Financial statements for the year ended 31 December 2021 and Independent Auditor's Report

Independent Auditor's Report

To the shareholders of Bangchak Corporation Public Company Limited

Opinion

I have audited the consolidated and separate financial statements of Bangchak Corporation Public Company Limited and its subsidiaries (the "Group") and of Bangchak Corporation Public Company Limited (the "Company"), respectively, which comprise the consolidated and separate statements of financial position as at 31 December 2021, the consolidated and separate statements of income, comprehensive income, changes in equity and cash flows for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

In my opinion, the accompanying consolidated and separate financial statements present fairly, in all material respects, the financial position of the Group and the Company, respectively, as at 31 December 2021 and their financial performance and cash flows for the year then ended in accordance with Thai Financial Reporting Standards (TFRSs).

Basis for Opinion

I conducted my audit in accordance with Thai Standards on Auditing (TSAs). My responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Consolidated and Separate Financial Statements* section of my report. I am independent of the Group and the Company in accordance with the Code of Ethics for Professional Accountants issued by the Federation of Accounting Professions that is relevant to my audit of the consolidated and separate financial statements, and I have fulfilled my other ethical responsibilities in accordance with these requirements. 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 judgment, were of most significance in my audit of the consolidated and separate financial statements of the current period. These matters were addressed in the context of my audit of the consolidated and separate financial statements as a whole, and in forming my opinion thereon, and I do not provide a separate opinion on these matters.

Gain of control of a subsidiary	
Refer to Notes 3 (a), 5 and 11 to the financial stateme	ents.
The key audit matter	How the matter was addressed in the audit
In 2021, the Group has gained control of the	My audit procedures included the following:
 In 2021, the Group has ganded control of the petroleum exploration and production business in Norway. The management applied significant judgement to classify an investment as an investment in subsidiary and has estimated the fair value of net assets acquired including consideration transferred with the differences which was recognised as goodwill amounting to Baht 2,365 million. Due to the materiality of the transactions and the significant judgment and complexities involved in determining the fair value, I consider this as a key audit matter. 	 Understood and assessed the classification of the investment by considering shareholding structure, power of control and key relevant activities. Made inquiries of management to obtain an understanding of management's procedures on identification of assets acquired and liabilities assumed and on the determination of the fair value of net asset acquired. Evaluated the independence and competency of independent appraiser. Involved KPMG specialist to evaluate valuation methodology and financial parameters applied to the discount rate. Evaluated significant assumptions underpinning the valuations reference to internal and external information and mathematical accuracy. Considered the adequacy of disclosures in accordance with Thai Financial Reporting Standards.

Impairment testing of investment in associates, investment in subsidiaries, oil exploration & production assets and goodwill

Refer to Notes 3 (m), 11, 12, 14 and 17 to the financi	al statements.
The key audit matter	How the matter was addressed in the audit
The Group has investment in many countries and	My audit procedures included the following:
there are risks from various external factors such as	
the fluctuation in economies, politics and laws.	- Understood the management's operation plan,
There is a risk that the operating results and the	process of the indicators identification and
investments might be significantly less than the	impairment testing process and tested the
initial forecast and budget and might result in the	calculation of recoverable amount prepared by the
assets' carrying value being higher than the	management.
recoverable amounts, which might represent losses	
from impairment.	- Assessed the key assumptions estimated by the
	management with reference to internally and
Due to the materiality of the transactions,	externally derived sources after taking into
the management's significant judgment and	account the historical forecasting accuracy.
complexities involved in estimating a recoverable	
amount of investment in associates, investment in	– Evaluated the appropriateness of valuation
subsidiaries, oil exploration & production assets and goodwill from discounted cash flow method,	methodology and financial parameters applied to
I consider this as a key audit matter.	the discount rate.
i consider uns as a key audit matter.	
	- Considered the adequacy of disclosures in
	accordance with Thai Financial Reporting
	Standards.

Valuation of inventories	
Refer to Notes 3 (g) and 10 to the financial statement	ïS.
The key audit matter	How the matter was addressed in the audit
Inventories are measured at the lower of cost and net realizable value. As a result of fluctuation in	My audit procedures included the following:
crude oil and oil products price which may cause the net realizable value to be lower than cost.	 Evaluated the appropriateness of inventories valuation by management.
	 Verified the appropriateness of the net realizable value calculation.
	 Checked the selling prices of finished goods with the reference market price and contract price.
	 Considered the adequacy of disclosures in accordance with Thai Financial Reporting Standards.

Other Information

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

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

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

When I read the annual report, if I conclude that there is a material misstatement therein, I am required to communicate the matter to those charged with governance and request that the correction be made.

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

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

In preparing the consolidated and separate financial statements, management is responsible for assessing the Group's and the Company'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 and the Company or to cease operations, or has no realistic alternative but to do so.

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

Auditor's Responsibilities for the Audit of the Consolidated and Separate Financial Statements

My objectives are to obtain reasonable assurance about whether the consolidated and separate 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 TSAs 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 consolidated and separate financial statements.

As part of an audit in accordance with TSAs, I exercise professional judgment and maintain professional skepticism throughout the audit. I also:

• Identify and assess the risks of material misstatement of the consolidated and separate 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 and the Company'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 and the Company'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 consolidated and separate 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 and the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated and separate financial statements, including the disclosures, and whether the consolidated and separate 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 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 consolidated and separate 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.

(Sakda Kaothanthong) Certified Public Accountant Registration No. 4628

KPMG Phoomchai Audit Ltd. Bangkok 17 February 2022

Statement of financial position

		Consolidate statem		Separate f statem	
		31 Dece	ember	31 Dece	ember
Assets	Note	2021	2020	2021	2020
			(in Ba	ht)	
Current assets					
Cash and cash equivalents	7	32,021,772,927	21,651,076,845	7,788,085,020	6,042,910,455
Short-term investments		807,642,035	24,926,509	-	-
Trade and other current receivables	6, 8, 9	15,233,579,294	6,401,832,975	7,368,200,614	3,004,450,187
Current tax assets		211,763,094	73,286,408	190,909,841	69,195,961
Short-term loan to related parties	6	-	-	922,000,000	-
Current portion of long-term loan to					
related parties	6	-	-	-	550,800,115
Inventories	10	18,497,017,551	16,162,353,035	15,309,993,126	13,387,573,029
Other current financial assets		273,667,343	55,624,900	6,769,765	55,624,900
Oil fuel fund subsidies receivable	_	2,326,727,135	2,926,502,670	2,326,727,135	2,926,502,670
Total current assets	-	69,372,169,379	47,295,603,342	33,912,685,501	26,037,057,317
Non-current assets					
Other non-current financial assets	31	4,547,575,874	1,696,318,642	909,211,201	237,064,163
Investments in subsidiaries	11	-	-	16,492,319,693	13,851,135,308
Investments in associates					
and joint ventures	12	13,669,982,757	14,331,209,255	73,000,000	73,000,000
Long-term loans	6	399,543,393	1,254,716,892	1,036,392,016	1,033,535,738
Investment properties	13	126,965,546	126,965,546	682,953,148	682,953,148
Property, plant and equipment	14	69,233,336,356	54,567,027,553	33,056,521,001	33,478,542,269
Right-of-use assets	15	13,624,881,284	11,086,968,337	10,394,221,630	10,386,998,257
Goodwill	5, 17	4,021,919,632	2,128,980,036	-	-
Intangible assets	18	11,591,206,569	11,179,679,221	286,510,474	356,290,524
Deferred tax assets	28	2,125,520,463	2,980,980,320	2,065,515,704	2,930,043,526
Indemnification assets	5	11,393,979,223	-	-	-
Other non-current assets	6 _	1,678,224,768	1,674,142,789	1,101,730,968	1,336,340,000
Total non-current assets	-	132,413,135,865	101,026,988,591	66,098,375,835	64,365,902,933
Total assets	=	201,785,305,244	148,322,591,933	100,011,061,336	90,402,960,250

Statement of financial position

		Consolidated	l financial	Separate f	ïnancial
		statem	ents	statem	ents
		31 Dece	mber	31 Dece	ember
Liabilities and equity	Note	2021 2020		2021	2020
			(in Bah	nt)	
Current liabilities					
Short-term loan from financial institutions	19	1,256,608,708	3,975,324,173	-	-
Trade and other current payables	6, 20	15,650,844,103	12,277,161,213	10,471,675,619	8,959,910,776
Current portion of long-term loans	19	4,964,480,782	2,674,132,316	700,153,846	425,153,846
Current portion of lease liabilities		1,219,857,079	1,316,127,944	1,008,098,718	1,283,743,076
Current portion of debentures	19	4,499,408,033	2,500,000,000	4,000,000,000	2,500,000,000
Short-term loan from related parties	6	17,236,960	-	-	-
Excise tax and oil fuel fund payable		959,765,164	947,748,884	959,765,164	947,748,884
Current income tax payable		3,046,049,614	146,235,567	-	-
Other current financial liabilities		509,692,344	184,691,621	507,118,671	157,823,261
Other current liabilities	_	1,981,428,314	1,480,727,593	1,155,820,566	1,387,610,341
Total current liabilities	_	34,105,371,101	25,502,149,311	18,802,632,584	15,661,990,184
Non-current liabilities					
Long-term loans	19	21,882,627,089	30,614,930,636	4,894,620,476	5,334,217,785
Lease liabilities		7,518,304,280	6,581,482,721	5,955,858,659	5,906,993,560
Debentures	19	47,904,187,428	23,479,970,719	26,475,665,108	23,479,970,719
Deferred tax liabilities	28	2,617,416,880	794,627,463	-	-
Non-current provisions for					
employee benefits	21	2,388,496,550	2,336,038,743	2,143,947,148	2,231,625,137
Provision for the decommissioning cost		15,601,638,939	256,229,922	-	-
Other non-current financial liabilities		28,995,719	87,186,280	-	-
Other non-current liabilities	6	178,944,979	353,550,703	44,153,810	52,241,594
Total non-current liabilities	_	98,120,611,864	64,504,017,187	39,514,245,201	37,005,048,795
Total liabilities	_	132,225,982,965	90,006,166,498	58,316,877,785	52,667,038,979

Statement of financial position

		Consolidated statem 31 Dece	ents	Separate fi statem 31 Dece	ents
Liabilities and equity	Note	2021	2020	2021	2020
			(in Bah	nt)	
Equity					
Share capital					
Authorised share capital					
(1,376,923,157 ordinary shares,					
par value at Baht 1 per share)	=	1,376,923,157	1,376,923,157	1,376,923,157	1,376,923,157
Issued and paid-up share capital					
(1,376,923,157 ordinary shares,					
par value at Baht 1 per share)		1,376,923,157	1,376,923,157	1,376,923,157	1,376,923,157
Share premium on ordinary shares	23	11,157,460,051	11,157,460,051	11,157,460,051	11,157,460,051
Other surpluses	23	3,332,546,360	3,441,394,816	189,617,759	189,617,759
Warrants		14,972,497	1,811,785	-	-
Retained earnings					
Appropriated					
Legal reserve	23	153,164,346	153,164,346	153,164,346	153,164,346
Treasury shares reserve	23	505,406,210	505,406,210	505,406,210	505,406,210
Unappropriated		28,204,678,139	22,441,357,804	18,965,909,728	14,917,959,248
Treasury shares	22	(505,406,210)	(505,406,210)	(505,406,210)	(505,406,210)
Perpetual subordinated debentures	24	9,940,796,710	9,940,796,710	9,940,796,710	9,940,796,710
Other components of equity	_	(713,436,328)	(2,146,945,146)	(89,688,200)	-
Equity attributable to owners					
of the parent		53,467,104,932	46,365,963,523	41,694,183,551	37,735,921,271
Non-controlling interests	11	16,092,217,347	11,950,461,912	<u> </u>	
Total equity	-	69,559,322,279	58,316,425,435	41,694,183,551	37,735,921,271
Total liabilities and equity	=	201,785,305,244	148,322,591,933	100,011,061,336	90,402,960,250

(Pichai Chunhavajira) Chairman (Chaiwat Kovavisarach) President and Group Chief Executive Officer

Bangchak Corporation Public Company Limited and its Subsidiaries Statement of income

		Consolidate stater		Separate staten	
		Year ended 3	1 December	Year ended 3	1 December
	Note	2021	2020	2021	2020
			(in B	aht)	
Revenue from sale of goods and rendering of services	6, 25	199,416,997,279	136,450,288,879	155,975,862,537	114,445,188,348
Cost of sale of goods and rendering of services	6, 26	(175,744,433,125)	(132,122,127,969)	(145,111,978,675)	(115,869,042,171)
Gross profit (loss)		23,672,564,154	4,328,160,910	10,863,883,862	(1,423,853,823)
Dividend income	6	-	-	975,351,027	463,190,017
Other income	6	1,278,744,715	532,528,699	867,578,979	511,379,830
Selling expenses	6. 26	(4,181,580,714)	(4,260,278,551)	(3,036,345,210)	(3,084,650,067)
Administrative expenses	6, 26	(2,971,488,792)	(2,880,755,707)	(1,516,546,459)	(1,576,356,775)
Exploration and evaluation expenses		(516,299,210)	-	-	-
Gain (loss) from derivatives		(1,273,966,199)	16,555,015	(1,428,941,580)	55,415,169
Gain on foreign exchange		250,506,098	732,127,200	348,365,817	514,003,787
Gain (loss) from fair value adjustment of investment		614,366,153	-	(10,484,500)	-
Gain from sale of investment	11	120,268,439	-	-	-
Loss from impairment of assets	11, 12, 14, 18	(1,357,623,057)	(2,374,857,657)	(180,367,503)	(2,085,441,944)
Profit (loss) from operating activities		15,635,491,587	(3,906,520,091)	6,882,494,433	(6,626,313,806)
Finance costs	27	(2,539,510,223)	(1,969,298,106)	(1,220,613,191)	(1,029,793,132)
Impairment gain and reversal of impairment loss					
(impairment loss) determined in accordance					
with TFRS 9	31	(30,327,264)	(890,738,980)	1,472,967,615	(3,946,399,416)
Share of profit (loss) of associates and joint ventures					
accounted for using euiqty method	12	1,042,110,810	(592,023,674)	-	-
Profit (loss) before income tax expense		14,107,764,910	(7,358,580,851)	7,134,848,857	(11,602,506,354)
Tax income (expense)	28	(4,263,046,969)	1,588,597,371	(820,554,434)	1,762,661,133
Profit (loss) for the year		9,844,717,941	(5,769,983,480)	6,314,294,423	(9,839,845,221)
Profit (loss) attributable to:					
Owners of the parent		7,623,789,858	(6,967,069,656)	6,314,294,423	(9,839,845,221)
Non-controlling interests		2,220,928,083	1,197,086,176		(),000,010,221)
Profit (loss) for the year		9,844,717,941	(5,769,983,480)	6,314,294,423	(9,839,845,221)
			((,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Basic earnings (loss) per share	29	5.25	(5.50)	4.28	(7.62)

(Pichai Chunhavajira) Chairman (Chaiwat Kovavisarach) President and Group Chief Executive Officer

Statement of comprehensive income

	Consolidated statem	ents	Separate financial statements				
	Year ended 31		Year ended 31				
	2021	2020	2021	2020			
		(in Bal	nt)				
Profit (loss) for the year	9,844,717,941	(5,769,983,480)	6,314,294,423	(9,839,845,221)			
Other comprehensive income (loss)							
Items that will be reclassified subsequently to profit or loss							
Exchange differences on translating financial statements	1,983,515,198	(1,504,726,256)	-	-			
Gain (loss) on cash flow hedges	71,479,023	(34,369,360)	-	-			
Loss on hedges of net investments in foreign operations	(167,466,585)	(52,005,591)	-	-			
Share of other comprehensive income (loss) of associates and							
joint ventures accounted for using equity method		40,794,813		-			
Total items that will be reclassified subsequently							
to profit or loss	1,887,527,636	(1,550,306,394)		-			
Items that will not be reclassified subsequently							
to profit or loss							
Gain (loss) on investment in equity instruments designated							
at FVOCI	235,702,942	156,014,650	(89,688,200)	-			
Gain on investment in equity instruments designated							
at FVOCI sold during the year	44,881,986	2,923,696,311	-	-			
Gain on remeasurments of defined benefit plans	135,056,688	911,121	133,884,687	-			
Share of other comprehensive income (loss) of assoicates							
and joint ventures accounted for using equity method	7,688,678	15,205,727	-	-			
Total items that will not be reclassified subsequently							
to profit or loss	423,330,294	3,095,827,809	44,196,487				
Other comprehensive income (loss) for the year,							
net of tax	2,310,857,930	1,545,521,415	44,196,487				
Total comprehensive income (loss) for the year	12,155,575,871	(4,224,462,065)	6,358,490,910	(9,839,845,221)			
Total comprehensive income (loss) attributable to:							
Owners of the parent	9,343,979,050	(4,973,039,367)	6,358,490,910	(9,839,845,221)			
Non-controlling interests	2,811,596,821	748,577,302		-			
Total comprehensive income (loss) for the year	12,155,575,871	(4,224,462,065)	6,358,490,910	(9,839,845,221)			
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Bangchak Corporation Public Company Limited and its Subsidiaries Statement of changes in equity

										Consolidated f	inancial statements								
					_		Retained earnings			_			Other component	nts of equity					
		Issued and					Treasury			Perpetual		Cash flow	Net investment		Share of other comprehensive income (loss) of associates and joint ventures	Total other	Equity attributable	Non-	
		paid-up	Share	Other		Legal	shares		Treasury	subordinated	Translation	hedge	hedge	Fair value	using equity	components	to owners	controlling	Total
	Note	share capital	premium	surpluses	Warrants	reserve	reserve	Unappropriated	shares	debentures	reserve	reserve	reserve	reserve	method	of equity	of the parent	interests	equity
Year ended 31 December 2020										(in	Baht)								
Balance at 1 January 2020		1,376,923,157	11,157,460,051	2,742,874,460	2,121,880	153,164,346	431,860,810	27,249,233,109	(431,860,810)	9,940,796,710	(1,305,355,067)	(55,813,138)	-	386,851,912	(25,247,952)	(999,564,245)	51,623,009,468	7,172,197,979	58,795,207,447
Transactions with owners, recorded																			
directly in equity Contributions by and distributions to																			
owners of the parent																			
Treasury shares purchased	22	-			-	-	73,545,400	(73,545,400)	(73,545,400)	-		-					(73,545,400)		(73,545,400)
Share options exercised				799,305	(310,095)		-	-	-	-		-	-	-			489,210	889,617	1,378,827
Dividends	30		-	-		-	-	(407,301,572)	-		-	-	-	-		-	(407,301,572)	(335,253,220)	(742,554,792)
Total	-			799,305	(310,095)	-	73,545,400	(480,846,972)	(73,545,400)	-	<u> </u>					<u> </u>	(480,357,762)	(334,363,603)	(814,721,365)
Changes in ownership interests																			
in subsidiaries																			
Acquisition of a subsidiary with																			
non-controlling interests				-	-	-	-		-	-		-	-	-			-	20,012,035	20,012,035
Changes in an ownership interests in																			
subsidiaries without a change in control	- k			697,721,051	-		-		-			-		-			697,721,051	4,344,038,199	5,041,759,250
Total	-			697,721,051	<u> </u>	· · ·	<u> </u>	· · ·			· · ·	<u> </u>		<u> </u>			697,721,051	4,364,050,234	5,061,771,285
Total transactions with owners, recorded																			
directly in equity	-			698,520,356	(310,095)		73,545,400	(480,846,972)	(73,545,400)				-	-			217,363,289	4,029,686,631	4,247,049,920
Comprehensive income (loss) for the year																			
Profit (loss)		-	-	-	-	-	-	(6,967,069,656)	-	-	-	-	-	-	-	-	(6,967,069,656)	1,197,086,176	(5,769,983,480)
Other comprehensive income (loss)	-	-	-	-	-	-		3,141,411,190	-		(1,064,288,272)	(23,697,673)	(35,857,855)	(62,149,474)	38,612,373	(1,147,380,901)	1,994,030,289	(448,508,874)	1,545,521,415
Total comprehensive income																			
(loss) for the year	-			-	· · ·	· · · ·		(3,825,658,466)	· · · ·		(1,064,288,272)	(23,697,673)	(35,857,855)	(62,149,474)	38,612,373	(1,147,380,901)	(4,973,039,367)	748,577,302	(4,224,462,065)
Coupon payment on perpetual																			
subordinated debentures	24	-	-	-	-	-	-	(501,369,867)		-	-	-	-	-	-	-	(501,369,867)	-	(501,369,867)
Balance at 31 December 2020		1,376,923,157	11,157,460,051	3,441,394,816	1,811,785	153,164,346	505,406,210	22,441,357,804	(505,406,210)	9,940,796,710	(2,369,643,339)	(79,510,811)	(35,857,855)	324,702,438	13,364,421	(2,146,945,146)	46,365,963,523	11,950,461,912	58,316,425,435

Bangchak Corporation Public Company Limited and its Subsidiaries Statement of changes in equity

										Consolidated	financial statements								
							Retained earnings						Other component	nts of equity					
												Cash	Net		Share of other comprehensive income (loss) of associates and		Equity		
		Issued and		Other			Treasury			Perpetual		flow	investment		joint ventures	Total other	attributable	Non-	
		paid-up	Share	surpluses		Legal	shares		Treasury	subordinated	Translation	hedge	hedge	Fair value	using equity	components	to owners	controlling	Total
	Note	share capital	premium	(deficits)	Warrants	reserve	reserve	Unappropriated	shares	debentures	reserve	reserve	reserve	reserve	method	of equity	of the parent	interests	equity
	-										n Baht)								
Year ended 31 December 2021																			
Balance at 1 January 2021		1,376,923,157	11,157,460,051	3,441,394,816	1,811,785	153,164,346	505,406,210	22,441,357,804	(505,406,210)	9,940,796,710	(2,369,643,339)	(79,510,811)	(35,857,855)	324,702,438	13,364,421	(2,146,945,146)	46,365,963,523	11,950,461,912	58,316,425,435
Transactions with owners, recorded																			
directly in equity																			
Contributions by and distributions to																			
owners of the parent																			
Share options exercised		-	-	316,948,353		-		-		-	-	-	-			-	316,948,353	1,159,413,017	1,476,361,370
Share-based payment transactions			-	766,391	13,160,712	-		-		-	-	-	-			-	13,927,103	9,339,020	23,266,123
Dividends	30		-	-	-	-	-	(1,900,228,630)	-	-	-	-	-	-		-	(1,900,228,630)	(771,953,147)	(2,672,181,777
Total	-			317,714,744	13,160,712			(1,900,228,630)									(1,569,353,174)	396,798,890	(1,172,554,284)
Changes in ownership interests in subsidiaries																			
Changes in an ownership interests in																			
subsidiary without a change in control	11	-		(368,261,809)	-	-		-		-	-	-	-		-	-	(368,261,809)	606,392,543	238,130,734
Changes in an ownership interests in																			
subsidiary from sale of investment	11	-	-	(58,301,391)				-		-	253,078,733	-	-			253,078,733	194,777,342	-	194,777,342
Acquisition of non-controlling interests																		326,967,181	326,967,181
with a change in control Total				(426,563,200)					<u> </u>		253.078.733					253.078.733	(173,484,467)	933.359.724	326,967,181 759,875,257
10111	-			(420,000,200)							200,070,700					230,070,700	(170,00,00)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	10,740,04207
Total transactions with owners, recorded																			
directly in equity	-	<u> </u>		(108,848,456)	13,160,712			(1,900,228,630)			253,078,733		<u> </u>			253,078,733	(1,742,837,641)	1,330,158,614	(412,679,027)
Comprehensive income (loss) for the year																			
Profit								7,623,789,858				-					7,623,789,858	2,220,928,083	9,844,717,941
Other comprehensive income (loss)		-			-			539,759,107			1,400,429,246	42,787,343	(167,285,721)	(100,103,225)	4,602,442	1,180,430,085	1,720,189,192	590,668,738	2,310,857,930
Total comprehensive income	-																		
(loss) for the year	-							8,163,548,965			1,400,429,246	42,787,343	(167,285,721)	(100,103,225)	4,602,442	1,180,430,085	9,343,979,050	2,811,596,821	12,155,575,871
Coupon payment on perpetual																			
subordinated debentures	24	-	-					(500,000,000)			-	-	-			-	(500,000,000)	-	(500,000,000)
Balance at 31 December 2021	-	1,376,923,157	11,157,460,051	3,332,546,360	14,972,497	153,164,346	505,406,210	28,204,678,139	(505,406,210)	9,940,796,710	(716,135,360)	(36,723,468)	(203,143,576)	224,599,213	17,966,863	(713,436,328)	53,467,104,932	16,092,217,347	69,559,322,279
	-																		

Statement of changes in equity

					Sep	arate financial sta				
						Retained earning	8			
		Issued and				Treasury			Perpetual	
		paid-up		Other		shares		Treasury	subordinated	Total
	Note	share capital	Share premium	Surpluses	Legal reserve	reserve	Unappropriated	shares	debentures	equity
						(in Baht)				
Year ended 31 December 2020										
Balance at 1 January 2020		1,376,923,157	11,157,460,051	189,617,759	153,164,346	431,860,810	25,740,021,308	(431,860,810)	9,940,796,710	48,557,983,331
Transactions with owners, recorded										
directly in equity										
Distributions to owners										
Treasury shares purchased	22	-	-	-	-	73,545,400	(73,545,400)	(73,545,400)	-	(73,545,400)
Dividends to owners of the Company	30 _	-		-			(407,301,572)		-	(407,301,572)
Total	_	-		-		73,545,400	(480,846,972)	(73,545,400)	-	(480,846,972)
Comprehensive income (loss) for the year							(0.020.045.221)			(0.020.045.221)
Loss		-	-	-	-	-	(9,839,845,221)	-	-	(9,839,845,221)
Other comprehensive income (loss)	-			-			- (0.020.045.221)	·		
Total comprehensive income (loss) for the year	-	<u> </u>					(9,839,845,221)		-	(9,839,845,221)
Coupon payment on perpetual										
subordinated debentures	24	-	-	-	-	-	(501,369,867)	-	-	(501,369,867)
Balance at 31 December 2020	-	1,376,923,157	11,157,460,051	189,617,759	153,164,346	505,406,210	14,917,959,248	(505,406,210)	9,940,796,710	37,735,921,271

Statement of changes in equity

					Sep	arate financial sta	tements				
										Other components	
						Retained earning	s			of equity	
		Issued and				Treasury			Perpetual		
		paid-up		Other		shares		Treasury	subordinated	Fair value	Total
	Note	share capital	Share premium	Surpluses	Legal reserve	reserve	Unappropriated	shares	debentures	reserve	equity
						(i	n Baht)				
Year ended 31 December 2021											
Balance at 1 January 2021		1,376,923,157	11,157,460,051	189,617,759	153,164,346	505,406,210	14,917,959,248	(505,406,210)	9,940,796,710	-	37,735,921,271
Transactions with owners, recorded											
directly in equity											
Distributions to owners											
Dividends to owners of the Company	30	-					(1,900,228,630)	-			(1,900,228,630)
Total		-	-	-			(1,900,228,630)	-	-		(1,900,228,630)
Comprehensive income (loss) for the year											
Profit		-	-	-	-	-	6,314,294,423	-	-	-	6,314,294,423
Other comprehensive income (loss)	-	-	-				133,884,687	-		(89,688,200)	44,196,487
Total comprehensive income (loss) for the y	ear .	-					6,448,179,110	-	-	(89,688,200)	6,358,490,910
Coupon payment on perpetual	a./						(500.000.000)				(
subordinated debentures	24	-	-	-	-	-	(500,000,000)	-	-	-	(500,000,000)
							·				
Balance at 31 December 2021	:	1,376,923,157	11,157,460,051	189,617,759	153,164,346	505,406,210	18,965,909,728	(505,406,210)	9,940,796,710	(89,688,200)	41,694,183,551

Bangchak Corporation Public Company Limited and its Subsidiaries Statement of cash flows

	Consolidated financial statements Year ended 31 December		Separate financial statements Year ended 31 December	
	2021	2020	2021	2020
		(in Bah	<i>t)</i>	
Cash flows from operating activities				
Profit (loss) for the year	9,844,717,941	(5,769,983,480)	6,314,294,423	(9,839,845,221)
Adjustments for				
Tax (income) expense	4,263,046,969	(1,588,597,371)	820,554,434	(1,762,661,133)
Finance costs	2,539,510,223	1,969,298,106	1,220,613,191	1,029,793,132
Depreciation and amortisation	8,074,878,355	6,821,366,531	5,220,582,122	5,216,866,940
Unrealised (gain) loss from derivatives	229,638,225	(31,890,616)	428,445,136	(54,230,777)
Unrealised (gain) loss on foreign exchange	639,953,658	(296,502,554)	380,797,252	(310,443,260)
(Reversal of) loss on inventories devaluation	2,090,572	(4,682,087)	-	-
Impairment loss on assets	1,357,623,057	2,374,857,657	180,367,503	2,085,441,944
(Reversal of) impairment loss determined in accordance with TFRS 9	30,327,264	890,738,980	(1,472,967,615)	3,946,399,416
Write-off of Exploration and evaluation expenses	69,401,848	-	-	-
Loss on disposal of property, plant and equipment	84,558,328	134,870,409	24,194,049	2,726,744
Loss on disposal of intangible assets	-	33,604,726	-	-
(Gain) loss on fair value adjustment	(614,366,153)	21,716,960	10,484,500	-
Expense from disposal of other investment	2,126,873	21,455,271	-	-
Gain on disposal of investment in subsidiaries	(120,268,439)	-	-	-
Interest income and dividend income	(184,792,930)	(157,410,894)	(1,119,811,302)	(726,422,771)
Provision for employee benefits	160,612,439	230,478,108	133,537,585	209,736,821
Warrants	23,266,124	-	-	-
Reversal of provision for customer loyalty programmes	(4,776,371)	(9,781,272)	(4,776,371)	(9,781,272)
Deferred revenue	(7,578,417)	(7,353,215)	(7,578,418)	(7,011,452)
Share of (profit) loss of associates and joint ventures (net of tax)	(1,042,110,810)	592,023,674		-
	25,347,858,756	5,224,208,933	12,128,736,489	(219,430,889)
Changes in operating assets and liabilities				
Trade accounts receivable	(3,654,195,735)	3,196,589,518	(3,769,847,373)	3,341,760,681
Other current receivables	(1,296,202,277)	255,195,930	(20,431,464)	(222,627,469)
Inventories	(1,642,274,072)	(386,763,857)	(2,105,669,125)	750,095,874
Other non-current assets	294,643,550	(44,411,087)	35,787,344	80,629,994
Trade accounts payable	251,940,908	(1,321,458,596)	1,812,110,471	(1,209,336,540)
Other current payables	(1,702,420,512)	(576,764,001)	140,085,117	(264,271,179)
Other current liabilities	236,302,963	21,284,434	(218,496,824)	(93,288,261)
Provision for employee benefits	(277,424,736)	(165,902,903)	(271,330,915)	(161,414,171)
Other non-current liabilities	(313,054,341)	(80,318,800)	(509,366)	(6,411,587)
Net cash generated from operating	17,245,174,504	6,121,659,571	7,730,434,354	1,995,706,453
Tax received (paid)	(265,017,584)	217,922,463	(111,211,665)	149,889,790
Net cash from operating activities	16,980,156,920	6,339,582,034	7,619,222,689	2,145,596,243

Bangchak Corporation Public Company Limited and its Subsidiaries Statement of cash flows

	Consolidated financial statements		Separate financial statements	
	Year ended 31	December	Year ended 31	December
	2021	2020	2021	2020
		(in Bah	nt)	
Cash flows from investing activities				
Decrease (increase) in short-term investments	(795,019,355)	267,931,247	-	200,000,000
Payment for investment in subsidiaries				
and associates, net of cash acquired	-	(5,015,464,810)	(2,515,767,978)	(2,226,702,335)
Proceeds from business combination	5,010,720,240	-	-	-
Payment for other investments	(1,707,699,371)	(796,514,158)	(775,248,203)	-
Cash decreased from sale of investment in subsidiary	(21,335,769)	-	-	-
Proceeds from sale of investment in subsidiary	285,916	-	-	-
Proceeds from sale of investment in associates and joint ventures	234,856,800	-	-	-
Proceeds from sale of other investments	433,087,993	4,251,704,493	3,000,000	-
Proceeds from capital reduction in associates	-	842,336,487	-	-
Acquisition of property, plant and equipment	(7,972,286,590)	(5,596,818,930)	(3,187,935,858)	(3,585,741,089)
Proceeds from sale of property, plant and equipment	438,850,572	26,584,813	15,332,816	7,516,987
Acquisition of right-of-use assets	(2,198,489,326)	(196,600,000)	(595,257,916)	(196,600,000)
Acquisition of intangible assets	(717,098,215)	(199,808,029)	(58,472,955)	(110,383,426)
Increase in short-term loans	-	-	(922,000,000)	-
Increase in long-term loans	(1,645,032,661)	(238,601,452)	-	(163,580,900)
Cash receipts from long-term loans	2,669,360,000	-	1,913,690,966	1,166,095,837
Interest received	226,644,539	239,844,849	288,281,954	149,450,444
Dividend received	203,234,333	62,342,773	966,351,027	463,190,017
Net cash used in investing activities	(5,839,920,894)	(6,353,062,717)	(4,868,026,147)	(4,296,754,465)
Cash flows from financing activities				
Proceeds from exercise of share options	-	1,378,826	-	-
Proceeds from increase in subsidiaries' share capital	1,654,871,361	5,149,074,814	-	-
Redemption of treasury shares	-	(73,545,400)	-	(73,545,400)
Decrease in short-term loans from financial institutions	(2,719,508,965)	(1,075,675,827)	-	-
Proceeds from long-term loans from financial institutions	3,352,091,133	13,784,122,642	-	3,610,336,000
Repayment of long-term loans from financial institutions	(13,054,950,135)	(2,835,865,581)	(425,153,846)	(375,153,846)
Proceeds from short-term loan from related parties	17,236,960	-	-	-
Payment of lease liabilities	(1,664,950,886)	(1,963,463,174)	(1,541,561,036)	(1,901,915,037)
Proceeds from issuance of debentures	20,283,563,060	8,000,000,000	7,000,000,000	8,000,000,000
Redemption of debentures	(3,322,600,494)	(3,000,000,000)	(2,500,000,000)	(3,000,000,000)
Dividend paid	(2,672,181,777)	(742,554,792)	(1,900,228,630)	(407,301,572)
Financial cost paid	(2,392,286,081)	(2,175,409,732)	(1,139,078,465)	(1,243,845,687)
Coupon payment on perpetual subordinated debentures	(500,000,000)	(501,369,867)	(500,000,000)	(501,369,867)
Net cash from (used in) financing activities	(1,018,715,824)	14,566,691,909	(1,006,021,977)	4,107,204,591
Net increase in cash and cash equivalents,				
before effect of exchange rates	10,121,520,202	14,553,211,226	1,745,174,565	1,956,046,369
Effect of exchange rate changes on cash and cash equivalents	249,175,880	(177,940,203)		-
Net increase in cash and cash equivalents	10,370,696,082	14,375,271,023	1,745,174,565	1,956,046,369
Cash and cash equivalents at 1 January	21,651,076,845	7,275,805,822	6,042,910,455	4,086,864,086
Cash and cash equivalents at 31 December	32,021,772,927	21,651,076,845	7,788,085,020	6,042,910,455
New cost down of a				
Non-cash transaction	(12 /21 500	(92.417.422	160 546 040	422 210 742
Outstanding payable from purchase of property, plant and equipment	613,431,590	682,416,423	168,546,848	432,218,743

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These notes form an integral part of the financial statements.

The financial statements issued for Thai statutory and regulatory reporting purposes are prepared in the Thai language. These English language financial statements have been prepared from the Thai language statutory financial statements, and were approved and authorised for issue by the Board of Directors on 17 February 2022.

1 General information

Bangchak Corporation Public Company Limited, the "Company" is incorporated in Thailand and was listed on the Stock Exchange of Thailand. The Company's registered offices are as follows:

- Head office : 2098 M Tower Building, 8th Floor, Sukhumvit Road, Phra Kanong Tai, Phra Kanong, Bangkok.
- Refinery plant : 210 Moo 1, Soi Sukhumvit 64, Sukhumvit Road, Phra Kanong Tai, Phra Kanong, Bangkok.

As at 31 December 2021, major shareholders of the Company were Vayupak Fund 1 and Social Security Office holding 19.84% and 14.40% of issued and paid-up capital, respectively (2020: 14.66% and 14.40%, respectively).

The principal businesses of the Group are operating an oil refinery and marketing the finished products through its service stations under its company's brand. The Group's oil market includes consumers in various sectors, such as transportation, aviation, shipping, construction, industrial, agriculture and sale of oil which is made through the major and the minor oil traders, production and distribution of electricity from solar cell and investment in alternative energy business, manufacturing and distributing of biofuel product and relating products and exploration and production of petroleum.

Details of the Company's subsidiaries as of 31 December 2021 and 2020 are given in note 6 and 11.

2 Basis of preparation of the financial statements

(a) Statement of compliance

The financial statements are prepared in accordance with Thai Financial Reporting Standards ("TFRS"), guidelines promulgated by the Federation of Accounting Professions and applicable rules and regulations of the Thai Securities and Exchange Commission. The financial statements are presented in Thai Baht, which is the Company's functional currency.

The preparation of financial statements in conformity with TFRS requires management to make judgements, estimates and assumptions that affect the application of the Group's accounting policies. Actual results may differ from these estimates. Estimates and underlying assumptions that described in each note are reviewed on an ongoing basis. Revisions to accounting estimates are recognised prospectively.

3 Significant accounting policies

The accounting policies set out below have been applied consistently to all periods presented in these financial statements.

(a) Basis of consolidation

The consolidated financial statements relate to the Company and its subsidiaries (together referred to as the "Group") and the Group's interests in associates and joint ventures.

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of subsidiaries are included in the consolidated financial statements from the date on which control commences until the date on which control ceases.

At the acquisition date, the Group measures any non-controlling interest at its proportionate interest in the identifiable net assets of the acquiree. In addition, when there is a change in the Group's interest in a subsidiary that do not result in a loss of control, any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received from the acquisition or disposal of the non-controlling interests with no change in control are accounted for as other surpluses/deficits in shareholders' equity.

When the Group loses control over a subsidiary, it derecognises the assets and liabilities, any related non-controlling interests and other components of equity of the subsidiary. Any resulting gain or loss is recognised in profit or loss. Any interest retained in the former subsidiary is measured at fair value when control is lost.

Associates are those entities in which the Group has significant influence, but not control or joint control, over the financial and operating policies. A joint venture is an arrangement in which the Group has joint control, whereby the Group has rights to the net assets of the arrangement, rather than rights to its assets and obligations for its liabilities.

The Group recognised investments in associates and joint ventures using the equity method in the consolidated financial statements. They are initially recognised at cost, which includes transaction costs. Subsequent to initial recognition, the consolidated financial statement include the Group's dividend income and share of the profit or loss and other comprehensive income of equity–accounted investees, until the date on which significant influence or joint control ceases.

Intra-group balances and transactions, and any unrealised income or expenses arising from intra-group transactions, are eliminated on consolidation. Unrealised gains arising from transactions with associates and joint ventures are eliminated against the investment to the extent of the Group's interest in the investee. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment.

Business combinations

The Group applies the acquisition method when the Group assess that the acquired set of activities and assets include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create output. The acquisition date is the date on which control is transferred to the Group, other than business combinations with entities under common control. Expenses in connection with a business combination are recognised as incurred.

Goodwill is measured as of the acquisition date as the fair value of the consideration transferred including the recognised amount of any non-controlling interest in the acquiree, less net fair value of the identifiable assets acquired and liabilities assumed. Any gain on bargain purchase is recognised in profit or loss immediately.

Consideration transferred includes the fair values of the assets transferred, liabilities incurred by the Group to the previous owners of the acquiree, and equity interests issued by the Group. Consideration transferred also includes the fair value of any contingent consideration.

Any contingent consideration is measured at fair value at the date of acquisition and remeasured at fair value at each reporting date. Subsequent changes in the fair value are recognised in profit or loss.

A contingent liability of the acquiree is assumed in a business combination only if such a liability represents a present obligation and arises from a past event, and its fair value can be measured reliably.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group estimates provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted during the measurement period, or additional assets or liabilities are recognised, to reflect new information obtained about facts and circumstances that existed at the acquisition date that, if known, would have affected the amounts recognised at that date.

When a business combination is achieved in stages, the Group's previously held equity interest in the acquiree is remeasured to its acquisition-date fair value and the resulting gain or loss, if any, is recognised in profit or loss. Amounts arising from interests in the acquiree prior to the acquisition date that have previously been recognised in other comprehensive income are reclassified to profit or loss where such treatment would be appropriate if that interest were disposed of.

Business combination under common control are accounted for using a method similar to the pooling of interest method, by recognising assets and liabilities of the acquired businesses at their carrying amounts in the consolidated financial statements of the ultimate parent company at the transaction date. The difference between the carrying amount of the acquired net assets and the consideration transferred is recognised as surplus or deficit from business combinations under common control in shareholder's equity. The surplus or deficit will be written off upon divestment of the businesses acquired. The results from operations of the acquired businesses will be included in the consolidated financial statements of the acquirer from the beginning of the comparative period or the moment the businesses came under common control, whichever date is later, until control ceases.

(b) Investments in subsidiaries, associates, and joint ventures

Investments in subsidiaries, associates, and joint ventures in the separate financial statements of the Company are measured at cost less allowance for impairment losses. Dividend income is recognised in profit or loss on the date on which the Group's right to receive payment is established. If the Company disposes of part of its investment, the deemed cost of the part sold is determined using the weighted average method. Gains and losses on disposal of the investments are recognised in profit or loss.

(c) Foreign currencies

Transactions in foreign currencies including non-monetary assets and liabilities dominated in foreign currencies are translated to the respective functional currencies of each entity in the Group at exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are translated at the exchange rate at the reporting date. Non-monetary assets and liabilities measured at fair value in foreign currencies are translated at the exchange rate at the exchange rates at the dates that fair value was determined.

Foreign currency differences are generally recognised in profit or loss. However, foreign currency differences arising from the translation of the following items are recognised in other comprehensive income:

- an investment in equity securities designated as at FVOCI
- a financial liability designated as a hedge of the net investment in a foreign operation to the extent that the hedge is effective; and
- qualifying cash flow hedges to the extent the hedge is effective.

Foreign operations

The assets and liabilities of foreign operations, including goodwill and fair value adjustments arising on acquisition, are translated to Thai Baht at the exchange rates at the reporting date. The revenues and expenses of foreign operations are translated to Thai Baht at rates approximating the exchange rates at the dates of the transactions.

Foreign exchange differences and the effective portion of any foreign currency differences arising from hedges of a net investment in a foreign operation (see note 3(d.4)) are recognised in other comprehensive income and accumulated in the translation reserve in equity until disposal of the investment, except to the extent that the translation difference is allocated to non-controlling interest.

When a foreign operation is disposed of in its entirety or partially such that control, significant influence or joint control is lost, the cumulative amount in the translation reserve related to that foreign operation is reclassified to profit or loss as part of the gain or loss on disposal. If the Group disposes of part of its interest in a subsidiary but retains control, then the relevant proportion of the cumulative amount is reattributed to non-controlling interests. When the Group disposes of only part of an associate or joint venture while retaining significant influence or joint control, the relevant proportion of the cumulative amount is reclassified to profit or loss.

When the settlement of a monetary item receivable from or payable to a foreign operation is neither planned nor likely in the foreseeable future, exchange gains and losses arising from such a monetary item are considered to form part of a net investment in a foreign operation and are recognised in other comprehensive income and presented in the translation reserve in equity until disposal of the investment.

(d) Financial instruments

(d.1) Recognition and initial measurement

Debt securities that the Group issued are initially recognised when they are originated. Other financial assets and financial liabilities (except trade accounts receivables (see note 3(f))) are initially recognised when the Group becomes a party to the contractual provisions of the instrument, and measured at fair value, taking into account for transaction costs that are directly attributable to its acquisition or issue of the securities, except for financial assets and financial liabilities measured at FVTPL, which are initially and subsequently measured at fair value, and any transaction costs that are directly attributable to its acquisition or issue of the securities are recognised in profit or loss.

On initial recognition, a financial asset is classified as measured at: amortised cost; fair value through other comprehensive income (FVOCI); or fair value through profit or loss (FVTPL). Financial assets are not reclassified subsequent to their initial recognition unless the Group changes its business model for managing financial assets, in which case all affected financial assets are reclassified prospectively from the reclassification date.

On initial recognition, financial liabilities are classified as measured at amortised cost using the effective interest method or FVTPL. Interest expense, foreign exchange gains and losses and any gain or loss on derecognition are recognised in profit or loss.

Financial assets measured at amortised costs are subsequently measured at amortised cost using the effective interest method. The amortised cost is reduced by expected credit losses. Interest income, foreign exchange gains and losses, expected credit loss and any gain or loss on derecognition are recognised in profit or loss.

Equity investments measured at FVOCI are subsequently measured at fair value. Dividend income is recognised as income in profit or loss on the date on which the Group's right to receive payment is established, unless the dividend clearly represents a recovery of part of the cost of the investment. Other net gains and losses are recognised in OCI and are never reclassified to profit or loss.

(d.2) Derecognition and offset

The Group derecognises a financial asset when the contractual rights to receive the cash flows from the financial asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or in which the Group neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset.

The Group derecognises a financial liability when its contractual obligations are discharged or cancelled, or expire. The Group also derecognises a financial liability when its terms are modified and the cash flows of the modified liability are substantially different, in which case a new financial liability based on the modified terms is recognised at fair value.

The difference between the carrying amount extinguished and the consideration received or paid is recognised in profit or loss.

Financial assets and financial liabilities are offset, and the net amount presented in the statement of financial position when, and only when, the Group currently has a legally enforceable right to set off the amounts and the Group intends either to settle them on a net basis or to realise the asset and settle the liability simultaneously.

(d.3) Derivatives

Derivative are recognised at fair value and remeasured at fair value at each reporting date. The gain or loss on remeasurement to fair value is recognised immediately in profit or loss, except where the derivatives qualify for cash flow hedge accounting or hedges of net investment in a foreign operation, in which case recognition of any resultant gain or loss depends on nature of the item being hedged (see note 3 (d.4)).

(d.4) Hedging

At inception of designated hedging relationships, the Group documents the risk management objective and strategy for undertaking the hedge, the economic relationship between the hedged item and the hedging instrument, including consideration of the hedge effectiveness at the inception of the hedging relationship and throughout the remaining period to determine the existence of economic relationship between the hedged item and the hedging instrument.

Cash flow hedges

When a derivative is designated as a cash flow hedging instrument, the effective portion of changes in the fair value of the derivative is recognised in OCI and accumulated in the hedging reserve. Any ineffective portion of changes in the fair value of the derivative is recognised immediately in profit or loss.

The Group designates only the change in fair value of the spot element of forward exchange contracts as the hedging instrument in cash flow hedging relationships. The change in fair value of the forward element of forward exchange contracts (forward points) is recognised in a cash flow hedging reserve within equity.

When the hedged forecast transaction subsequently results in the recognition of a non-financial item such as inventory, the amount accumulated in the cash flow hedging reserve is included directly in the initial cost of the non-financial item when it is recognised.

For all other hedged forecast transactions, the amount accumulated in the cash flow hedging reserve is reclassified to profit or loss in the same period or periods during which the hedged expected future cash flows affect profit or loss.

If the hedge no longer meets the criteria for hedge accounting or the hedging instrument is sold, expires, is terminated or is exercised, then hedge accounting is discontinued prospectively. When hedge accounting for cash flow hedges is discontinued, the amount that has been accumulated in the cash flow hedging reserve remains in equity until, for a hedge of a transaction resulting in the recognition of a non-financial item, it is included in the non-financial item's cost on its initial recognition or, for other cash flow hedges, it is reclassified to profit or loss in the same period or periods as the hedged expected future cash flows affect profit or loss.

If the hedged future cash flows are no longer expected to occur, then the amounts that have been accumulated in the cash flow hedging reserve are immediately reclassified to profit or loss.

Net investment hedges

When a derivative instrument or a non-derivative financial liability is designated as the hedging instrument, the effective portion of, for a derivative, changes in the fair value of the hedging instrument or, for a non-derivative, foreign exchange gains and losses is recognised in OCI and presented in the translation reserve within equity. Any ineffective portion is recognised immediately in profit or loss. The amount recognised in OCI is reclassified to profit or loss as a reclassification adjustment on disposal of the foreign operation.

(d.5) Impairment of financial assets other than trade accounts receivables

The Group recognises allowances for expected credit losses (ECLs) on financial assets measured at amortised cost, lease receivables, and loan commitments issued which are not measured at FVTPL.

The Group recognises ECLs equal to 12-month ECLs unless there has been a significant increase in credit risk of the financial instrument since initial recognition or credit-impaired financial assets, in which case the loss allowance is measured at an amount equal to lifetime ECLs.

ECLs are a probability-weighted estimate of credit losses based on forward-looking and historical experience. Credit losses are measured as the present value of all cash shortfalls discounted by the effective interest rate of the financial asset.

The Group considers a financial asset to have low credit risk when its credit rating is equivalent to the globally understood definition of 'investment grade'. The Group recognises ECLs for low credit risk financial asset as 12-month ECLs.

The Group assumes that the credit risk on a financial asset has increased significantly if there are significant deterioration in credit rating, significant deterioration in the operating results of the debtor and existing or forecast changes in the technological, market, economic or legal environment that have a significant adverse effect on the debtor's ability to meet its obligation to the Group.

The Group considers a financial asset to be in default when the debtor is unlikely to pay its credit obligations to the Group in full, without recourse by the Group to actions such as realising security (if any is held).

(d.6) Write off

The gross carrying amount of a financial asset is written off when the Group has no reasonable expectations of recovering. Subsequent recoveries of an asset that was previously written off, are recognised as a reversal of impairment in profit or loss in the period in which the recovery occurs.

(d.7) Interest

Interest income and expense is recognised in profit or loss using the effective interest method. In calculating interest income and expense, the effective interest rate is applied to the gross carrying amount of the asset (when the asset is not credit-impaired) or to the amortised cost of the liability. However, for financial assets that have become credit-impaired subsequent to initial recognition, interest income is calculated by applying the effective interest rate to the amortised cost of the financial asset. If the asset is no longer credit-impaired, then the calculation of interest income reverts to the gross basis.

(e) Cash and cash equivalents

Cash and cash equivalents comprise cash balances, call deposits and highly liquid short-term investments which has a maturity of three months or less from the date of acquisition. Bank overdrafts that are repayable on demand are a component of financing activities for the purpose of the statement of cash flows.

(f) Trade accounts receivable

A trade receivable is recognised when the Group has an unconditional right to receive consideration. A trade receivable is measured at transaction price less allowance for expected credit loss. Bad debts are written off when incurred.

The Group estimates lifetime expected credit losses (ECLs), using a provision matrix to find ECLs rate. This method groups the debtors based on shared credit risk characteristics and past due status, taking into account historical credit loss data, adjusted for factors that are specific to the debtors and an assessment of both current economic conditions and forward-looking general economic conditions at the reporting date.

(g) Inventories

Inventories are measured at the lower of cost and net realisable value. Cost is calculated using the weighted average cost principle. Cost includes direct costs incurred in acquiring the inventories. In the case of manufactured inventories and work-in-progress, cost includes an appropriate share of production overheads based on normal operating capacity. Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs to complete and to make the sale.

(h) Investment properties

Investment properties are measured at cost less accumulated depreciation and impairment losses. Cost includes expenditure that is directly attributable to the acquisition of the investment property. The cost of self-constructed assets includes capitalised borrowing costs.

No depreciation charged on freehold land.

(i) Property, plant and equipment

Property, plant and equipment are measured at cost less accumulated depreciation and impairment losses.

Cost includes expenditure that is directly attributable to the acquisition of the asset. The cost of selfconstructed assets includes capitalised borrowing costs and the costs of dismantling and removing the items and restoring the site on which they are located including transfers from other comprehensive income of any gain or loss on qualifying cash flow hedges of foreign currency purchases of property, plant and equipment. Purchased software that is integral to the functionality of the related equipment is capitalised as part of that equipment.

Differences between the proceeds from disposal and the carrying amount of property, plant and equipment are recognised in profit or loss.

Subsequent costs

The cost of replacing a part of an item of property, plant and equipment is recognised in the carrying amount of the item when the future economic benefits embodied within the part will flow to the Group, and its cost can be measured reliably. The carrying amount of the replaced part is derecognised. The costs of the day-to-day servicing of property, plant and equipment are recognised in profit or loss as incurred.

Depreciation

Depreciation is calculated on a straight-line basis over the estimated useful lives of each component of an asset and recognised in profit or loss. No depreciation is provided on freehold land and assets under construction.

The estimated useful lives are as follows:		
Buildings	10 - 50	years
Machinery, equipment refinery plants and terminal	2 - 30	years
Equipment solar plants	10 - 25	years
Marketing and office equipment	3 - 20	years
Vehicles	5 - 7	years
Other assets	21	years

Oil exploration and production assets

When the technical and commercial feasibility of an undeveloped oil or gas field has been demonstrated, the field enters its development phase. The costs of oil exploration and production assets are transferred from exploration and evaluation expenditure and reclassified into development phase.

The costs of oil exploration and production assets include past exploration and evaluation costs, preproduction development costs and the ongoing costs of continuing to develop reserves for production as well as decommission costs.

Depletion charges are calculated using a unit of production method over the life of the estimated proved plus probable reserves.

(j) Goodwill

Goodwill is measured at cost less accumulated impairment losses. In respect of equity-accounted investee, the carrying amount of goodwill is included in the carrying amount of the investment.

(k) Other intangible assets

Intangible assets that have definite useful lives are measured at cost less accumulated amortisation and impairment losses. Subsequent expenditure is capitalised only when it will generate the future economic benefits. Amortisation is calculated on a straight-line basis over the estimated useful lives of intangible assets and recognised in profit or loss.

The estimated useful lives are as follows:		
Right to use and cost of development of computer software	3 - 10	years
Right to connect electrical transmission line	20 - 25	years
Power purchase agreement	20	years
Power purchase agreement and assets under concession agreement	28	years

Exploration and evaluation expenditure

Exploration and evaluation expenditure is stated at cost as intangible assets and is accumulated in respect of each identifiable area of interest. These costs are capitalised until the viability of the area of interest is determined.

Accumulated costs in relation to an abandoned area are written off through profit or loss in the period in which the decision to abandon the area is made.

Once an area of interest enters the development phase, exploration and evaluation expenditures are transferred to oil and gas properties.

Service concession arrangements

The Group recognises intangible assets arising from a service concession arrangement when it has a right to charge for use of the concession infrastructure. An intangible asset received as consideration for providing construction services in a service concession arrangement is measured at fair value on initial recognition with reference to the fair value of the services provided. Subsequent to initial recognition, the intangible asset is measured at cost, which includes capitalised borrowing costs, less accumulated amortisation and accumulated impairment losses.

(l) Leases

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

As a lessee

At commencement or on modification of a contract, the Group allocates the consideration in the contract to each lease component on the basis of its relative stand-alone prices of each component. For the leases of property, the Group has elected not to separate non-lease components and account for the lease and non-lease components wholly as a single lease component.

The Group recognises a right-of-use asset and a lease liability at the lease commencement date, except for leases of low-value assets and short-term leases which is recognised as an expense on a straight-line basis over the lease term.

Right-of-use asset is measured at cost, less any accumulated depreciation and impairment loss, and adjusted for any remeasurements of lease liability. The cost of right-of-use asset includes the initial amount of the lease liability adjusted for any prepaid lease payments made plus any initial direct costs incurred and an estimate of restoration costs, less any lease incentives received. Depreciation is charged to profit or loss on a straight-line method from the commencement date to the end of the lease term, unless the lease transfers ownership of the underlying asset to the Group by the end of the lease term or the Group will exercise a purchase option. In that case the right-of-use asset will be depreciated over the useful life of the underlying asset, which is determined on the same basis as those of property and equipment.

The lease liability is initially measured at the present value of all lease payments that shall be paid under the lease. The Group uses the Group's incremental borrowing rate to discount the lease payments to the present value. The Group determines its incremental borrowing rate by obtaining interest rates from various external financing sources and makes certain adjustments to reflect the terms of the lease and type of the asset leased.

The lease liability is measured at amortised cost using the effective interest method. It is remeasured when there is a lease modification, or a change in the assessment of options specified in the lease. When the lease liability is remeasured, a corresponding adjustment is made to the carrying amount of the right-of-use asset or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

As a lessor

At inception or on modification of a contract, the Group allocates the consideration in the contract to each component on the basis of their relative standalone selling prices.

At lease inception, the Group considers to classify a lease that transfers substantially all of the risks and rewards incidental to ownership of the underlying asset to lessees as a finance lease. A lease that does not meet this criteria is classified as an operating lease.

The Group recognises lease payments received under operating leases in profit or loss on a straight-line basis over the lease term as part of 'other income.' Contingent rents are recognised as rental income in the accounting period in which they are earned.

The Group estimates lifetime expected credit losses (ECLs), using a provision matrix to find ECLs rate. This method groups the lease receivables based on shared credit risk characteristics and past due status, taking into account historical credit loss data, adjusted for factors that are specific to the debtors and an assessment of both current economic conditions and forward-looking general economic conditions at the reporting date. The Group derecognises the lease receivables as disclosed in note 3(d).

(m) Impairment of non-financial assets

The carrying amounts of the Group's assets are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, the assets' recoverable amounts are estimated. For goodwill, the recoverable amount is estimated each year at the same time.

An impairment loss is recognised in profit or loss if the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount, unless it reverses a previous revaluation credited to equity, in which case it is charged to equity.

The recoverable amount is the greater of the asset's value in use and fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pretax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. For an asset that does not generate cash inflows largely independent of those from other assets, the recoverable amount is determined for the cash-generating unit to which the asset belongs.

Impairment losses of assets recognised in prior periods is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss in respect of goodwill is not reversed. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

(n) Employee benefits

Defined contribution plans

Obligations for contributions to the Group's provident funds are expensed in profit or loss in the period as the related service is provided.

Defined benefit plans

The Group's net obligation in respect of defined benefit plans is calculated by estimating the amount of future benefit that employees have earned in the current and prior periods. The defined benefit obligations is discounted to the present value, which performed every 3 years by a qualified actuary using the projected unit credit method.

Remeasurements of the net defined benefit liability, actuarial gain or loss are recognised immediately in OCI. The Group determines the interest expense on the net defined benefit liability for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period, taking into account any changes in the net defined benefit liability during the period as a result of contributions and benefit payments. Net interest expense and other expenses related to defined benefit plans are recognised in profit or loss.

When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss on curtailment is recognised immediately in profit or loss. The Group recognises gains and losses on the settlement of a defined benefit plan when the settlement occurs.

The Group's net obligation in respect of long-term employee benefits is the amount of future benefit that employees have earned in return for their service in the current and prior periods. That benefit is discounted to determine its present value. Remeasurements are recognised in profit or loss in the period in which they arise.

Termination benefits are expensed at the earlier of when the Group can no longer withdraw the offer of those benefits and when the Group recognises costs for a restructuring. If benefits are not expected to be settled wholly within 12 months of the end of the reporting period, then they are discounted.

Short-term employee benefits are expensed as the related service is provided. A liability is recognised for the amount expected to be paid if the Group has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee and the obligation can be estimated reliably.

(o) Share-based payments

The grant-date fair value of equity-settled share-based payment awards granted to employees is generally recognised as an expense, with a corresponding increase in equity, over the vesting period of the awards. The amount recognised as an expense is adjusted to reflect the number of awards for which the related service and non-market performance conditions are expected to be met, such that the amount ultimately recognised is based on the number of awards that meet the related service and non-market performance conditions, the grant-date fair value of the share-based payment is measured to reflect such conditions and there is no true-up for differences between expected and actual outcomes.

(p) Provisions

A provision is recognised if, as a result of a past event, the Group has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The unwinding of the discount is recognised as finance cost.

(q) Fair value measurement

'Fair value' is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date in the principal or, in its absence, the most advantageous market to which the Group has access at that date. The fair value of a liability reflects its non-performance risk.

When measuring the fair value of an asset or a liability, the Group uses observable market data as far as possible. Fair values are categorised into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows:

- Level 1: quoted prices in active markets for identical assets or liabilities.
- Level 2: inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly.
- Level 3: inputs for the asset or liability that are based on unobservable input.

If an asset or a liability measured at fair value has a bid price and an ask price, then the Group measures assets and asset positions at a bid price and liabilities and liability positions at an ask price.

The best evidence of the fair value of a financial instrument on initial recognition is normally the transaction price – i.e. the fair value of the consideration given or received. If the Group determines that the fair value on initial recognition differs from the transaction price, the financial instrument is initially measured at fair value adjusted for the difference between the fair value on initial recognition and the transaction price and the difference is recognised in profit or loss immediately. However, for the fair value categorised as level 3, such difference is deferred and will be recognised in profit or loss on an appropriate basis over the life of the instrument or until the fair value level is transferred or the transaction is closed out.

(t) Share capital

Ordinary shares

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of ordinary shares are recognised as a deduction from equity.

Treasury shares

When share capital recognised as equity is repurchased, the amount of consideration paid, including directly attributable costs, is classified as treasury shares and recognised as a deduction from equity. An equal amount is appropriated from retained earnings and taken to a reserve for treasury shares within equity. When treasury shares are sold, the amount received is recognised as an increase in equity by crediting the cost of the treasury shares sold, calculated using the weighted average method, to the treasury shares account and transferring the equivalent amount back from reserve for treasury shares to retained earnings. Surpluses on the sale of treasury shares are taken directly to a separate category within equity, 'Share premium on treasury shares. Net deficits on sale or cancellation of treasury shares are debited to retained earnings after setting off against any remaining balance of surplus on treasury shares.

(u) Perpetual subordinated debentures

Perpetual subordinated debentures are recognised as equity when the Group has the sole right and discretion to early redeem the debentures per conditions as stipulated in the terms of the debentures and to defer interest and cumulative interest payment without time and deferral amount limitation and the coupon payments are discretionary. Accordingly, any coupon payments are accounted for as dividends and are recognised directly in equity at the time the payment obligation arises. Coupon payments are recognised in the statement of cash flows in the same way as dividends to ordinary shareholders.

(v) Revenue

Revenue is recognised when a customer obtains control of the goods or services in an amount that reflects the consideration to which the Group expects to be entitled, excluding those amounts collected on behalf of third parties, value added tax and is after deduction of any trade discounts and volume rebates.

Sale of goods and services rendered

Revenue from sales of goods is recognised on the date on which the goods are delivered to the customers. For the sales that permit the customers to return the goods, the Group estimates the returns based on the historical return data, does not recognise revenue for this transaction and remains recognition of inventory for the estimated products to be returned.

For bundled packages, the Group recognises revenue from sales of products and rendering of services separately if a product or service is separately identifiable from other items and a customer can benefit from it or the multiple services are rendered in different reporting periods. The consideration received is allocated based on their relative stand-alone selling prices.

Income from sale of electricity

Income from the sale of electricity is recognised in profit or loss in accordance with delivery units supplied as stipulated in the contract. Income from the sale of electricity for some entities within Thailand is entitled to receive ADDER for a period of 10 years from the commencement of commercial sales. Thereafter, subsequent to this initial period income from sale of electricity is recognised at normal rates.

Income from operating rights

Income from operating right is recognised in accordance with the timing of the rights utilisation and with conditions as stipulated in the contract.

Loyalty programmes

For customer loyalty programme that the Group offers to customers, the consideration received are allocated based on the relative stand-alone selling price of the products and the loyalty points. The amount allocated to the loyalty points is recognised as contract liabilities and revenue is recognised when loyalty points are redeemed or the likelihood of the customer redeeming the loyalty points becomes remote. The stand-alone selling prices of the points is estimated based on discount provided to customers and the likelihood that the customers will redeem the points, and the estimate shall be reviewed at the end of the reporting period.

Service concession arrangements

Revenue related to construction under a service concession arrangement is recognised over time. Operation or service revenue is recognised in the period in which the services are provided by the Group. If the service concession arrangement contains more than one performance obligation, the consideration received is allocated with reference to the relative stand-alone selling prices of the services delivered.

(w) Income tax

Income tax expense for the year comprises current and deferred tax, which is recognised in profit or loss except to the extent that they relate to a business combination, or items recognised directly in equity or in other comprehensive income.

Current tax is recognised in respect of the taxable income or loss for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is not recognised for the temporary differences: the initial recognition of goodwill; the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit or loss; and differences relating to investments in subsidiaries to the extent that it is probable that they will not reverse in the foreseeable future.

The measurement of deferred tax reflects the tax consequences that would follow the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities, using tax rates enacted or substantively enacted at the reporting date.

A deferred tax asset is recognised to the extent that it is probable that future taxable profits will be available against which the temporary differences can be utilised. Deferred tax assets are reviewed at each reporting date and reduced to the extent that it is no longer probable that the related tax benefit will be realised.

(x) Earnings per share (EPS)

Basic EPS is calculated by dividing the profit or loss attributable to ordinary shareholders of the Company by the weighted average number of ordinary shares outstanding during the period, adjusted for own shares held.

4 **Impact of COVID-19 pandemic**

COVID-19 pandemic is still on going, while vaccines for COVID-19 are being rolled out during 2021. Due to uncertainty of the situation in 2020, the Group applied accounting guidance on temporary accounting relief measures for additional accounting options in response to impact from the situation of COVID-19 in preparing the financial statements for the year ended 31 December 2020 by excluding COVID-19 situation in impairment of assets, lease modifications, fair value measurement and deferred tax assets. As the accounting guidance already expired on 31 December 2020, the Group has adjusted the value of assets in 2021 (see note 8, 15, and 31).

5 Gain of control of a subsidiary

The Group has considered to change the recording of investment in OKEA ASA ("OKEA") from investment in indirect associate to indirect subsidiary since 1 July 2021. This is because there are events and supporting evidence to support the conclusion that the Group has significant control over operations of OKEA, which the Group previously had a significant influence but has no right to control.

During the period from 1 July 2021 to 31 December 2021, OKEA contributed revenue of Baht 10,068 million and profit of Baht 1,488 million to the Group's results. If the acquisition had occurred on 1 January 2021, management estimates that consolidated revenue would have increased by Baht 4,128 million and consolidated profit for the year would have increased by Baht 44 million. In determining these amounts, management has assumed that the fair value adjustments, determined provisionally, that arose on the date of acquisition would have been the same if the acquisition had occurred on 1 January 2021.

assumed Note **Book value** Adjustment Fair value (in million Baht) Cash and cash equivalents 5.011 5.011 Trade and other current receivables 1,986 1,986 -Inventories 861 861 Property, plant and equipment 14 (6, 280)11,037 17,317 Right-of-use assets 15 626 626 Intangible assets 18 82 82 _ Other non-current assets 11,458 11,458 Trade and other payables (3,528)(3,528)_ Other current liabilities (229)(229)Lease liabilities (626)(626)_ Debenture 19 (8,994)(8,994) Deferred tax liabilities 28 4,887 (6,060)(1,173)Non-current provisions for employee benefits 21 (125)(125)Provisions for decommissioning cost (15,752)(15,752)Total identifiable net assets 2,027 (1,393)634 Less Non-controlling interests (53.91 %) (342)Total identifiable net assets received 292 Goodwill 2,365 **Consideration transferred** 2,657

Identifiable assets acquired and liabilities

Other non-current assets mainly consisted of indemnification assets which was expenses related to close down and removal of oil equipment of oil field, which could be collected from a seller of oil field.

The fair value of exploration and production of petroleum assets was determined based on income approach. Key assumptions included forecast oil and gas price, oil reserve, production capacity and discount rate.

6 Related parties

A related party is a person or entity that has direct or indirect control or joint control, or has significant influence over the financial and managerial decision-making of the Group; a person or entity that are under common control or under the same significant influence as the Group; or the Group has direct or indirect control or joint control or has significant influence over the financial and managerial decision-making of a person or entity.

Relationships with subsidiaries, associates, joint venture and other related parties were as follows:

Name of entities	Country of incorporation/ nationality	Nature of relationships
Major shareholders	v	
Vayupak Fund 1	Thailand	Some common directors
Social Security Office	Thailand	Some common directors
Subsidiaries or indirect subsidiaries		
Bangchak Green Net Co., Ltd.	Thailand	The Company's management as director
BCPG Public Company Limited	Thailand	The Company's management as director
BBGI Public Company Limited	Thailand	The Company's management as director
Bangchak Retail Co., Ltd.	Thailand	The Company's management as director
BCPR Co., Ltd.	Thailand	The Company's management as director
BCV Bio Based Co., Ltd.	Thailand	The Company's management as director
BCV Energy Co., Ltd.	Thailand	The Company's management as director
BCV Innovation Co., Ltd.	Thailand	The Company's management as director
BTSG Company Limited.)Formerly, BCV Partnership Co., Ltd.(Thailand	The Company's management as director <i>(See note 11)</i>
BCP Energy International Pte. Ltd.	Singapore	The Company's management as director <i>(See note 11)</i>
BCP Innovation Pte. Ltd.	Singapore	The Company's management as director
BCP Trading Pte. Ltd.	Singapore	The Company's management as director
BCPR Pte. Ltd.	Singapore	The Company's management as director
Bangchak Solar Energy Co., Ltd.	Thailand	Subsidiary's management as director
Bangchak Solar Energy	Thailand	Subsidiary's management as director
(Prachinburi) Co., Ltd.		
Bangchak Solar Energy	Thailand	Subsidiary's management as director
(Chaiyaphum1) Co., Ltd.		
Bangchak Solar Energy	Thailand	Subsidiary's management as director
(Buriram) Co., Ltd.		
Bangchak Solar Energy	Thailand	Subsidiary's management as director
(Buriram1) Co., Ltd.		
Bangchak Solar Energy	Thailand	Subsidiary's management as director
(Nakhon Ratchasima) Co., Ltd.		
Thai Digital Development Company Limited	Thailand	Subsidiary's management as director
BCPG Indochina Company Limited	Thailand	Subsidiary's management as director
Group		
Lomligor Co., Ltd.	Thailand	Subsidiary's management as director
RPV Energy Co., Ltd. Group	Thailand	Subsidiary's management as director and management
BSE Power Holding (Thailand) Co., Ltd.	Thailand	Subsidiary's director and management as director and management
Prathumwan Smart District Cooling Co., Ltd.	Thailand	Subsidiary's director and management as director

Name of entities	Country of incorporation/ nationality	Nature of relationships
Subsidiaries or indirect subsidiaries (cont		
KSL Green Innovation Public Company Limited	Thailand	The Company's management as director
Bangchak Biofuel Co., Ltd.	Thailand	The Company's management as director
Bangchak Bioethanol (Chachoengsao) Co., Ltd.	Thailand	The Company's management as director
BBGI Utility and Power Co., Ltd.	Thailand	Subsidiary's director and management as director and management
Nido Petroleum Pty. Ltd. Group	Australia/ British Virgin Islands/ Bahrain	Subsidiary's director and management as director <i>(See note 11)</i>
OKEA ASA	Norway	The Company's management as director (See note 5)
BCPG Investment Holdings Pte. Ltd.	Singapore	Subsidiary's management as director
BSE Energy Holdings Pte. Ltd.	Singapore	Subsidiary's management as director
BCPG Japan Corporation Group	Japan	Subsidiary's management as director/ indirect subsidiary of the subsidiary affiliate in TK investment
Greenergy Holdings Pte. Ltd.	Singapore	Subsidiary's management as director
Greenergy Power Pte. Ltd.	Singapore	Subsidiary's management as director
BCPG Wind Cooperatief U.A.	Netherland	Subsidiary's management as director
Nam San 3A Power Sole Co., Ltd.	Laos	Subsidiary's director and management as director and management
Nam San 3B Power Sole Co., Ltd.	Laos	Subsidiary's director and management as director and management
Indochina Development and Operation Holdings Pte. Ltd.	Singapore	Subsidiary's management as director
BCPG Formosa Co., Ltd.	Taiwan	Subsidiary's management as director
Indirect associates and joint venture		, ,
Bongkot Marine Services Co., Ltd.	Thailand	The Company's management as director
Oam Suk Social Enterprise Co., Ltd.	Thailand	The Company's management as director
PetroWind Energy Inc.	Philippines	Subsidiary's management as director
Star Energy Group Holdings Pte. Ltd.	Singapore	Subsidiary's management as director
Impact Energy Asia Development Limited	Hong Kong	Subsidiary's management as director
WIN Ingredients Co., Ltd.	Thailand	Subsidiary's management as director
Other related parties		
Fuel Pipeline Transportation Ltd.	Thailand	The Company's management as director
Ubon Bio Ethanol Pte. Ltd.	Thailand	Subsidiary's management as director <i>(See note 12)</i>
Ubon Bio Agricultural Co., Ltd.	Thailand	Subsidiary's management as director <i>(See note 12)</i>
PEA Encom International Company Limited	Thailand	Shareholder of the subsidiary
Key management personnel	Thailand	Persons having authority and responsibility for planning, directing and controlling the activities of the entity, directly or indirectly, including any director (whether executive or otherwise) of the Group

	Consolidated		Separate	
Significant transaction with related parties	financial statements		financial statements	
Year ended 31 December	2021	2020	2021	2020
		(in millio	n Baht)	
Subsidiaries and indirect subsidiaries				
Sales of goods	-	-	43,476	30,109
Purchases of goods	-	-	41,502	35,446
Dividend income	-	-	951	463
Other income	-	-	155	124
Interest income	-	-	127	208
Other expenses	-	-	50	36
Indirect associates and joint ventures				
Sales of goods	8	12	8	12
Purchases of goods	676	1,184	676	1,184
Dividend income	-	-	24	-
Other income	8	10	-	9
Interest income	16	10	-	-
Other expenses	469	454	469	454
Key management personnel				
Key management personnel compensation				
Short-term employee benefits	349	276	142	122
Post-employment benefits and other				
long-term benefits	17	13	5	9
Share-based payments	17	-	-	-
Total key management personnel				
compensation	383	289	147	131
Other related parties				
Sales of goods	7	_	6	-
Purchases of goods	319	_	297	-
Other income	6	4	4	4
Interest income	-	83	-	· -
Pipeline transportation expenses	244	301	244	301
Other expenses	1	-		-
	-			

Balances as at 31 December with related parties were as follows:

	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
		(in millior	1 Baht)	
Trade accounts receivable				
Subsidiaries and indirect subsidiaries	-	-	2,080	661
Other related parties	7	1	3	1
Total	7	1	2,083	662
Other current receivables				
Subsidiaries and indirect subsidiaries	-	-	41	36
Indirect associate and joint ventures	13	1	9	-
Other related parties	-	32	-	-
Total	13	33	50	36
Less allowance for expected credit loss	-	-	-	(10)
Net	13	33	50	26
	35			

24 15 15 (10 14 ate At 1	(55 7) 18 52 52 52 0) 12 52 52 52 52 52 52 52 52 52 5		34 34 34 (4) (4) (4) Effect of change in exchange rates	411 411 (11) 400 255 255 (7) 248 ts
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At 1 er January	Separat Increase	e Decrease	Effect of change in exchange rates	ts . At 31
At 1 er January	/ Increase	e Decrease	Effect of change in exchange rates	At 31
er January)	(in million E	change ir exchange rates	At 31
	,		Baht)	
645		- (645)		
645		. (645)		
			-	-
-	922	-	-	922
1,105	-	(1,105)	-	-
3,189		(1,100) $(1,269)$	79	1,999
4,939	922	(3,019)	79	2,921 (922)
(551) (3,355) 1,033)			(963) 1,036
	=			
			(10)	645
1,199 3,104		- (94)	85	1,105 3,189
F =0.4	164	4 (1,091)	75	4,939 (551) (3,355)
	878 1,199 3,104	878 129 1,199 3,104	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

			lidated statements	Separate financial statements			
		2021	2020	2021			
		2021		lion Baht)	2020		
Other non-current assets			(111 1111)	iion Duni)			
Indirect subsidiary				35	473		
Indirect subsidiary		29	- 11	55	H 75		
		29		-	-		
Other related parties			4		4		
Total		29	15	35	477		
Less allowance for expected credit le	DSS				(311)		
Net		29	15	35	166		
(Reversal of) allowance for expected Year ended 31 December	d credit loss						
Other current receivables		-	-	(10)	-		
Loans to		3	(3)	(1,454)	2,724		
Other non-current assets		-	-	-	333		
Trade accounts payable							
Subsidiaries and indirect subsidiaries	5	-	-	4,407	4,211		
Indirect associate		-	151	-	151		
Other related parties		158	-	145	-		
Total		158	151	4,552	4,362		
<i>Other current payables</i> Subsidiaries and indirect subsidiaries	_			40	11		
	5	-	-	40	44		
Joint ventures		16	9	16	9		
Other related parties		32	27	29	27		
Total		48	36	85	80		
Other current liabilities							
Subsidiaries		-	-	6	6		
Total		-		6	6		
	Interest rate	Co	nsolidated fi	nancial staten	nents		
				Effect of			
				change in			
	At 31	At 1		exchange	At 31		
Loans	December	January	Increase	rates	December		
	(% p.a.)		(in mil	lion Baht)			
2021	_ ·			*			
Other related parties	2.83	-	17	-	17		
Total			17		17		
		Conso	lidated	Son	arate		
			statements				
		2021		2021	statements		
		2021	2020	2021	2020		
		2021	(in mil	lion Baht)			
Other non-current liabilities		2021	(in mil	lion Baht)			
<i>Other non-current liabilities</i> Other related parties		1	(in mil	lion Baht)	1		

Significant agreements with related parties

Fuel Pipeline Transportation Agreement

The Company entered into a Fuel Pipeline Transportation Agreement with a related company. The related company will provide transportation service of fuel products to Don-mueang and Suvarnabhumi International Airport and transportation service for petroleum products to fuel depot at Bang-pa-in. The agreement was amended to specify the expiration date as 31 December 2021.

Oil Terminal Rental Agreement

The Company has entered into an Oil Terminal Rental Agreement with a joint venture. The rental fee is stipulated in the agreement which will be expired in 2022.

Bio-diesel Sales and Purchase Agreement

The Company entered into a Bio-diesel Sales and Purchase Agreement with an indirect subsidiary. Such agreement has effective since April 2018 to October 2027 and will be automatically renewed unless terminated by either party as stipulated in the agreement. The Company will purchase bio-diesel oil at yearly average volumes not less than 60% of maximum bio-diesel production capacity of indirect subsidiary at the price reference to market as stipulated in the agreement.

Denature Ethanol Sales and Purchase Agreement

The Company entered into a Denatured Ethanol Sales and Purchase Agreement with a subsidiary. Such agreement has effective since April 2018 to October 2027 and will be automatically renewed unless terminated by either party as stipulated in the agreement. The Company will purchase denatured ethanol at yearly average volumes not less than 50% of denatured ethanol production per year of the indirect subsidiary within the same Group at the price reference to market as stipulated in the agreement.

Fuel Product Sale and Purchase Agreement

The Company entered into a fuel product sale and purchase agreement with a subsidiary. The Company will purchase fuel product at quantity and price in accordance with obligation under the agreement.

Service Station Operating Right Agreement

The Company entered into Service Station Operating Right Agreement which include the right to operate related business within service station, selling and purchasing of fuel products with a subsidiary for a period of 5 years. Operating right fee and sale and purchase price are as stipulated in the agreement.

Store Operation Right Agreement

The Company entered into Store Operation Right Agreement with a subsidiary to operate retail stores within service stations under the Company's brand for a period of 5 years. Fee is as stipulated in the agreement.

Information Technology Service Agreement

The Company has entered into information technology service agreements with subsidiaries and indirect subsidiaries. Agreements will be reviewed annually. The Company is responsible for management information system, system structure, maintenance system and advisory in accordance with subsidiaries' direction. Service fees is as stipulated in the agreement.

Management Service Agreement

The Company entered into management service agreement with subsidiaries and indirect subsidiaries for general management service for a period of 1 to 3 years. The Company agreed to provide human resources to manage operation process in accordance with subsidiaries' direction. Service fees is as stipulated in the agreement.

Land Rental Agreement

The Company has entered into land rental agreement with BCPG Public Company Limited, which is of a subsidiary of the group, for the purpose of 38 MW solar farm project at Bang Pa-In establishment and related objectives. The agreement term is for a period of 22 years effective from 1 December 2015 to 30 November 2037. The rental fee is as stipulated in the same agreement.

The Company has entered into additional land rental agreement with BCPG Public Company Limited, which is a subsidiary of the Group, for the purpose of related objectives of solar farm project. The agreement term is for a period of 21 years 2 months effective from 1 October 2016 to 30 November 2037. The rental fee is as stipulated in the same agreement.

Joint Development Area Agreement

The Company has entered into operating rights agreement with a subsidiary to operate a service and product distribution in service station under its subsidiary's operation for a period of not exceeding 20 years. The subsidiary agrees to pay operating right fee as stipulated in the agreement.

Lending Agreement

The Company has an unsecured lending agreement with Bangchak Retail Company Limited, which is a subsidiary of the Group, for the credit facility of Baht 700 million. The interest rate and repayment schedule are as stipulated in the agreement.

The Company has an unsecured lending agreement with BCP Innovation Pte. Ltd", which is a subsidiary of the Group, for the credit facility of USD 80 million. The loan bears interest and repayment schedule as stipulated in the agreement.

The Company has an unsecured lending agreement with BCPR Pte. Ltd., which is an indirect subsidiary of the Group, for the credit facility of USD 120 million. Subsequently in 2019, the Company amended the lending agreement by revision lending currency of the loan of USD 100 million to NOK 917 million. The loan has a repayment schedule, bears interest and conditions as stipulated in the agreement

The Company has an unsecured lending agreement with Bangkok Fuel Pipeline and Logistics Co., Ltd., which is a subsidiary of the Group, for the credit facility of Baht 810 million. The loan has a repayment schedule, bears interest and conditions as stipulated in the agreement.

According to the transfer of all shares in Impact Energy Asia Development Limited ("IEAD"), the Group's associate, held by BCPG Public Company Limited ("BCPG") to Indochina Development and Operation Holdings Pte. Ltd. ("IDO"), BCPG cancelled its loan agreement with IEAD. IDO has entered into an unsecured loan agreement with IEAD which has the same repayment schedule, interest and conditions as the previous loan agreement between BCPG and IEAD. As at 31 December 2021, the outstanding balance of this loan is USD 12 million (approximately Baht 411 million) (2020: None).

Borrowing Agreement

Thai Digital Energy Development Company Limited, which is a subsidiary of the Group entered into an unsecured loan agreement with PEA ENCOM International Company Limited, a shareholder of the subsidiary, for the purpose of investing in operational equipment. The loan has a repayment schedule, bears interest and conditions as stipulated in the agreement.

Guarantee Agreement

BCPG Public Company Limited, which is a subsidiary of the Group, has entered into guarantee agreement with BCPG Engineering Company, an indirect subsidiary of the Group, in accordance with solar power system operation and maintenance of power system from solar energy contract which BCPG Engineering Company has with Tarumizu Solar Solution Godo Kaisha in the event that BCPG Engineering Company causes damage to the assets within the power plant of Tarumizu Solar Solutions Godo Kaisha and is not able to compensate. The guarantee agreement is JPY 28 million per annum, with a guarantee facility totalling JPY 280 million, covering the period of operation and maintenance of power system from solar energy contract. Under the conditions within the loan agreement between Tarumizu Solar Solutions Godo Kaisha and certain financial institution in Japan, it is specified that the parent company is responsible for the guarantee of possible damage loss.

BCPG Public Company Limited, which is a subsidiary of the Group, has entered into guarantee agreement for loans from financial institutions of a subsidiary, in the amount not exceeding USD 172 million. As at 31 December 2021, the balance of loans from financial institutions is USD 157 million (2020: USD 166 million) with a condition of installment payment of principal and interest within the year 2030.

7 Cash and cash equivalents

	Consoli financial st		Separ financial st	
	2021	2020	2021	2020
Cash on hand	106	167	-	-
Cash at banks - current accounts	8,614	4,351	98	36
Cash at banks - savings accounts	15,844	17,133	7,690	6,007
Highly liquid short-term investments	7,458	-	-	-
Total	32,022	21,651	7,788	6,043

As at 31 December 2021, certain indirect subsidiaries has a restricted deposits at financial institution totaling Baht 1,576 million (2020: Baht 764 million) under the long-term loan agreement with several financial institutions which required such indirect subsidiaries to obtain a permission on withdrawal of restricted deposits with the financial institution.

8 Trade accounts receivables

				eparate al statements		
31 December	2021	2020	2021	2020		
		(in millio	on Baht)			
Within credit terms	7,440	4,365	5,930	2,351		
Overdue:						
Less than 3 months	736	508	205	59		
3-6 months	341	39	4	-		
6-12 months	404	887	1	870		
Over 12 months	413	40	10	20		
Total	9,334	5,839	6,150	3,300		
Less allowance for expected credit loss	(76)	(919)	(3)	(883)		
Net	9,258	4,920	6,147	2,417		

Allowance for expected credit loss	Consolic financial sta		Separate financial statements		
	2021	2020	2021	2020	
		(in millio	n Baht)		
At 1 January	919	38	883	14	
Addition	37	907	-	893	
Reversal	(13)	(2)	(11)	-	
Classified as non-current assets	(905)	-	(905)	-	
Effect of change in exchange rates	38	(24)	36	(24)	
At 31 December	76	919	3	883	

Information of credit risk is disclosed in note 31 (c.1).

9 Other current receivables

		Consol financial s		Separ financial st	
	Note	2021	2020	2021	2020
			(in millio	on Baht)	
Related parties	6	13	33	50	26
Other parties					
Accrued income		1,854	20	-	-
Receivable from revenue					
department		1,117	252	685	151
Advance payment for goods		436	420	-	10
Prepaid expenses		253	92	17	16
Underlift of petroleum products		848	-	-	-
Working capital and overcall,			-	-	-
joint operation/licenses		619			
Indemnification assets		314	-	-	-
Others		522	665	469	385
Total		5,976	1,482	1,221	588

10 Inventories

	Consoli financial st		Separate financial statements		
	2021	2020	2021	2020	
		(in millio	n Baht)		
Crude oil and other raw materials	9,483	7,047	7,989	5,814	
Finished oil products	7,535	8,052	6,548	6,704	
Materials and supplies	1,680	1,104	1,151	1,064	
Consumer products	52	49	-	-	
Semi - finished products	127	105	-	-	
·	18,877	16,357	15,688	13,582	
Less: allowance for obsolete and slow moving	(378)	(195)	(378)	(194)	
allowance for decline in value	(2)	-	-	-	
Net	18,497	16,162	15,310	13,388	
Inventories recognised in cost of sale (Note 26)					
- Cost of sale	104,718	75,074	92,973	65,723	
- (Reversal of) write-down to net realisable value	2	(5)	-	-	
Total	104,720	75,069	92,973	65,723	

As at 31 December 2021 and 2020, the Company's inventories included petroleum legal reserve of 253 million liters with approximated value of Baht 4,388 million and 256 million liters with approximated value of Baht 2,477 million, respectively.

11 Investments in subsidiaries

	Separ financial st	
Year ended 31 December	2021	2020
	(in millio	n Baht)
At 1 January	13,851	13,659
Addition	2,516	2,227
Difference of interest rate per lending agreement and market rate	-	11
Reversal of (loss from impairment)	125	(2,046)
At 31 December	16,492	13,851

Change in investment in subsidiaries

Bangchak Retail Co., Ltd.

On 25 March 2021, at the Board of Directors' meeting of the Company, the Board approved an increase in share capital at of Bangchak Retail Co., Ltd. ("BCR") of Baht 700 million from the existing share capital of Baht 800 million to Baht 1,500 million through newly issued 70 million ordinary shares at a par value of Baht 10 each. The Company's ownership interest in BCR has not been changed. The subsidiary registered the increase in paid-up share capital with Ministry of Commerce on 30 March 2021.

BCV Innovation Co., Ltd.

On 25 March 2021, at the Board of Directors' meeting of the Company, the Board approved an increase in share capital of BCV Innovation Co., Ltd. amounting to Baht 30 million to enter into a share purchase agreement to acquire 100% shareholding in WINNONIE Company Limited ("WINNONIE") which the principal business of WINNONIE are electric motorcycle rental, battery replacement service and others. The registration for the increased in share capital increase was complete and the paid-up capital was received in April 2021.

On 1 November 2021, at the Board of Directors' meeting of the Company, the Board approved an increase in the registered share capital of BCVI amounting to Baht 15 million from the existing share capital of Baht 50 million to Baht 65 million. The Company's ownership interest in BCVI has not been changed. The subsidiary registered the increase in paid-up share capital with Ministry of commerce on 26 November 2021.

General Energy Manning Co., Ltd.

On 25 March 2021, at the Board of Directors' meeting of the Company, the Board approved the establishment of General Energy Manning Co., Ltd. ("GEMS") for recruitment and human resource management which is 49% owned by the Company. On 29 April 2021, GEMS registered the initial authorised share capital of Baht 1 million with Ministry of Commerce and the paid-up capital was fully received in August 2021.

BCP Energy International Pte. Ltd.

On 2 July 2021, the Group sold all shares held in BCP Energy International Pte. Ltd. ("BCPE") to Sacgasco Limited, a company listed in Australian Securities Exchange. The Group recognised gain from sale of investment net of exchange differences on translating financial statements of Baht 122 million. The transaction resulted in BCPE and Nido Petroleum Limited Group, which are subsidiaries of BCPE, ceasing to be a subsidiary of the Group.

BCPG Public Company Limited

On 20 July 2021, the Company exercised Warrant of BCPG Public Company Limited No. (BCPG-W1) which is warrants of BCPG Public Company Limited ("BCPG"). The Company has exercised warrants for 69.15 million units at exercise price of Baht 8 each, amounting to Baht 553 million. The Company's ownership interest in BCPG has changed to be at 61.31% without change in control over BCPG.

On 28 October 2021, BCPG issued the registered share capital for an exercise of warrant of BCPG No.1 (BCPG-W1) for 3.14 million units and for warrant of BCPG which allocated to private placement investors (BCPG-W3) for 178.57 million units. The Company's ownership interest in BCPG has changed to be at 57.46% without change in control over BCPG.

BCP Trading Pte Ltd.

On 29 July 2021, at the Board of Directors' meeting of the Company, the Board approved an increase in the registered share capital of USD 10 million of BCP Trading Pte. Ltd. ("BCPT") and BCPT issued of USD 9 million bonus shares. As a result, the existing share capital of USD 1 million has changed to USD 20 million (Baht 661 million) through newly issued 19 million ordinary shares at a par value of USD 1 each. The Company's ownership interest in BCPT has not been changed. The subsidiary registered the increase in paid-up share capital on 24 August 2021.

BTSG Company Limited

On 29 July 2021, at the Board of Directors' meeting of the Company, the Board approved the development of liquefied natural gas (LNG) business in response to future business expansion strategy by having BCV Partnership Co., Ltd. ("BCVP"), which the Company has 100% shareholding, register the change of the company name from to BTSG Company Limited ("BTSG") and register an increase in capital from Baht 20 million to Baht 200 million. On 23 September 2021, the Company had 51% shareholding in BTSG and Thai Special Gas Co, Ltd. has 49% shareholding without change in control over BTSG.

Bangkok Fuel Pipeline and Logistics Co., Ltd.

On 4 October 2021, at the Board of Directors' meeting of the Company, the Board approved the establishment of Bangkok Fuel Pipeline and Logistics Co., Ltd. ("BFPL") for operating fuel and transportation and logistics business which is 100% owned by the Company. On 4 October 2021, BFPL registered the initial authorised share capital of Baht 1 million with Ministry of Commerce and the paid-up capital was fully received in October 2021.

On 28 October 2021, at the Board of Directors' meeting of the Company, the Board approved an increase in share capital of BFPL amounting to Baht 799 million from the existing share capital of Baht 1 million to Baht 800 million through newly issued 79.90 million shares at a par value of Baht 10 each. The Company's ownership interest in BFPL has not been changed. The subsidiary registered the increase in paid-up share capital with Ministry of Commerce on 1 December 2021.

Impairment of investment in subsidiary

During the year ended 31 December 2021, the Group reversed impairment loss of investment in BCPR Co., Ltd. in the separate financial statements amounting to Baht 125 million to adjust the book value to be close to the recoverable amount.

Non-controlling interests

The following table summarises the information relating to each of the Group's subsidiaries that has a material non-controlling interest, before any intra-group eliminations:

	BCPG Public Co	1 2	BBGI Public Cor	1 2	OKEA ASA
	For the year	For the year	For the year	For the year	F 1114
	ended 31	ended 31	ended 31	ended 31	From 1 July to
	December	December	December	December	31 December
	2021	2020	2021	2020	2021
			(in million Baht)		
Non-controlling interest percentage	43%	40%	40%	40%	54%
Current assets	13,933	12,493	3,037	3,281	13,708
Non-current assets	44,788	38,727	9,870	9,451	32,904
Current liabilities	(4,678)	(4,046)	(2,940)	(3,697)	(6,736)
Non-current liabilities	(26,815)	(24,625)	(3,063)	(2,530)	(33,438)
Net assets	27,228	22,549	6,904	6,505	6,438
Carrying amount of non-controlling interest	11,708	9,020	2,762	2,602	3,477
Revenue	4,669	4,231	14,095	12,571	10,068
Profit	2,010	1,912	1,188	1,112	1,448
Other comprehensive income	1,499	(1,444)	(62)	-	40
Total comprehensive income	3,509	467	1,127	1,112	1,488
Profit allocated to non-controlling interest	1,408	144	587	605	817
Dividends to non-controlling interest	346	192	426	144	-
Cash flows from operating activities	2,426	3,079	1,742	1,693	5,606
Cash flows from investing activities	(4,117)	(5,309)	(167)	(1,693)	(1,813)
Cash flows from financing activities	1,622	12,068	(1,349)	89	(1,187)

Investments in subsidiaries as at 31 December 2021 and 2020 and dividend income from the investment for each years were as follows:

					Se	parate finan	cial stateme	nts				
	Ownershi	p interest	Paid-up	capital	Со	st	Impair	ment	At cost	t - net	Dividend for the	
	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020
Subsidiaries	(%	6)					(in millio	n Baht)				
Bangchak Green Net Co., Ltd.	49.00	49.00	1	1							54	15
BCPG Public Company Limited	49.00 57.46	60.36	14,470	13,202	- 9,780	9,227	-	-	- 9,780	9,227	537	448
Bangchak Retail Co., Ltd.	100.00	100.00	1,500	800	1,500	800	-	-	1,500	800	557	
BCP Energy International	100.00	100.00	1,500	800	1,500	800	-	-	1,500	800	-	-
Pte. Ltd.	_	100.00	-	3,673	_	3,673	_	(3,673)	_	_	_	_
BCP Innovation Pte. Ltd.	100.00	100.00	1,790	1,790	1,790	1,790	-	(5,075)	1,790	1,790	_	_
BCP Trading Pte. Ltd.	100.00	100.00	661	35	371	35	_	_	371	35	59	-
BBGI Public Company Limited	60.00	60.00	2,532	2,532	1,700	1,700	_	_	1,700	1,700	301	-
BCPR Co., Ltd.	100.00	100.00	661	661	661	661	(317)	(442)	344	219	-	-
BCV Bio Based Co., Ltd.	100.00	100.00	20	20	20	20	(= - /)	-	20	20	-	-
BCV Energy Co., Ltd.	100.00	100.00	20	20	20	20	-	-	20	20	-	-
BCV Innovation Co., Ltd.	100.00	100.00	65	20	65	20	-	-	65	20	-	-
BTSG Company Limited												
(Formerly, BCV Partnership												
Co., Ltd.)	51.00	100.00	200	20	102	20	-	-	102	20	-	-
General Energy Manning Co.,												
Ltd.	49.00	-	1	-	-	-	-	-	-	-	-	-
Bangkok Fuel Pipeline and												
Logistics Co., Ltd.	100.00	-	800	-	800	-	-	-	800	-	-	-
Nido Petroleum Pty. Ltd.						134		(134)	-			-
					16,809	18,100	(317)	(4,249)	16,492	13,851	951	463

12 Investments in associates and joint ventures

	Consol		Separate		
Year ended 31 December	financial s 2021	tatements 2020	financial st 2021	atements 2020	
Teur ended 51 December	2021	2020 (in millio	-	2020	
Indirect associates		(111 111111	m Duni)		
At 1 January	14,149	17,888	-	-	
Share of net profit (loss) of associates	1,015	(623)	-	-	
Share of other comprehensive	,	()			
income of associates	8	56	-	-	
Dividend income	(179)	(40)	-	-	
Reversal of (loss from impairment)	400	(1,013)	-	-	
Effect of change in exchange rates	1,596	(1,277)	-	-	
Sale of investment	(128)	(842)	-	-	
Reclassification	(3,375)	-	-	-	
At 31 December	13,486	14,149		-	
	i				
Joint ventures					
At 1 January	182	110	73	73	
Share of net profit of joint ventures	26	31	-	-	
Dividend income	(24)	-	-	-	
Increase	-	41	-	-	
At 31 December	184	182	73	73	
Total					
At 1 January	14,331	17,998	73	73	
Share of net profit (loss) of associates	14,551	17,998	75	15	
and joint ventures	1,042	(592)	_	_	
Share of other comprehensive	1,042	(3)2)	-	-	
income of associates	8	56	_	_	
Dividend income	(203)	(40)	_	_	
Reversal of (loss from impairment)	400	(1,013)	_	_	
Effect of change in exchange rates	1,595	(1,013) $(1,277)$	-	-	
Increase	-	41	-	-	
Sales of investment	(128)	(842)	-	-	
Reclassification	(3,375)	-	-	-	
At 31 December	13,670	14,331	73	73	
	10,070	,		.0	

Changes in investment in indirect associates

Ubon Bio Ethanol Public Company Limited

During the third quarter of 2021, Ubon Bio Ethanol Public Company Limited ("UBE") registered the increase in paid-up share capital with Ministry of Commerce, resulting in the Group's ownership interest in UBE has decreased thereby ceased to be an indirect associate and became an other financial assets. The Group recognised gain on fair value adjustment of such investment of Baht 616 million. And the Board of Directors' meeting of the subsidiary approved a sale of 98 million shares of UBE amounting to Baht 235 million. As a result, on 31 December 2021, the Group's ownership interest in UBE has decreased to 12.39%. The Group classified such investment as equity securities measured at FVOCI.

OKEA ASA

On 1 April 2021, OKEA ("OKEA") registered the share capital increase of 502,700 shares. As a result, OKEA has 103,005,350 registered and paid-up share capital, which resulting in BCPR Pte. Ltd.'s shareholding in OKEA to decrease from 46.32% to 46.09%

On 1 July 2021, the Group has considered to change the status of investment in OKEA from an indirect associate to an indirect subsidiary *(see note 5)*.

Investments in associates and joint ventures as at 31 December 2021 and 2020 and dividend income for each years were as follows:

			Dividend	
2 1		1 V	for the	
2020 2021	2020 202	1 2020	2021	2020
n million Baht)				
	-		79	2
1,128 -	- 1,1	91 1,128	-	38
10,595 -			100	-
2,623 -	(1,013)	- 1,610	-	-
15,162 -	(1,013) 13,4	86 14,149	179	40
140 -	-]	44 140	24	-
1 -	-	1 1	-	-
41 -	-	39 41	-	-
182 -	- 1	84 182	24	-
15,344 -	(1,013) 13,0	570 14,331	203	40
1 1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	MImpairment 2020At equity - net 2021for the 2020 2021 2020 2021 2020 2021 2021 2020 2021 2020 2021 2021 2020 2021 2021 2021 2021 2020 2021 2021 2021 2021 2020 2021 2021 2021 2021 2020 2021 2020 2021 2021 2020 2021 2021 2021 1128 81679 $1,128$ 12,295 $10,595$ 100 $2,623$ -(1,013)- $1,610$ - $ 15,162$ 144 140 24 1 11- 140 144 140 24 1 11- 41 39 41 - 182 184 182 24

As at 31 December 2021, none of the Group's equity-accounted investee is publicly listed and consequently does not have published price quotations.

					Sepa	rate finan	cial staten	nents				
	Owne	rship									Dividend	l income
	interest		Paid-up capital		Cost		Impairment		At cost - net		for the year	
	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020
	(%)					(in million Baht)						
Joint ventures												
Bongkot Marine Services Co., Ltd.	30.00	30.00	240	240	72	72	-	-	72	72	24	-
Oam Suk Social Enterprise Co., Ltd.	40.00	40.00	3	3	1	1	-	-	1	1	-	-
Total					73	73			73	73	24	_

None of the Company's equity-accounted investee is publicly listed and consequently does not have published price quotations.

Material associates

The following table summarises the financial information of the material associates as included in their own financial statements, adjusted for fair value adjustments at acquisition and differences in accounting policies. The table also reconciles the summarised financial information to the carrying amount of the Group's interest in these companies.

	OKEA	ASA.	Star Energy Group Holdings Pte. Ltd.			
		For the year	For the year	For the year		
	From 1	ended 31	ended 31	ended 31		
	January to 30	December	December	December		
	June 2021	2020	2021	2020		
		(in milli	on Baht)			
Statement of income						
Revenue	4,128	5,506	17,208	16,925		
Net profit (loss)	815	(2,008)	5,185	3,714		
Other comprehensive income (loss)	-	(2)	23	321		
Total comprehensive						
income (loss) for the year	815	(2,010)	5,208	4,035		
Group's share of total comprehensive income (loss)	371	(914)	584	289		

	OKEA	ASA.	Star Energy Group Holdings Pte. Ltd.		
	2021	2020	2021	2020	
		(in millio	lion Baht)		
As at 31 December					
Statement of financial position					
Current assets	-	6,668	17,538	13,158	
Non-current assets	-	27,473	97,635	87,014	
Current liabilities	-	(3,412)	(4,625)	(4,019)	
Non-current liabilities	-	(26,948)	(77,667)	(70,874)	
Net assets (100%)	_	3,781	32,881	25,279	
Less non-controlling interest in net asset					
associates	-	-	(16,279)	(14,153)	
Net assets of associates		3,781	16,602	11,126	
Group's share of net assets	-	1,751	5,533	3,708	
Goodwill	-	872	6,762	6,887	
Carrying amount of interest in associates	-	2,623	12,295	10,595	

Immaterial associates and joint ventures

The following is summarised financial information for the Group's interest in immaterial of associates and joint ventures based on the amounts reported in the Group's consolidated financial statements:

	2021 (in million	2020 1 Baht)
Carrying amount of interests in immaterial of associates	,	,
and joint ventures	1,375	2,125
Share of net profit from investment in associates and joint ventures		
in consolidated financial statements:		
- Profit for the year	95	87
- Other comprehensive income	-	-
- Total comprehensive income	95	87

13 Investment properties

	Consol financial st		Separate financial statements		
	2021	2020	2021	2020	
		(in millio	on Baht)		
Cost					
At 1 January	127	127	683	683	
At 31 December	127	127	683	683	
Depreciation and impairment losses					
At 1 January	-	-	-	-	
At 31 December	-	-	-	-	
Net book value					
At 31 December	127	127	683	683	

The leases of investment properties comprise a number of commercial properties that are leased to BCPG Public Company Limited, which is a subsidiary of the Group *(see note 6), are leased to third parties under operating leases. Each of the leases contains an initial non-cancellable period of 2 - 3 years.* Subsequent renewals are negotiated with the lessee. For all investment property leases, the rental income is fixed under the contracts, but some leases require the lessee to reimburse the insurance costs of the Group. When this is the case, the amounts of insurance costs are determined annually.

The fair value is appraised by an independent appraiser at market comparison value. As at 31 December 2021, investment properties had fair value for consolidate and separate financial statements at Baht 346 million and Baht 1,180 million, respectively (2020: Baht 346 million and Baht 1,180 million, respectively).

14 Property, plant and equipment

	Consolidated financial statementsMachinery,Explorationequipmentand										
	Land	Buildings	refinery plants and terminal	Electricity producing equipment	production of petroleum assets <i>(in</i>	Marketing and office equipment million Baht)	Platinum catalyst	Vehicles	Other assets	Construction work in progress	Total
Cost					, , , , , , , , , , , , , , , , , , ,	· · · · · · · · · · · · · · · · · · ·					
At 1 January 2020	4,133	4,055	50,088	11,911	-	8,824	239	420	28	10,763	90,461
Impact of changes in											
accounting policies	(156)	(206)	(23)	-	-	-	-	(15)	-	-	(400)
Additions	12	1	35	2	-	18	-	10	-	6,334	6,412
Acquisitions through business											
combination	87	24	-	256	-	-	-	-	-	-	367
Transfers	-	253	1,376	73	-	486	-	14	-	(2,245)	(43)
Disposals	-	(153)	-	(2)	-	(232)	-	(58)	-	-	(445)
Effect of movement											
in exchange rate	19	2	(71)	61		1				102	114
At 31 December 2020 and											
1 January 2021	4,095	3,976	51,405	12,301	-	9,097	239	371	28	14,954	96,466
Additions	18	20	63	10	2,793	45	-	52	-	7,727	10,728
Acquisitions through business		• • •			• • • •	. –				0.404	
combination (Note 5)	-	301	-	-	2,283	47	-	-	-	8,406	11,037
Transfers	16	1,173	11,922	1,927	9,034	240	-	1	-	(24,461)	(148)
Disposals	-	(443)	(1,728)	(98)	-	(104)	-	(7)	-	-	(2,380)
Effect of movement	(1)	8		(10)	8	r				224	231
in exchange rate	(1)		- (1.((2			2			-		
At 31 December 2021	4,128	5,035	61,662	14,130	14,118	9,327	239	417	28	6,850	115,934

	Consolidated financial statements Machinery, Exploration equipment and										
			refinery plants and	Electricity producing	production of petroleum	Marketing and office	Platinum		Other	Construction work in	
	Land	Buildings	terminal	equipment	assets	equipment <i>million Baht</i>)	catalyst	Vehicles	assets	progress	Total
Depreciation and impairment losses					, , , , , , , , , , , , , , , , , , ,	· · · · · · · · · · · · · · · · · · ·					
At 1 January 2020	(6)	(1,297)	(28,859)	(2,489)	-	(4,955)	-	(265)	(6)	-	(37,877)
Impact of changes in											
accounting policies	-	2	1	-	-	-	-	-	-	-	3
Depreciation charge for the year	-	(187)	(2,928)	(579)	-	(599)	-	(42)	(1)	-	(4,336)
Impairment losses	-	(4)	(16)	-	-	(3)	-	-	-	-	(23)
Transfer	-	1	-	-	-	(2)	-	(1)	-	-	(2)
Disposals	-	40	-	-	-	185	-	56	-	-	281
Effect of movement											
in exchange rate	_	(1)	67	(11)							55
At 31 December 2020 and											
1 January 2021	(6)	(1,446)	(31,735)	(3,079)	-	(5,374)	-	(252)	(7)	-	(41,899)
Depreciation charge for the year	-	(209)	(3,052)	(616)	(1,117)	(581)	-	(39)	(2)	-	(5,616)
Impairment losses	(1)	-	(121)	(49)	(840)	-	-	-	(1)	-	(1,012)
Transfer	-	(91)	39	52	-	-	-	-	-	-	-
Disposals	-	131	1,700	29	-	92	-	7	-	-	1,959
Effect of movement											
in exchange rate	-	(6)	-	-	(126)	(1)		-		-	(133)
At 31 December 2021	(7)	(1,621)	(33,169)	(3,663)	(2,083)	(5,864)		(284)	(10)		(46,701)
Net book value											
At 31 December 2020	4,089	2,530	19,670	9,222	-	3,273	239	119	21	14,954	54,567
At 31 December 2021	4,121	3,414	28,493	10,467	12,035	3,463	239	133	18	6,850	69,233

As at 31 December 2021, certain subsidiaries have mortgaged its land, buildings and machinery as collateral with financial institutions for credit facilities totalling Baht 30,306 million (2020: Baht 12,812 million).

As at 31 December 2021, the Group has capitalised borrowing costs relating to construction of the new factory amounted to Baht 339 million (2020: Baht 374 million), with a capitalisation rate of 1.30% - 3.83% p.a. (2020: 0.95% - 4.52% p.a.) (see note 27).

			Machinery,		Separate final	ncial statement	S			
	Land	Buildings	equipment refinery plants and terminal	Electricity producing equipment	Marketing and office equipment (in mill	Platinum catalyst <i>ion Baht)</i>	Vehicles	Other assets	Construction work in progress	Total
Cost	2 2 60	<i>(</i> 1 <i>(</i>)	45 155	50	0.105	220	2.4.1	•	=	< 4 0 2 5
At 1 January 2020	2,369	616	45,175	72	8,107	239	341	28	7,890	64,837
Additions	-	-	33	-	-	-	9	-	4,365	4,407
Transfers	-	72	1,197	-	475	-	-	-	(1,772)	(28)
Disposals	-	(5)	(66)		(121)		(49)			(241)
At 31 December 2020 and		60 •			0.144	•••	• • •	• •	10 100	<pre><pre></pre></pre>
1 January 2021	2,369	683	46,339	72	8,461	239	301	28	10,483	68,975
Additions	6	-	35	-	-	-	4	-	3,018	3,063
Transfers	-	8	11,695	-	251	-	-	-	(11,954)	-
Disposals	-	(6)	(1,706)	-	(69)	-	(7)	-	(1)	(1,789)
At 31 December 2021	2,375	685	56,363	72	8,643	239	298	28	1,546	70,249
Depreciation and impairment losses										
At 1 January 2020	(6)	(483)	(27,255)	(9)	(4,523)		(225)	(6)		(32,507)
Depreciation charge for the year	(0)	(483)	(2,621)	(9)	(4,525)	-	(223)	(0) (2)	-	(32,307) (3,204)
Reversal of (impairment losses)	-	(19)	(16)	(0)	(524)	-	(32)	(2)	-	(15)
Disposals	_	5	64	-	112	-	49	-	-	230
At 31 December 2020 and		5			112					230
1 January 2021	(6)	(497)	(29,828)	(15)	(4,934)		(208)	(9)		(35,496)
Depreciation charge for the year	(0)	(497)	(29,828) (2,756)	(13)	(508)	-	(208)	(8) (1)	-	(3,322)
Impairment losses	-	(22)	(121)	(0)	(308)	-	(29)	(1) (1)	-	(122)
Disposals	-	5	1,684	-	57	-	2	(1)	-	1,748
At 31 December 2021				(21)				(10)	·	,
At 51 December 2021	(6)	(514)	(31,021)	(21)	(5,385)		(235)	(10)		(37,192)
Net book value										
At 31 December 2020	2,363	186	16,511	57	3,527	239	93	20	10,483	33,479
At 31 December 2021	2,369	171	25,342	51	3,258	239	63	18	1,546	33,057
=	,		,		,					,

Capitalised borrowing costs relating to construction of the new plant amounted to Baht 139 million (2020: Baht 360 million), with a capitalisation rate of 3.14% - 3.83% p.a. (2020: 3.51% - 4.52% p.a.) (see note 27).

15 **Right-of-use assets**

			Consolidated fin	nancial statements		
				Machinery,		
	Land and			equipment refinery	Vehicle and oil	
	buildings	Rental	Tank farm	plants and terminal	tanker	Total
			(in mil	lion Baht)		
Cost						
At 1 January 2020	9,860	10	1,125	23	736	11,754
Acquisitions through business						
combination	27	-	-	-	-	27
Additions	1,175	1	892	-	667	2,735
Transfers	-	-	-	-	(12)	(12)
Disposal	(50)	-	-	-	(1)	(51)
Effect of movement in exchange rate	13	-	-	-	-	13
At 31 December 2020 and						
1 January 2021	11,025	11	2,017	23	1,390	14,466
Acquisitions through business						
combination (Note 5)	-	626	-	-	-	626
Additions	1,083	301	168	-	2,191	3,743
Transfers	2	-	-	-	-	2
Disposal	(8)	-	-	-	-	(8)
Effect of movement in exchange rate	1	6	-	-	-	7
At 31 December 2021	12,103	944	2,185	23	3,581	18,836

	Consolidated financial statements Machinery,										
	Land and			equipment refinery	Vehicle and oil						
	buildings	Rental	Tank farm	plants and terminal	tanker	Total					
Depreciation and impairment losses											
At 1 January 2020	(1,526)	-	-	(1)	-	(1,527)					
Depreciation for the year	(756)	(2)	(643)	(4)	(475)	(1,880)					
Disposal	27	-	-	-	1	28					
At 31 December 2020 and											
1 January 2021	(2,255)	(2)	(643)	(5)	(474)	(3,379)					
Depreciation for the year	(779)	(49)	(608)	(5)	(392)	(1,833)					
Transfers	-	-	(2)	-	(1)	(3)					
Disposal	7	-	-	-	-	7					
Effect of movement in exchange rate	-	(3)	-	-	-	(3)					
At 31 December 2021	(3,027)	(54)	(1,253)	(10)	(867)	(5,211)					
Net book value											
At 31 December 2020	8,770	9	1,374	18	916	11,087					
At 31 December 2021	9,076	890	932	13	2,714	13,625					

Separate financial statements

	Land and buildings	Rental	Tank farm	Vehicle and oil tanker	Total
Cost			(in million Baht)		
At 1 January 2020	8,690	10	1,125	708	10,533
Additions	1,161	1	892	662	2,716
Disposal	(44)	-	-	-	(44)
At 31 December 2020 and					
1 January 2021	9,807	11	2,017	1,370	13,205
Additions	990	-	168	567	1,725
Transfers	1	-	-	-	1
Disposal	(8)	-	-	-	(8)
At 31 December 2021	10,790	11	2,185	1,937	14,923
Depreciation and impairment losses					
At 1 January 2020	(1,027)	-	-	-	(1,027)
Depreciation for the year	(703)	(2)	(643)	(467)	(1,815)
Disposal	24	-	-	-	24
At 31 December 2020 and					
1 January 2021	(1,706)	(2)	(643)	(467)	(2,818)
Depreciation for the year	(725)	(1)	(609)	(382)	(1,717)
Transfers	1	-	(2)	(1)	(2)
Disposal	8	-	-	-	8
At 31 December 2021	(2,422)	(3)	(1,254)	(850)	(4,529)
Net book value					
At 31 December 2020	8,101	9	1,374	903	10,387
At 31 December 2021	8,368	8	931	1,087	10,394

16 Leases

	Consoli financial sta			Separate financial statements		
Year ended 31 December	2021	2020	2021	2020		
		(in milli	on Baht)			
Amounts recognised in profit or loss						
Interest on lease liabilities	227	201	186	176		
Expenses relating to short-term leases	28	44	2	14		
Expenses relating to leases of low-value assets	11	21	7	17		
Variable lease payments	430	425	408	408		

In 2021, total cash outflow for leases of the Group and the Company were Baht 1,665 million and Baht 1,542 million, respectively (2020: Baht 1,963 million and Baht 1,902 million, respectively).

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17 Goodwill

	Consolidated financial statements (in million Baht)
Cost	
At 1 January 2020	1,921
Acquisitions through business combination	253
Effect of contingent consideration adjustment	(31)
Effect of movement in exchange rate	(14)
At 31 December 2020 and 1 January 2021	2,129
Acquisitions through business combination (Note 5)	2,365
Loss from impairment	(571)
Effect of movement in exchange rate	99
At 31 December 2021	4,022

Impairment testing for the cash generating unit containing goodwill

BCPG Public Company Limited

Goodwill amounted to Baht 586 million from business combinations of BCPG Public Company Limited Group, the Group calculated the recoverable amount by using the value in use models which was determined by discounting future cash flows. The key assumptions used in the estimation of the future cash flows were based on the concession agreements, power purchase agreements, estimated selling production unit of electricity, with reference to historical data and external source such as inflation and exchange rate.

The discount rate was weighted average after-tax cost of capital by using Capital Asset Pricing Model (CAPM). Risk free rate was derived from long-term U.S. treasury bond yield. The adjustment for market risk premium to reflect risk of equity investment and country risk premium is also taking into consideration.

The estimated recoverable amount of the CGU exceeded its carrying amount, therefore no impairment loss is recognised at 31 December 2021.

The management have also conducted sensitivity test by increasing discount rate or inflation 0.7% and found no impairment for goodwill.

BBGI Public Company Limited

For goodwill amounted to Baht 1,602 million from business combinations of BBGI Public Company Limited Group, the Group calculated the recoverable amount by using the value in use models which was determined by discounting future cash flows for the next 5 years. The key assumptions used in the estimation of the recoverable amount included the discount rate which was a post-tax measure based on the rate of 10-year government bonds issued by the government in the relevant market and in the same currency as the cash flows, adjusted for a risk premium to reflect both the increased risk of investing in equities generally.

The discount rates of the relevant industries in which the Company operates are ranged from 4% - 6%. The subsidiary's discount rate which applied in the calculation of recoverable amounts was fall within the industries' range.

The impairment test has been prepared by the management and no impairment charges are required for goodwill.

If the assumption used in the calculation on impairment tests for goodwill change, the selling price decrease by 1 Baht per Litre or cost of raw material increase by 1 Baht per litre, there is still no impairment of goodwill.

OKEA ASA

At 1 July 2021, the Group has goodwill amounted to NOK 636 million (equivalent to Baht 2,365 million from the acquisition of control of OKEA ASA. The Group calculated the recoverable amount based on the estimated future cash flows. The key assumptions used in the cash flow projections include the oil and gas prices, oil reserve, production profile and discount rates. The discount rate was weighted average after-tax cost of capital by using Capital Asset Pricing Model (CAPM). Risk free rate was derived from long-term U.S. treasury bond yield. The adjustment for market risk premium to reflect risk of equity investment and country risk premium is also taking into consideration.

The carrying amount of cash generating unit was lower than its recoverable amount. The Group, therefore, recognised impairment loss of goodwill amounting to NOK 149 million (equivalent to Baht 571 million) and recognised impairment loss of oil exploration and production assets amounting to NOK 217 million (equivalent to Baht 840 million) for the year 2021.

18 Intangible assets

	Consolidated financial statements						
	Right to use and cost of development of computer software	Right to connect electric transmission line	Power purchase agreement (in million	Power purchase agreement and assets under concession agreement <i>a Baht</i>)	Exploration and evaluation expenditure	Total	
Cost							
At 1 January 2020 Acquisitions through business	1,402	86	1,350	5,096	3,250	11,184	
combination	-	1,109	-	3,386	-	4,495	
Additions	200	-	-	-	-	200	
Transfer	3	-	-	-	(49)	(46)	
Disposals	(110)	-	-	-	-	(110)	
Effect of movements in exchange rates	15	2	71	(192)	(11)	(115)	
At 31 December 2020 and							
1 January 2021	1,510	1,197	1,421	8,290	3,190	15,608	
Acquisitions through business							
combination (Note 5)	-	-	-	-	82	82	
Additions	74	-	-	-	22	96	
Transfer	(157)	161	-	-	-	4	
Disposals	(3)	-	-	-	(3,469)	(3,472)	
Effect of movements in exchange rates	2	(2)		935	215	1,150	
At 31 December 2021	1,426	1,356	1,421	9,225	40	13,468	

	Right to use and cost of development of computer software	Right to connect electric transmission line	Consolidated finan Power purchase agreement <i>(in million</i>	Power purchase agreement and assets under concession agreement	Exploration and evaluation expenditure	Total
Amortisation and impairment losses						
At 1 January 2020	(606)	(12)	(83)	(54)	(1,935)	(2,690)
Amortisation for the year	(193)	(20)	(23)	(333)	-	(569)
Disposals	76	-	-	-	-	76
Impairment losses	-	-	-	-	(1,315)	(1,315)
Effect of movements in exchange rates			(4)	14	60	70
At 31 December 2020 and						
1 January 2021	(723)	(32)	(110)	(373)	(3,190)	(4,428)
Amortisation for the year	(148)	(6)	(64)	(363)	-	(581)
Disposals	-	-	-	-	3,404	3,404
Effect of movements in exchange rates			-	(58)	(214)	(272)
At 31 December 2021	(871)	(38)	(174)	(794)	<u> </u>	(1,877)
Net book value						
At 31 December 2020	787	1,165	1,311	7,917	-	11,180
At 31 December 2021	555	1,318	1,247	8,431	40	11,591

	Separate financial statement Right to use and cost of development of computer softw			
	2021	2020		
	(in million	Baht)		
Cost				
At 1 January	1,013	903		
Additions	59	110		
At 31 December	1,072	1,013		
Amortisation and impairment losses				
At 1 January	(657)	(504)		
Amortisation for the year	(128)	(153)		
At 31 December	(785)	(657)		
Net book value				
At 31 December	287	356		

19 Loans and debentures

	Consoli	dated	Separate		
	financial sta	atements	financial st	atements	
	2021	2020	2021	2020	
		(in millio	on Baht)		
Current					
Short-term loan from financial institutions					
secured	76	2,027	-	-	
unsecured	1,181	1,948		-	
	1,257	3,975		-	
Current portion of long-term loans					
from financial institutions					
secured	2,447	1,957	-	-	
unsecured	2,372	717	700	425	
	4,819	2,674	700	425	
Current portion of other long-term loans		_			
secured	145	-	-	-	
	145	-		-	
Debenture					
unsecured	4,500	2,500	4,000	2,500	
	4,500	2,500	4,000	2,500	
Total current	10,721	9,149	4,700	2,925	
Non-current					
Long-term loans from financial institutions					
secured	6,508	21,897	-	-	
unsecured	13,661	8,718	4,895	5,334	
	20,169	30,615	4,895	5,334	
Other long-term loans					
secured	1,714	-	-	-	
	1,714	-	-	-	

	Consoli financial st		Separate financial statements	
	2021	2020	2021	2020
		(in millio	on Baht)	
Debentures				
secured	8,645	-	-	-
unsecured	39,259	23,480	26,476	23,480
	47,904	23,480	26,476	23,480
Total non-current	69,787	54,095	31,371	28,814
Total	80,508	63,244	36,071	31,739

The loan agreements contain certain conditions such as maintaining certain financial ratios such as maintaining of certain debt to equity ratio, debt service coverage ratio and current ratio and transfer right of any agreements. These loans are secured by mortgage of the land, building, land improvement and infrastructure, machinery and 33.33% shares of issued and paid-up capital of Star Energy Group Holdings Pte. Ltd which is an indirect associate of the group and total shares of issued and paid-up capital of BCPG Indochina Company Limited, an indirect subsidiary of the Group.

The movements of loans and debentures during the year were as follows:

		Consolidated		Separate		
	Note	financial sta	tements	financial statements		
Year ended 31 December		2021	2020	2021	2020	
			(in millio	on Baht)		
At 1 January		63,244	48,041	31,739	23,699	
Acquisitions through business						
combination	5	8,994	583	-	-	
Increase		25,446	21,834	7,000	11,610	
Decrease		(19,073)	(6,912)	(2,925)	(3,375)	
Transaction cost capitalised-net						
of amortisation		72	(41)	(15)	(1)	
Effect of change in exchange rates		1,824	(261)	271	(194)	
Total		80,507	63,244	36,071	31,739	
Less Current portion of long-term loans		(4,964)	(2,674)	(700)	(425)	
Current portion of debentures		(4,500)	(2,500)	(4,000)	(2,500)	
Short term loans		(1,256)	(3,975)	_	_	
At 31 December		69,787	54,095	31,371	28,814	

The Group had unutilised credit facilities as follow:

	Conso	lidated	Separate		
	financial	statements	financial st	tatements	
As at 31 December	2021	2020	2021	2020	
Baht	11,399 million	15,078 million	5,030 million	7,530 million	
USD	-	35 million	-	-	
JPY	8,703 million	15,888 million	-	-	

Debentures

Detail of debentures as at 31 December 2021 and 2020 were as follows:

	Consolida financial stat		Separate financial statement	
	2021	2020	2021	2020
		(in million	Baht)	
Debentures	52,589	26,000	30,500	26,000
Less Unamortised deferred expenses on				
debentures	(185)	(20)	(24)	(20)
	52,404	25,980	30,476	25,980
Less Current portion due within one year	(4,500)	(2,500)	(4,000)	(2,500)
Total	47,904	23,480	26,476	23,480

The Company and subsidiaries issued debentures which are named-registered, unsubordinated, unsecured and no bond holder (except debenture no.6 to 17 have bond holder) and no early redemption with representative with a face value of Baht 1,000 each with interest is payable semi-annually. The details are as follows:

	Consolidated Separate						
	Financial sta	financial st	atements				
No.	2021	2020	2021	2020	Interest rate	Term	Maturity Date
	(in million	Baht)	(in million	n Baht)	(% p.a.)	(years)	
	Bangchak Cor	rporation H	Public Compa	ny Limited			
1	1,000	1,000	1,000	1,000	5.35	10	30 April 2022
2	-	2,500	-	2,500	4.81	7	11 April 2021
3	3,500	3,500	3,500	3,500	5.18	10	11 April 2024
4	2,000	2,000	2,000	2,000	4.72	12	3 March 2027
5	1,000	1,000	1,000	1,000	5.05	15	3 March 2030
6	400	400	400	400	2.96	5	10 August 2023
7	600	600	600	600	3.42	7	10 August 2025
8	7,000	7,000	7,000	7,000	4.04	10	20 December 2028
9	3,000	3,000	3,000	3,000	2.60	2	8 May 2022
10	500	500	500	500	3.00	7	8 May 2027
11	4,500	4,500	4,500	4,500	3.40	10	8 May 2030
12	2,000	-	2,000	-	1.45	2	5 November 2023
13	1,000	-	1,000	-	2.29	5	5 November 2026
14	1,400	-	1,400	-	3.11	8	5 November 2029
15	2,600	-	2,600	-	3.43	10	5 November 2031
	BBGI Public	Company L	imited				
16	500	-	-	-	2.53	1.5	11 November 2022
17	800	-	-	-	3.30	3	11 May 2024
	BCPG Public	Company.	Limited ⁽¹⁾				
18	2,000	-	-	-	1.64	3	15 September 2024
19	1,000	-	-	-	2.14	5	15 September 2026
20	1,000	-	-	-	2.51	7	15 September 2028
21	4,000	-	-	-	3.31	10	15 September 2031
21	4,000	-	-	-	3.61	12	15 September 2033

	Consoli Financial st		Sepai financial st				
No.	2021	2020	2021	2020	Interest rate	Term	Maturity Date
	(in millio		(in millio	n Baht)	(% p.a.)	(years)	
	OKEA ASA (2)					
					LIBOR 3		
					months		
23	4,762	-	-	-	plus 6.50%	5	27 June 2023
24	4,027	-	-	-	8.75	5	10 December 2024
	52,589	26,000	30,500	26,000			

⁽¹⁾ Named-registered, unsubordinated, and unsecured Green Bonds. issued to institution investors and high net worth investors. These debentures have a par value of Baht 1,000 and interest payable semi-annually.

⁽²⁾ Unsubordinated, secured, have bond holder and early redemption debentures amounting to USD 265 million. These debentures have a par value of USD 100,000 and interest is payable semi-annually.

In connection with the terms of the rights and responsibilities of the debentures issuer, the Company, as the issuer, has to comply with certain restrictions and conditions as stipulated therein, such as maintaining certain financial ratios, etc.

Secured interest-bearing liabilities as at 31 December were secured on the following assets:

	Consoli financial st		Separate financial statements	
	2021	2020	2021	2020
		(in millio	on Baht)	
Property, plant and equipment	30,306	12,812	-	-
Investment in subsidiaries/associates	4,742	20,269	-	-
Restricted cash at bank	58	74	-	-
Total	35,106	33,155	-	-

20 Other current payables

			lated itements	Separ financial st	
	Note	2021	2020	2021	2020
			(in millio	on Baht)	
Related parties	6	48	36	85	80
Other parties	-				
Accrued expenses		3,566	971	580	524
Payable for project construction		614	682	169	432
Payable for utilities		361	231	361	231
Accrued interest		207	62	60	34
Other accounts payable		1,076	1,187	625	858
Total	-	5,872	3,169	1,880	2,159

21 **Provisions for employee benefits**

	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
		(in millio	on Baht)	
Statement of financial position		, ,	,	
Non-current provisions for:				
Post-employment benefits	2,413	2,580	2,176	2,481
Other long-term employee benefits	64	62	57	57
Total	2,477	2,642	2,233	2,538
Current	89	306	89	306
Non-current	2,388	2,336	2,144	2,232
Total	2,477	2,642	2,233	2,538
Year ended 31 December				
Statement of comprehensive income:				
Recognised in profit or loss				
Post-employment benefits	154	216	128	203
Other long-term employee benefits	7	7	5	6
Total	161	223	133	209
Recognised in other comprehensive				
income:				
Actuarial gain recognised in the year	(162)	(3)	(167)	-
Cumulative actuarial losses recognised	496	658	528	695

Defined benefit plan

The Group and the Company operate a defined benefit plan based on the requirement of Thai Labour Protection Act B.E 2541 (1998) to provide retirement benefits to employees based on pensionable remuneration and length of service. The defined benefit plans expose the Group to actuarial risks, such as longevity risk, currency risk, interest rate risk and market (investment) risk.

Present value of the defined benefit obligations	Consolid financial sta			Separate financial statements	
-	2021	2020	2021	2020	
		(in millio	n Baht)		
At 1 January	2,642	2,588	2,538	2,490	
Acquisition through business	125				
combination) <i>Note5(</i> Decrease from sale of investment in	125	-	-	-	
subsidiary	(15)	-	-	-	
Include in profit or loss:					
Current service costs and interest on					
obligation	161	223	133	209	
-	161	223	133	209	

Present value of the defined benefit obligations	Consolidated financial statements		Separate financial statements		
-	2021	2020	2021	2020	
		(in millio	on Baht)		
Included in other comprehensive income	2.	Υ.	,		
Actuarial (gain) loss					
- Demographic assumptions	16	2	16	-	
- Financial assumptions	198	3	192	-	
- Experience adjustment	(376)	(8)	(375)	-	
Effect of movements in exchange rate	3	-	-	-	
	(159)	(3)	(167)	-	
Others					
Benefit paid	(277)	(166)	(271)	(161)	
At 31 December	2,477	2,642	2,233	2,538	
Principal actuarial assumptions	Consolidated		Separ	Separate	
	financial st	financial sta	cial statements		
	2021	2020	2021	2020	
		(%	<i>6)</i>		
Discount rate	0.1 - 3.16	0.1 - 3.95	1.36 - 1.81	1.61	
Future salary growth	2 - 6	2 - 6	6	6	
Employee turnover	0 - 57.3	0 - 52	1.91 - 8.6	1 - 8	

Assumptions regarding future mortality have been based on published statistics and mortality tables.

At 31 December 2021, the weighted-average duration of the defined benefit obligation was 5 - 29 years (2020: 10-29 years).

Sensitivity analysis

Reasonably possible changes at the reporting date to one of the relevant actuarial assumptions, holding other assumptions constant, would have affected the defined benefit obligation by the amounts shown below.

	Consolidated financial statements				
	1% incre	ase in	1% decrease in		
Impact to the employee benefits obligation	assump	otion	assumption		
at 31 December	2021 2020		2021	2020	
		(in millior	1 Baht)		
Discount rate	(203)	(227)	233	262	
Future salary growth	242	318	(215)	(276)	
Employee turnover	(111)	(115)	126	130	
	Separate financial statements				
	Sej	parate financ	ial statement	8	
	Sej 1% incre	•	ial statements 1% decre		
Impact to the employee benefits obligation	-	ase in		ease in	
Impact to the employee benefits obligation at 31 December	1% incre	ase in	1% decre	ease in	
	1% incre assump	ase in tion	1% decre assump 2021	ease in otion	
	1% incre assump	ase in tion 2020	1% decre assump 2021	ease in otion	
at 31 December	1% incre assump 2021	ase in tion 2020 <i>(in million</i>	1% decre assump 2021 n Baht)	ease in otion 2020	

22 Treasury shares

On 21 November 2019, the meeting of the Board of Directors approved the share repurchase program for financial management purpose (Treasury Stock), in the maximum amount of share repurchase not exceeding Baht 2,100 million and maximum number of shares not exceed 70 million shares with a par value of Baht 1 per share. The number of shares to be repurchased is 5% of the total issued shares. The Company can purchase the share during the period from 6 December 2019 to 5 June 2020 with the condition that the share purchase must be resold after 6 months from the date that the repurchase is completed but must not exceed 3 years.

As at 31 December 2021, the Company has repurchased treasury shares under such program totaling 19 million shares, at Baht 505 million (2020: 19 million shares at Baht 505 million) and presented as a separated item in equity and as a deduction item in equity in the consolidated financial statements. Accordingly, the Company has appropriated retained earnings at the same amount as treasury share reserve.

23 Surpluses and reserves

Share premium

Section 51 of the Public Companies Act B.E. 2535 (1992) requires companies to set aside share subscription monies received in excess of the par value of the shares issued to a reserve account ("share premium"). Share premium is not available for dividend distribution.

Capital surplus on registered and paid-up share reduction

Capital surplus on share reduction is from capital surplus on registered and paid-up share reduction in the Company's registered share capital from Baht 1,032,761,220 to Baht 843,143,461 and the paid-up share capital from Baht 753,040,940 to Baht 563,423,181. These changes were due to the reduction of 189,617,759 shares.

Other surpluses

Surplus from the change in the ownership interest in subsidiaries

Change in parent's ownership interest in subsidiaries within equity comprises of effect from dilution of percentage of holding of the Company in a subsidiary and difference from changes in parent's ownership interest in subsidiaries that do not result in a loss of control.

Surplus from business combination

Surplus from business combination represents the measurement of net assets acquired and recognised at fair value from business combination.

Legal reserve

Section 116 of the Public Companies Act B.E. 2535 (1992) requires that a company shall allocate not less than 5% of its annual net profit, less any accumulated losses brought forward (if any), to a reserve account ("legal reserve"), until this account reaches an amount not less than 10% of the registered authorised capital. The legal reserve is not available for dividend distribution.

Treasury shares reserve

The treasury shares reserve is the amount appropriated from the retained earnings equal to the cost of the Company's own shares held by the Company. The treasury shares reserve is not available for dividend distribution.

Other components of equity

Translation reserve

The translation reserves comprises all foreign currency differences arising from the translation of the financial statements of foreign operations, as well as the effective portion of any foreign currency differences arising from hedges of a net investment in a foreign operation (see note 3 (d.4)).

Hedging reserve

The hedging reserve comprises the effective portion of the cumulative net change in the fair value of hedging instruments used in cash flow hedges pending subsequent recognition in profit or loss or directly included in the initial cost or other carrying amount of a non-financial asset or non-financial liability.

Fair value reserve

The fair value reserve comprise the cumulative net change in the fair value of equity securities designated at FVOCI.

24 Subordinated perpetual debentures

On 18 October 2019, the Company completed the issuance of Subordinated Perpetual Debentures of Baht 10,000 million. The debentures are unsecured, unconvertible, with debenture holder representatives and no scheduled repayment of principal. Bullet payment is upon dissolution of the Company or upon the exercise of the debenture issuer's early redemption right per conditions as stipulated in the terms and conditions of the debentures. These debentures bear fixed interest rate of 5% per annum during the first year to the fifth year. The debenture issuer will adjust the interest rate of the debentures every 5 years and interest is payable on a semi-annual basis throughout the term of the debentures. The Company has the sole right to unconditionally defer interest and cumulative interest payments to debentures holders without time and deferral amount limitation. If the Company defers the interest payment, the Company shall not declare and make any dividend payment. From the determination of the terms and conditions of the debentures, Subordinated perpetual debentures are classified as equity. Issuance cost of debentures of Baht 59 million are recognised as a part of equity in the consolidated and separate financial statements as at 31 December 2021. The Company paid coupon payment on perpetual subordinated debentures of Baht 500 million (2020: Baht 501 million) which were recognised as a part of equity in consolidated and separate financial statement.

25 **Operating segments**

Management determined that the Group has six reportable segments, as described below, which are the Group's strategic divisions for different products and services, and are managed separately because they require different technology and marketing strategies. The following summary describes the operations in each of the Group's reportable segments.

Segment 1	Refinery and oil trading
Segment 2	Marketing
Segment 3	Electricity
Segment 4	Bio-based product
Segment 5	Natural resource
Segment 6	Others

Each segment's performance is measured based on segment profit (loss) before tax, financial costs, depreciation and amortisation, gain on foreign exchange, gain (loss) on derivatives from forward contracts and impairment losses ("Group's Profit (loss) from operating segment"), as included in the internal management reports that are reviewed by the Group's CODM. Group's Profit (loss) from operating segment is used to measure performance as management believes that such information is the most relevant in evaluating the results of certain segments relative to other entities that operate within these industries. Inter-segment pricing determined on an arm's length basis.

			C		ancial statemen	ts		
For the year ended	Refinery and	Maultating	El a stui sitar	Bio-based	Natural	Otherm		Tatal
31 December 2021	oil trading	Marketing	Electricity	product	resources ion Baht)	Others	Eliminations	Total
External revenue	65,161	117,265	4,661	2,234	10,093	3	-	199,417
Inter-segment revenue	108,483	3	8	11,861	-	-	(120,355)	-
Total revenue	173,644	117,268	4,669	14,095	10,093	3	(120,355)	199,417
Profit (loss) from operating								
segment	9,363	2,614	4,193	1,863	8,251	(466)	-	25,818
Depreciation and amortisation								(8,075)
Loss from derivatives								(1)
Gain on foreign exchange								251
Gain from fair value adjustment of investment								43
Impairment loss								(1,388)
Finance costs								(2,540)
Tax expense								(4,263)
Profit for the year							-	9,845
Interest income	-	14	52	2	117	-	-	185
Financial costs	(644)	(414)	(892)	(108)	(397)	(85)	-	(2,540)
Depreciation and amortisation	(3,854)	(1,388)	(994)	(415)	(1,373)	(51)	-	(8,075)
Segments assets	68,104	18,365	58,645	12,084	44,512	75	-	201,785
Investments in associates								
and joint ventures	144	1	13,486	39	-	-	-	13,670
Capital expenditure	(4,437)	(1,117)	(3,341)	(482)	(1,083)	(28)	-	(10,488)

For the year ended 31 December 2020	Refinery and oil trading	Marketing	C	Bio-based product	ancial statemen Natural resources	t s Others	Eliminations	Total
External revenue Inter-segment revenue	34,191 86,791	95,325 5	4,223 8	(in millio 2,710 9,860	on Baht) - -	1	- (96,664)	136,450
Total revenue	120,982	95,330	4,231	12,570		1	(96,664)	136,450
Profit (loss) from operating segment Depreciation and amortisation Gain from derivatives Gain on foreign exchange Impairment loss Finance costs Tax income Others Loss for the year	(2,169)	2,174	3,640	1,828	(1,004)	(365)	-	4,104 (6,821) 20 732 (3,266) (1,969) 1,589 (159) (5,770)
Interest income Financial costs Depreciation and amortisation	22 (380) (3,863)	23 (394) (1,413)	25 (816) (1,072)	2 (123) (420)	85 (220) (3)	(36) (50)	-	157 (1,969) (6,821)
Segments assets	59,764	18,807	51,118	11,984	6,649	-	-	148,322
Investments in associates and joint ventures Capital expenditure	139 (3,664)	1 (270)	11,723 (1,140)	858 (928)	1,610	-	-	14,331 (6,002)

Disaggregation of revenue

Timing of revenue recognition of major revenues of the Group and the Company are point in time, except power plant segment, which timing of revenue recognition is over time.

Geographical segments

In presenting information on the basis of geographical segments, segment sales are based on the entity's country of domicile. Segment non-current assets (exclude derivatives and deferred tax) are based on the geographical location of the assets.

	Consolidated financial statements						
Geographical information	Revenue			Non-current assets			
	2021	2020	2021	2020			
		(in millio	n Baht)				
Thailand	151,694	111,610	67,415	64,859			
Singapore	17,944	20,066	1,553	3,024			
Norway	10,068	-	12,689	1,610			
Korea	7,127	2,177	-	-			
Brunei	2,900	-	-	-			
Malaysia	2,115	177	-	-			
Russia	2,057	-	-	-			
Japan	1,934	382	9,478	6,675			
Laos	1,776	1,652	9,469	8,465			
China	1,154	-	-	-			
Philippines	4	2	1,190	1,143			
Indonesia	-	-	12,312	10,595			
Others	644	384	4,775	1,674			
Total	199,417	118,881	98,045				

Major customer

Revenues from one customer of the Group's 1 and 2 segments represents approximately Baht 16,637 million (2020: Baht 10,846 million) of the Group's total revenues.

Promotional privileges

The Group has been granted promotional certificates by the Office of the Board of Investment by virtue of the provisions of the Industrial Investment Promotion Act of B.E. 2520 for Petroleum Refinery process, production of Biodiesel and production of electricity from solar cell. The privileges granted include:

Production of Biodiesel, Ethanol and Biogas

- (a) Exemption from payment of import duty on machinery approved by the Board;
- (b) Exemption from payment of income tax for certain operations for a period of six and eight years from the date on which the income is first derived from such operations.

Production of electricity from solar cell

- (a) Exemption from payment of import duty on machinery approved by the Board;
- (b) Exemption from payment of income tax for certain operations for a period of eight years from the date on which the income is first derived from such operations.

(c) A 50% reduction in the normal income tax rate on the net profit derived from certain operations for a period of five years, commencing from the expiry date in (b) above.

As promoted companies, the Group must comply with certain terms and conditions prescribed in the promotional certificates.

Summary of revenue from promoted and non-promoted businesses:

	Consolidated financial statements							
		2021			2020			
		Non-			Non-			
	Promoted	promoted		Promoted	promoted			
	businesses	businesses	Total	businesses	businesses	Total		
			(in mill	ion Baht)				
Export sales	91	78,657	78,748	54	47,440	47,494		
Local sales	10,955	194,509	205,464	9,155	145,497	154,652		
Eliminations		-	(84,795)			(65,696)		
Total	11,046	273,166	199,417	9,209	192,937	136,450		

The Company has no revenue from promoted business.

26 Expenses by nature

The financial statements include an analysis of expenses by function. Expenses by nature disclosed in accordance with the requirements of various TFRS were as follows:

	Consolidated		Sepa	rate
	financial st	tatements	financial st	atements
	2021	2020	2021	2020
		(in milli	on Baht)	
Changes in inventories of finished goods and				
work in progress	(65)	844	(155)	777
Raw materials and consumables used	104,718	75,074	92,973	65,723
Tax expenses and oil fuel fund	24,386	27,529	24,386	27,529
Depreciation and amortisation	8,075	6,821	5,221	5,217
Employee benefit expenses	4,579	3,402	2,117	2,025
Advertisement expenses	553	519	399	400
Transportation expenses	1,580	1,538	1,375	1,319
Rental expenses	29	83	15	51
Professional and advisory fees	723	596	232	437

Defined contribution plans

The defined contribution plans comprise provident funds established by the Group for its employees. Membership to the funds is on a voluntary basis. Contributions are made monthly by the employees at rates ranging from 3% to 15% of their basic salaries and by the Group at rates ranging from 3% to 10% of the employees' basic salaries. The provident funds are registered with the Ministry of Finance as juristic entities and are managed by licensed Fund Manager.

27 Finance costs

		Consol	idated	Sepa	rate
		financial s	tatements	financial s	tatements
	Note	2021	2020	2021	2020
			(in milli	on Baht)	
Interest expense					
Financial institutions		993	1,034	153	184
Debentures		1,402	1,017	1,003	1,017
Lease liabilities		194	201	186	176
Total interest expense		2,589	2,252	1,342	1,377
Amortisation of transaction			,		
costs capitalised		121	51	17	12
Others finance costs		169	40	1	1
		2,879	2,343	1,360	1,390
Less Amount included in the cost of property, plant and		,	,	,	,
equipment under construction	14	(339)	(374)	(139)	(360)
Net		2,540	1,969	1,221	1,030

28 Income tax

Income tax recognised in profit or loss	Consolic financial st		Separate financial statements		
	2021	2020	2021	2020	
		(in millio	n Baht)		
Current tax expense		,	,		
Current year	2,831	231	-	-	
Over provided in prior years	(17)	(42)	(10)	(27)	
	2,814	189	(10)	(27)	
Deferred tax expense			<u>, , , , , , , , , , , , , , , , , , , </u>	<u>```</u>	
Movements in temporary differences	1,449	(1,778)	831	(1,736)	
	1,449	(1,778)	831	(1,736)	
Total tax expense (income)	4,263	(1,589)	821	(1,763)	

	Consolid	lated	Separate		
Reconciliation of effective tax rate	financial sta	tements	financial statements		
	2021	2020	2021	2020	
		(in million	n Baht)		
Profit (loss) before income tax expense	14,108	(7,359)	7,135	(11,603)	
Corporate income tax rate (%)	20.00	20.00	20.00	20.00	
Profit (loss) before income tax using the Thai					
corporation tax rate	2,821	(1,472)	1,427	(2,321)	
Effect of difference tax rates in foreign					
jurisdictions	2,735	(47)	-	-	
Income not subject to tax / Expenses that are					
deductible at a greater amount	(1,047)	(647)	(320)	(233)	
Expenses not deductible / Other adjustments	177	435	(276)	818	
Current year losses for which no deferred tax					
assets was recognised	78	184	-	-	
Over provided in prior years	(17)	(42)	(10)	(27)	
Others	(484)	-	-	-	
Total	4,263	(1,589)	821	(1,763)	
Tax rate (%)	30.22	(21.59)	11.50	(15.19)	

Deferred tax	Consolidated financial statements					
At 31 December	Asse	ets	Liabil	Liabilities		
	2021	2020	2021	2020		
		(in millio	n Baht)			
Total	7,369	3,074	(7,861)	(888)		
Set off of tax	(5,243)	(93)	5,243	93		
Net deferred tax assets (liabilities)	2,126	2,981	(2,618)	(795)		
	Sep	arate financ	ial statemen	ts		
Deferred tax	Asse	ets	Liabil	ities		
At 31 December	2021	2020	2021	2020		
		(in millio	n Baht)			
Total	2,133	2,952	(67)	(22)		
Set off of tax	(67)	(22)	67	22		
Net deferred tax assets	2,066 2,930 -					

Movements in total deferred tax assets and liabilities during the year were as follows:

	Consolidated financial statement							
		Charged / C	Credited to:	Acquisition				
	At		Other	through business		At 31		
	1 January		comprehensive	combinations	Exchange	December		
	2021	Profit or loss	income	(note 5)	differences	2021		
			(in million	Baht)				
Deferred tax assets								
Loss from impairment of assets	1,074	(950)	-	-	-	124		
Property, plant and equipment	158	(39)	-	-	-	119		
Provisions for employee benefits	525	(25)	(34)	-	-	466		
Provision for the decommissioning cost	-	217	-	4,823	55	5,095		
Loss carry forward	1,231	130	-	3	-	1,364		
Others	86	115	-	-	-	201		
Total	3,074	(552)	(34)	4,826	55	7,369		
Deferred tax liabilities								
Property, plant and equipment	(83)	(1,212)	-	(4,986)	(53)	(6,334)		
Intangible assets	(776)	516	-	(551)	(37)	(848)		
Inventories	-	(103)	-	(442)	(3)	(548)		
Others	(29)	(98)	16	(20)	-	(131)		
Total	(888)	(897)	16	(5,999)	(93)	(7,861)		
Net	2,186	(1,449)	(18)	(1,173)	(38)	(492)		

	Consolidated financial statement Charged / Credited to:							
	At 1 January 2020	Profit or loss	Other comprehensive income (in million	Acquisition through business combinations <i>Baht</i>)	Exchange differences	At 31 December 2020		
Deferred tax assets			, ,	, ,				
Loss from impairment of assets	607	467	-	-	-	1,074		
Property, plant and equipment	77	21	-	59	1	158		
Provisions for employee benefits	505	24	(4)	-	-	525		
Loss carry forward	42	1,188	-	-	1	1,231		
Others	80	5	-	-	1	86		
Total	1,311	1,705	(4)	59	3	3,074		
Deferred tax liabilities								
Property, plant and equipment	(153)	76	-	(8)	2	(83)		
Intangible assets	(502)	6	-	(260)	(20)	(776)		
Leasehold rights	(1)	-	-	-	-	(1)		
Others	(19)	(9)	-	-	-	(28)		
Total	(675)	73	-	(268)	(18)	(888)		
Net	636	1,778	(4)	(209)	(15)	2,186		

	S	Separate fina	ncial statements		S	eparate fina	ncial statements	
		Charged /	Credited to:			Charged /	Credited to:	
	At 1		Other	At 31	At 1		Other	At 31
	January	Profit or	comprehensive	December	January	Profit or	comprehensive	December
	2021	loss	income	2021	2020	loss	income	2020
		(in mil	lion Baht)			(in mill	lion Baht)	
Deferred tax assets								
Loss from impairment of assets	1,074	(958)	-	116	607	467	-	1,074
Property, plant and equipment	90	(28)	-	62	70	20	-	90
Provisions for employee benefits	508	(28)	(33)	447	499	9	-	508
Loss carry forward	1,197	124	-	1,321	-	1,197	-	1,197
Others	83	104	-	187	70	13	-	83
Total	2,952	(786)	(33)	2,133	1,246	1,706	-	2,952
Deferred tax liabilities								
Property, plant and equipment	(21)	(45)	-	(66)	(51)	30	-	(21)
Others	(1)	-	-	(1)	(1)	-	-	(1)
Total	(22)	(45)		(67)	(52)	30	-	(22)
Net	2,930	(831)	(33)	2,066	1,194	1,736		2,930

29 Earnings per share

	Consolidated financial statements		Separate financial statements		
	2021	2020	2021	2020	
		(in millio	on Baht)		
Profit (loss) for the period attributable to ordinary shareholders of the Company	7,624	(6,967)	6,314	(9,840)	
Less Cumulative coupon payment for the year on perpetual subordinated					
debentures	(500)	(501)	(500)	(501)	
Profit (loss) for calculating earnings					
(loss) per share	7,124	(7,468)	5,814	(10,341)	
Number of ordinary shares outstanding	1,377	1,377	1,377	1,377	
Effect of treasury shares	(19)	(19)	(19)	(19)	
Weighted average number of ordinary shares outstanding	1,358	1,358	1,358	1,358	
Earnings (loss) per share (basic) <i>(in Baht)</i>	5.25	(5.50)	4.28	(7.62)	

30 Dividends

	Approval Date	Payment schedule	Dividend rate per share (Baht)	Amount (in million Baht)
2021 Annual dividend 2020 An interim dividend 2021 Dividend payment during	8 April 2021 26 August 2021 the year 2021	22 April 2021 21 September 2021	0.40 1.00 1.40	543 1,357 1,900
2020 Annual dividend 2019 An interim dividend 2019 Dividend payment during	30 March 2020 15 August 2019	24 April 2020 10 September 2019	0.80 (0.50) 0.30	1,096 (689) 407

31 Financial instruments

(a) Carrying amounts and fair values

The following table shows the carrying amounts and fair values of financial assets and financial liabilities, including their levels in the fair value hierarchy. It does not include fair value information for financial assets and financial liabilities measured at amortised cost if the carrying amount is a reasonable approximation of fair value.

	Consolidated financial statements								
	Fair value - applied hedge	C Fair value through	Carrying amount Fair value through other comprehensive	Amortised			Fair	value	
At 31 December	accounting	profit or loss	income	cost - net	Total	Level 1	Level 2	Level 3	Total
2021				(in millio	on Baht)				
2021									
Financial assets		4.1	1 712		1 754	1 754			1 754
Investment in equity instruments	-	41	1,713	-	1,754	1,754	-	-	1,754
Investment in convertible bond	-	914	-	-	914	-	914	-	914
Investment in other non-marketable equity			1.065		1.065			1.065	1.065
instruments	-	-	1,865	-	1,865	-	-	1,865	1,865
Loans to (fixed interest rate)	-	-	-	428	428	-	440	-	440
Derivatives assets	84	202	-	-	286	-	286	-	286
Financial liabilities									
Loans from financial institutions (fixed interest rate)	-	-	-	4,008	4,008	-	2,244	1,859	4,103
Debentures	-	-	-	52,404	52,404	9,081	43,253	-	52,334
Derivatives liabilities	32	507	-	-	539	-	539	-	539
2020									
Financial assets									
Investment in equity instruments	-	-	192	-	192	192	-	-	192
Investment in other non-marketable equity									
instruments	-	90	1,411	-	1,501	-	-	1,501	1,501
Loans to (fixed interest rate)	-	-	-	1,266	1,266	-	1,437	-	1,437
Derivatives assets	-	56	-	-	56	-	56	-	56
Financial liabilities									
Loans from financial institutions									
(fixed interest rate)	-	-	-	2,571	2,571	-	2,720	-	2,720
Debentures	-	-	-	25,980	25,980	-	26,925	-	26,925
Derivatives liabilities	114	158	-	-	272	-	272	-	272

	Separate financial statements									
		Ca	arrying amount Fair value	•			Fair value			
At 31 December	Fair value - applied hedge accounting	Fair value through profit or loss	through other comprehensive income	Amortised cost - net <i>(in millio</i>	Total	Level 1	Level 2	Level 3	Total	
2021				(111 111111	on Buni)					
Financial assets										
Investment in equity instruments Investment in other non-marketable	-	41	342	-	383	383	-	-	383	
equity instruments	-	-	525	-	525	-	-	525	525	
Loans to (fixed interest rate)	-	-	-	2,957	2,957	-	-	2,997	2,997	
Derivatives assets	-	7	-	-	7	-	7	-	7	
<i>Financial liabilities</i> Loans from financial institutions										
(fixed interest rate)	-	-	-	1,201	1,201	-	1,245	-	1,245	
Debentures	-	-	-	30,476	30,476	-	30,845	-	30,845	
Derivatives liabilities	-	507	-	-	507	-	507	-	507	
2020 Financial assets										
Investment in other non-marketable			224		224			224	224	
equity instruments Loans to (fixed interest rate)	-	-	234	4,939	234 4,939	-	4,132	234	234 4,132	
Derivatives assets	-	- 56	-	4,939	4,939	-	4,132	-	4,132	
	-	50	-	-	50	-	50	-	50	
Financial liabilities Loans from financial institutions										
(fixed interest rate)	-	-	-	1,501	1,501	-	1,582	-	1,582	
Debentures	-	-	-	25,980	25,980	-	26,925	-	26,925	
Derivatives liabilities	-	158	-	-	158	-	158	-	158	

In July 2021, BCPG Public Company Limited, which is a subsidiary of the Group, has invested in convertible bond of VRB Energy Inc. ("VRB") amounting to USD 24 million (approximately Baht 775 million). The objective is to expand the investment in energy storage system business and for further use as an application to support the Group's current renewable energy businesses. In accordance with the terms and conditions set out in the agreement, such convertible bond can be converted into ordinary share of VRB.

Level 2 fair values for simple over-the-counter derivative financial instruments are based on broker quotes. Those quotes are tested for reasonableness by discounting expected future cash flows using market interest rate for a similar instrument at the measurement date. Fair values reflect the credit risk of the instrument and include adjustments to take account of the credit risk of the Group and counterparty when appropriate.

Level 3 fair values for debt instruments and equity instruments measured at fair value through profit and loss and equity instruments measured at fair value through other comprehensive income are as follows;

- For investments in non-marketable securities, the fair values are based on cost which considered as estimated fair values, except there are significant changes in their operations.

Consolidated financial statements

			Consonuat	cu manch	ii statements		
Marketable equity securities	At 1 January	Purchase	Disposal	Transfer	Fair value adjustment	Effect of change in exchange rates	At 31 December
			(in	million Ba	(ht)		
2021			, ,		,		
Non-current financial assets							
Equity securities measured at							
- FVTPL	-	52	-	-	(11)	-	41
- FVOCI	192	431	(381)	1,491	(41)	21	1,713
2020							
Non-current financial assets							
Equity securities measured at							
- FVOCI	1,349	-	(1,131)	-	(69)	43	192

(b) Marketable financial instruments

During the year ended 31 December 2021, a subsidiary had sold all of its investment in Lithium America Corp. amounted to Baht 381 million and recognised gain on sale of equity instruments designated at fair value through other comprehensive income amounted to Baht 45 million in equity.

During the year ended 31 December 2021, the Company purchase an investment in Bangkok Fuel Pipeline and Logistics Co., Ltd. Of 15 million shares amounted to Baht 483 million, of which 1.6 million shares are measured at FVTPL and 13.4 million shares are measured at FVOCI, in order to comply with the company's investment policy.

Separate financial statements						
At 1	-	Fair value	At 31			
anuary	Purchase	adjustment	December			
(in million Baht)						
-	52	(11)	41			
-	431	(90)	341			
	anuary -	At 1 anuary Purchase <i>(in mil</i>) - 52	At 1 Fair value anuary Purchase adjustment (in million Baht) - 52 (11)			

(c) Financial risk management policies

Risk management framework

The Group's board of directors has overall responsibility for the establishment and oversight of the Group's risk management framework. The board of directors has established the risk management committee, which is responsible for developing and monitoring the Group's risk management policies. The committee reports regularly to the board of directors on its activities.

The Group's risk management policies are established to identify and analyses the risks faced by the Group, to set appropriate risk limits and controls and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Group's activities.

The Board of Directors' policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business. The Board monitors the return on capital, which the Group defines as result from operating activities divided by total shareholders' equity, excluding non-controlling interests and also monitors the level of dividends to ordinary shareholders.

(c.1) Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Group's receivables from customers and loans to related parties of the Group.

(c.1.1) Trade accounts receivables

The Group's exposure to credit risk is influenced mainly by the individual characteristics of each customer. However, management also considers the factors that may influence the credit risk of its customer base, including the default risk associated with the industry and country in which customers operate.

The Group limits its exposure to credit risk from trade accounts receivables by performing an impairment analysis at each reporting date. The provision rates of expected credit loss are based on actual credit loss experience over the past 1 year. These rates have included the consideration of current economic conditions and the Group's view of economic conditions over the expected lives of the receivables. The normal credit term granted by the Group ranges from 1 day to 120 days.

Information relevant to trade accounts receivables and contract assets are disclosed in note 8

(c.1.2) Loans to related parties and accrued interest.

The following table presents the exposure to credit risk and expected credit loss for loans to related parties and accrued interest.

Movement of allowance for expected credit loss of loans to related parties and accrued interest	-	ECL impaired impaired					
2021							
At 1 January	-	7	-	7			
New financial assets acquired	-	3	-	3			
Effect of change in exchange rates	-	1	-	1			
At 31 December		11		11			
2020							
At 1 January	-	10	-	10			
Net remeasurement of loss allowance	-	(10)	-	(10)			
New financial assets acquired	-	8	-	8			
Effect of change in exchange rates	-	(1)	-	(1)			
At 31 December		7		7			

	Separate financial statements							
		Lifetime						
Movement of allowance for expected		ECL- not	Lifetime					
credit loss of loans to related parties	12-months	credit-	ECL- credit-					
and accrued interest	ECL	impaired	impaired					
	(Stage 1)	(Stage 2)	(Stage 3)	Total				
	(in million Baht)							
2021								
At 1 January	94	2,156	1,411	3,661				
Net remeasurement of loss allowance	-	(651)	(1,411)	(2,062)				
Financial assets repaid	(94)	(709)	-	(803)				
Effect of change in exchange rates		167		167				
At 31 December		963		963				
2020								
At 1 January	107	478	-	585				
Net remeasurement of loss allowance	68	1,967	1,161	3,196				
Transfer from Stage 1 to Stage 2	(44)	44	-	-				
Transfer from Stage 2 to Stage 3	-	(478)	478	-				
Financial assets repaid	(37)	-	(98)	(135)				
Effect of change in exchange rates		145	(130)	15				
At 31 December	94	2,156	1,411	3,661				

(c.1.3) Cash and cash equivalent and derivatives

The Group's exposure to credit risk arising from cash and cash equivalents and derivative assets is limited because the counterparties are banks and financial institutions for which the Group considers to have low credit risk.

(c.2) Liquidity risk

The Group monitors its liquidity risk and maintains a level of cash and cash equivalents deemed adequate by management to finance the Group's operations and to mitigate the effects of fluctuations in cash flows.

The following table are the remaining contractual maturities of financial liabilities at the reporting date. The amounts are gross and undiscounted and include contractual interest payments and exclude the impact of netting agreements.

	Consolidated financial statements Contractual cash flows More than 1 years but								
4.01 D 1	Carrying	1 year or	less than 5	More than	TT (1				
At 31 December	amount	less	years (in million Bah	5 years	Total				
2021			,	/					
Non-derivative financial liabilities									
Trade payables	9,779	9,779	-	-	9,779				
Contingent consideration	150	150	-	-	150				
Loans from financial									
institutions	26,245	6,093	17,420	14,838	38,351				
Lease liabilities	8,738	1,251	4,013	4,316	9,580				
Debentures	52,404	4,500	20,089	28,000	52,589				
	97,316	21,773	41,522	47,154	110,449				
Derivative financial liabilities									
Interest rate swaps									
- Cash outflow	(32)	(22)	(67)	(36)	(125)				
- Cash inflow	-	15	44	23	82				
Forward exchange contracts									
- Cash outflow	(13)	(23)	-	-	(23)				
- Cash inflow	-	-	-	-	-				
Crude and product oil price hedging contract									
- Cash outflow	(494)	(494)	-	-	(494)				
- Cash inflow				-					
	(539)	(524)	(23)	(13)	(560)				

			lated financial st ontractual cash flo More			
At 31 December	Carrying amount	1 year or less	than 1 years but less than 5 years (in million Baht)	More than 5 years	Total	
2020 Non-derivative financial liabilities						
Trade payables Contingent consideration Loans from financial	9,108 150	9,108 -	150	-	9,108 150	
institutions Lease liabilities Debentures	37,264 7,898 25,980	6,510 1,510 2,500	24,178 3,800 8,500	7,321 3,944 15,000	38,009 9,254 26,000	
	80,400	19,628	36,628	26,265	82,521	
Derivative financial liabilities						
Interest rate swaps - Cash outflow - Cash inflow	(103)	(68) 31	(172) 92	(88) 57	(328) 180	
Cross currency swaps - Cash outflow - Cash inflow	(10)	(50) 48	(133) 128	(140) 135	(323) 311	
Forward exchange contracts - Cash outflow - Cash inflow	(2)	(50) 41	-	-	(50) 41	
Crude and product oil price hedging contract - Cash outflow	(156)	(149)	(55)	-	(204)	
- Cash inflow	(271)	<u> </u>	(140)	(36)	<u> </u>	
	Separate financial statements Contractual cash flows More than 1 years but					
At 31 December	Carrying amount	1 year or less	less than 5 years (in million Baht)	More than 5 years	Total	
2021 Non-derivative financial liabilities						
Trade payables Loans from financial	8,591	8,591	-	-	8,591	
institutions Lease liabilities Debentures	5,595 6,964 30,476	700 1,008 4,000	4,913 2,840 7,500	3,235	5,613 7,083 30,500	
	51,626	14,299	15,253	22,235	51,787	

	Separate financial statements Contractual cash flows More than 1 years but								
At 31 December	Carrying amount	1 year or less	less than 5 years (in million Baht)	More than 5 years	Total				
2021 Derivative financial liabilities									
Forward exchange contracts - Cash outflow	(13)	(23)	-	-	(23)				
 Cash inflow Crude and product oil price hedging contract 	-	-	-	-	-				
- Cash outflow	(494)	(494)	-	-	(494)				
- Cash inflow	- (507)	- (517)			- (517)				
	(307)	(317)			(317)				
2020 Non-derivative financial liabilities									
Trade payables Loans from financial	6,800	6,800	-	-	6,800				
institutions	5,759	425	5,342	-	5,767				
Lease liabilities	7,191	1,452	3,271	3,688	8,411				
Debentures	25,980	2,500	8,500	15,000	26,000				
	45,730	11,177	17,113	18,688	46,978				
Derivative financial liabilities									
Forward exchange contracts									
- Cash outflow	(2)	(8)	-	-	(8)				
 Cash inflow Crude and product oil price hedging contract 	-	-	-	-	-				
- Cash outflow	(156)	(149)	(55)	-	(204)				
- Cash inflow		6			6				
	(158)	(151)	(55)	-	(206)				

The cash inflows and cash outflows disclosed in the above table represent the contractual undiscounted cash flows relating to derivative financial liabilities held for risk management purposes and which are not usually closed out before contractual maturity. The disclosure shows net cash flow amounts for derivatives that are net cash-settled and gross cash inflow and outflow amounts for derivatives that have simultaneous gross cash settlement.

(c.3) Market risk

The Group is exposed to the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk is as follows:

(c.3.1) Foreign currency risk

The Group is exposed to the transactions with foreign currency risk to the extent that there is a mismatch between the currencies in which sales, purchases, lending's and borrowings are denominated and the respective functional currencies of the Group. The functional currencies of the Group are primarily Thai Baht. The currencies in which these transactions are primarily denominated are US Dollars and Japanese Yen.

The Group primarily utilises forward exchange contracts with maturities of less than one year to hedge such financial assets and financial liabilities denominated in foreign currencies. The forward exchange contracts entered into at the reporting date also relate to anticipated sales, purchases and loans to denominated in foreign currencies. These contracts are designated as cash flow hedges. The Group's policy specifies the critical terms of the forward exchange contracts to align with the hedged item.

The Group primarily utilises cross currency swap contracts to hedge such financial liabilities denominated in foreign currencies. The cross currency swap contracts entered into at the reporting date also relate to borrowings denominated in foreign currencies. These contracts are designated as cash flow hedges.

The Group determines the existence of an economic relationship between the hedging instrument and hedged item based on the currency, amount and timing of their respective cash flows. The Group assesses whether the derivative designated in each hedging relationship is effective in offsetting changes in cash flows of the hedged item using the hypothetical derivative method.

		solidated fina	ncial statem	ents	Separate financial statements			
Exposure to foreign currency at 31 December	United States Dollars	Japanese Yen (in million	Others <i>Baht)</i>	Total	United States Dollars	Krone Norway (in million	Others <i>n Baht)</i>	Total
2021								
Cash and cash equivalents	3,814	20	492	4,326	2,183	-	-	2,183
Trade and other receivables	1,124	-	71	1,195	2,445	-	-	2,445
Loan to related parties	104	-	-	104	-	1,072	-	1,072
Interest-bearing liabilities	(16,016)	(4,966)	(2)	(20,984)	(2,688)	-	-	(2,688)
Trade and other payables	(1,741)	(2)	(38)	(1,781)	(4,990)	-	(4)	(4,994)
Net statement of financial								
position exposure	(12,715)	(4,948)	523	(17,140)	(3,050)	1,072	(4)	(1,982)
Loans from financial institution								
designated as net investment hedge	2,688	1,017	-	3,705	-	-	-	-
Currency swaps contracts	270	-	-	270	-	-	-	-
Forward exchange purchase contracts	-	-	-	-	-	-	-	-
Forward exchange selling contracts	(447)	-	-	(447)	(447)	-	-	(447)
Net exposure	(10,204)	(3,931)	523	(13,612)	(3,497)	1,072	(4)	(2,429)
2020								
Cash and cash equivalents	2,375	22	132	2,529	973	-	-	973
Trade and other receivables	336	-	-	336	344	-	-	344
Loan to related parties	248	-	-	248	-	1,033	-	1,033
Interest-bearing liabilities	(6,097)	(6,158)	-	(12,255)	(2,416)	-	-	(2,416)
Trade and other payables	(500)	(1)	(4)	(505)	(3,899)	-	(21)	(3,920)
Net statement of financial						<u>.</u>		
position exposure	(3,638)	(6,137)	128	(9,647)	(4,998)	1,033	(21)	(3,986)
Loans from financial institution						,	()	
designated as net investment hedge	-	978	-	978	-	-	-	-
Currency swaps contracts	287	_	-	287	-	-	-	-
Forward exchange purchase contracts	2,010	-	-	2,010	1,968	-	-	1,968
Forward exchange selling contracts	(252)	-	-	(252)	(252)	-	-	(252)
Net exposure	(1,593)	(5,159)	128	(6,624)	(3,282)	1,033	(21)	(2,270)

Sensitivity analysis

A reasonably possible strengthening (weakening) of the Thai Baht against all other currencies at the reporting date would have affected the measurement of financial instruments denominated in a foreign currency. This analysis assumes that all other variables, in particular interest rates, remain constant.

		Consolic financial sta		Separate financial statements			
Impact to profit or loss		Strengthening	Weakening	Strengthening	Weakening		
	(%)		(in millio	on Baht)			
At 31 December 2021							
USD	5	630	(630)	43	(43)		
JPY	2	(94)	94	-	-		
NOK	5	(54)	54	(54)	54		
<i>At 31 December 2020</i> USD	5	134	(134)	250	(250)		
JPY	-	-		250	(250)		
•1 1	2	(13)	13	-	-		
NOK	5	(159)	159	(159)	159		

(c.3.2) Interest rate risk

Interest rate risk is the risk that future movements in market interest rates will affect the results of the Group's operations and its cash flows because loan interest rates are mainly float. The Group mitigates this risk by using interest rate swaps, to manage exposure to fluctuations in interest rates on specific borrowings.

The Group adopts a hedging policy to ensure that interest rate risk exposure is at an appropriate level. This is achieved partly by entering fixed-rate instruments and partly by borrowing at a floating rate and using interest rate swaps as hedges of the variability in cash flows attributable to movements in interest rates.

The Group determines the existence of a relationship between the hedging instrument and hedged item based on the reference interest rates, tenors, repricing dates and maturities and the notional or par amounts.

The Group assesses whether the derivative designated in each hedging relationship is expected to be effective in offsetting changes in cash flows of the hedged item using the hypothetical derivative method.

In these hedge relationships, the main sources of ineffectiveness are:

- the effect of the counterparty's and the Group's own credit risk on the fair value of the swaps, which is not reflected in the change in the fair value of the hedged cash flows attributable to the change in interest rates and;
- differences in repricing dates between the swaps and the borrowings.

	Consolidated		Separate	
Exposure to interest rate risk	financial s	tatements	financial statements	
at 31 December	2021	2020	2021	2020
		(in millio	on Baht)	
Financial instruments with variable interest rates				
Financial assets	-	-	-	-
Financial liabilities	(27,601)	(34,693)	(4,394)	(4,258)
Net statement of financial position				
exposure	(27,601)	(34,693)	(4,394)	(4,258)
Interest rate swaps	740	2,890	-	
Net exposure	(26,861)	(31,803)	(4,394)	(4,258)

Fair value sensitivity analysis for fixed-rate instruments

The Group does not account for any fixed-rate financial assets or financial liabilities, at FVTPL, and the Group does not designate derivatives (interest rate swaps) as hedging instruments under a fair value hedge accounting model. Therefore, a change in interest rates at the reporting date would not affect profit or loss.

Cash flow sensitivity analysis for variable-rate instruments

A reasonable possible change of 0.25% in interest rates at the reporting date would have increased (decreased) equity and profit or loss by the amounts shown below. This analysis assumes that all other variables, in particular foreign currency exchange rates, remain constant.

	Consolidated financial statements		Separate financial statements	
	0.25% increase in	0.25% decrease in	0.25% increase in	0.25% decrease in
Impact to profit or loss	interest rate	interest rate <i>(in millio</i>	interest rate on Baht)	interest rate
2021 Financial instruments with				
variable interest rate	(33)	33	2	(2)
<i>2020</i> Financial instruments with				
variable interest rate	(51)	51	7	(7)

(d) Hedge accounting

(d.1) Cash flow hedges

At 31 December 2021, the Group held the following financial instruments to hedge exposures to changes in foreign currency and interest rates.

	Consolidated financial statements					
At 31 December		2021			2020	
		Maturity More than 1			Maturity More than 1	
	Within	year but less		Within	year but less	More than
Foreign currency risk	one year	than 5 years	5 years	one year	than 5 years	5 years
Cross currency swaps						
Net exposure (in million Baht)	48	121	124	48	128	135
Average THB:USD forward	-10	121	127	-10	120	155
contracts rate	29.51	29.94	30.42	29.60	29.74	30.34
	27.01	_,,,,	000.1	_,	_,,,,	00101
Forward exchange contracts						
Net exposure (in million Baht)	2,906	-	-	41	-	-
Average THB:USD forward				20.20		
contracts rate	-	-	-	30.29	-	-
Average THB:JPY forward	0.2000					
contracts rate	0.2986	-	-	-	-	-
Interest rate risk						
Interest rate swaps						
Net exposure (in million Baht)	15	44	23	31	92	57
Average fixed interest rate (%)	3.13	3.12	3.06	2.74	2.76	3.02

The amounts at the reporting date relating to items designated as hedged items were as follows.

	Consolidated financial statements			
	Change in value used for calculating hedge	Cash flow hedge	Balance remaining in the cash flow hedge reserve from hedging relationships for which hedge accounting is no	
At 31 December	ineffectiveness	reserve	longer applied	
		(in millio	on Baht)	
2021				
Interest rate risk				
Loans from financial institutions – variable		72		
interest	-	12	-	
2020				
Foreign currency risk				
Loans from financial				
institutions – foreign	-	4	-	
2020				
Interest rate risk				
Loans from financial institutions – variable				
interest	-	(38)	-	
	93			

The amounts relating to items designated as hedging instruments and hedge ineffectiveness were as follows.

	Consolidated financial statements 2021 2020 <i>(in million Baht)</i>		
Foreign currency risk	(
At 31 December			
Cross currency swaps – nominal amount	270	287	
Carrying amount included in:			
- other current financial assets (liabilities)	3	(1)	
- other non-current financial assets (liabilities)	13	(9)	
Forward exchange contracts – nominal amount	2,906	41	
Carrying amount included in:			
- other current financial assets	68	-	
For the year ended 31 December			
Recognised in OCI			
- changes in value of the hedging instrument	-	4	
Interest rate risk			
Interest rate swaps – nominal amount	82	180	
Carrying amount included in:			
- other current financial liabilities	(3)	(25)	
- other non-current financial liabilities	(29)	(78)	
For the year ended 31 December			
Recognised in OCI			
- changes in value of the hedging instrument	72	(38)	

The following table provides a reconciliation by risk category of components of equity and analysis of OCI items, net of tax, resulting from cash flow hedge accounting.

	Consolidated financial statements		
	2021 2020		
	(in million	Baht)	
Balance at 1 January	(114)	(80)	
Cash flow hedges			
Changes in fair value:			
Foreign currency risk - Loans from financial institutions	-	4	
Interest rate risk - Loans from financial institutions	72	(38)	
Balance at 31 December	(42)	(114)	

(d.2) Net investment hedges

A foreign currency exposure arises from the Group's net investment in its Japanese subsidiary that has a Japanese Yen functional currency and the Group's net investment in its Singaporean an subsidiary that has a United States Dollar functional currency. The risk arises from the fluctuation in spot exchange rates between the Japanese Yen and the Thai Baht and the fluctuation in spot exchange rates between the United States Dollar and the Thai Baht, which causes the amount of the net investment to vary.

The hedged risk in the net investment hedge is the risk of a weakening Japanese Yen against the Thai Baht and the risk of a weakening United States Dollar against the Thai Baht that will result in a reduction in the carrying amount of the Group's net investment in the Japanese and net investment in the Singapore an subsidiaries.

The Group's net investment in its Japanese subsidiary is hedged by a Japanese Yen-denominated loans from financial institutions and the Group's net investment is its Singaporean an subsidiary is hedged by a United States Dollar-denominated loans from financial institutions, which mitigates the foreign currency risk arising from the subsidiary's net assets. The loan is designated as a hedging instrument for the changes in the value of the net investment that is attributable to changes in the THB/JPY spot rate and THB/USD spot rate.

To assess hedge effectiveness, the Group determines the economic relationship between the hedging instrument and the hedged item by comparing changes in the carrying amount of the debt that is attributable to a change in the spot rate with changes in the investment in the foreign operation due to movements in the spot rate (the offset method). The Group's policy is to hedge the net investment only to the extent of the debt principal.

The amounts related to items designated as hedged items were as follows.

	Consolidated financial statements			
	Change in value used for calculating hedge ineffectiveness	Foreign currency translation reserve (in million	Balance remaining in the foreign currency translation reserve from hedging relationships for which hedge accounting is no longer applied Baht)	
<i>2021</i> USD net investment JPY net investment	563 1	(167)	396	
2020 JPY net investment	-	(52)	-	

The amounts related to items designated as hedging instruments were as follows.

	Consolidated financial statements		
	2021 2020		
	(In millio	n Baht)	
At 31 December			
Foreign exchange - denominated debt (USD) - nominal			
amount	2,688	-	
Foreign exchange - denominated debt (JPY) - nominal			
amount	1,017	1,017	
Carrying amount included in loan and borrowings	3,705	1,017	
<i>For the year ended 31 December</i> <i>Recognised in OCI</i>			
- changes in value of the hedging instrument	(167)	(52)	
<i>Recognised in profit or loss</i>change in value used for calculating hedge ineffectiveness	1	-	

Capital Management

The Board of Directors' policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business. The Board regularly monitors the return on capital, by evaluating result from operating activities divided by total shareholders' equity, excluding non-controlling interests and also monitors the level of dividends to ordinary shareholders.

32 Commitments with non-related parties

	Consolidated financial statements		Separ financial st	
	2021	2020	2021	2020
		(in milli	on Baht)	
Capital commitment				
Construction contracts	3,643	4,090	224	391
Total	3,643	4,090	224	391
Other commitment				
Bank guarantees	257	150	155	68
Total	257	150	155	68

33 Contingent liabilities and contingent assets

During the second quarter of 2016, the Company (the first defendant) was co-accused with another company (the second defendant) for alleged breach of a lubricant product distribution contract for a claim totalling Baht 46 million. Subsequently, the plaintiff filed additional claim against the Company for alleged breach of a contract as a result of ceasing lubricant product distribution for a claim totalling Baht 688 million. During the first quarter of 2017, the civil court ordered a dismiss on both cases. The plaintiff was re-appealed to the Appeal Court. Subsequently, during the second quarter of 2018, the Appeal Court had ordered the Company to pay the plaintiff for two claims totalling Baht 1 million. During the first quarter of 2021, the Supreme Court reserved the judgement of the Appeal Court and ordered a dismiss on both cases are final according to the judgement of the Supreme Court.

An indirect subsidiary of the Group has been filed and accusation of failing to comply with the hire of work agreement by a contractor. The dispute is requested the indirect subsidiary to compensate for the loss of breaching the construction contract totalling of Baht 121 million. In September 2021, the indirect subsidiary has filed and objection to the Arbitration Institute. The management of the indirect subsidiary believes that the indirect subsidiary has fully comply with the condition in the agreement, and this dispute is still in the arbitration process. Therefore, as at 31 December 2021, the indirect subsidiary did not recognise contingent liabilities from the dispute.

34 Events after the reporting period

Changes in investment in subsidiary

At the Extraordinary General Meeting of Shareholders of the subsidiary held on 24 December 2021, the shareholders of subsidiary approved to change the par value from 5 Baht per share to 2.50 baht per share. The subsidiary registered the change in the par value with the Department of Business Development, Ministry of Commerce on 6 January 2022. The change in the par value will cause the number of shares of the subsidiary to increase from 506 million shares to 1,013 million shares.

At the Board of Directors' meeting held on 27 January 2022, the Board has resolved to approve the framework and procedures for determination of the Company's shareholders that are entitled to subscribe newly-issued ordinary shares in the total number of 65 million shares and has resolved to schedule the record date for the right to subscribe additional shares of the subsidiary on 14 February 2022 and the Ex-Other Benefits Date (XB) on 11 February 2022.

Changes in investment in associate

At the Board of Directors' meeting of the subsidiary held on 26 January 2022, the Board approved a sale of the whole investment in Star Energy Group Holdings Pte. Ltd., the indirect associate of the Group, to Springhead Holdings Pte. Ltd. (buyer) which was not the Group's related party at the selling price of USD 440 million (approximately Baht 14,567 million). Subsequently, on 28 January 2022, the subsidiary and the buyer entered into the share purchase agreement. The subsidiary and the buyer are in progress of completing conditions stipulated in the share purchase agreement. It is expected that all conditions will be satisfied, the shares shall be transferred, and the payment shall be made to the subsidiary within the first quarter of 2022.

At the Board of Directors' meeting of the subsidiary held on 26 January 2022, the Board also approved on the signing of Memorandum of Agreement ("MOA") with Capital Asia Investments Pte. Ltd. ("CAI") (as a co-investor of the subsidiary), which was not the Group's related party, and the Ministry of Finance of the Lao People's Democratic Republic acting for and on behalf of the Government of Lao People's Democratic Republic ("GOL") with the subsidiary's preliminary investment amount of not exceeding USD 100 million. Subsequently, the subsidiary and CAI had signed in the MOA on 8 February 2022. This investment results in a pre-investment right in renewable energy business in the Lao People's Democratic Republic that GOL has a policy to grant an investment through Lao State Holding Enterprise ("LHSE") and revenue from providing business consultation to LHSE relating to renewable energy business management under terms and conditions.

Dividend payment

At the Board of Directors' meeting held on 17 February 2022, the Board approved to submit for approval at the Annual General Meeting of the Shareholders, a full year 2021 dividend payment at the rate of Baht 2 per share of which Baht 1 per share was paid as an interim dividend. Thus, the remaining dividend will be at the rate of Baht 1 per share payable to the shareholders entitled to receive dividends. This dividend is subject to the approval of the Shareholders at the Annual General Meeting to be held on 8 April 2022.

At the Board of Directors' meeting of the subsidiary held on 15 February 2022, the Board of subsidiary approved to submit for approval at the Annual General Meeting of the Shareholders, a full year 2021 dividend payment at the rate of Baht 0.33 per share, of which Baht 0.16 per share was paid as an interim dividend. Thus, the remaining dividend will be at the rate of Baht 0.17 per share payable to the shareholders entitled to receive dividends. This dividend is subject to the approval of the Shareholders at the Annual General Meeting to be held on 7 April 2022.

35 Thai Financial Reporting Standards (TFRS) not yet adopted

The Federation of Accounting Professions has revised TFRS 7 *Financial instruments: Disclosure* and TFRS 9 *Financial instruments* due to Interbank Offer Rate (IBOR) reform - Phase 2, which will become effective for annual reporting periods beginning on or after 1 January 2022. The Group has assessed the potential impact of these revised TFRSs and expects that there will be no material impact on the financial statements in the period of initial application.