation	-	(21,233)	(217,442)	(15,425)	-	(254,100)
Allowance for impairment of assets	-	(1,240)	(2,814)	(61)	-	(4,115)
Net book value	6,606	19,836	176,451	3,879	42,868	249,640

Borrowing costs were capitalized as a part of costs of property, plant and equipment. During the year, the Group used capitalization rates ranging from 2.30% - 6.71% per annum (2023: 2.00% - 7.00% per annum). The Company used capitalization rates at 3.21% per annum (2023: 3.40% per annum).

16. Property, plant and equipment (Continued)**Investment in Clean Fuel Project of TOP**

TOP entered into the Engineering, Procurement and Construction Contract (the "EPC Contract") with the main contractor for the construction of the Clean Fuel Project (CFP), which was approved at the Extraordinary General Meeting of Shareholders on 27 August 2018. The total investment value of the project is approximately USD 4,825 million, or equivalent to approximately Baht 160,279 million, including interest during construction of approximately USD 151 million, or equivalent to approximately Baht 5,016 million. The project cost also includes the investment in the Energy Recovery Unit (ERU), an electrical power plant with a designed generating capacity of 250 megawatts, which will supply electricity and steam to the production process of the CFP.

Due to the COVID-19 pandemic, which affected the CFP Project from the commencement of the engineering design stage, the procurement of equipment and materials and on-site construction, requiring compliance with COVID-19 prevention measures, operational plans had to be adjusted to reflect the prevailing circumstances and address problems to ensure the continued progress of the CFP Project. These factors led to an increase in the CFP Project costs and an extension of the construction timeline beyond the original schedule. Accordingly, the Board of Directors Meeting No. 9/2021 of TOP resolved to approve an increase in interest during construction of the CFP Project by an additional USD 422 million, or equivalent to approximately Baht 14,278 million. Subsequently, the Board of Directors Meeting No. 4/2022 of TOP approved an additional budget for the development of the CFP Project and the execution of an amendment agreement to the EPC Contract with the Main Contractor. This approval increased the budget of the CFP Project by approximately USD 550 million, or equivalent to approximately Baht 18,165 million, and extended the project completion timeline by 24 months under the EPC Contract to ensure the best interests of TOP and the successful completion of the CFP Project.

During 2024, the Main Contractor's failure to pay to its subcontractors working on the CFP Project resulted in work stoppages or workforce reductions. As a result, TOP had to explore various options to ensure the completion of the CFP Project. In this regard, TOP engaged a technical advisor to review and analyse the remaining construction work of the CFP Project and considered recommendations and opinions provided by TOP's technical advisor, legal advisor and independent financial advisor. At the Board of Directors Special Meeting No. 6/2024 of TOP, held on 19 December 2024, the Board of Directors approved an increase of the investment cost of the CFP Project and approved the convening of the Extraordinary General Meeting of Shareholders No. 1/2025 of TOP, scheduled for 21 February 2025, to propose an increase in the investment cost in the CFP Project by approximately USD 1,776 million, or equivalent to approximately Baht 63,028 million and an increase in interest during construction of approximately USD 505 million, or equivalent to approximately Baht 17,922 million. The additional investment will be used for the construction of the CFP Project, procurement of remaining equipment and materials and payment of other expenses related to the development of the CFP Project, including advisory fees, to support the completion of the CFP Project.

16. Property, plant and equipment (Continued)The Enforcement of security in respect of the Clean Fuel Project (CFP)

TOP has enforced security provided under the EPC contract between TOP and the Consortium of PSS Netherlands B.V. (Offshore Contractor) and an unincorporated joint venture of Samsung E&A (Thailand) Co., Ltd., Petrofac South East Asia Pte. Ltd., and Saipem Singapore Pte. Ltd. (Onshore Contractor), in accordance with the contract and in the interest of TOP and its shareholders, in an amount of approximately USD 358 million, approximately equivalent to Baht 12,339 million. TOP received such enforcement proceeds in January 2025 and will record the transaction in the first quarter of 2025, deducting the cost of construction in progress of the CFP Project amounting to approximately Baht 12,241 million, and recording other income amounting to approximately Baht 98 million.

17. Right-of-use assets

Details of right-of-use assets are as follows:

	Consolidated financial statements					Total
	Land	Buildings and building improvements	Machinery and equipment	Vehicles	Exploration and production properties	
As at 1 January 2023						
Cost	72,539	5,218	31,571	6,570	41,476	13,196
Less Accumulated depreciation	(21,101)	(1,868)	(9,953)	(2,302)	(10,025)	(1,257)
Allowance for impairment of assets	(11)	-	-	-	-	-
Net book value	51,427	3,350	21,618	4,268	31,451	11,939
						124,053

Unit: Million Baht

17. Right-of-use assets (Continued)

Details of right-of-use assets are as follows: (Continued)

	Consolidated financial statements						Total
	Land	Buildings and building improvements	Machinery and equipment	Vehicles	Exploration and production properties	Other assets	
Unit: Million Baht							
For the year ended 31 December 2023							
Beginning net book value	51,427	3,350	21,618	4,268	31,451	11,939	124,053
- Additions	1,802	2,161	1,135	1,071	4,864	315	11,348
- Modification	64	44	772	-	852	(14)	1,718
- Reclassifications	-	-	1	30	-	-	31
- Termination	(26)	(247)	(101)	(20)	(862)	1	(1,255)
- Depreciation for the year	(3,147)	(1,904)	(2,722)	(1,822)	(8,484)	(1,488)	(19,567)
- Classified to assets held for sale	-	(4)	-	-	-	-	(4)
- Exchange differences on translation of financial statements	1	(8)	6	21	(245)	-	(225)
Ending net book value	50,121	3,392	20,709	3,548	27,576	10,753	116,099
As at 31 December 2023							
Cost	74,169	5,473	32,124	6,662	43,052	13,441	174,921
Less: Accumulated depreciation	(24,037)	(2,081)	(11,415)	(3,114)	(15,476)	(2,688)	(58,811)
Allowance for impairment of assets	(11)	-	-	-	-	-	(11)
Net book value	50,121	3,392	20,709	3,548	27,576	10,753	116,099

17. Right-of-use assets (Continued)

Details of right-of-use assets are as follows: (Continued)

Unit: Million Baht

	Consolidated financial statements						Total
	Land	Buildings and building improvements	Machinery and equipment	Vehicles	Exploration and production properties	Other assets	
For the year ended 31 December 2024							
Beginning net book value	50,121	3,392	20,709	3,548	27,576	10,753	116,099
- Additions	5,923	1,552	1,405	1,890	13,390	394	24,554
- Modification	1,003	17	(10)	(15)	(519)	(469)	7
- Reclassifications	9	9	-	318	(305)	-	31
- Termination	(115)	(93)	(65)	(57)	-	(1)	(331)
- Depreciation for the year	(3,332)	(1,590)	(2,893)	(1,853)	(11,650)	(1,726)	(23,044)
- Loss on impairment	(191)	(42)	(52)	(11)	-	-	(296)
- Exchange differences on translation of financial statements	(156)	(77)	(47)	(21)	(239)	(2)	(542)
Ending net book value	53,262	3,168	19,047	3,799	28,253	8,949	116,478
As at 31 December 2024							
Cost	79,355	5,469	32,173	7,650	51,019	13,236	188,902
Less: Accumulated depreciation	(25,906)	(2,262)	(13,076)	(3,841)	(22,766)	(4,287)	(72,138)
Allowance for impairment of assets	(187)	(39)	(50)	(10)	-	-	(286)
Net book value	53,262	3,168	19,047	3,799	28,253	8,949	116,478

17. Right-of-use assets (Continued)

Details of right-of-use assets are as follows: (Continued)

Unit: Million Baht

	Separate financial statements					Total
	Land	Buildings and building improvements	Machinery and equipment	Vehicles	Other assets	
As at 1 January 2023						
Cost	29,888	39	11,397	3,611	214	45,149
<u>Less</u> Accumulated depreciation	(12,483)	(25)	(6,844)	(885)	(36)	(20,273)
Allowance for impairment of assets	(7)	-	-	-	-	(7)
Net book value	17,398	14	4,553	2,726	178	24,869
For the year ended 31 December 2023						
Beginning net book value	17,398	14	4,553	2,726	178	24,869
- Additions	294	2	292	399	117	1,104
- Modification	5	-	2	(1)	(63)	(57)
- Reclassifications	(15)	-	-	-	-	(15)
- Depreciation for the year	(1,073)	(9)	(597)	(750)	(49)	(2,478)
Ending net book value	16,609	7	4,250	2,374	183	23,423
As at 31 December 2023						
Cost	30,161	38	11,686	3,657	267	45,809
<u>Less</u> Accumulated depreciation	(13,545)	(31)	(7,436)	(1,283)	(84)	(22,379)
Allowance for impairment of assets	(7)	-	-	-	-	(7)
Net book value	16,609	7	4,250	2,374	183	23,423

17. Right-of-use assets (Continued)

Details of right-of-use assets are as follows: (Continued)

Unit: Million Baht

	Separate financial statements					Total
	Land	Buildings and building improvements	Machinery and equipment	Vehicles	Other assets	
For the year ended						
31 December 2024						
Beginning net book value	16,609	7	4,250	2,374	183	23,423
- Additions	238	14	2,403	784	200	3,639
- Modification	(40)	9	8	(15)	(64)	(102)
- Reclassifications	(14)	-	-	15	36	37
- Termination	-	-	-	(7)	-	(7)
- Depreciation for the year	(1,033)	(14)	(667)	(1,024)	(93)	(2,831)
Ending net book value	15,760	16	5,994	2,127	262	24,159
As at 31 December 2024						
Cost	30,138	38	14,041	4,282	403	48,902
<u>Less</u> Accumulated depreciation	(14,371)	(22)	(8,047)	(2,155)	(141)	(24,736)
Allowance for impairment of assets	(7)	-	-	-	-	(7)
Net book value	15,760	16	5,994	2,127	262	24,159

18. Goodwill

Movements in goodwill are as follows:

	Unit: Million Baht	
	Consolidated	
	financial statements	
	2024	2023
Net book value as at 1 January	183,731	188,964
- Business acquisition	687	-
- Loss on impairment of assets	-	(4,255)
- Write-off	-	(2,623)
- Classified as assets held for sale	-	(236)
- Exchange differences on translation of financial statements	(5,511)	1,881
Net book value as at 31 December	<u>178,907</u>	<u>183,731</u>

19. Other intangible assets other than goodwill

Details of other intangible assets other than goodwill are as follows:

Unit: Million Baht

	Consolidated financial statements				
	Computer software	Customer contracts	Copyright, license and trademark	Others	Total
As at 1 January 2023					
Cost	38,467	68,006	47,952	40,064	194,489
<u>Less</u> Accumulated amortization	(25,071)	(13,029)	(9,329)	(9,788)	(57,217)
Allowance for impairment of assets	(26)	-	(3)	(192)	(221)
Net book value	13,370	54,977	38,620	30,084	137,051
For the year ended 31 December 2023					
Beginning net book value	13,370	54,977	38,620	30,084	137,051
- Additions	2,608	-	1,900	1,129	5,637
- Reclassifications	1,841	34	3,500	(4,028)	1,347
- Disposal and write-off - net	(113)	-	(243)	(53)	(409)
- Amortization for the year	(3,773)	(2,686)	(3,433)	(1,878)	(11,770)
- Loss on impairment of assets	-	-	(103)	-	(103)
- Business disposal	(88)	-	-	(28)	(116)
- Classified as assets held for sale	(36)	-	(2,749)	-	(2,785)
- Exchange differences on translation of financial statements	(93)	483	226	844	1,460
Ending net book value	13,716	52,808	37,718	26,070	130,312
As at 31 December 2023					
Cost	42,016	68,683	50,153	37,885	198,737
<u>Less</u> Accumulated amortization	(28,274)	(15,875)	(12,159)	(11,793)	(68,101)
Allowance for impairment of assets	(26)	-	(276)	(22)	(324)
Net book value	13,716	52,808	37,718	26,070	130,312

19. Other intangible assets other than goodwill (Continued)

Details of other intangible assets other than goodwill are as follows: (Continued)

Unit: Million Baht

	Consolidated financial statements				Total
	Computer software	Customer contracts	Copyright, license and trademark	Others	
For the year ended					
31 December 2024					
Beginning net book value	13,716	52,808	37,718	26,070	130,312
- Business acquisitions	1	-	-	456	457
- Additions	3,594	-	1,281	1,183	6,058
- Borrowing costs	10	-	-	-	10
- Reclassifications	4,470	35	35	(652)	3,888
- Disposal and write-off - net	(98)	-	-	(90)	(188)
- Amortization for the year	(4,272)	(2,675)	(3,117)	(1,832)	(11,896)
- Loss on impairment of assets	(9)	-	(423)	(54)	(486)
- Business disposal	(13)	-	-	-	(13)
- Exchange differences on translation of financial statements	(44)	(1,108)	(914)	(1,538)	(3,604)
Ending net book value	17,355	49,060	34,580	23,543	124,538
As at 31 December 2024					
Cost	48,879	67,167	50,145	36,574	202,765
<u>Less</u> Accumulated amortization	(31,490)	(18,107)	(14,910)	(12,959)	(77,466)
Allowance for impairment of assets	(34)	-	(655)	(72)	(761)
Net book value	17,355	49,060	34,580	23,543	124,538

19. Other intangible assets other than goodwill (Continued)

Details of other intangible assets other than goodwill are as follows: (Continued)

Unit: Million Baht

	Separate financial statements		
	Computer software	Others	Total
As at 1 January 2023			
Cost	10,878	36	10,914
<u>Less</u> Accumulated amortization	(8,188)	-	(8,188)
Allowance for impairment of assets	(24)	-	(24)
Beginning net book value	2,666	36	2,702
For the year ended 31 December 2023			
Beginning net book value	2,666	36	2,702
- Additions	157	-	157
- Reclassifications	813	1	814
- Disposal and write-off - net	(31)	-	(31)
- Amortization for the year	(1,050)	-	(1,050)
Ending net book value	2,555	37	2,592
As at 31 December 2023			
Cost	11,510	37	11,547
<u>Less</u> Accumulated amortization	(8,932)	-	(8,932)
Allowance for impairment of assets	(23)	-	(23)
Net book value	2,555	37	2,592

19. Other intangible assets other than goodwill (Continued)

Details of other intangible assets other than goodwill are as follows: (Continued)

	Unit: Million Baht		
	Separate financial statements		
	Computer software	Others	Total
For the year ended 31 December 2024			
Beginning net book value	2,555	37	2,592
- Additions	95	-	95
- Reclassifications	412	-	412
- Amortization for the year	(1,019)	-	(1,019)
Ending net book value	2,043	37	2,080
As at 31 December 2024			
Cost	11,886	37	11,923
<u>Less</u> Accumulated amortization	(9,819)	-	(9,819)
Allowance for impairment of assets	(24)	-	(24)
Net book value	2,043	37	2,080

20. Exploration and evaluation assets

Movements in petroleum exploration and evaluation assets are as follows:

	Unit: Million Baht	
	Consolidated	
	financial statements	
	2024	2023
Net book value as at 1 January	94,331	106,161
- Additions	5,148	5,531
- Reclassifications	(4,979)	(7,770)
- Disposal and write-off - net	(1,523)	(2,182)
- Business acquisitions	-	(6,542)
- Reclassified to assets held for sale	(2,066)	-
- Exchange differences on translation of financial statements	(527)	(867)
Net book value as at 31 December	90,384	94,331

21. Impairment of assets

The Group performs an impairment test on assets whenever events or circumstances suggest that the carrying amount of the assets may exceed its recoverable amount. For the intangible assets with indefinite useful lives or not yet available for use and goodwill from business combination, the Group perform impairment tests annually or when the indication exists. A loss on impairment is recognized when the recoverable amount of an asset is lower than its carrying amount. The recoverable amount is the higher of the asset's fair value less cost to sell and its value in use.

Losses on impairment of assets, excluding goodwill, may be reversed if the estimates and assumptions applied in determining the recoverable amount change.

In determining recoverable amounts, the Group applied significant estimates and assumptions related to various matters, such as the short-term forward oil price curve, e.g. Brent and Dubai, and the long-term oil price based on global supply and demand, estimates made by the project management team regarding the capital expenditure and operating expenditure approved by management using the constant inflation rate at rate of 2% for periods beyond five years, exchange rates, discount rates, and past industry performance. These estimates and assumptions were consistent with external information sources. The significant assumptions used in testing the value in use of assets were discount rates from 7.00% to 12.00%.

During the year ended 31 December 2024, the Group recognized loss on impairment of assets in statements of income as follows:

	Unit: Million Baht
	Consolidated
	financial statements
Investments in joint ventures (Note 14)	516
Investments in associates (Note 14)	500
Property, plant and equipment (Note 16)	6,888
Other assets	1,583
Total	9,487

22. Income taxes and deferred taxes

Applicable tax rates for the Group are as follows:

	<u>Rates (%)</u>
Petroleum income tax on petroleum business in Thailand	
pursuant to the Petroleum Income Tax Act, B.E. 2514 and B.E. 2532	50
pursuant to the Petroleum Income Tax Act, B.E. 2560	20
Corporate Income tax from the Petroleum business in the Thai-Malaysia	
co-development area under the Petroleum Income Tax Act (No.5) B.E. 2541 and	
Petroleum Income tax in Malaysia	10
Petroleum income tax in foreign countries	20 - 80
Petroleum resource rent tax in Australia	40
Income tax under the Revenue Code of the Company and its subsidiaries	Exempt, 3 - 20
Corporate income tax in foreign countries	5 - 80
Income tax from the profit distribution	10 - 20

22.1 Income taxes recognized in the statements of income for the years ended 31 December 2024 and 2023 are as follows:

	Unit: Million Baht			
	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Current tax:				
Current tax	76,141	79,368	4,367	10,989
Adjustments in respect of current tax of				
previous year	(1,019)	(1,413)	(245)	(375)
	75,122	77,955	4,122	10,614
Deferred tax:				
Change in temporary differences	(7,701)	3,054	57	(4,391)
Tax effect of currency translation on tax base	(211)	304	-	-
	(7,912)	3,358	57	(4,391)
Total	67,210	81,313	4,179	6,223

22. Income taxes and deferred taxes (Continued)

22.2 Reconciliations between income taxes and the accounting profit before income taxes multiplied by the applicable tax rate are as follows:

	Unit: Million Baht			
	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Accounting profit before income taxes	180,678	236,593	78,034	84,607
Applicable tax rate at 20%	36,136	47,319	15,607	16,921
Tax effect of :				
Income not subject to tax	(4,132)	(2,011)	(12,321)	(7,240)
Non-deductible expenses	22,218	13,578	5,453	625
Expenses deductible at a greater amount	(1,275)	(979)	(117)	(105)
Loss from the entities not subject to tax	782	2,672	-	-
Adjustment in respect of prior year	(1,019)	(1,413)	(245)	(375)
Share of (profit) loss from investment in joint ventures and associates	951	(926)	-	-
Tax credit on petroleum royalty	(11,891)	(13,514)	-	-
Differences in tax rate	29,751	33,870	-	-
Deferred tax on functional currency	(211)	304	-	-
Previously deductible temporary differences and unrecognized tax losses that is used to reduce current tax expense	-	-	(4,186)	(3,608)
Others	(4,100)	2,413	(12)	5
Income taxes	67,210	81,313	4,179	6,223

22. Income taxes and deferred taxes (Continued)

Impact of international tax reform - Pillar Two model rules

The Group falls within the scope of the Pillar Two model rules published by the Organization for Economic Cooperation and Development (OECD). This includes the collection of top-up tax from large multinational corporations whose effective tax rates from operations in each country are lower than 15%. Accordingly, the Group has applied the mandatory exception requiring that entities shall neither recognize nor disclose information about deferred tax assets and liabilities related to Pillar Two income taxes.

The Group operates in several countries where Pillar Two legislation has already been enacted and became effective for fiscal years beginning on or after 1 January 2024. The Group's management believes that most of these countries have benefited from the "Transitional Safe Harbour" relief measures. Therefore, the Group has not recognized an additional provision for liabilities related to the top-up tax in the financial statements for the year ended 31 December 2024.

In addition, on 26 December 2024, Thailand enacted such law, which will be effective for fiscal years beginning on or after 1 January 2025. The Group's management is currently assessing the potential impact of the Pillar Two legislation on the Group's financial statements. The management expects that the legislation will not have a significant impact on the Group's financial statements for the year ended 31 December 2025.

22.3 Movements in deferred taxes

Deferred income tax assets are recognized for tax loss and carried forwards only to the extent that realization of the related tax benefit through the future taxable profits is probable. The Group does not recognize deferred tax asset from tax losses of Baht 33,720 million (2023: Baht 32,053 million) to carry forward against future taxable income. Some portions of tax losses could be carried forward against future taxable income without expiration invalid and some portions will be expired during 2025 to 2044.

22. Income taxes and deferred taxes (Continued)

22.3 Movements in deferred taxes (Continued)

Unit: Million Baht

	Consolidated financial statements							
	Net balance as at 1 January 2024	Profit (loss)	Other Comprehensive income (loss)	Currency translation differences	Others	Net Balance	As at 31 December 2024	
						Deferred tax assets	Deferred tax liabilities	
Trade and other current receivables	(686)	89	-	(1)	-	(598)	744	(1,342)
Inventories	(404)	647	(1)	(17)	-	225	349	(124)
Investments measured at fair value through other comprehensive income	(553)	6	1,602	-	53	1,108	4,052	(2,944)
Other investments in financial assets	(328)	(15)	-	19	-	(324)	109	(433)
Property, plant and equipment	(87,642)	129	-	880	(2,323)	(88,956)	12,974	(101,930)
Right-of-use assets	(3,002)	(442)	-	(639)	(1,655)	(5,738)	6,245	(11,983)
Intangible assets	(7,487)	511	-	991	(10,296)	(16,281)	5,711	(21,992)
Derivatives	1,550	(598)	230	(36)	(90)	1,056	1,411	(355)
Loans	(89)	(9)	-	-	-	(98)	-	(98)
Lease liabilities	6,109	563	-	601	1,605	8,878	14,283	(5,405)
Provisions for employee benefits	6,844	314	293	(44)	2	7,409	7,409	-
Provision for decommissioning costs	31,445	4,336	-	(396)	12,205	47,590	47,592	(2)
Cumulative loss carried forward	9,563	1,976	-	(90)	-	11,449	11,449	-
Tax effect of currency translation on tax base	(851)	210	-	(9)	-	(650)	-	(650)
Others	5,314	195	2	(177)	-	5,334	8,397	(3,063)
Total before set-off of taxes	(40,217)	7,912	2,126	1,082	(499)	(29,596)	120,725	(150,321)
Set-off of taxes						-	(73,902)	73,902
Net deferred tax assets (liabilities)						(29,596)	46,823	(76,419)

22. Income taxes and deferred taxes (Continued)

22.3 Movements in deferred taxes (Continued)

Unit: Million Baht

	Consolidated financial statements						As at 31 December 2023	
	Net balance as at 1 January 2023	Profit (loss)	Other Comprehensive income (loss)	Currency translation differences	Others	Net Balance	Deferred tax assets	Deferred tax liabilities
Trade and other current receivables	(11,830)	11,144	-	-	-	(686)	770	(1,456)
Inventories	(242)	(192)	-	(5)	35	(404)	442	(846)
Investments measured at fair value through other comprehensive income	(3,926)	9	3,373	-	(9)	(553)	2,677	(3,230)
Other investments in financial assets	(477)	(116)	-	2	263	(328)	1	(329)
Property, plant and equipment	(79,964)	(7,729)	-	(87)	138	(87,642)	11,939	(99,581)
Right-of-use assets	(3,347)	345	-	1	(1)	(3,002)	782	(3,784)
Intangible assets	(6,902)	(74)	-	(40)	(471)	(7,487)	6,424	(13,911)
Derivatives	1,842	(303)	7	4	-	1,550	1,712	(162)
Loans	(72)	(16)	-	(1)	-	(89)	5	(94)
Lease liabilities	4,694	1,451	-	(37)	1	6,109	6,109	-
Provisions for employee benefits	6,540	202	157	(16)	(39)	6,844	6,879	(35)
Provision for decommissioning costs	34,572	(3,132)	-	5	-	31,445	31,615	(170)
Cumulative loss carried forward	14,489	(4,964)	-	20	18	9,563	9,564	(1)
Tax effect of currency translation on tax base	(586)	(306)	-	16	25	(851)	-	(851)
Others	4,997	323	-	33	(39)	5,314	8,475	(3,161)
Total before set-off of taxes	(40,212)	(3,358)	3,537	(105)	(79)	(40,217)	87,394	(127,611)
Set-off of taxes						-	(44,916)	44,916
Net deferred tax assets (liabilities)						(40,217)	42,478	(82,695)

22 Income taxes and deferred taxes (Continued)

22.3 Movements in deferred taxes (Continued)

Unit: Million Baht

	Separate financial statements					
	Net balance as at 1 January 2024	Profit (loss)	Other comprehensive income (loss)	As at 31 December 2024		
				Net balance	Deferred tax assets	Deferred tax liabilities
Trade and other current receivables	31	10	-	41	69	(28)
Inventories	95	(82)	-	13	13	-
Investments measured at fair value through other comprehensive income - equity instruments	(470)	-	230	(240)	-	(240)
Other investments in financial assets	(53)	9	-	(44)	9	(53)
Property, plant and equipment	463	(62)	-	401	401	-
Right-of-use assets	(1,873)	(318)	-	(2,191)	-	(2,191)
Intangible assets	53	(17)	-	36	36	-
Derivatives	840	23	-	863	863	-
Lease liabilities	1,932	307	-	2,239	2,239	-
Provisions for employee benefits	1,358	82	144	1,584	1,584	-
Provisions for decommissioning costs	2	26	-	28	28	-
Others	1,007	(36)	-	971	1,134	(163)
Total before set-off of taxes	3,385	(58)	374	3,701	6,376	(2,675)
Set-off of taxes				-	(2,675)	2,675
Net deferred tax assets (liabilities)				3,701	3,701	-

22. Income taxes and deferred taxes (Continued)

22.3 Movements in deferred taxes (Continued)

Unit: Million Baht

	Separate financial statements					
	Net balance as at 1 January 2023	Profit (loss)	Other comprehensive income (loss)	As at 31 December 2023		Deferred tax liabilities
				Net balance	Deferred tax assets	
Trade and other current receivables	(5,017)	5,048	-	31	74	(43)
Inventories	41	54	-	95	95	-
Investments measured at fair value through other comprehensive income - equity instruments	(811)	-	341	(470)	-	(470)
Other investments in financial assets	(80)	27	-	(53)	1	(54)
Property, plant and equipment	409	54	-	463	463	-
Right-of-use assets	(2,015)	142	-	(1,873)	-	(1,873)
Intangible assets	72	(19)	-	53	53	-
Derivatives	1,178	(338)	-	840	840	-
Lease liabilities	2,080	(148)	-	1,932	1,932	-
Provisions for employee benefits	1,200	67	91	1,358	1,358	-
Provisions for decommissioning costs	-	2	-	2	2	-
Others	1,505	(498)	-	1,007	1,023	(16)
Total before set-off of taxes	(1,438)	4,391	432	3,385	5,841	(2,456)
Set-off of taxes				-	(2,456)	2,456
Net deferred tax assets (liabilities)				3,385	3,385	-

23. Other non-current assets

Details of other non-current assets as at 31 December 2024 and 2023 are as follows:

	Unit: Million Baht			
	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Advance payments and deferred charge	2,705	1,731	22	35
Decommissioning fund	13,109	11,932	-	-
Others	3,669	4,225	1,117	1,063
Total	19,483	17,888	1,139	1,098

24. Trade payables

Details of trade payables as at 31 December 2024 and 2023 are as follows:

	Unit: Million Baht			
	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Trade payables - non-related parties	232,931	239,295	91,811	90,602
Oil fuel fund payable and excise tax payable	5,736	3,099	383	588
Trade payables - related parties (Note 9.4)	1,526	991	43,714	58,137
Total	240,193	243,385	135,908	149,327

25. Other current payables

Details of other current payables as at 31 December 2024 and 2023 are as follows:

	Unit: Million Baht			
	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Other current payables - non-related parties	46,756	54,327	8,817	12,902
Accrued interest expenses	6,496	7,248	1,132	1,796
Advance received	8,218	7,973	438	327
Others	4,463	9,311	148	268
Other current payables - related parties (Note 9.5)	1,533	1,238	6,901	7,431
Total	67,466	80,097	17,436	22,724

26. Other current liabilities

Details of other current liabilities as at 31 December 2024 and 2023 are as follows:

	Unit: Million Baht			
	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Undue output VAT	4,613	4,996	3,411	3,770
Provision for remuneration for the renewal of petroleum production	1,842	1,950	-	-
Others	7,362	4,280	13	3
Total	13,817	11,226	3,424	3,773

27. Borrowings and lease liabilities

27.1 Details of borrowings and lease liabilities are as follows:

Unit: Million Baht

	Consolidated financial statements						As at 31 December 2024	
	Cash flows from financing			Non-cash items				
	Additions	Repayments	Lease - Additions	(Gain) loss on exchange rates	Exchange differences on translation of financial statements	Others		
As at 1 January 2024								
Short-term borrowings from financial institutions	96,511	567,421	(560,721)	-	10	(447)	-	102,774
Short-term borrowings - related parties (Note 9.5)	6,500	1,679	(57)	-	134	(109)	-	8,147
Borrowings - Baht currency	199,904	49,223	(29,420)	-	-	-	-	219,707
Borrowings - foreign currencies*	65,398	7,434	(11,241)	-	34	(3,238)	407	58,794
Debentures - Baht currency	398,995	15,477	(66,354)	-	220	(220)	64	348,182
Debentures - foreign currencies**	296,405	-	(26,621)	-	60	(806)	(3,721)	265,317
Lease liabilities	97,729	-	(21,240)	25,754	(65)	(1,843)	2,940	103,275
Total	1,161,442	641,234	(715,654)	25,754	393	(6,663)	(310)	1,106,196

* The borrowings of PTT Treasury Center Co., Ltd. is guaranteed by the Company which the maximum liability under the guarantee will be capped at an amount equal to 125% of the principal or equivalent to JPY 28,750 Million.

** The debentures of PTT Treasury Center Co., Ltd. is guaranteed by the Company which the maximum liability under the guarantee will be capped at an amount equal to 125% of the principal or equivalent to approximately USD 1,594 Million.

27. Borrowings and lease liabilities (Continued)

27.1 Details of borrowings and lease liabilities are as follows: (Continued)

Unit: Million Baht

	Separate financial statements							As at 31 December 2024
	As at 1 January 2024	Cash flows from financing		Non-cash items			As at	
		Additions	Repayments	Lease - Additions	Gain on exchange rates	Others		
Short-term borrowings - related parties (Note 9.5)	18,297	1,715	(3,193)	-	-	-	16,819	
Borrowings - Baht currency	29,422	-	-	-	-	28	29,450	
Borrowings - foreign currencies	49,379	-	-	-	(925)	3	48,457	
Debentures - Baht currency	143,281	499	(39,354)	-	-	14	104,440	
Debentures - foreign currencies	9,997	-	-	-	(70)	5	9,932	
Lease liabilities	9,072	-	(1,772)	3,636	(37)	(240)	10,659	
Total	259,448	2,214	(44,319)	3,636	(1,032)	(190)	219,757	

27. Borrowings and lease liabilities (Continued)

27.2 Interest rates charged on borrowings and lease liabilities as at 31 December 2024 and 2023 are as follows:

	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Short-term borrowings from financial institutions	0.60 - 22.35	0.00 - 10.00	-	-
Loans - Baht currency	2.22 - 6.10	1.99 - 6.10	2.78 - 3.91	2.78 - 3.83
Loans - foreign currencies				
- USD	5.94 - 9.15	5.64 - 9.15	4.20 - 6.38	4.20 - 6.38
- EUR	1.00 - 7.42	1.00 - 5.71	-	-
- JPY	4.45	4.45	4.95	4.95
- Others	2.91 - 7.20	3.60 - 9.59	-	-
Debentures - Baht currency	1.31 - 5.90	0.96 - 6.80	1.31 - 5.90	0.96 - 6.80
Debentures - foreign currency				
- USD	2.50 - 5.88	2.50 - 6.35	4.50 - 5.88	4.50 - 5.88
Lease liabilities	0.09 - 23.06	0.18 - 23.06	0.98 - 9.05	0.72 - 9.05

Unit: % per annum

27. Borrowings and lease liabilities (Continued)

27.3 Details of borrowings and lease liabilities as at 31 December 2024 and 2023 are as follows:

Current portion of borrowings and lease liabilities

	Unit: Million Baht			
	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Loans - Baht currency	51,029	27,428	7,492	-
Loans - foreign currencies	5,856	3,624	-	-
Debentures - Baht currency	20,396	66,347	12,497	39,352
Leases liabilities	20,601	16,077	2,031	1,511
Total	97,882	113,476	22,020	40,863

Long-term borrowings and lease liabilities

	Unit: Million Baht			
	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Loans - Baht currency	168,678	172,476	21,958	29,422
Loans - foreign currencies	52,938	61,774	48,457	49,379
Debentures - Baht currency	327,786	332,648	91,943	103,929
Debentures - foreign currency	265,317	296,405	9,932	9,997
Lease liabilities	82,674	81,652	8,628	7,561
Total	897,393	944,955	180,918	200,288

27.4 Long-term loans can be classified by types of interest rate as follows:

	Unit: Million Baht			
	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Floating interest rate	266,611	252,038	29,450	29,423
Fixed interest rate	728,664	806,393	173,488	211,728
Total	995,275	1,058,431	202,938	241,151

As at 31 December 2024, following the execution of an interest rate swap agreement, long-term loans bearing a fixed interest rate account for approximately 70.64% of the Group's total long-term borrowings, as presented in the consolidated financial statements (31 December 2023: 71.60%). In the separate financial statements, such loans account for approximately 66.82% of the Company's total long-term borrowings (31 December 2023: 67.05%).

27. Borrowings and lease liabilities (Continued)

27.5 Detail of long-term loans and debentures are as follows:

27.5.1 Loans

Loans - Baht currency

As at 31 December 2024, details of long-term loans from financial institutions in Baht currency of the Company are as follows:

No.	Principal (unit: million Baht)	Interest rate (percent per annum)	Repayment terms
1	7,500	3M Compounded THOR plus margin	Principal is repayable at the end of contract in July 2025.
2	6,000	6M Compounded THOR plus margin	Principal is repayable at the end of contract in September 2026.
3	6,000	6M Compounded THOR plus margin	Principal is repayable at the end of contract in June 2027.
4	5,000	6M FDR plus margin	Principal is repayable at the end of contract in June 2027.
5	5,000	6M Compounded THOR plus margin	Principal is repayable at the end of contract in August 2028.

As at 31 December 2024, details of long-term loans from financial institutions in Baht currency of the subsidiaries are as follows:

No.	Principal (unit: million Baht)	Interest rate (percent per annum)	Repayment terms
1	1,310	THOR plus margin	Principal is repayable every 3 months, totalling 16 instalments, commencing in October 2022.
2	6,000	Fixed rate	Principal is repayable every 6 months, totalling 20 instalments, commencing in September 2020.
3	3,500	1M THOR plus margin	Principal is repayable every 6 months, totalling 19 instalments, commencing in September 2022.
4	5,000	MLR minus discount	Principal is repayable every 6 months, totalling 9 instalments, commencing in June 2027.
5	1,000	3M THOR plus margin	Principal is repayable every 6 months, totalling 12 instalments, commencing in December 2029.

27. Borrowings and lease liabilities (Continued)

27.5 Detail of long-term loans and debentures are as follows: (Continued)

27.5.1 Loans (Continued)

Loans - Baht currency (Continued)

As at 31 December 2024, details of long-term loans from financial institutions in Baht currency of the subsidiaries are as follows: (Continued)

No.	Principal (unit: million Baht)	Interest rate (percent per annum)	Repayment terms
6	1,000	3M THOR plus margin	Principal is repayable at the end of contract in June 2026.
7	7,500	6M FDR plus margin	Principal is repayable every 6 months, totalling 24 instalments, commencing in June 2018.
8	1,319	THOR plus margin	Principal is repayable every 6 months, totalling 15 instalments, commencing in June 2018.
9	1,981	THOR plus margin	Principal is repayable every 6 months, totalling 16 instalments, commencing in September 2024.
10	169	Fixed rate	Principal is repayable every 6 months, totalling 29 instalments, commencing in June 2017.
11	256	Fixed rate	Principal is repayable every 3 months, totalling 51 instalments, commencing in October 2022.
12	444	THOR plus margin	Principal is repayable every 3 months, totalling 43 instalments, commencing in September 2024.
13	6,844	MLR minus discount	Principal is repayable every 6 months, totalling 25 instalments, commencing in April 2024.
14	156	MLR minus discount	Principal is repayable every 6 months, totalling 25 instalments, commencing in October 2023.
15	1,400	3M THOR plus margin	Principal is repayable every 6 months, totalling 12 instalments, commencing in October 2023.
16	1,000	3M THOR plus margin	Principal is repayable every 6 months, totalling 25 instalments, commencing in October 2023.
17	883	3M BIBOR plus margin	Principal is repayable every 6 months, totalling 15 instalments, commencing in May 2021.
18	422	3M BIBOR plus margin	Principal is repayable every 6 months, totalling 11 instalments, commencing in June 2021.

27. Borrowings and lease liabilities (Continued)

27.5 Detail of long-term loans and debentures are as follows: (Continued)

27.5.1 Loans (Continued)

Loans - Baht currency (Continued)

As at 31 December 2024, details of long-term loans from financial institutions in Baht currency of the subsidiaries are as follows: (Continued)

No.	Principal (unit: million Baht)	Interest rate (percent per annum)	Repayment terms
19	3,185	THOR plus margin	Principal is repayable every 6 months, totalling 22 instalments, commencing in October 2020.
20	6,000	THOR plus margin	Principal is repayable every 6 months, totalling 17 instalments, commencing in February 2022.
21	1,500	6M THOR plus margin	Principal is repayable every 6 months, totalling 16 instalments, commencing in January 2024.
22	3,000	6M BIBOR plus margin	Principal is repayable every 6 months, totalling 16 instalments, commencing in February 2024.
23	6,500	1M THOR plus margin	Principal is repayable every 6 months, totalling 19 instalments, commencing in September 2022.
24	3,000	Fixed rate	Principal is repayable at the end of contract in January 2025.
25	2,000	THOR plus margin	Principal is repayable every 6 months, totalling 9 instalments, commencing in December 2025.
26	2,000	6M FDR plus margin	Principal is repayable at the end of contract in March 2030.
27	2,000	3M BIBOR plus margin	Principal is repayable at the end of contract in August 2030.
28	5,000	3M THOR plus margin	Principal is repayable every 6 months, totalling 11 instalments, commencing in March 2025.
29	2,000	6M THOR plus margin	Principal is repayable at the end of contract in August 2025.
30	1,500	6M FDR plus margin	Principal is repayable every 6 months, totalling 10 instalments, commencing in December 2022.

27. Borrowings and lease liabilities (Continued)

27.5 Detail of long-term loans and debentures are as follows: (Continued)

27.5.1 Loans (Continued)

Loans - Baht currency (Continued)

As at 31 December 2024, details of long-term loans from financial institutions in Baht currency of the subsidiaries are as follows: (Continued)

No.	Principal (unit: million Baht)	Interest rate (percent per annum)	Repayment terms
31	1,085	6M FDR plus margin	Principal is repayable every 6 months, totalling 10 instalments, commencing in October 2023.
32	275	6M THBFX plus margin	Principal is repayable every 3 months, totalling 14 instalments, commencing in April 2023.
33	1,000	6M FDR plus margin	Principal is repayable every 6 months, totalling 10 instalments, commencing in March 2022.
34	1,800	6M FDR plus margin	Principal is repayable every 6 months, totalling 10 instalments, commencing in June 2023.
35	2,450	6M FDR plus margin	Principal is repayable every 6 months, totalling 10 instalments, commencing in October 2023.
36	700	6M FDR plus margin	Principal is repayable every 6 months, totalling 10 instalments, commencing in October 2023.
37	1,500	6M FDR plus margin	Principal is repayable every 6 months, totalling 10 instalments, commencing in November 2020.
38	500	6M FDR plus margin	Principal is repayable at the end of contract in March 2027.
39	1,500	3M THOR plus margin	Principal is repayable every 6 months, totalling 10 instalments, commencing in November 2027.
40	2,000	1M THOR plus margin	Principal is repayable every 6 months, totalling 8 instalments, commencing in November 2027.
41	3,000	1M THOR plus margin	Principal is repayable every 6 months, totalling 8 instalments, commencing in November 2027.
42	2,000	3M THOR plus margin	Principal is repayable every 6 months, totalling 11 instalments, commencing in June 2027.

27. Borrowings and lease liabilities (Continued)

27.5 Detail of long-term loans and debentures are as follows: (Continued)

27.5.1 Loans (Continued)

Loans - Baht currency (Continued)

As at 31 December 2024, details of long-term loans from financial institutions in Baht currency of the subsidiaries are as follows: (Continued)

No.	Principal (unit: million Baht)	Interest rate (percent per annum)	Repayment terms
43	3,000	6M FDR plus margin	Principal is repayable every 6 months, totalling 10 instalments, commencing in April 2028.
44	10,000	THOR plus margin	Principal is repayable at the end of contract in June 2025.
45	10,000	THOR plus margin	Principal is repayable every 6 months, totalling 12 instalments, commencing in January 2022.
46	10,000	MLR minus discount	Principal is repayable every 3 months, totalling 12 instalments, commencing in January 2023.
47	12,799	THOR plus margin	Principal is repayable every 6 months, totalling 20 instalments, commencing in March 2023.
48	10,000	MLR minus discount	Principal is repayable every 3 months, totalling 12 instalments, commencing in December 2024.
49	2,000	THOR plus margin	Principal is repayable every 6 months, totalling 10 instalments, commencing in March 2026.
50	2,000	THOR plus margin	Principal is repayable every 6 months, totalling 10 instalments, commencing in March 2026.
51	15,000	MLR minus discount	Principal is repayable every 3 months, totalling 14 instalments, commencing in March 2026.
52	1,000	Prime rate minus discount	Principal is repayable every 6 months, totalling 6 instalments, commencing in June 2026.
53	6,004	THOR plus margin	Principal is repayable every 6 months, totalling 20 instalments, commencing in February 2021.
54	1,250	THOR plus margin	Principal is repayable every 6 months, totalling 20 instalments, commencing in April 2023.

27. Borrowings and lease liabilities (Continued)

27.5 Detail of long-term loans and debentures are as follows: (Continued)

27.5.1 Loans (Continued)

Loans - Baht currency (Continued)

As at 31 December 2024, details of long-term loans from financial institutions in Baht currency of the subsidiaries are as follows: (Continued)

No.	Principal (unit: million Baht)	Interest rate (percent per annum)	Repayment terms
55	755	6M FDR plus margin	Principal is repayable every 6 months, totalling 10 instalments, commencing in June 2024.
56	755	THOR plus margin	Principal is repayable every 6 months, totalling 10 instalments, commencing in June 2024.
57	10,000	THOR plus margin	Principal is repayable at the end of contract in December 2029.
58	2,000	THOR plus margin	Principal is repayable every 6 months, totalling 10 instalments, commencing in June 2026.
59	25	Average THOR plus margin	Principal is repayable every 3 months, totalling 12 instalments, commencing in October 2022.
60	45	MLR minus discount	Principal is repayable every months, totalling 36 instalments, commencing in December 2023.
61	5,000	6M FDR plus margin	Principal is repayable every 6 months, totalling 17 instalments, commencing in September 2018.
62	10,000	MLR minus discount	Principal is repayable every 6 months, totalling 16 instalments, commencing in September 2018.
63	10,000	Average THOR plus margin	Principal is repayable every 6 months, totalling 12 instalments, commencing in September 2018.
64	2,000	3M BIBOR plus margin	Principal is repayable every 6 months, totalling 15 instalments, commencing in September 2018.
65	1,000	3M BIBOR plus margin	Principal is repayable every 6 months, totalling 15 instalments, commencing in March 2023.
66	1,500	3M BIBOR plus margin	Principal is repayable every 6 months, totalling 12 instalments, commencing in September 2022.

27. Borrowings and lease liabilities (Continued)

27.5 Detail of long-term loans and debentures are as follows: (Continued)

27.5.1 Loans (Continued)

Loans - Baht currency (Continued)

As at 31 December 2024, details of long-term loans from financial institutions in Baht currency of the subsidiaries are as follows: (Continued)

No.	Principal (unit: million Baht)	Interest rate (percent per annum)	Repayment terms
67	5,000	6M FDR plus margin	Principal is repayable every 6 months, totalling 17 instalments, commencing in September 2022.
68	42	THOR plus margin	Principal is repayable every 6 months, totalling 8 instalments, commencing in June 2023.
69	10	THOR plus margin	Principal is repayable every 6 months, totalling 5 instalments, commencing in December 2023.
70	5,400	THOR plus margin	Principal is repayable every 6 months, totalling 20 instalments, commencing in June 2019.
71	504	THOR plus margin	Principal is repayable at the end of contract.
72	7,000	MLR minus discount	Principal is repayable every 3 months, totalling 20 instalments, commencing in March 2023.
73	5,000	6M BIBOR plus margin	Principal is repayable every 6 months, totalling 10 instalments, commencing in June 2023.
74	500	3M BIBOR plus margin	Principal is repayable at the end of contract in March 2028.
75	500	3M THOR plus margin	Principal is repayable at the end of contract in March 2028.
76	1,000	3M THOR plus margin	Principal is repayable every 3 months, totalling 24 instalments, commencing in June 2025.
77	3,000	3M THOR plus margin	Principal is repayable every 6 months, totalling 12 instalments, commencing in June 2025.
78	1,000	MLR minus discount	Principal is repayable every 3 months, totalling 20 instalments, commencing in June 2025.

27. Borrowings and lease liabilities (Continued)

27.5 Detail of long-term loans and debentures are as follows: (Continued)

27.5.1 Loans (Continued)

Loans - Baht currency (Continued)

As at 31 December 2024, details of long-term loans from financial institutions in Baht currency of the subsidiaries are as follows: (Continued)

No.	Principal (unit: million Baht)	Interest rate (percent per annum)	Repayment terms
79	1,500	1M BIBOR plus margin	Principal is repayable at the end of contract in March 2029.
80	1,500	3M THOR plus margin	Principal is repayable at the end of contract in March 2029.
81	1,000	3M THOR plus margin	Principal is repayable at the end of contract in March 2031.
82	3,000	MLR minus discount	Principal is repayable every 6 months, totalling 9 instalments, commencing in December 2026.

27. Borrowings and lease liabilities (Continued)

27.5 Detail of long-term loans and debentures are as follows: (Continued)

27.5.1 Loans (Continued)

Loans - foreign currency

As at 31 December 2024, details of long-term loans from financial institutions in foreign currency of the subsidiaries are as follows:

No.	Principal (million)	Currency	Interest rate (percent per annum)	Repayment terms
1	185	USD	SOFR plus margin	Principal is repayable every 12 months, totalling 8 instalments, commencing in September 2025.
2	2,100	NTD	TAIBOR	Principal is repayable every 6 months, totalling 33 instalments, commencing in March 2024.
3	20	USD	SOFR plus margin	Principal is repayable every 6 months, totalling 9 instalments, commencing in June 2020.
4	700	CNY	LPR minus discount	Principal is repayable every 6 months, totalling 10 instalments, commencing in December 2025.
5	450	EUR	EURIBOR plus margin	Principal is repayable at the end of contract in October 2029.
6	300	USD	SOFR plus margin	Principal is repayable at the end of contract in October 2029.
7	100	USD	SOFR plus margin	Principal is repayable every December of 2025, 2026, 2028 and 2030.
8	2	USD	Fixed rate	Principal is repayable every 3 months, totalling 15 instalments, commencing in October 2023.
9	60,000	KRW	Fixed rate	Principal is repayable every 12 months, totalling 3 instalments, commencing in October 2026.
10	10,000	KRW	Fixed rate	Principal is repayable at the end of contract in May 2026.
11	6,030	NTD	Fixed rate	Principal is repayable every 6 months, totalling 5 instalments, commencing in October 2026.
12	27	USD	Fixed rate	Principal is repayable every 6 months, totalling 5 instalments, commencing in October 2026.
13	700	NTD	Fixed rate	Principal is repayable every 6 months, totalling 4 instalments, commencing in October 2026.

27. Borrowings and lease liabilities (Continued)

27.5 Detail of long-term loans and debentures are as follows: (Continued)

27.5.1 Loans (Continued)

Loans - foreign currency (Continued)

As at 31 December 2024, details of long-term loans from financial institutions in foreign currency of the subsidiaries are as follows: (Continued)

No.	Principal (million)	Currency	Interest rate (percent per annum)	Repayment terms
14	1,314	NTD	Fixed rate	Principal is repayable every 6 months, totalling 4 instalments, commencing in October 2026.
15	1,400	NTD	Fixed rate	Principal is repayable every 6 months, totalling 4 instalments, commencing in October 2026.
16	23,000*	JPY	Fixed rate	Principal is repayable at the end of contract in April 2036.
17	310,791	VND	COF plus margin	Principal is repayable every 6 months, totalling 18 instalments, commencing in July 2019.

* Guaranteed by the Company which the maximum liability under the guarantee will be capped at an amount equal to 125% of the principal or equivalent to JPY 28,750 Million.

The Group has entered into derivative contracts on long-term loans to cover foreign currency exchange rates risks and interest rates risks as mentioned in Note 38.2 and Note 38.4.

27. Borrowings and lease liabilities (Continued)

27.5 Detail of long-term loans and debentures are as follows: (Continued)

27.5.2 Debentures

Debentures - Baht currency

As at 31 December 2024, the details of unsecured, unsubordinated debentures in Baht currency of the Company are as follows:

No.	Principal (million Baht)	Par value (per share)	Period (years)	Interest rate (percent per annum)	Repayment terms
1	8,000	1,000	3	1.79	Interest is repayable every 6 months and mature in April 2025.
2	1,000	1,000	2	2.31	Interest is repayable every 6 months and mature in May 2025.
3	3,000	1,000	5	2.05	Interest is repayable every 6 months and mature in July 2025.
4	500	1,000	1	2.38	Interest is repayable every 6 months and mature in September 2025.
5	15,000	1,000	5	1.31	Interest is repayable every 6 months and mature in August 2026.
6	13,000	1,000	7	2.85	Interest is repayable every 6 months and mature in July 2027.
7	3,000	1,000	5 years 6 months	2.45	Interest is repayable every 6 months and mature in October 2027.
8	5,000	1,000	7	1.79	Interest is repayable every 6 months and mature in August 2028.
9	20,000	1,000	7	3.25	Interest is repayable every 6 months and mature in May 2029.
10	2,000	1,000	10	2.84	Interest is repayable every 6 months and mature in July 2030.

27. Borrowings and lease liabilities (Continued)

27.5 Detail of long-term loans and debentures are as follows: (Continued)

27.5.2 Debentures (Continued)

Debentures - Baht currency (Continued)

As at 31 December 2024, the details of unsecured, unsubordinated debentures in Baht currency of the Company are as follows: (Continued)

No.	Principal (million Baht)	Par value (per share)	Period (years)	Interest rate (percent per annum)	Repayment terms
11	8,000	1,000	10	2.37	Interest is repayable every 6 months and mature in August 2031.
12	9,000	1,000	12	3.47	Interest is repayable every 6 months and mature in April 2034.
13	6,000	1,000	15	3.20	Interest is repayable every 6 months and mature in July 2035.
14	7,000	1,000	25	3.74	Interest is repayable every 6 months and mature in July 2045.

27. Borrowings and lease liabilities (Continued)

27.5 Detail of long-term loans and debentures are as follows: (Continued)

27.5.2 Debentures (Continued)

Debentures - Baht currency (Continued)

As at 31 December 2024, the details of unsecured, unsubordinated debentures with the debenture holders' early redemption right of the Company in Baht currency are as follows:

No.	Principal (million Baht)	Par value (per share)	Period (years)	Interest rate (percent per annum)	Repayment terms
1	4,000	1,000	100	5.90	Interest is repayable every 6 months and mature in December 2110. (The debenture holders can early redeem at the end of 50th and 75th year and other cases specified in the regulations regarding the rights and obligations of the issuer and the debenture holders.)

27. Borrowings and lease liabilities (Continued)

27.5 Detail of long-term loans and debentures are as follows: (Continued)

27.5.2 Debentures (Continued)

Debentures - Baht currency (Continued)

As at 31 December 2024, the details of unsecured, unsubordinated debentures in Baht currency of the subsidiaries are as follows:

No.	Principal (million Baht)	Par value (per share)	Period (years)	Interest rate (percent per annum)	Repayment terms
1	1,000	1,000	3	2.55	Interest is repayable every 6 months and mature in June 2025.
2	3,000	1,000	5	3.04	Interest is repayable every 6 months and mature in June 2027.
3	1,000	1,000	8	3.56	Interest is repayable every 6 months and mature in June 2030.
4	3,000	1,000	10	3.75	Interest is repayable every 6 months and mature in June 2032.
5	4,000	1,000	15	4.40	Interest is repayable every 6 months and mature in June 2037.
6	6,000	1,000	7	2.52	Interest is repayable every 6 months and mature in November 2026.
7	8,000	1,000	10	2.86	Interest is repayable every 6 months and mature in November 2029.
8	7,500	1,000	12	3.15	Interest is repayable every 6 months and mature in November 2031.
9	6,500	1,000	15	3.25	Interest is repayable every 6 months and mature in November 2034.
10	1,500	1,000	5	2.11	Interest is repayable every 6 months and mature in August 2025.
11	1,000	1,000	10	2.94	Interest is repayable every 6 months and mature in August 2030.
12	2,500	1,000	15	3.24	Interest is repayable every 6 months and mature in August 2035.
13	3,000	1,000	12	3.78	Interest is repayable every 6 months and mature in April 2035.

27. Borrowings and lease liabilities (Continued)

27.5 Detail of long-term loans and debentures are as follows: (Continued)

27.5.2 Debentures (Continued)

Debentures - Baht currency (Continued)

As at 31 December 2024, the details of unsecured, unsubordinated debentures in Baht currency of the subsidiaries are as follows: (Continued)

No.	Principal (million Baht)	Par value (per share)	Period (years)	Interest rate (percent per annum)	Repayment terms
14	1,000	1,000	3	2.69	Interest is repayable every 6 months and mature in March 2027.
15	6,000	1,000	4	2.86	Interest is repayable every 6 months and mature in May 2028.
16	4,500	1,000	7	3.17	Interest is repayable every 6 months and mature in March 2031.
17	2,300	1,000	9	3.46	Interest is repayable every 6 months and mature in March 2033.
18	1,200	1,000	12	3.70	Interest is repayable every 6 months and mature in March 2036.
19	4,000	1,000	5	3.50	Interest is repayable every 6 months and mature in September 2025.
20	1,300	1,000	10	3.93	Interest is repayable every 6 months and mature in September 2030.
21	2,700	1,000	15	4.40	Interest is repayable every 6 months and mature in September 2035.
22	4,000	1,000	5	3.00	Interest is repayable every 6 months and mature in May 2026.
23	2,000	1,000	7	2.91	Interest is repayable every 6 months and mature in May 2028.
24	2,000	1,000	10	3.38	Interest is repayable every 6 months and mature in May 2031.
25	2,000	1,000	15	4.10	Interest is repayable every 6 months and mature in May 2036.
26	500	1,000	4	3.03	Interest is repayable every 6 months and mature in May 2026.

27. Borrowings and lease liabilities (Continued)

27.5 Detail of long-term loans and debentures are as follows: (Continued)

27.5.2 Debentures (Continued)

Debentures - Baht currency (Continued)

As at 31 December 2024, the details of unsecured, unsubordinated debentures in Baht currency of the subsidiaries are as follows: (Continued)

No.	Principal (million Baht)	Par value (per share)	Period (years)	Interest rate (percent per annum)	Repayment terms
27	7,000	1,000	5	3.10	Interest is repayable every 6 months and mature in May 2027.
28	750	1,000	7	4.17	Interest is repayable every 6 months and mature in May 2029.
29	1,500	1,000	10	4.52	Interest is repayable every 6 months and mature in May 2032.
30	2,250	1,000	12	4.86	Interest is repayable every 6 months and mature in May 2034.
31	3,203	1,000	3	3.20	Interest is repayable every 6 months and mature in May 2026.
32	3,753	1,000	5	3.70	Interest is repayable every 6 months and mature in May 2028.
33	3,004	1,000	7	4.00	Interest is repayable every 6 months and mature in May 2030.
34	2,041	1,000	10	4.20	Interest is repayable every 6 months and mature in May 2033.
35	11,400	1,000	15	4.82	Interest is repayable every 6 months and mature in June 2029.
36	6,000	1,000	5	2.25	Interest is repayable every 6 months and mature in November 2026.
37	5,000	1,000	5	2.09	Interest is repayable every 6 months and mature in April 2027.
38	1,000	1,000	7	2.69	Interest is repayable every 6 months and mature in April 2029.
39	6,000	1,000	10	3.05	Interest is repayable every 6 months and mature in April 2032.

27. Borrowings and lease liabilities (Continued)

27.5 Detail of long-term loans and debentures are as follows: (Continued)

27.5.2 Debentures (Continued)

Debentures - Baht currency (Continued)

As at 31 December 2024, the details of unsecured, unsubordinated debentures in Baht currency of the subsidiaries are as follows: (Continued)

No.	Principal (million Baht)	Par value (per share)	Period (years)	Interest rate (percent per annum)	Repayment terms
40	1,500	1,000	3	2.51	Interest is repayable every 6 months and mature in May 2026.
41	7,000	1,000	7	2.43	Interest is repayable every 6 months and mature in September 2026.
42	1,500	1,000	10	2.75	Interest is repayable every 6 months and mature in September 2029.
43	1,530	1,000	7	2.60	Interest is repayable every 6 months and mature in April 2027.
44	3,310	1,000	10	2.99	Interest is repayable every 6 months and mature in April 2030.
45	4,360	1,000	12	3.29	Interest is repayable every 6 months and mature in April 2032.
46	5,800	1,000	15	3.50	Interest is repayable every 6 months and mature in April 2035.
47	14,000	1,000	5	2.13	Interest is repayable every 6 months and mature in January 2027.
48	2,000	1,000	7	2.65	Interest is repayable every 6 months and mature in January 2029.
49	2,000	1,000	10	3.05	Interest is repayable every 6 months and mature in January 2032.
50	12,000	1,000	12	3.29	Interest is repayable every 6 months and mature in January 2034.
51	5,000	1,000	5	3.21	Interest is repayable every 6 months and mature in June 2027.
52	3,000	1,000	12	4.00	Interest is repayable every 6 months and mature in June 2034.

27. Borrowings and lease liabilities (Continued)

27.5 Detail of long-term loans and debentures are as follows: (Continued)

27.5.2 Debentures (Continued)

Debentures - Baht currency (Continued)

As at 31 December 2024, the detail of unsecured, unsubordinated debentures with the debenture holders' early redemption right of the subsidiaries in Baht currency is as follows:

No.	Principal (million Baht)	Par value (per share)	Period (years)	Interest rate (percent per annum)	Repayment terms
1	17,000	1,000	7	3.50	Interest is repayable every 6 months and mature in June 2029. (The debenture holders can early redeem regarding the rights and obligations of the issuer and the debenture holders.)
2	7,500	1,000	15	5.05	Interest is repayable every 6 months and mature in March 2027. (The debenture holders can early redeem regarding the rights and obligations of the issuer and the debenture holders.)
3	1,400	1,000	3	2.99	Interest is repayable every 6 months and mature in November 2025. (The debenture holders can early redeem regarding the rights and obligations of the issuer and the debenture holders.)
4	600	1,000	5	3.64	Interest is repayable every 6 months and mature in November 2027. (The debenture holders can early redeem regarding the rights and obligations of the issuer and the debenture holders.)

27. Borrowings and lease liabilities (Continued)

27.5 Detail of long-term loans and debentures are as follows: (Continued)

27.5.2 Debentures (Continued)

Debentures - Baht currency (Continued)

As at 31 December 2024, the detail of unsecured, unsubordinated debentures with the debenture holders' early redemption right of the subsidiaries in Baht currency is as follows: (Continued)

No.	Principal (million Baht)	Par value (per share)	Period (years)	Interest rate (percent per annum)	Repayment terms
5	2,000	1,000	7	4.13	Interest is repayable every 6 months and mature in November 2029. (The debenture holders can early redeem regarding the rights and obligations of the issuer and the debenture holders.)
6	1,700	1,000	10	4.49	Interest is repayable every 6 months and mature in November 2032. (The debenture holders can early redeem regarding the rights and obligations of the issuer and the debenture holders.)
7	3,100	1,000	12	4.79	Interest is repayable every 6 months and mature in November 2034. (The debenture holders can early redeem regarding the rights and obligations of the issuer and the debenture holders.)
8	3,200	1,000	15	5.09	Interest is repayable every 6 months and mature in November 2037. (The debenture holders can early redeem regarding the rights and obligations of the issuer and the debenture holders.)

27. Borrowings and lease liabilities (Continued)

27.5 Detail of long-term loans and debentures are as follows: (Continued)

27.5.2 Debentures (Continued)

Debentures - Baht currency (Continued)

As at 31 December 2024, the detail of unsecured, unsubordinated debentures with the debenture holders' early redemption right of the subsidiaries in Baht currency is as follows: (Continued)

No.	Principal (million Baht)	Par value (per share)	Period (years)	Interest rate (percent per annum)	Repayment terms
9	2,800	1,000	5	3.32	Interest is repayable every 6 months and mature in May 2028. (The debenture holders can early redeem regarding the rights and obligations of the issuer and the debenture holders.)
10	2,300	1,000	10	3.84	Interest is repayable every 6 months and mature in May 2033. (The debenture holders can early redeem regarding the rights and obligations of the issuer and the debenture holders.)
11	4,900	1,000	15	4.24	Interest is repayable every 6 months and mature in May 2038. (The debenture holders can early redeem regarding the rights and obligations of the issuer and the debenture holders.)

27. Borrowings and lease liabilities (Continued)

27.5 Detail of long-term loans and debentures are as follows: (Continued)

27.5.2 Debentures (Continued)

Debentures - foreign currency

As at 31 December 2024, the details of unsecured, unsubordinated debentures in foreign currency with the debenture holders' early redemption right of the Company are as follows:

No.	Principal (million)	Currency	Par value (per share)	Period (years)	Interest rate (percent per annum)	Repayment terms
1	53	USD	1,000	30	5.88	Interest is repayable every 6 months and mature in August 2035. (The debenture holders can early redeem at anytime regarding the rights and obligations of the issuer and the debenture holders and other related documents.)
2	241	USD	1,000	30	4.50	Interest is repayable every 6 months and mature in October 2042. (The debenture holders can early redeem at anytime regarding the rights and obligations of the issuer and the debenture holders and other related documents.)

27. Borrowings and lease liabilities (Continued)

27.5 Detail of long-term loans and debentures are as follows: (Continued)

27.5.2 Debentures (Continued)

Debentures - foreign currency (Continued)

As at 31 December 2024, the detail of unsecured, unsubordinated debentures with the debenture holders' early redemption right of the subsidiaries in foreign currency are as follows:

No.	Principal (million)	Currency	Par value (per share)	Period (years)	Interest rate (percent per annum)	Repayment terms
1	350	USD	1,000	10	2.99	Interest is repayable every 6 months and mature in January 2030. (The debenture holders can early redeem regarding the rights and obligations of the issuer and the debenture holders.)
2	458	USD	1,000	30	6.35	Interest is repayable every 6 months and mature in June 2042. (The debenture holders can early redeem regarding the rights and obligations of the issuer and the debenture holders.)
3	600	USD	1,000	40	3.90	Interest is repayable every 6 months and mature in December 2059. (The debenture holders can early redeem regarding the rights and obligations of the issuer and the debenture holders.)
4	500	USD	1,000	7	2.59	Interest is repayable every 6 months and mature in June 2027. (The debenture holders can early redeem regarding the rights and obligations of the issuer and the debenture holders.)

27. Borrowings and lease liabilities (Continued)

27.5 Detail of long-term loans and debentures are as follows: (Continued)

27.5.2 Debentures (Continued)

Debentures - foreign currency (Continued)

As at 31 December 2024, the detail of unsecured, unsubordinated debentures with the debenture holders' early redemption right of the subsidiaries in foreign currency are as follows: (Continued)

No.	Principal (million)	Currency	Par value (per share)	Period (years)	Interest rate (percent per annum)	Repayment terms
5	630	USD	1,000	10	2.98	Interest is repayable every 6 months and mature in March 2031. (The debenture holders can early redeem regarding the rights and obligations of the issuer and the debenture holders.)
6	374	USD	1,000	30	4.30	Interest is repayable every 6 months and mature in March 2051. (The debenture holders can early redeem regarding the rights and obligations of the issuer and the debenture holders.)
7	339	USD	1,000	10	4.40	Interest is repayable every 6 months and mature in March 2032. (The debenture holders can early redeem regarding the rights and obligations of the issuer and the debenture holders.)
8	103	USD	1,000	30	5.20	Interest is repayable every 6 months and mature in March 2052. (The debenture holders can early redeem regarding the rights and obligations of the issuer and the debenture holders.)

27. Borrowings and lease liabilities (Continued)

27.5 Detail of long-term loans and debentures are as follows: (Continued)

27.5.2 Debentures (Continued)

Debentures - foreign currency (Continued)

As at 31 December 2024, the detail of unsecured, unsubordinated debentures with the debenture holders' early redemption right of the subsidiaries in foreign currency are as follows: (Continued)

No.	Principal (million)	Currency	Par value (per share)	Period (years)	Interest rate (percent per annum)	Repayment terms
9	172	USD	1,000	30	4.88	Interest is repayable every 6 months and mature in January 2043. (The debenture holders can early redeem regarding the rights and obligations of the issuer and the debenture holders.)
10	328	USD	1,000	30	4.88	Interest is repayable every 6 months and mature in January 2043. (The debenture holders can early redeem regarding the rights and obligations of the issuer and the debenture holders.)
11	400	USD	1,000	10	4.63	Interest is repayable every 6 months and mature in November 2028. (The debenture holders can early redeem regarding the rights and obligations of the issuer and the debenture holders.)
12	600	USD	1,000	30	5.38	Interest is repayable every 6 months and mature in November 2048. (The debenture holders can early redeem regarding the rights and obligations of the issuer and the debenture holders.)

27. Borrowings and lease liabilities (Continued)

27.5 Detail of long-term loans and debentures are as follows: (Continued)

27.5.2 Debentures (Continued)

Debentures - foreign currency (Continued)

As at 31 December 2024, the detail of unsecured, unsubordinated debentures with the debenture holders' early redemption right of the subsidiaries in foreign currency are as follows: (Continued)

No.	Principal (million)	Currency	Par value (per share)	Period (years)	Interest rate (percent per annum)	Repayment terms
13	565	USD	1,000	30	3.50	Interest is repayable every 6 months and mature in October 2049. (The debenture holders can early redeem regarding the rights and obligations of the issuer and the debenture holders.)
14	400	USD	1,000	10	2.50	Interest is repayable every 6 months and mature in June 2030. (The debenture holders can early redeem regarding the rights and obligations of the issuer and the debenture holders.)
15	600	USD	1,000	30	3.75	Interest is repayable every 6 months and mature in June 2050. (The debenture holders can early redeem regarding the rights and obligations of the issuer and the debenture holders.)

27. Borrowings and lease liabilities (Continued)

27.5 Detail of long-term loans and debentures are as follows: (Continued)

27.5.2 Debentures (Continued)

Debentures - foreign currency (Continued)

As at 31 December 2024, the detail of unsecured, unsubordinated debentures with the debenture holders' early redemption right of the subsidiaries in foreign currency are as follows: (Continued)

No.	Principal (million)	Currency	Par value (per share)	Period (years)	Interest rate (percent per annum)	Repayment terms
16	245*	USD	1,000	16	5.88	Interest is repayable every 6 months and mature in August 2035. (The debenture holders can early redeem regarding the rights and obligations of the issuer and the debenture holders.)
17	330**	USD	1,000	23	4.50	Interest is repayable every 6 months and mature in October 2042. (The debenture holders can early redeem regarding the rights and obligations of the issuer and the debenture holders.)
18	700***	USD	1,000	50	3.70	Interest is repayable every 6 months and mature in July 2070. (The debenture holders can early redeem regarding the rights and obligations of the issuer and the debenture holders.)

* Guaranteed by the Company which the maximum liability under the guarantee will be capped at an amount equal to 125% of the principal or equivalent to approximately USD 306 Million.

** Guaranteed by the Company which the maximum liability under the guarantee will be capped at an amount equal to 125% of the principal or equivalent to approximately USD 413 Million.

*** Guaranteed by the Company which the maximum liability under the guarantee will be capped at an amount equal to 125% of the principal or equivalent to approximately USD 875 Million.

The Group has entered into derivative contracts on debentures to cover foreign currency exchange rates risks and interest rates risks as mentioned in Note 38.2 and Note 38.4.

27. Borrowings and lease liabilities (Continued)

27.5 Detail of long-term loans and debentures are as follows: (Continued)

The proceeds from these borrowings and debentures are to be used for working capital and general corporate purposes, repayment of borrowings, capital expenditure, and to provide loans to group companies.

Under the terms of the borrowings and debentures, The Group has to comply with certain conditions as stipulated, such as maintaining net debt to equity ratios, maintaining debt service coverage ratio, and maintaining the Company's shareholding proportion in the subsidiary, etc.

The Group has certain Sustainability-Linked Loan, where the interest rates will be adjusted upon the fulfillment of conditions specified in the agreements if the sustainability targets are achieved.

27.6 Lease liabilities

Details of lease liabilities as at 31 December 2024 and 2023 are as follows:

	Unit: Million Baht			
	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Lease payments	130,421	121,524	13,062	10,593
Less: Deferred interest expenses	(27,146)	(23,795)	(2,403)	(1,521)
Total	103,275	97,729	10,659	9,072
Less: Current portion	(20,601)	(16,077)	(2,031)	(1,511)
Lease liabilities - net of current portion	82,674	81,652	8,628	7,561

28. Provision for employee benefits

Details of provision for employee benefits as at 31 December 2024 and 2023 are as follows:

	Unit: Million Baht			
	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Retirement benefits	32,956	30,807	7,577	6,547
Other long-term benefits	6,338	5,935	342	245
Fair value of plan assets	(2,844)	(2,926)	-	-
Total	36,450	33,816	7,919	6,792

Movements in the present value of provision for employee benefits are as follows:

	Unit: Million Baht			
	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
As at 1 January	33,816	32,356	6,792	5,998
Current service cost	2,227	2,117	415	360
Past service cost	(161)	(10)	-	-
Interest cost	1,129	1,034	211	188
Actuarial loss from provision for post-employment benefits	1,757	515	721	460
Actuarial loss from provision for other long-term employee benefits	264	31	90	32
Actual payment	(2,369)	(1,862)	(310)	(246)
Return on plan assets	(148)	(23)	-	-
Business acquisition	15	-	-	-
Business disposal	(2)	(134)	-	-
Others	109	193	-	-
Exchange differences on translation of financial statements	(187)	(401)	-	-
As at 31 December	36,450	33,816	7,919	6,792

The Group expects to pay for the long-term employee benefits within 1 year of Baht 1,754 million (the Company only: Baht 339 million).

28. Provision for employee benefits (Continued)

Details of actuarial gain from provision for post-employment benefits are as follows:

Unit: Million Baht

	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
(Gain) loss from experience adjustments	(303)	203	138	124
Loss from changes in financial assumptions	2,017	339	583	336
(Gain) loss from changes in demographic assumptions	43	(27)	-	-
Total	1,757	515	721	460

Expenses recognized in the statements of income and comprehensive income for the years ended 31 December 2024 and 2023 are as follows:

Unit: Million Baht

	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Cost of sales and services	1,032	992	140	106
Selling and distribution expenses	335	266	40	33
Administrative expenses	2,055	1,889	534	439
Management remuneration	37	25	2	2
Other comprehensive loss	1,609	492	721	460
Total	5,068	3,664	1,437	1,040

Principal actuarial assumptions used in determining the present value of provision for post-employment benefits of the Group are as follows:

	Annual percentage rate	
	2024	2023
Discount rate	1.35 - 7.04	0.66 - 7.30
Inflation rate	0.00 - 8.00	0.00 - 8.00
Employee turnover rate	0.00 - 60.00	0.00 - 60.00
Mortality rate	based on the published statistics of each country	based on the published statistics of each country

28. Provision for employee benefits (Continued)

Sensitivity analysis of significant actuarial assumption used in determining the present value of provision for post-employment benefits of the Group as at 31 December 2024 and 2023 are as follows:

Unit: Million Baht

	Increase (decrease) in present value of the provisions	
	2024	2023
Discount rate		
Increase 1%	(3,945)	(3,502)
Decrease 1%	4,820	4,296

Weighted average duration of the provisions for post-employment benefits of the Group for the year ended 31 December 2024 is 15.23 years (31 December 2023: 15.57 years).

29. Provision for decommissioning costs

Movements in the provision for decommissioning costs which will occur in the future are as follows:

Unit: Million Baht

	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
As at 1 January	136,385	110,051	25	-
- Business acquisition	6	-	-	-
- Additional provision	17,108	36,461	112	25
- Finance costs	6,722	5,354	1	-
- Utilization during the year	(3,051)	(10,455)	-	-
- Reversal of non-occurred provision	(3,517)	(3,706)	-	-
- Exchange differences on translation of financial statements	(1,554)	(1,320)	-	-
As at 31 December	152,099	136,385	138	25
- Current portion	(3,458)	(2,107)	(26)	-
- Long-term portion	148,641	134,278	112	25

30. Other non-current liabilities

Other non-current liabilities as at 31 December 2024 and 2023 are as follows:

	Unit: Million Baht			
	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Provision for remuneration for the renewal of petroleum production*	4,522	5,441	-	-
Deferred revenue**	20,674	19,679	6,166	5,050
Others	4,885	3,740	-	-
Total	30,081	28,860	6,166	5,050

* The Group recognized provision for remuneration for production bonus and the renewal of petroleum production which has to pay remuneration fee to the Ministry of Energy by using the discounted cash flows based on the significant assumptions, such as sales volume data, accumulate volume of total petroleum production, oil price and discounted rate, etc.

** Deferred revenue in the consolidated financial statements include advance receipts of availability payments in relation to the availabilities of a subsidiary's power plant, as agreed with EGAT and in accordance with the terms of PPA, amounting to Baht 14,568 million. (2023 : Baht 14,439 million)

31. Reserves**31.1 Legal reserve**

Under the Public Limited Companies Act B.E. 2535, the Company is required to appropriate not less than 5% of its annual net profit to a legal reserve until the reserve fund reaches 10% of the registered share capital. The reserve is non-distributable. The Company's reserve has already reached the 10% of registered share capital stipulated in the Act.

31.2 Reserve for self-insurance fund

The self-insurance fund was set up to provide insurance coverage for the Company's business. The Company appropriates net profit from operations and the returns of the fund each year as contributions to the fund.

32. Subordinated perpetual debentures

On 13 December 2024, PTT Global Chemical Public Company Limited (PTTGC) issued and offered its subordinated perpetual debentures No. 1/2024 (the "Debentures") for Baht 17,000 million at a par value with bullet payment upon its dissolution or upon the exercise of early redemption right in accordance with stipulated terms and conditions of the Debentures. The Debentures are unsecured and unconvertible. The Debentures bear interest at 5.25% per annum for the first five years and six months. Thereafter, the interest rate for the Debentures shall vary in accordance with the terms and conditions of the Debentures. The interest is paid on a six-month basis. However, PTTGC has the exclusive right to unconditionally defer interest and cumulative interest payments to the debenture holders without any time and outstanding amount limitations. If PTTGC exercises the right to defer interest and cumulative interest payments, it shall not perform the following:

- declare or pay any dividend; and
- pay interest or distribute any assets to the holders of securities issued by the debenture issuer with a legal status equivalent to the debentures, or to the holders of securities with a subordinate legal status.
- redeem, reduce, cancel, acquire or buy back any instruments or securities issued by PTTGC which rank pari passu or junior to these debentures.

33. Sales and service income

Details of sales and service income for the years ended 31 December 2024 and 2023 are as follows:

	Unit: Million Baht			
	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Oil products	1,950,764	1,955,138	1,148,069	1,205,945
Gas products	500,416	555,885	595,237	658,181
Petrochemical products	496,838	492,658	23,207	25,441
Pharmaceutical products	20,290	21,541	-	-
Non-oil businesses	24,780	23,505	2	20
Utilities	78,220	78,886	-	-
Services	15,004	13,629	2,332	1,067
Others	4,141	3,642	-	-
Total	3,090,453	3,144,884	1,768,847	1,890,654

Sales and service income for the years ended 31 December 2024 includes revenue from sales to government agencies and state enterprises amounting to Baht 144,035 million (2023 : Baht 168,028 million) in the consolidated financial statements, and Baht 95,065 million (2023 : Baht 121,518 million) in the separate financial statements.

On 19 December 2023, the cabinet meeting passed a resolution regarding the pass-through of natural gas prices in the Gulf of Thailand in case of shortfall (where producers are unable to deliver gas as per the gas sale and purchase agreement). This resolution is part of measures to lower electricity prices.

In this regard, the Energy Regulatory Commission (ERC) ordered the Company to include the shortfall amounting to Baht 4,300 million incurred during the period from October 2020 to December 2022 in the pool gas calculation for January 2024. Therefore, the Company appealed such order to the ERC since the Company believes that it has complied with applicable resolutions of the National Energy Policy Committee (NEPC) and relevant ERC notifications. Furthermore, the Company fulfilled the terms and conditions in accordance with the gas sales agreement. Subsequently, ERC decided to dismiss the Company's appeal, requiring the Company to comply with ERC's order immediately. If the Company disagrees with the ERC's decision, the Company is entitled to file a petition with the Administrative Court or the Office of the Attorney General. This is in accordance with the Rules of the Office of the Prime Minister on the determination of settlement disputes between government agencies and legal proceedings, B.E. 2561 within 90 days from the date of acknowledgement of the ERC's decision.

On 12 January 2024, the Board of Directors, at the special meeting No. 1/2567, passed a resolution approving the Company's compliance with the ERC's decision on the appeal. In response to this resolution, the Company will take into account necessary and appropriate legal measures or exercise its legal rights under applicable laws. The Company therefore included the shortfall in the pool gas calculation, which impacted the Company's sales income in January 2024.

34. Other income

Details of other income for the years ended 31 December 2024 and 2023 are as follows:

Unit: Million Baht

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Transportation income	842	996	7,620	7,094
Dividend income	1,864	2,190	60,925	36,251
Interest income	18,172	12,219	4,322	3,144
Gain (loss) on disposals of assets and investments	10,384	6,110	7	(33)
Gain (loss) on investment at fair value through profit and loss	544	355	(33)	(143)
Loss on capital decrement of subsidiary	-	-	(26,375)	-
Reverse of allowance on impairment of investment	-	-	20,932	18,040
Gain on change in status of investments	-	2,443	-	-
Gain on repurchase of debentures	3,959	2,160	-	-
Others	12,160	12,163	6,242	5,959
Total	47,925	38,636	73,640	70,312

35. Expenses by nature

Details of expenses by nature for the years ended 31 December 2024 and 2023 are as follows:

Unit: Million Baht

	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Changes in inventories decrease	2,462,553	2,501,373	1,694,627	1,813,697
Staff costs	81,872	80,455	11,160	10,439
Depreciation and amortization	185,918	173,065	19,794	19,459
Expenses related to short-term lease agreements	1,483	1,096	31	24
Expenses related to low-value assets lease agreements	348	370	104	106
Expenses related to variable rental	746	932	569	718
Loss on impairment of assets and investments	9,487	4,942	-	143
Loss from business closure and restructuring	5,248	-	-	-
Share of return from investment to General Partner	2,218	-	-	-

36. Finance costs

Details of finance costs for the years ended 31 December 2024 and 2023 are as follows:

Unit: Million Baht

	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Interest expenses:				
Loans	13,743	12,195	4,203	3,445
Debentures	19,503	22,171	4,203	5,729
Finance leases liabilities	3,544	2,996	231	227
Derivative for cash flow hedge instruments	304	363	-	-
Provision for decommissioning costs	6,722	5,354	1	-
Others	1,100	225	-	-
Other finance costs	1,905	2,079	113	81
Total	46,821	45,383	8,751	9,482

37. Operating segments

These operating segments are consistent with the internal management reports provided to the Chief Operating Decision Maker (CODM), who makes decisions related to the allocation of resources to the segments and assesses their performance.

For management purposes, the Group is organized into business groups based on types of products and services. The major segments of the Group are as follows:

Upstream petroleum and Natural gas business group

1. Petroleum exploration and production business:

The Group conducts petroleum exploration and production business both domestically and overseas. The Group is the operator and jointly invests with leading petroleum exploration and production companies. Most domestic projects are located in the Gulf of Thailand, while overseas projects are located in Southeast Asia, Australia, America and Africa.

2. Natural gas business:

The Group conducts natural gas business including procurement, natural gas pipeline transmission, distribution, and natural gas separation. Products from the natural gas separation plants are used as feedstock for the petrochemical industry and as fuel in the household, transportation and industry sectors.

Downstream petroleum business group

1. Oil and retail business:

The Group conducts marketing of petroleum products and lube oil in both domestic and overseas markets under an efficient operating system of procurement, storage, and distribution of products as well as the retail business at service stations.

2. International trading business:

The Group conducts international trading business including the import and export of petroleum and petrochemical products as well as other related products. This includes the price risk management and international chartering.

3. Petrochemical and Refining business:

The Group conducts refining business including the production and distribution of petroleum and petrochemicals products in both domestic and overseas markets.

37. Operating segments (Continued)

New business and sustainability group

During the year, the Company restructured the corporate governance within the Group and renamed the operating segment from “New Business and Infrastructure” to “New Business and Sustainability” (“NBS”) to align with the Company’s strategy to focus on developing new businesses involving Non-Hydrocarbon sectors alongside the sustainability management of the Group. This includes an emphasis on decarbonization to achieve the Net Zero Emission target of the Group. The NBS Group aims to expand and develop various businesses, including the power business and non-hydrocarbon businesses such as electric vehicles, life sciences and logistics. The NBS Group is also exploring business opportunities in Carbon Capture and Storage and Carbon Capture and Utilization, as well as developing related technologies. In addition, it is exploring hydrogen-related opportunities to, including the development of hydrogen technology businesses to create added value for the organization.

Other operations of the Group are included in other segments, none of which constitutes a separately reportable segment.

37. Operating segments (Continued)

Consolidated financial statements

For the year ended 31 December 2024

	Upstream petroleum and natural gas				Downstream petroleum			New business and sustainability	Others	Elimination	Total
	Petroleum exploration and production	Natural gas	Oil and retail	International trading	Petrochemicals and refining						
Sales - others	76,849	410,301	692,500	996,452	819,988	93,387	976	-	3,090,453		
- related parties	235,461	169,289	34,533	944,452	532,336	20,815	11,898	(1,948,784)	-		
Net sales	312,310	579,590	727,033	1,940,904	1,352,324	114,202	12,874	(1,948,784)	3,090,453		
Gross profit (loss)*	261,951	71,896	35,036	8,489	91,574	33,667	1,079	(4,909)	498,783		
EBITDA	234,368	62,844	18,240	3,095	53,499	25,248	(949)	(111)	396,234		
Depreciation and amortization expenses	(94,822)	(19,655)	(7,242)	(1,400)	(46,988)	(13,482)	(2,329)	-	(185,918)		
Segment operating profit (loss)	139,546	43,189	10,998	1,695	6,511	11,766	(3,278)	(111)	210,316		
Share of profit (loss) from investments in joint ventures and associates	973	2,279	370	-	(10,587)	325	(28)	-	(6,668)		
Others	(2,008)	5,603	(985)	-	(9,874)	4,620	20	-	(2,624)		
Unallocated revenue and expenses:											
Interest income									18,172		
Loss on derivatives									(6,933)		
Gain on foreign exchange rate									15,235		
EBIT									227,498		
Profit for the year									113,468		

* Gross profit (loss) excludes depreciation and amortization expenses in cost of sales.

37. Operating segments (Continued)

Consolidated financial statements

As at 31 December 2024

	Upstream petroleum and natural gas						Downstream petroleum			New business and sustainability	Others	Elimination	Total
	Petroleum exploration and production		Natural gas		Oil and retail		International trading		Petrochemicals and refining				
Segment assets	910,880	394,091	189,908	135,311	1,078,916				319,665	191,915	-	3,220,686	
Inter-company assets	22,059	17,569	2,980	61,575	39,258				9,393	5,208	(158,042)	-	
Investments in joint ventures and associates	8,631	16,613	9,265	-	81,375				55,149	242	-	171,275	
Total segment assets	941,570	428,273	202,153	196,886	1,199,549				384,207	197,365	(158,042)	3,391,961	
Non-allocated assets												46,823	
Total assets												3,438,784	
Segment liabilities	377,509	57,761	67,349	138,261	662,024				182,236	220,348	-	1,705,488	
Inter-company liabilities	1,412	13,165	30,329	24,715	55,919				4,686	27,634	(157,860)	-	
Total segment liabilities	378,921	70,926	97,678	162,976	717,943				186,922	247,982	(157,860)	1,705,488	
Non-allocated liabilities												76,419	
Total liabilities												1,781,907	
Capital expenditure	163,320	20,412	9,474	1,138	39,036				11,288	2,777	(3,857)	243,588	

Unit: Million Baht

37. Operating segments (Continued)

Consolidated financial statements

For the year ended 31 December 2023

	Upstream petroleum and natural gas					Downstream petroleum			New business and sustainability	Others	Elimination	Total
	Petroleum exploration and production	Natural gas	Oil and retail	International trading	Petrochemicals and refining							
Sales - others	76,241	471,875	737,138	979,240	785,755			91,938	2,697	-	3,144,884	
- related parties	224,453	183,884	34,277	1,052,823	557,795			21,702	10,758	(2,085,692)	-	
Net sales	300,694	655,759	771,415	2,032,063	1,343,550			113,640	13,455	(2,085,692)	3,144,884	
Gross profit (loss)*	259,686	75,796	40,695	8,836	112,749			29,529	4,232	(4,337)	527,186	
EBITDA	231,301	66,024	21,403	4,325	80,640			23,336	(362)	228	426,895	
Depreciation and amortization expenses	(84,729)	(20,144)	(6,521)	(1,282)	(45,177)			(13,417)	(1,795)	-	(173,065)	
Segment operating profit (loss)	146,572	45,880	14,882	3,043	35,463			9,919	(2,157)	228	253,830	
Share of profit (loss) from investments in joint ventures and associates	1,069	825	696	-	(939)			1,367	(5)	-	3,013	
Others	(2,414)	1,481	(642)	-	5,131			308	(41)	-	3,823	
Unallocated revenue and expenses:												
Interest income											12,219	
Loss on derivatives											(13,194)	
Gain on foreign exchange rate											22,285	
EBIT											281,976	
Profit for the year											155,280	

* Gross profit (loss) excludes depreciation and amortization expenses in cost of sales.

37. Operating segments (Continued)

Consolidated financial statements

As at 31 December 2023

	Upstream petroleum and natural gas				Downstream petroleum			New business and sustainability	Others	Elimination	Unit: Million Baht Total
	Petroleum exploration and production	Natural gas	Oil and retail	Natural gas	International trading	Petrochemicals and refining					
Segment assets	843,938	437,627	199,173	140,370	1,142,906	312,719	168,929	-	3,245,662		
Inter-company assets	30,702	18,474	6,029	72,353	46,851	12,806	40,950	(228,165)	-		
Investments in joint ventures and associates	6,438	5,165	9,513	-	94,343	56,695	168	-	172,322		
Total segment assets	881,078	461,266	214,715	212,723	1,284,100	382,220	210,047	(228,165)	3,417,984		
Non-allocated assets									42,478		
Total assets									3,460,462		
Segment liabilities	349,599	53,180	77,623	159,872	696,941	157,258	258,319	-	1,752,792		
Inter-company liabilities	1,361	40,109	32,476	33,684	69,664	22,304	28,550	(228,148)	-		
Total segment liabilities	350,960	93,289	110,099	193,556	766,605	179,562	286,869	(228,148)	1,752,792		
Non-allocated liabilities									82,694		
Total liabilities									1,835,486		
Capital expenditure	117,907	23,654	11,578	718	50,592	12,925	2,695	(1,804)	218,265		

37. Operating segments (Continued)

Geographical information

Sales and service income are presented in respect of the geographical location of customers for the years ended 31 December 2024 and 2023 are as follows:

Unit: Million Baht

	Consolidated financial statements	
	2024	2023
Thailand	1,679,266	1,744,359
Asia	1,178,289	1,167,335
Europe	81,604	66,270
America	83,957	103,986
Others	67,337	62,934
Total	3,090,453	3,144,884

Non-current assets are presented in respect of the geographical location of the assets as at 31 December 2024 and 2023 are as follows:

Unit: Million Baht

	Consolidated financial statements	
	2024	2023
Thailand	1,542,531	1,591,029
Asia	418,197	367,899
Europe	139,474	159,339
America	19,247	22,165
Others	127,892	126,693
Total	2,247,341	2,267,125

Major customers

For the years 2024 and 2023, the Group has no major customer with revenue of 10% or more of the entity's revenues.

38. Financial instruments

38.1 Classification of financial assets and liabilities

Unit: Million Baht

	Consolidated financial statements						Total
	31 December 2024						
Measured at	Measured at	Measured at	Measured at	Measured at	Measured at	Measured at	Total
fair value	fair value through	fair value through	fair value through	fair value through	amortized cost		
- using hedge	profit or loss	other comprehensive	other comprehensive	other comprehensive			
accounting		income	income	income			
		- debt instruments	- equity instruments	- equity instruments			
Financial assets							
Cash and cash equivalents	-	-	5	-	405,134	405,139	
Short-term investments in financial assets	-	2	353	-	42,829	43,184	
Trade receivables	-	-	-	-	251,391	251,391	
Other current receivables	-	-	-	-	28,328	28,328	
Short-term lending	-	-	-	-	947	947	
Long-term investments in financial assets (include current portion)	-	4,826	523	43,958	5,794	55,101	
Long-term lending (include current portion)	-	-	-	-	44,926	44,926	
Derivatives	1,870	8,850	-	-	-	10,720	
Other current financial assets	-	-	-	-	728	728	
Other non-current financial assets	-	2,741	-	-	14,415	17,156	
Total financial assets	1,870	16,419	881	43,958	794,492	857,620	

38. Financial instruments (Continued)

38.1 Classification of financial assets and liabilities (Continued)

	Consolidated financial statements				Total
	31 December 2024				
	Measured at fair value - using hedge accounting	Measured at fair value through profit or loss	Measured at amortized cost		
Financial liabilities					
Bank overdrafts and short-term loans from financial institutions	-	-	102,774		102,774
Trade payables	-	-	234,457		234,457
Other current payables	-	-	53,326		53,326
Short-term borrowings	-	-	8,147		8,147
Long-term borrowings (include current portion)	-	-	892,000		892,000
Lease liabilities (include current portion)	-	-	103,275		103,275
Deposits on LPG cylinders	-	-	13,187		13,187
Derivatives	2,426	10,189	-		12,615
Other current financial liabilities	-	-	1,721		1,721
Other non-current financial liabilities	-	-	4,468		4,468
Total financial liabilities	2,426	10,189	1,413,355		1,425,970

Unit: Million Baht

38. Financial instruments (Continued)

38.1 Classification of financial assets and liabilities (Continued)

Unit: Million Baht

	Consolidated financial statements							Total
	31 December 2023							
	Measured at fair value	Measured at fair value through profit or loss	Measured at fair value through other comprehensive income	Measured at fair value through other comprehensive income	Measured at fair value through amortized cost			
Financial assets								
Cash and cash equivalents	-	-	1	-	417,133		417,134	
Short-term investments in financial assets	-	-	797	-	25,684		26,481	
Trade receivables	-	-	-	-	259,813		259,813	
Other current receivables	-	-	-	-	40,271		40,271	
Short-term lending	-	-	-	-	275		275	
Long-term investments in financial assets (include current portion)	-	4,675	842	40,215	5,910		51,642	
Long-term lending (include current portion)	-	-	-	-	8,884		8,884	
Derivatives	46	9,556	-	-	-		9,602	
Other current financial assets	-	-	-	-	878		878	
Other non-current financial assets	-	2,372	-	-	13,261		15,633	
Total financial assets	46	16,603	1,640	40,215	772,109		830,613	

38. Financial instruments (Continued)

38.1 Classification of financial assets and liabilities (Continued)

	Consolidated financial statements				Unit: Million Baht
	31 December 2023				
	Measured at fair value - using hedge accounting	Measured at fair value through profit or loss	Measured at amortized cost	Total	
Financial liabilities					
Bank overdrafts and short-term loans from financial institutions	-	-	96,511	96,511	
Trade payables	-	-	240,286	240,286	
Other current payables	-	-	67,344	67,344	
Short-term borrowings	-	-	6,500	6,500	
Long-term borrowings (include current portion)	-	-	960,702	960,702	
Lease liabilities (include current portion)	-	-	97,729	97,729	
Deposits on LPG cylinders	-	-	12,952	12,952	
Derivatives	1,168	8,793	-	9,961	
Other current financial liabilities	-	-	524	524	
Other non-current financial liabilities	-	26	4,966	4,992	
Total financial liabilities	1,168	8,819	1,487,514	1,497,501	

38. Financial instruments (Continued)

38.1 Classification of financial assets and liabilities (Continued)

Unit: Million Baht

	Separate financial statements				Total
	31 December 2024				
	Measured at fair value through profit or loss	Measured at fair value through other comprehensive income - equity instruments	Measured at amortized cost		
Financial assets					
Cash and cash equivalents	-	-	78,862		78,862
Short-term investments in financial assets	2	-	20,924		20,926
Trade receivables	-	-	162,012		162,012
Other current receivables	-	-	5,763		5,763
Short-term lending	-	-	3,053		3,053
Long-term investments in financial assets (include current portion)	276	5,092	5,794		11,162
Long-term lending (include current portion)	-	-	36,557		36,557
Derivatives	1,340	-	-		1,340
Other current financial assets	-	-	298		298
Other non-current financial assets	-	-	246		246
Total financial assets	1,618	5,092	313,509		320,219

38. Financial instruments (Continued)

38.1 Classification of financial assets and liabilities (Continued)

Unit: Million Baht

	Separate financial statements		Total
	Measured at fair value through profit or loss	Measured at amortized cost	
		31 December 2024	
Financial liabilities			
Trade payables	-	135,525	135,525
Other current payables	-	13,205	13,205
Short-term borrowings	-	16,819	16,819
Long-term borrowings (include current portion)	-	192,279	192,279
Lease liabilities (include current portion)	-	10,659	10,659
Derivatives	4,488	-	4,488
Other current financial liabilities	-	1,041	1,041
Other non-current financial liabilities	-	1,425	1,425
Total financial liabilities	4,488	370,953	375,441

38. Financial instruments (Continued)

38.1 Classification of financial assets and liabilities (Continued)

Unit: Million Baht

	Separate financial statements				Total
	31 December 2023				
	Measured at fair value through profit or loss	Measured at fair value through other comprehensive income - equity instruments	Measured at amortized cost		
Financial assets					
Cash and cash equivalents	-	-	87,570		87,570
Short-term investments in financial assets	-	-	1,344		1,344
Trade receivables	-	-	164,397		164,397
Other current receivables	-	-	8,697		8,697
Short-term lending	-	-	481		481
Long-term investments in financial assets (include current portion)	448	6,124	5,910		12,482
Long-term lending (include current portion)	-	-	56,553		56,553
Derivatives	1,361	-	-		1,361
Other current financial assets	-	-	297		297
Other non-current financial assets	-	-	209		209
Total financial assets	1,809	6,124	325,458		333,391

38. Financial instruments (Continued)

38.1 Classification of financial assets and liabilities (Continued)

	Separate financial statements			Total
	31 December 2023			
	Measured at fair value through profit or loss	Measured at amortized cost		
				Unit: Million Baht
Financial liabilities				
Trade payables	-	148,739		148,739
Other current payables	-	18,679		18,679
Short-term borrowings	-	18,297		18,297
Long-term borrowings (include current portion)	-	232,079		232,079
Lease liabilities (include current portion)	-	9,072		9,072
Derivatives	4,358	-		4,358
Other current financial liabilities	-	211		211
Other non-current financial liabilities	-	1,487		1,487
Total financial liabilities	4,358	428,564		432,922

38. Financial instruments (Continued)

38.2 Disclosure of financial instruments and financial risk managements

Financial instruments of the Group consist of cash and cash equivalents, trade receivables, lending loans, investments, loans and debentures. The Group has financial risks associated with those financial instruments and has risk managements policys as follows

- Credit risks refer to the risks of customers defaulting on payment
- Market risks refer to risks related to exchange rate fluctuations, interest rate changes and oil price fluctuations
- Liquidity risk

38.2.1 Credit risk

Credit risk arises when customers do not comply with the terms of agreements or the conditions of credit agreements, causing financial losses to the Group. However, the Group has managed risk by adjusting its credit policies according to the current economic situation, focusing on using financial instruments, such as the bank guarantee, letter of guarantee or standby letter of credit, making payment by using letter of credit (L/C), trade credit insurance. The Group also manages credit risk in various ways, such as cash collateral and advanced payment in order to reduce credit risk and to determine procedures for risk prevention and mitigation, including credit rating for all trading partners. In addition, the Group reviews their credit ratings regularly to be standardized and be effective for credit consideration process.

38.2.2 Market risk

The Group faces three significant market risks: fluctuations in exchange rates, changes in interest rates, and fluctuations in global oil market prices. The Group also has certain portions of sales, purchases and loans for operations nominated in foreign currencies which are paid in both fixed and floating interest rates. Accordingly, the management has entered into derivative contracts to cover these risks. The financial instruments used for hedging risks are forward foreign exchange contracts, interest rate swap contracts, cross-currency swap contracts, participating swap contracts etc. Some contracts relate to sustainability operations.

Risk exposure relating to global oil market prices is managed by derivatives such as swap oil price contracts, forward oil contracts and commodity option contracts. These has to report details of the costs and market prices of all financial instruments to management, including outstanding forward foreign exchange contracts and forward oil contracts to management as well. Moreover, the Group has established structures and processes for governance and risk management consistent with international standards and has set Value at Risk (VaR) in commercial transactions. The Group also regularly prepared a risk status report to management and relvent departments.

38. Financial instruments (Continued)

38.2 Disclosure of financial instruments and financial risk managements (Continued)

38.2.2 Market risk (Continued)

Foreign exchange rate risk

The Group has entered into forward foreign exchange contracts. The contract prices and exchange rates under the forward foreign exchange contracts as at 31 December 2024 and 2023 are as follows:

	Unit: Million Baht	
	Consolidated financial statements	
	2024	2023
Forward foreign exchange purchase contracts		
Rate 31.7000 - 35.9500 Baht = 1 USD	102,358	-
Rate 32.8475 - 36.2000 Baht = 1 USD	-	95,808
Rate 3.3530 - 3.5073 Baht = 1 SEK	-	382
Rate 15,787.0000 - 16,210.0000 IDR = 1 USD	626	-
Rate 15,435.0000 - 15,538.0000 IDR = 1 USD	-	144
Rate 7.1073 - 7.3180 CNY = 1 USD	839	-
Rate 7.0962 - 7.3790 CNY = 1 USD	-	569
Rate 1.4640 USD = 1 EUR		246
Rate 0.0901 - 0.1038 USD = 1 NOK	-	1,477
Rate 0.2558 - 0.2575 Baht = 1 JPY	98	-
Rate 0.2455 - 0.2575 Baht = 1 JPY	-	195
Rate 0.0064 - 0.0073 USD = 1 JPY	204	-
Rate 0.0068 - 0.0081 USD = 1 JPY	-	202
Rate 10.1669 - 11.0954 NOK = 1 USD	715	-
Rate 11.6538 - 12.0315 NOK = 1 EUR	284	-
Rate 0.0001 USD = 1 IDR	37	-
Rate 0.0116 - 0.1118 USD = 1 INR	510	-

38. Financial instruments (Continued)

38.2 Disclosure of financial instruments and financial risk managements (Continued)

38.2.2 Market risk (Continued)

Foreign exchange rate risk (Continued)

Unit: Million Baht

	Consolidated financial statements	
	2024	2023
Forward foreign exchange sale contracts		
Rate 32.2751 - 36.0115 Baht = 1 USD	65,566	-
Rate 34.3400 - 36.7925 Baht = 1 USD	-	43,105
Rate 37.3500 - 38.1200 Baht = 1 EUR	-	51
Rate 0.1267 - 0.1304 EUR = 1 CNY	142	-
Rate 0.1261 - 0.1295 EUR = 1 CNY	-	133
Rate 4.7009 - 4.8490 Baht = 1 CNY	-	15
Rate 0.2210 - 0.2258 Baht = 1 JPY	6,522	-
Rate 0.2412 - 0.2486 Baht = 1 JPY	-	2,449
Rate 0.5908 - 0.6363 AUD = 1 Baht	-	833
Rate 1.1697 - 1.1799 EUR = 1 GBP	150	-
Rate 1.1417 - 1.1606 EUR = 1 GBP	-	110
Rate 0.5470 - 0.5584 EUR = 1 NZD	96	-
Rate 0.5378 - 0.5851 EUR = 1 NZD	-	229
Rate 0.2065 - 0.2170 CNY = 1 Baht	24	-
Rate 0.5936 - 0.6196 EUR = 1 AUD	887	-
Rate 0.1380 - 0.1387 USD = 1 CNY	63	-

Unit: Million Baht

	Separate financial statements	
	2024	2023
Forward foreign exchange purchase contracts		
Rate 31.8600 - 34.9041 Baht = 1 USD	27,633	-
Rate 34.0733 - 36.0892 Baht = 1 USD	-	41,797
Forward foreign exchange sale contracts		
Rate 32.2751 - 36.0115 Baht = 1 USD	59,149	-
Rate 34.3500 - 35.9868 Baht = 1 USD	-	34,624
Rate 0.2210 - 0.2258 Baht = 1 JPY	6,522	-
Rate 0.2412 - 0.2486 Baht = 1 JPY	-	2,449

38. Financial instruments (Continued)**38.2 Disclosure of financial instruments and financial risk managements (Continued)****38.2.2 Market risk (Continued)**Foreign exchange rate risk (Continued)

The Group has entered into a cross-currency swap contract of a long-term loan in the form of a participating swap contracts. The term of such contract as at 31 December 2024 and 2023 is as follows:

	Unit: Million Baht	
	Consolidated and separate financial statements	
	2024	2023
JPY 23,000 million/USD 197 million	5,034	5,652

This contract has a maturity more than five years.

Currency and interest rate risks

The Group has entered into cross-currency swap contracts of other long-term investments, long-term loans and debentures. The terms of the outstanding cross-currency swap contracts as at 31 December 2024 and 2023 are as follows:

	Unit: Million Baht			
	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Baht 42,236 million/USD 1,270 million	42,236	-	-	-
Baht 58,991 million/USD 1,770 million	-	58,991	-	-
USD 940 million/Baht 29,878 million	30,578	-	-	-
USD 1,092 million/Baht 34,465 million	-	35,847	-	-
CNY 1 million/Baht 4 million	-	4	-	-
GBP 443 million/USD 564 million	24,111	-	-	-
USD 298 million/Baht 9,466 million	-	-	10,165	-
USD 448 million/Baht 13,963 million	-	-	-	15,344
Total	96,925	94,842	10,165	15,344

38. Financial instruments (Continued)

38.2 Disclosure of financial instruments and financial risk managements (Continued)

38.2.2 Market risk (Continued)

Currency and interest rate risks (Continued)

The maturity periods of contracts are as follows:

	Unit: Million Baht			
	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Due within 1 year	3,449	5,202	-	5,108
Over 1 year and up to 5 years	57,809	41,502	-	-
Over 5 years	35,667	48,138	10,165	10,236
Total	96,925	94,842	10,165	15,344

38. Financial instruments (Continued)

38.2 Disclosure of financial instruments and financial risk managements (Continued)

38.2.2 Market risk (Continued)

Interest rate risk

The Group has entered into interest rate swap contracts of long-term loans and debentures. The terms of the outstanding interest rate swap contracts as at 31 December 2024 and 2023 are as follows:

Unit: Million Baht

	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Interest rate swap contracts to swap floating for fixed rate in USD currency	680	-	-	-
Interest rate swap contracts to swap fixed for floating rate in USD currency	14,943	15,060	14,943	15,060
Interest rate swap contracts to swap floating for fixed rate in Baht currency	11,500	16,736	-	-
Interest rate swap contracts to swap fixed for floating rate in Baht currency	17,991	29,988	17,991	29,988
Interest rate swap contracts to swap fixed for lower fixed rate in Baht currency	1,998	1,998	1,998	1,998
Interest rate swap contracts to swap fixed for fixed rate in Baht currency	4,000	-	4,000	-
Interest rate swap contracts to swap floating for fixed rate in EUR currency	1,771	1,902	-	-
Total	52,883	65,684	38,932	47,046

38. Financial instruments (Continued)

38.2 Disclosure of financial instruments and financial risk managements (Continued)

38.2.2 Market risk (Continued)

Interest rate risk (Continued)

The maturity periods of contracts are as follows:

	Unit: Million Baht			
	Consolidated		Separate	
	financial statements		financial statements	
	2024	2023	2024	2023
Due within 1 year	680	15,000	-	8,000
Over 1 year and up to 5 years	31,262	29,626	17,991	17,988
Over 5 years	20,941	21,058	20,941	21,058
Total	52,883	65,684	38,932	47,046

Sensitivity analysis

Sensitivity analysis of financial instruments in consolidated financial statements as at 31 December 2024 and 2023 are as follows:

- Foreign exchange rate

The following tables demonstrates the sensitivity of the Group's profit before tax and equity to a reasonably possible change in the USD exchange rates, with all other variables held constant. The Group's exposure to foreign currency changes for all other currencies is not material.

Foreign exchange rate effects	Unit: Million Baht			
	Profit before tax		Other components of shareholders' equity - currency translation differences	
	Increase (decrease)		Increase (decrease)	
	2024	2023	2024	2023
USD currency appreciate by 10% against by Baht currency	(3,725)	(5,464)	53,790	49,214
USD currency depreciate by 10% against by Baht currency	3,956	5,338	(53,790)	(49,214)

38. Financial instruments (Continued)

38.2 Disclosure of financial instruments and financial risk managements (Continued)

38.2.2 Market risk (Continued)

Sensitivity analysis (Continued)

Sensitivity analysis of financial instruments in consolidated financial statements as at 31 December 2024 and 2023 are as follows: (Continued)

- Interest rate

The following table demonstrates the sensitivity of the Group's profit before tax to a reasonably possible change in interest rates on floating rate loans as at 31 December 2024 and 2023, with all other variables held constant.

Interest rate effects	Unit: Million Baht	
	Financial costs	
	Increase (decrease)	
	2024	2023
Interest rate increase by 1%	2,013	2,203
Interest rate decrease by 1%	(2,012)	(2,204)

- Commodity price

The following table demonstrates the sensitivity of the Group's profit before tax to a reasonably possible change in commodity price as at 31 December 2024 and 2023, with all other variables held constant.

Commodity price effects	Unit: Million Baht	
	Profit before tax	
	increase (decrease)	
	2024	2023
Increase in commodity price of USD 1 per Barrel	(257)	(159)
Decrease in commodity price of USD 1 per Barrel	253	159

38. Financial instruments (Continued)**38.2 Disclosure of financial instruments and financial risk managements (Continued)****38.2.3 Liquidity risk**

The Group has liquidity risk management by maintaining the level of cash and cash equivalents and having the ability to access a variety of funding sources to ensure sufficient for the operation of the Group.

The details of maturity of financial liabilities of the Group as at 31 December 2024 and 2023 considering from cash flow of contract which are not discounted as follows:

Unit: Million Baht

	Consolidated financial statements			
	31 December 2024			
	Less than 1 year	1- 5 years	Over 5 years	Total
Trade payables	234,457	-	-	234,457
Other current payables	46,810	-	-	46,810
Other current financial liabilities	1,721	-	-	1,721
Bank overdrafts and borrowings:				
Bank overdrafts and short-term loans from financial institutions	102,774	-	-	102,774
Short-term borrowings	8,147	-	-	8,147
Long-term borrowings	77,377	396,044	420,649	894,070
Interest paid	26,472	81,653	199,936	308,061
Lease liabilities	23,903	45,292	61,226	130,421
Deposits on LPG cylinders	-	-	13,187	13,187
Other non-current financial liabilities	-	2,406	986	3,392
Cash outflow from derivatives	120,084	28,660	36,801	185,545
Cash inflow from derivatives	120,211	28,273	38,907	187,391
Cash outflow from commodity derivatives	2,945	-	-	2,945
Cash inflow from commodity derivatives	262	-	-	262
Cash outflow from commodity contracts	13,426	-	-	13,426
Cash inflow from commodity contracts	11,941	-	-	11,941

38. Financial instruments (Continued)

38.2 Disclosure of financial instruments and financial risk managements (Continued)

38.2.3 Liquidity risk (Continued)

The details of maturity of financial liabilities of the Group as at 31 December 2024 and 2023 considering from cash flow of contract which are not discounted as follows: (Continued)

	Unit: Million Baht			
	Consolidated financial statements			
	31 December 2023			
	Less than 1 year	1- 5 years	Over 5 years	Total
Trade payables	240,286	-	-	240,286
Other current payables	60,097	-	-	60,097
Other current financial liabilities	524	-	-	524
Bank overdrafts and borrowings:				
Bank overdrafts and short-term loans from financial institutions	96,511	-	-	96,511
Short-term borrowings	6,500	-	-	6,500
Long-term borrowings	97,435	360,671	504,583	962,689
Interest paid	29,501	94,351	231,172	355,024
Lease liabilities	18,548	44,208	58,768	121,524
Deposits on LPG cylinders	-	-	12,952	12,952
Other non-current financial liabilities	-	2,992	831	3,823
Cash outflow from derivatives	155,447	45,945	42,566	243,958
Cash inflow from derivatives	153,562	45,586	44,427	243,575
Cash outflow from commodity derivatives	58	-	-	58
Cash inflow from commodity derivatives	2,519	-	-	2,519
Cash outflow from commodity contracts	9,404	-	-	9,404
Cash inflow from commodity contracts	6,348	-	-	6,348

38. Financial instruments (Continued)

38.2 Disclosure of financial instruments and financial risk managements (Continued)

38.2.3 Liquidity risk (Continued)

The details of maturity of financial liabilities of the Group as at 31 December 2024 and 2023 considering from cash flow of contract which are not discounted as follows: (Continued)

Unit: Million Baht

	Separate financial statements			
	31 December 2024			
	Less than 1 year	1- 5 years	Over 5 years	Total
Trade payables	135,525	-	-	135,525
Other current payables	11,029	-	-	11,029
Other current financial liabilities	1,041	-	-	1,041
Borrowings:				
Short-term borrowings	16,819	-	-	16,819
Long-term borrowings	20,000	78,000	94,263	192,263
Interest paid	6,662	21,583	85,071	113,316
Lease liabilities	2,338	4,709	6,015	13,062
Other non-current financial liabilities	-	266	91	357
Cash outflow from derivatives	98,220	7,973	15,047	121,240
Cash inflow from derivatives	98,137	6,721	15,346	120,204
Cash outflow from commodity derivatives	887	-	-	887
Cash inflow from commodity derivatives	42	-	-	42
Cash outflow from commodity contracts	9,458	-	-	9,458
Cash inflow from commodity contracts	9,549	-	-	9,549

38. Financial instruments (Continued)**38.2 Disclosure of financial instruments and financial risk managements (Continued)****38.2.3 Liquidity risk (Continued)**

The details of maturity of financial liabilities of the Group as at 31 December 2024 and 2023 considering from cash flow of contract which are not discounted as follows: (Continued)

Unit: Million Baht

	Separate financial statements			
	31 December 2023			
	Less than 1 year	1- 5 years	Over 5 years	Total
Trade payables	148,739	-	-	148,739
Other current payables	16,002	-	-	16,002
Other current financial liabilities	211	-	-	211
Borrowings:				
Short-term borrowings	18,297	-	-	18,297
Long-term borrowings	39,354	77,500	115,248	232,102
Interest paid	7,934	23,396	89,966	121,296
Lease liabilities	1,744	5,106	3,743	10,593
Other non-current financial liabilities	-	220	98	318
Cash outflow from derivatives	86,360	8,941	16,508	111,809
Cash inflow from derivatives	86,150	7,569	16,590	110,309
Cash outflow from commodity derivatives	19	-	-	19
Cash inflow from commodity derivatives	160	-	-	160
Cash outflow from commodity contracts	8,890	-	-	8,890
Cash inflow from commodity contracts	8,960	-	-	8,960

38. Financial instruments (Continued)

38.2 Disclosure of financial instruments and financial risk managements (Continued)

38.2.3 Liquidity risk (Continued)

Principal and undrawn amount of short-term bank credit facilities as at 31 December 2024 and 2023 are as follows:

Unit: Million Baht

	Consolidated financial statements			
	Credit limit		Undrawn amount	
	2024	2023	2024	2023
Short-term committed bank credit facility	75,209	71,049	42,342	31,133
Short-term uncommitted bank credit facility	429,542	316,146	323,601	221,087

Unit: Million Baht

	Separate financial statements			
	Credit limit		Undrawn amount	
	2024	2023	2024	2023
Short-term committed bank credit facility	4,365	4,365	4,365	4,365
Short-term uncommitted bank credit facility	87,569	91,952	70,750	73,655

Principal and undrawn amount of long-term bank credit facilities as at 31 December 2024 and 2023 are as follows:

	Consolidated financial statements			
	Long-term committed bank credit facility			
	Credit limit		Undrawn amount	
	2024	2023	2024	2023
Credit facility in Baht (Million Baht)	231,023	144,394	59,434	48,605
Credit facility in USD (Million USD)	4,160	17,112	762	17,112
Credit facility in EUR (Million EUR)	33,892	43,658	4,889	5,683
Credit facility in VND (Million VND)	709	99	110	99

38. Financial instruments (Continued)**38.3 Fair value measurement of financial instruments**

As at 31 December 2024 and 2023, the Group had financial assets and financial liabilities measured at fair value as follows:

Unit: Million Baht

	Consolidated financial statements			
	31 December 2024			
	Level 1	Level 2	Level 3	Total
Financial assets measured at fair value				
Cash and cash equivalents	-	5	-	5
Investments in short-term financial assets	-	353	2	355
Investments measured at fair value through other comprehensive income	10,618	523	33,340	44,481
Investments measured at fair value through profit or loss	826	-	4,000	4,826
Derivatives	-	10,720	-	10,720
Other non-current financial assets	2,741	-	-	2,741
Financial liabilities measured at fair value				
Derivatives	2,818	9,797	-	12,615

38. Financial instruments (Continued)

38.3 Fair value measurement of financial instruments (Continued)

As at 31 December 2024 and 2023, the Group had financial assets and financial liabilities measured at fair value as follows: (Continued)

Unit: Million Baht

	Consolidated financial statements			
	31 December 2023			
	Level 1	Level 2	Level 3	Total
Financial assets measured at fair value				
Cash and cash equivalents	-	1	-	1
Investments in short-term financial assets	-	797	-	797
Investments measured at fair value				
through other comprehensive income	3,897	842	36,318	41,057
Investments measured at fair value				
through profit or loss	970	-	3,705	4,675
Derivatives	3,856	5,746	-	9,602
Other non-current financial assets	2,372	-	-	2,372
Financial liabilities measured at fair value				
Derivatives	-	9,961	-	9,961
Other non-current financial liabilities	-	-	26	26

38. Financial instruments (Continued)

38.3 Fair value measurement of financial instruments (Continued)

As at 31 December 2024 and 2023, the Group had financial assets and financial liabilities measured at fair value as follows: (Continued)

Unit: Million Baht

	Separate financial statements			
	31 December 2024			
	Level 1	Level 2	Level 3	Total
Financial assets measured at fair value				
Investments in short-term financial assets	-	-	2	2
Investments measured at fair value through other comprehensive income	1,667	-	3,425	5,092
Investments measured at fair value through profit or loss	275	-	-	275
Derivatives	-	1,340	-	1,340
Financial liabilities measured at fair value				
Derivatives	-	4,488	-	4,488

Unit: Million Baht

	Separate financial statements			
	31 December 2023			
	Level 1	Level 2	Level 3	Total
Financial assets measured at fair value				
Investments measured at fair value through other comprehensive income	2,349	-	3,775	6,124
Investments measured at fair value through profit or loss	328	-	120	448
Derivatives	-	1,361	-	1,361
Financial liabilities measured at fair value				
Derivatives	-	4,358	-	4,358

38. Financial instruments (Continued)

38.3 Fair value measurement of financial instruments (Continued)

As at 31 December 2024 and 2023, the Group had financial assets and financial liabilities that were not measured at fair value, though the fair values approximate their carrying value, except financial assets and liabilities as follows:

Unit: Million Baht

	Consolidated financial statements			
	31 December 2024			
	Level 1	Level 2	Level 3	Total
Financial assets disclosed at fair value				
Amortized cost investments	-	5,811	-	5,811
Financial liabilities disclosed at fair value				
Long-term borrowings	-	251,427	33,233	284,660
Debentures	-	567,233	-	567,233

Unit: Million Baht

	Consolidated financial statements			
	31 December 2023			
	Level 1	Level 2	Level 3	Total
Financial assets disclosed at fair value				
Amortized cost investments	-	5,299	-	5,299
Financial liabilities disclosed at fair value				
Long-term borrowings	-	237,613	33,198	270,811
Debentures	-	651,492	-	651,492

38. Financial instruments (Continued)

38.3 Fair value measurement of financial instruments (Continued)

As at 31 December 2024 and 2023, the Group had financial assets and financial liabilities that were not measured at fair value, though the fair values approximate their carrying value, except financial assets and liabilities as follows: (Continued)

Unit: Million Baht

	Separate financial statements			
	31 December 2024			
	Level 1	Level 2	Level 3	Total
Financial assets disclosed at fair value				
Amortized cost investments	-	5,811	-	5,811
Financial liabilities disclosed at fair value				
Long-term borrowings	-	-	74,032	74,032
Debentures	-	109,646	-	109,646

Unit: Million Baht

	Separate financial statements			
	31 December 2023			
	Level 1	Level 2	Level 3	Total
Financial assets disclosed at fair value				
Amortized cost investments	-	5,299	-	5,299
Financial liabilities disclosed at fair value				
Long-term borrowings	-	-	77,547	77,547
Debentures	-	150,311	-	150,311

During the year, there were no transfers of items within the fair value hierarchy.

38. Financial instruments (Continued)

38.3 Fair value measurement of financial instruments (Continued)

Fair value valuation techniques and inputs for level 2 valuation

The fair values of debt securities were determined based on the latest bid price or the yield rate quoted by the Thai Bond Market Association or other relevant markets. They were also calculated based on the contractual cash flows, discounted using the market reference rate of other debt securities that have observable prices.

In determining the fair values of derivatives, most of the inputs used for the valuations are observable in the relevant markets, adjusted by appropriate risk factors, such as market price, price volatility, foreign exchange rate volatility, spot rates of foreign currencies, yield curves of the respective currencies, the market value of swap price, timing of exercise and commodity price yield curves. Discounting was applied if there was a significant impact to the fair value of the derivative instruments.

The fair values of long-term loans were determined based on the present values of future cash flows, discounted using the market interest rate for similar instruments. The fair values of debentures were based on the latest closing price or the reference interest rate quoted by the bond or other market or ask prices or latest price of comparable market securities. They were also calculated using the reference price in the secondary market of bond or other market that are quoted in an active market.

Fair value valuation techniques and inputs for level 3 valuation

The significant unobservable input for level 3 valuation is the risk-adjusted discount rate. This is estimated based on public companies' weighted average cost of capital and cost of equity that are, in the opinion of the Group, in a comparable financial position with the counterparties to the contract.

The fair values of debt instruments measured at fair value through profit or loss are as follows:

- For investments in startup companies, the fair values are based on the valuation made during the latest round of fundraising.
- For investments in non-marketable securities, the fair values are based on the discounted present value of the future cash flows, estimated based on available performance indicators and an appropriate interest rate, or the fair values are based on the net asset method whereby the information is reasonably available.

38. Financial instruments (Continued)

38.3 Fair value measurement of financial instruments (Continued)

Fair value valuation techniques and inputs for level 3 valuation (Continued)

The fair values of equity instruments measured at fair value through other comprehensive income are as follows:

- For investments in startup companies, the fair values are based on the valuation made during the latest round of fundraising.
- For investments in non-marketable securities, the fair values are based on cost which is treated as an estimate of fair value unless there are significant changes in the operations of the investee, or the fair values are based on the discounted present value of the future cash flows, estimated based on an incremental borrowing rate and likely assumptions related to the conditions in the Share Purchase Agreement, or the fair values are based on the net asset method whereby the information is reasonably available.
- For investments in funds, the fair values are referred to the net asset value of the funds.

The fair values of long-term loans were determined based on discounted future cash flows and valuation model techniques, using an appropriate risk-adjusted discount rate. Most of the inputs used for the valuation are observable in the relevant markets, such as spot rates of foreign currencies, interest rate yield curves and bonds yield curves.

The fair value of other non-current financial liabilities that are categorized as contingent considerations from business acquisition and contingent considerations from interest acquisition in joint venture were determined by discounted cash flow. Significant unobservable input of fair value hierarchy level 3 is risk adjusted discount rate. It is estimated based on the Group's cost of debt and assumptions about related probability according to specified conditions in Sales and Purchase Agreement (SPA).

38. Financial instruments (Continued)

38.3 Fair value measurement of financial instruments (Continued)

The reconciliation of financial assets and liabilities regularly measured fair value and categorized as level 3 as follows:

Unit: Million Baht

	Consolidated financial statements				Total
	Investments in short-term financial assets	Investments measured at fair value through other comprehensive income	Investments measured at fair value through profit and loss	Contingent considerations from business acquisition	
Balance as at 1 January 2024	-	36,318	3,705	26	40,049
- Increase (Decrease)	-	495	(92)	(27)	376
- Reclassification	-	(7,960)	(70)	-	27
- Net gain on profit and loss	2	-	655	-	657
- Net gain on other comprehensive income	-	4,768	-	-	4,768
- Exchange differences on translation	-	(281)	(198)	1	(477)
Balance as at 31 December 2024	2	33,340	4,000	-	45,400

38. Financial instruments (Continued)

38.3 Fair value measurement of financial instruments (Continued)

The reconciliation of financial assets and liabilities regularly measured fair value and categorized as level 3 as follows: (Continued)

	Consolidated financial statements				Total
	Investments in short-term financial assets	Investments measured at fair value through other comprehensive income	Investments measured at fair value through profit and loss	Contingent considerations from business acquisition	
Balance as at 1 January 2023	72	36,750	2,863	50	39,735
- Increase (Decrease)	-	942	257	(25)	1,174
- Net gain (loss) on profit and loss	(72)	-	602	1	531
- Net loss on other comprehensive income	-	(1,201)	-	-	(1,201)
- Exchange differences on translation	-	(173)	(17)	-	(190)
Balance as at 31 December 2023	-	36,318	3,705	26	40,049

Unit: Million Baht

38. Financial instruments (Continued)

38.3 Fair value measurement of financial instruments (Continued)

The reconciliation of financial assets and liabilities regularly measured fair value and categorized as level 3 as follows: (Continued)

	Separate financial statements			Total
	Investments in short-term financial assets	Investments measured at fair value through other comprehensive income	Investments measured at fair value through profit and loss	
Balance as at 1 January 2024	-	3,775	120	3,895
- Increases (Decrease)	-	119	(125)	(6)
- Net gain on profit and loss	2	-	5	7
- Net loss on other comprehensive income	-	(469)	-	(469)
Balance as at 31 December 2024	2	3,425	-	3,427
Balance as at 1 January 2023	72	3,325	-	3,397
- Increases	-	621	125	746
- Net loss on profit and loss	(72)	-	(5)	(77)
- Net loss on other comprehensive income	-	(171)	-	(171)
Balance as at 31 December 2023	-	3,775	120	3,895

Unit: Million Baht

38. Financial instruments (Continued)

38.4 Cash flow hedge

The Group uses derivatives as hedging instruments as at 31 December 2024 and 2023 as follows:

	Consolidated financial statements			
	31 December 2024			
	Maturity			
	Less than 1 year	1 - 5 years	Over 5 years	Total
Foreign currency forward contracts (for highly probable forecast purchases)				
Notional amount (Unit: Million Baht)	40	-	-	40
Average forward rate (Baht : USD)	33.72 - 34.11	-	-	33.72 - 34.11
Interest rate swap contracts (for loans)				
Notional amount (Unit: Million Baht)	-	1,906	-	1,906
Average fixed rate (%)	-	4.30	-	4.30
Cross-currency swap contracts (for loans)				
Notional amount (Unit: Million Baht)	-	-	17,935	17,935
Average forward rate (Baht : USD)	-	-	30.76 - 32.00	30.76 - 32.00
Average fixed rate (%)	-	-	3.50	3.50
Notional amount (Unit: Million Baht)	-	24,111	-	24,111
Average forward rate (USD : GBP)	-	1.27 - 1.28	-	1.27 - 1.28
Average fixed rate (%)	-	6.08	-	6.08
Cross-currency swap contracts (for debentures)				
Notional amount (Unit: Million Baht)	-	23,400	7,567	30,967
Average forward rate (Baht : USD)	-	32.66 - 33.75	30.72 - 33.50	30.72 - 33.75
Average fixed rate (%)	-	2.09 - 4.82	2.69 - 4.99	2.09 - 4.99

38. Financial instruments (Continued)

38.4 Cash flow hedge (Continued)

The Group uses derivatives as hedging instruments as at 31 December 2024 and 20223 as follows: (Continued)

	Consolidated financial statements			
	31 December 2023			
	Maturity			
	Less than 1 year	1 - 5 years	Over 5 years	Total
Foreign currency forward contracts (for highly probable forecast sale)				
Notional amount (Unit: Million Baht)	916	-	-	916
Average forward rate (Baht : USD)	34.34 - 36.79	-	-	34.34 - 36.79
Foreign currency forward contracts (for highly probable forecast purchases)				
Notional amount (Unit: Million Baht)	360	-	-	360
Average forward rate (Baht : USD)	32.85 - 35.34	-	-	32.85 - 35.34
Notional amount (Unit: Million Baht)	382	-	-	382
Average forward rate (Baht : SEK)	3.35 - 3.51	-	-	3.35 - 3.51
Interest rate swap contracts (for loans)				
Notional amount (Unit: Million Baht)	-	2,236	-	2,236
Average fixed rate (%)	-	4.30	-	4.30
Cross-currency swap contracts (for loans)				
Notional amount (Unit: Million Baht)	-	-	17,935	17,935
Average forward rate (Baht : USD)	-	-	30.76 - 32.00	30.76 - 32.00
Average fixed rate (%)	-	-	3.50	3.50
Cross-currency swap contracts (for debentures)				
Notional amount (Unit: Million Baht)	-	11,000	19,967	30,967
Average forward rate (Baht : USD)	-	33.00 - 33.75	30.72 - 33.60	30.72 - 33.75
Average fixed rate (%)	-	2.00 - 3.26	2.69 - 4.99	2.00 - 4.99

38. Financial instruments (Continued)

38.4 Cash flow hedge (Continued)

The impact of the derivatives on the statement of financial position as at 31 December 2024 and 2023 as follows:

	Consolidated financial statements		Unit: Million Baht
	31 December 2024		
	Provision of cash flow hedge		Provision for cost of hedging
	Continuous hedging	Hedge termination	
Loans	(1,553)	-	(1,156)
Debentures	1,583	-	18

	Consolidated financial statements		Unit: Million Baht
	31 December 2023		
	Provision of cash flow hedge		Provision for cost of hedging
	Continuous hedging	Hedge termination	
Highly probable forecast sale	27	-	-
Highly probable forecast purchases	(1)	-	5
Loans	(1,311)	-	(610)
Debentures	685	-	455

38. Financial instruments (Continued)

38.4 Cash flow hedge (Continued)

The impact of the hedging instruments on the statement of financial position as at 31 December 2024 and 2023 and the impact of cash flow hedge on the statement of income for the year ended 31 December 2024 and 2023 as follows:

Unit: Million Baht

	Consolidated financial statements					Line item
	31 December 2024					
Notional amount	Carrying amount	Change in fair value used for measuring effectiveness for the period	Cost of hedging recognized in shareholders' equity	Provision of cash flow hedge classified to profit and loss		
Interest rate swap contracts - for loans	1,906	(128)	20	(6)	25	Finance cost
Cross-currency swap contracts - for loans	42,047	(1,842)	2,068	1,257	(214)	Gain (loss) on foreign exchange rates
Cross-currency swap contracts - for debentures	30,967	1,020	1,206	(248)	(199)	Gain (loss) on foreign exchange rates

38. Financial instruments (Continued)

38.4 Cash flow hedge (Continued)

The impact of the hedging instruments on the statement of financial position as at 31 December 2024 and 2023 and the impact of cash flow hedge on the statement of income for the year ended 31 December 2024 and 2023 as follows: (Continued)

	Consolidated financial statements						Unit: Million Baht
	31 December 2023						
	Notional amount	Carrying amount	Change in fair value used for measuring effectiveness for the period	Cost of hedging recognized in shareholders' equity	Provision of cash flow hedge classified to profit and loss	Line item in the statement of incomes or non-financial assets	
Foreign currency forward contracts							
- for highly probable forecast sale	916	34	-	-	-	-	
Foreign currency forward contracts							
- for highly probable forecast purchases	742	5	22	5	-	-	
Interest rate swap contracts - for loans	2,236	(81)	(63)	-	76	Finance cost	
Cross-currency swap contracts - for loans	17,935	(949)	1,230	610	-	-	
Cross-currency swap contracts - for debentures	30,967	333	186	(386)	(289)	Gain (loss) on foreign exchange rates	

38. Financial instruments (Continued)

38.4 Cash flow hedge (Continued)

Movement of other components of shareholders' equity and other comprehensive income analysis as follows:

	Unit: Million Baht	
	Consolidated financial statements	
	Provision of cash flow hedge	Provision for cost of hedging
As at 1 January 2024	(600)	(150)
- Change in fair value of hedging instruments	981	(1,105)
- Classification to profit and loss	(456)	(6)
- Effect of taxes	104	123
As at 31 December 2024	29	(1,138)

	Unit: Million Baht	
	Consolidated financial statements	
	Provision of cash flow hedge	Provision for cost of hedging
As at 1 January 2023	(1,197)	258
- Change in fair value of hedging instruments	818	(432)
- Classification to profit and loss	(214)	-
- Effect of taxes	(7)	24
As at 31 December 2023	(600)	(150)

39. Dividend payment

Dividend	Approved by	Dividend payment rate (Baht/share)	Number of shares (shares)	Total dividend (Million Baht)	Payment date
For the year 2023	The 2024 Annual General Shareholders' Meeting of the Company on 12 April 2024	1.20	28,562,589,041	34,275	30 April 2024
Interim 2024	The Board of Directors Meeting of the Company on 15 August 2024	0.80	28,561,982,046	22,850	13 September 2024
				57,125	

40. Promotional privileges

The Company has been granted promotional privileges for the following activities from the Board of Investment (BOI) under the Investment Promotion Act, B.E. 2520 for the energy and environmental efficiency improvement project for the Natural Gas Separation Plant, Unit 5.

The promotional privileges include:

- an exemption from import duties on machinery approved by the BOI
- an exemption from corporate income tax on net income from certain promoted businesses at a rate of 50% of the investment in efficiency improvements, excluding land and working capital for a periods of three years, starting from the date on which the income is first derived from such operations.

During the year 2024, the Company has exercised the privileges for the energy and environmental efficiency improvement project for the Natural Gas Separation Plant, Unit 5.

The Company's sales and service income from the promoted and non-promoted businesses for the years ended 31 December 2024 and 2023 are as follows:

	Unit: Million Baht	
	Separate financial statements	
	2024	2023
Promoted businesses	50,621	-
Non-promoted businesses	1,718,226	1,890,654
Total	1,768,847	1,890,654

40. Promotional privileges (Continued)

Certain subsidiaries have been granted promotional privileges by the BOI under the Investment Promotion Act B.E. 2520, as summarized below:

TOP Group has been granted promotion certificates from the BOI for its finished oil products, power and steam generation, petrochemical product production, and chemical product production. The promotional privileges include exemption from import duties and tax on the machinery and equipment approved by the BOI, exemption from corporate income tax on the net income from the promoted business for 3 to 8 years starting from the date on which income is first derived from such operations or eight years from the date on which the income is received subsequent to when the promotional privileges were granted, and a 50% reduction of corporate income tax on the net income from the promoted business for 5 years starting from the expiry date of the corporate income tax exemption.

PTTGC Group has been granted promotion certificates privileges from the BOI for its production of upstream, intermediate and downstream petrochemical, utility production, port terminal services for liquid cargo and liquid cargo storage, marine freight transportation services, and the production of chemical products from petroleum. As a result, PTTGC Group is entitled to various privileges, including exemption and/or reduction of corporate income tax on net profits derived from these promoted operations.

GPSC Group has been granted promotional privileges for its production of electricity, steam, water, chilled water, and refuse-derived fuel. The promotional privileges include exemption from various duties and taxes and exemption from corporate income tax on the net income from the promoted business for four or eight years starting from the date on which income is first derived from such operations.

IRPC Group has been granted promotional privileges for its manufacture of Compounded Plastic, the cogeneration and steam power plant project (CHP), Propylene project (PRP), EBSM Upgrading for ABS Specialties project (EBSM), Polypropylene Resin (PPE) project, Polypropylene Compound project (PPC), High Pressure HDPE Compound project, Upstream project for Hygiene&Value Added Products (UHV), Floating Solar project, and PP Melt Blown project. The promotional privileges include exemption from import duties and tax on materials essential supplies and machinery approved by the BOI, exemption from corporate income tax on the net income from the promoted business for three to eight years starting from the date on which income is first derived from such operations, a 50% reduction of corporate income tax on the net income from the promoted business for five years starting from the expiry date of the corporate income tax exemption, and double deduction of logistics, electricity and water expenses for a period of ten years from the date the income is first derived from such operations.

OR Group has received investment promotion certificates granting promotional privileges for the manufacture of quality roasted coffee beans and one investment promotion certificate granting promotional privileges for the electricity generated from solar energy. Under certain imposed conditions, such promotional privileges include exemptions from corporate income tax.

PTT TANK Group has been granted promotional privileges for its loading/unloading facilities for sea transport Category 7.1: Public utilities and basic services. The promotional privileges include exemption from import duties on the machinery approved by the BOI, exemption from corporate income tax on the net income from the promoted business for eight years starting from the date on which income is first derived from such operations, and a 50% reduction of corporate income tax on the net income from the promoted business for five years starting from the expiry date of the corporate income tax exemption. Moreover, PTT TANK Group has been granted promotional privileges for its loading/unloading facilities for sea transport, Category 7.1.4 Loading/unloading facilities for sea transport. The promotional privileges include exemption from import duties on the machinery approved by the BOI and exemption from corporate income tax on the net income from the promoted business for six years starting from the date on which income is first derived from such operations.

40. Promotional privileges (Continued)

Certain subsidiaries have been granted promotional privileges by the BOI under the Investment Promotion Act B.E. 2520, as summarized below:(Continued)

PTTLNG has been granted promotional privileges, for its liquefied natural gas transportation business, Category 7.1 Public utilities and basic services, in accordance with Investment Promotion Certificates No. 1581(2)/2551 and No. 1836(2)/2557. The promotional privileges include exemption from import duties on machinery approved by the BOI, exemption from corporate income tax on the net income from the promoted business for 8 years starting from the date on which income is first derived from such operations, and a 50% reduction of corporate income tax on the net income from the promoted business for 5 years starting from the expiry date of the corporate income tax exemption. The tax privileges under Investment Promotion Certificate No. 1581(2)/2551, which grants a 50% reduction of corporate income tax for the promoted business, expired on 5 September 2024. Moreover, PTTLNG has been granted promotional privileges for its loading facilities for sea transport, Category 7.1.4., under Investment Promotion Certificate No. 61-1297-1-00-1-0. under certain imposed conditions, the promotional privileges include exemption from corporate income tax on the net income from the promoted business for 5 years starting from the date on which income is first derived from such operations. On 30 April 2024, the promotional privileges granted under the aforementioned Investment Promotion Certificate were transferred to PE LNG Co., Ltd,

PTTGM Group has been granted promotional privileges for its production of Li-ion batteries. These privileges include exemption from import duties on machinery approved by the BOI and exemption from corporate income tax on the net income from the promoted business (up to 100% of the investment amount, excluding land and working capital) for 8 years starting from the date on which income is first derived from such operations. In the event of a business loss during the period of corporate income tax exemption, the promoted entity will be allowed to carry forward the annual losses incurred during that period to offset against net profits generated after the expiration of the corporate income tax exemption period, with a time limit of no more than 5 years from the date the exemption period expires.

PTTEP Group has been granted an investment promotion certificate from the BOI for its solar power generation business. Under this certificate, PTTEP Group is entitled to various tax exemptions and privileges as specified in the investment promotion certificate.

The Group must comply with certain terms and conditions prescribed in the promotional certificates.

41. Commitments and contingent liabilities

Details of significant changes in commitments and contingent liabilities are as follows:

41.1 Details of commitments to related parties are as follows:

41.1.1 The Company has provided loans to its subsidiaries through PTT Treasury Center Company Limited (PTTTCC) (a subsidiary of the Company) with credit limits totalling Baht 91,964 million. As at 31 December 2024, the remaining credit limits were Baht 53,309 million.

41. Commitments and contingent liabilities (Continued)

Details of significant changes in commitments and contingent liabilities are as follows: (Continued)

41.1 Details of commitments to related parties are as follows: (Continued)

41.1.2 As at 31 December 2024, the Group entered into the Sponsor Support Agreements with their related parties totalling Baht 3,098 million, and USD 1,267 million with credit limits based on the Group's participating interest in those related parties.

The Company has commitments arising from issuing Parent Company Guarantees (PCG) on behalf of a subsidiary, providing guarantees for purchases of goods. However, the subsidiary has established risk management measures for such transactions. Therefore, the Company bears very low risk of assuming responsibility for the above obligations.

The Company has commitments for guarantee of the subsidiaries' loans and debentures as mentioned in Note 27.

41.1.3 As at 31 December 2024, the Group had obligations not exceeding USD 270 million in respect of the purchase of shares in the associates under the share purchase agreements.

The Company had obligations under the Shareholder Agreements to pay for ordinary shares in proportion to its shareholding. As at 31 December 2024, the Company had remaining obligations amounting to Baht 9,499 million.

41.2 Commitments under leases - the Group as a lessee, the future minimum lease payments under uncancellable leases as at 31 December 2024 are as follows:

	Unit: Million Baht	
	Consolidated financial statements	Separate financial statements
Due date		
- Within 1 year	1,350	145
- Over 1 year and up to 5 years	638	108
- Over 5 years	825	52
Total	2,813	305

41.3 As at 31 December 2024, the Group had capital commitments of Baht 121,382 million in the consolidated financial statements and Baht 19,200 million in the separate financial statements.

41. Commitments and contingent liabilities (Continued)

Details of significant changes in commitments and contingent liabilities are as follows: (Continued)

- 41.4 As at 31 December 2024, the Group had outstanding letters of credit of Baht 65,032 million in the consolidated financial statements and Baht 887 million in the separate financial statements.
- 41.5 As at 31 December 2024, the Group had contingent liabilities in the form of letter of guarantee amounting to Baht 80,167 million in the consolidated financial statements and Baht 563 million in the separate financial statements.
- 41.6 On 25 February 2014, the contractor for an onshore natural gas pipeline project (the contractor) filed a lawsuit against the Company in the Civil Court, alleging that the Company unlawfully terminated the contract and breached the agreement. The contractor demanded the Company to pay outstanding wages and damages. The Company preserved that its actions were in accordance with the contract and referred this matter to the Office of the Attorney General for defense, The prosecutor submitted a statement to the Civil Court. However, the Civil Court ordered the case to be transferred to the Central Administrative Court, for consideration and judgement, as both courts agreed that the case falls under administrative jurisdiction. The case is currently under consideration by the Central Administrative Court.

After the Company terminated the contract with the contractor, it proceeded to complete the natural gas pipeline project. Subsequently, on 20 June 2018, the Company filed a lawsuit with the Central Administrative Court, seeking damages from the construction contractor for breach of contract and work abandonment. Subsequently, the Central Administrative Court ordered the consolidation of this case with the previously filed lawsuit by the contractor against the Company.

On 25 September 2019, the contractor informed the Central Administrative Court that on 8 March 2019, the National Company Law Tribunal of India ordered the contractor to enter into a corporate insolvency resolution process and appointed a Resolution Professional in accordance with Indian law. The Company examined this information and verified it. Subsequently, on 26 November 2019, the Company submitted a claim for debt repayment to the Resolution Professional in India. However, the contractor was not granted business rehabilitation and was therefore required to undergo bankruptcy and liquidation proceedings in accordance with Indian law. The Company has also submitted a claim for debt repayment.

On 27 December 2023, the Central Administrative Court rendered a judgment in the case filed by the contractor, dismissing the case. In the case filed by the Company, the court ordered the contractor to pay damages amounting to approximately Baht 6,400 million, along with legal interest. Which, the payment must be completed within 60 days from the date of the judgment. It was subsequently discovered that the contractor did not file an appeal within the prescribed time frame and failed to settle the debt as ruled by the Central Administrative Court

41. Commitments and contingent liabilities (Continued)

Details of significant changes in commitments and contingent liabilities are as follows: (Continued)

On 13 February 2024, the Central Administrative Court issued a Certification of case finalization to the Company, as the contractor did not appeal the judgment of the Central Administrative Court. On 14 May 2024, the Central Administrative Court ordered the appointment of an executing officer to seize and attach the contractor's assets for debt repayment in accordance with the court's judgment. The process of locating the contractor's assets for debt settlement in accordance with the final judgment is currently underway.

Regarding legal proceedings in India, where the contractor's headquarters is located, the liquidator appointed under the Indian's bankruptcy process has ordered that the Company be entitled to debt repayment from the contractor's asset pool in the amount determined by the final judgment of the Central Administrative Court of Thailand. Presently, the process of distributing assets to creditors on a pro-rata basis is currently underway.

- 41.7 During the third quarter of 2014, the number of people in Rayong filed several lawsuits with the Civil Court and the Rayong Provincial Court against PTT Global Chemical Public Co., Ltd. (PTTGC) to claim the extra compensation from oil spill incident and to perform the rehabilitation of the sea and natural environmental recovery. Some cases have been dismissed and some cases have been passed a judgment by the Civil Court on 25 August 2016 ordered PTTGC to compensate for damages including interest and rehabilitation of approximately Baht 11 million. PTTGC has appealed on 17 February 2017. Subsequently, on 11 May 2018, PTTGC made compromise agreements with majority plaintiffs at the Civil Court. On 20 December 2018, the Court of Appeal has passed the judgment according to the compromise contracts which PTTGC has already paid compensation in full amount. For the remaining plaintiffs, the Court of Appeal orders PTTGC to pay compensation with its interest according to the judgement of the Court of First Instance and reduced the amount of interest. PTTGC has paid compensation to all plaintiff completely and no petition is submitted to Supreme Court by any of plaintiff. This case has become final.

For the case at Rayong Provincial Court, on 28 September 2018, the Court has made the judgement ordering PTTGC to pay damage cost with its interest approximately Baht 38 million by deducting the remedy payment paid to the plaintiffs of Baht 24 million. PTTGC deposited the remaining damage cost with its interest to the Rayong Provincial Court on 25 February 2019. Some plaintiffs filed an appeal with the Rayong Provincial Court and PTTGC has filed an answer to the appeal with the Rayong Provincial Court on 2 October 2019. Subsequently, on 1 September 2020, the Court of Appeal Region 2 has made the judgement ordering PTTGC to pay damage cost with its interest to the plaintiffs. PTTGC deposited the amount of Baht 25 million to the Rayong Provincial Court on 30 September 2020, which is to cover the additional damages ordered under the judgement. Afterwards, on 14 October 2020, the Rayong Provincial Court sent an appointment to hear the judgement or the order of the Court of Appeal Region 2 on 26 November 2020. Then, the plaintiffs have filed the Dika appeal period on 1 March 2021. The Supreme Court has issued an order accepting the Dika appeal of the plaintiffs on 2 March 2022 and sent a copy of Dika appeal to PTTGC on 19 March 2022. PTTGC filed a petition to the Dika appeal on 13 September 2022. The case is currently under the trial by the Supreme Court.

41. Commitments and contingent liabilities (Continued)

Details of significant changes in commitments and contingent liabilities are as follows: (Continued)

Subsequently, on 28 July 2023, PTTGC received a summons and a copy of the civil plaint, which the Department of National Parks, Wildlife and Plant Conservation filed against the Company with Rayong Provincial Court regarding the wrongful act causing damage to natural resources and claim for damages. The plaintiff claimed that the oil spill incident in 2013 caused damage to the plaintiff. However, PTTGC and its legal advisor of PTTGC considered relevant facts, evidence and applicable laws and are of the opinion that PTTGC has taken appropriate measures to provide remedy and compensation for the damage, and the natural resources and environment have been restored since the incident. Therefore, PTTGC is not liable for the damages as claimed, and no provision for any losses resulting from this case has been recorded.

41.8 On 8 April 2023, PTTGC received a summons and a copy of the civil plaint which the Local Fisheries Association, fishermen and merchants ("Plaintiffs") filed against Star Petroleum Refining Public Company Limited as the first defendant and the PTTGC as the second defendant with Rayong Provincial Court regarding the wrongful act, claim for damages and request for marine resources restoration. The Plaintiffs claimed that the oil spill incident caused the Plaintiffs' loss of income. However, PTTGC and its legal advisor considered relevant facts, evidence and applicable laws and are of the opinion that PTTGC did not commit a wrongful act against the Plaintiffs as claimed. Therefore, it is not liable for the damages as claimed. PTTGC submitted the statement of defense to the Rayong Provincial Court on 8 June 2023 and the case is under the consideration by the Rayong Provincial Court. Accordingly, no provision for any losses resulting from this case has been recorded.

41.9 In September 2024, IRPC Public Company Limited (IRPC) received a Value Added Tax (VAT) assessment notification (Por.Por. 73.1) and a VAT refund notification letter (Por.Por. 72.1) from the Revenue Department. These notifications pertained to a VAT assessment for VAT underpayment related to export sales to an overseas customer during the period from August 2019 to September 2020, amounting to Baht 538 million. This amount includes additional fines and surcharges as required by VAT law. Currently, IRPC is appealing the tax assessment with the Appeal Committee in accordance with the Revenue Code. The management is confident that IRPC has no obligation to pay the VAT underpayment, fines and surcharges as assessed since the export sales were conducted through the standard export process, as is customary with its customers. Therefore, as at 31 December 2024, IRPC has not recorded a provision for the liability.

42. Reclassification

A subsidiary of the Company has reclassified items to align with the presentation of financial information for the current year. The reclassification has no impact on the total net profit, as presented below.

Unit: Million Baht

	Consolidated financial statements		
	For the year ended 31 December 2023		
	Before reclassification	Reclassification	After reclassification
Statement of income			
Sales and service income	3,144,551	333	3,144,884
Cost of sales and services	2,767,102	2,395	2,769,497
Other income	40,705	(2,069)	38,636
Selling and distribution expenses	45,404	714	46,118
Administrative expenses	86,889	(4,845)	82,044

43. Events after the reporting period

- 43.1 On 20 February 2025, at the Board of Directors Meeting No. 2/2025 of the Company, the Board passed a resolution to propose to the Annual General Meeting of the Company's shareholders for the approval of dividend payment of Baht 2.10 per share for the year 2024. On 13 September 2024, the Company paid an interim dividend of Baht 0.80 per share as described in Note 39. Accordingly, the remaining dividend of Baht 1.30 per share or approximately Baht 37,132 million will be proposed for approval by the Annual General Meeting of the Company's shareholders for the year 2025.
- 43.2 The Board of Directors of the Company approved these financial statements for public issuance on 20 February 2025.



Audit Fee

Audit Fee

In the fiscal year 2024, the company and its subsidiaries incurred a total audit fee of THB 344,240,280 which includes fees paid to the auditing firm, EY, as well as individuals or entities related to the auditor. This amount consists of THB 54,271,796 paid to the aforementioned auditing firm and THB 289,968,484 paid to other auditing firms.

Non-Audit Fee

In the fiscal year 2024, PTT and its subsidiaries paid a total of THB 119,396,598 for other services to EY, including persons or entities related to the auditor and the auditing firm, mainly for consulting services in various area.

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