

BANPU PUBLIC COMPANY LIMITED

CONSOLIDATED AND SEPARATE FINANCIAL STATEMENTS

31 DECEMBER 2021



Independent Auditor's Report

To the shareholders of Banpu Public Company Limited

My opinion

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

What I have audited

The consolidated financial statements and the separate financial statements comprise:

- the consolidated and separate statements of financial position as at 31 December 2021;
- the consolidated and separate statements of comprehensive income for the year then ended;
- the consolidated and separate statements of changes in equity for the year then ended;
- the consolidated and separate statements of cash flows for the year then ended; and
- the notes to the consolidated and separate financial statements, which include significant accounting policies and other explanatory information.

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 are 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 judgement, 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.

Key audit matter	How my audit addressed the key audit matter
Impairment assessment of goodwill Refer to Note 19 Goodwill. As at 31 December 2021, the Group has goodwill in the amount of US Dollar 432 million in the consolidated statement of financial position. The goodwill mainly arose from the acquisitions of mining business in overseas. Goodwill of US Dollar 354 million arose from the acquisition of coal mining business in Australia. Management assesses impairment of goodwill annually. The impairment test is performed at the level of the cash generating unit (CGU) and computing the recoverable amount by applying a value-in-use model which involves the significant management judgements in respect to the future operating results of business, projected cash flows and the discount rate to be applied to the projected cash flows. The key assumptions applied in the value-in-use model of coal mining business in Australia include the trend of global coal prices, estimated reserves on coal, production plans, cost structures, growth rate and discount rate applied to cash flow forecasts. As a result of management tests, the Group did not recognise any impairment loss in the 2021 consolidated financial statements.	The audit procedures of this matter were performed by the component auditor in Australia. I planned the audit of the subsidiaries' financial information to support the audit of consolidation process and communicated them to the component auditors. In addition, I understood and evaluated the work of the component auditor to obtain sufficient and appropriate audit evidence for the impairment testing of goodwill arising from the acquisition of coal mining business in Australia. I also satisfied myself as to the appropriateness of management's identification of the Group's CGUs and the continued satisfactory operation of the Group's controls over the impairment assessment process. The component auditor carried out the following procedures to review management's assessment of impairment testing of goodwill which I have reviewed. • held discussions with the management to understand the basis for the assumptions used and assessed whether the impairment testing process and assumptions had been applied consistently across the Group. • evaluated management's significant assumptions used in impairment testing for goodwill, specifically the global coal price, foreign exchange rate forecasts, production plan, cost profiles and discount rate. The procedures included comparing the key assumptions to the external sources for trend of global coal price, foreign exchange rate forecasts and the approved business and mine plan.



Key audit matter	How my audit addressed the key audit matter
I focused on the valuation of goodwill arising from the acquisition of coal mining business in Australia due to its significant value and the fact that the determination of value-in-use depends on a number of assumptions. Those assumptions involve significant judgement made by the management in assessing the possibility of future business plans.	- assessed the reasonableness of business and mine plans for 2021 and compared the plans with actual results of 2021. - assessed the discount rate taking into account the independently obtained data from available public information of companies in the industry, to see whether the discount rate used by management was within an acceptable range. - tested sensitivity analysis over key assumptions in the model prepared by the management in order to assess factors to be sensitive to assumptions and potential impact of a range possible outcomes. As a result of the procedures performed, the key assumptions used by the management in assessing the recoverable amount of goodwill are within the reasonable range and consistent with supporting evidence.
Acquisition of investment in a subsidiary Refer to Note 14.1 d) Acquisition of investment in a subsidiary. During the year ended 31 December 2021, BKV-BPP Power LLC (BKV-BPP), which is held equally by Banpu Power US Corporation (BPP US), and BKV Corporation (BKV) completed the purchase of all shares in Temple Generation Intermediate Holdings, LLC which holds a 100% interest in Temple I gas-fired power plant in the United States with the total consideration of US Dollar 440.96 million.	The audit procedures of this matter were performed by a component auditor in the United States. I planned the audit procedures of the consolidation process and communicated them to the component auditors. In addition, I understood and evaluated the work performed by the component auditor to obtain sufficient and appropriate audit evidence. The component auditor carried out the following procedures, which I have reviewed, to obtain evidence for management's assessment of accounting related to the asset acquisition and allocation of the purchase price according to the relative fair value of identifiable assets acquired. reviewed management's assessment that the net assets acquired meet the concentration test criteria, and do not meet the definition of a business under TFRS 3, and should be accounted for as an asset acquisition.



Key audit matter	How my audit addressed the key audit matter
The management applied a concentration test which is an optional test to permit a simplified assessment of whether the acquired set of activities and assets qualified as not a business acquisition according to TFRS 3, Business combinations. As a result, management determined that this acquisition is an asset acquisition under TFRS 3 because substantially all of the fair value of the gross assets acquired is concentrated in property, plant and equipment of Temple I. Therefore, the management applied the concept in TFRS 3 for the valuation methodology and assumptions used in the model to the measure the fair value of property, plant and equipment arising from the asset acquisition by involving the external valuer. I focused on identifying the fair value of assets arising from the asset acquisition due to its significant value and the valuation involves significant assumptions and judgments made by the management.	• evaluated the competency, qualifications, experience and objectivity of the external valuer who is management's expert. • assessed the appropriateness of the identifiable assets acquired and the liabilities assumed at the acquisition date and evaluated management's procedures for determining the fair values of the net identifiable assets acquired and the allocation of the purchase price proportionally according to the relative fair values. • tested the calculation of fair values of property, plant and equipment acquired, challenged management's judgement in relation to the assumptions used in the cash flow forecasting and compared those assumptions to the relevant underlying agreements and external sources. • assessed the discount rate, taking into account independently obtained data from available public information of companies in the industry, to see whether the discount rate used by management was within an acceptable range. As a result of the procedures performed, I determined that the acquisition of shareholding in Temple Generation Intermediate Holdings, LLC is an asset acquisition based on the application of the optional test (the concentration test) under TFRS 3. The assumptions used to identify the fair value of property, plant and equipment arising from the asset acquisition were reasonable and in line with the accounting for asset acquisition.



Other information

The directors are 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 the audit committee.

Responsibilities of the directors for the consolidated and separate financial statements

The directors are responsible for the preparation and fair presentation of the consolidated and separate financial statements in accordance with TFRS, and for such internal control as the directors determine 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, the directors are 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 the directors either intend to liquidate the Group and the Company or to cease operations, or has no realistic alternative but to do so.

The audit committee assists the directors in discharging their responsibilities 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 judgement and maintain professional scepticism 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 the directors.
- Conclude on the appropriateness of the directors' 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 the audit committee 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 the audit committee 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 the audit committee, 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.

PricewaterhouseCoopers ABAS Ltd.

A handwritten signature in blue ink, appearing to read "Rodjanart", with a long, sweeping flourish extending to the right.

Rodjanart Banyatananusard

Certified Public Accountant (Thailand) No. 8435

Bangkok

23 February 2022

	Notes	Consolidated financial statements			
		US Dollar'000		Baht'000	
		2021	2020	2021	2020
Assets					
Current assets					
Cash and cash equivalents	10	1,184,361	730,456	39,581,234	21,940,785
Investment in debt instruments measured at fair value through profit or loss	6	15,687	11,071	524,272	332,546
Investment in debt instruments measured at fair value through other comprehensive income	6	168	346	5,600	10,392
Investment in debt instruments measured at amortised cost		-	156	-	4,676
Trade accounts receivable, net	11	472,940	248,754	15,805,596	7,471,862
Amounts due from related parties	30	2,068	1,104	69,096	33,166
Current portion of dividend receivables from related parties	30	24,191	25,819	808,475	775,517
Inventories, net	12	116,834	101,389	3,904,574	3,045,444
Spare parts and machinery supplies, net		41,400	29,622	1,383,594	889,764
Financial derivative assets due in one year	6	20,990	29,961	701,494	899,933
Short-term loans to related parties	30	69,260	61,130	2,314,662	1,836,164
Current portion of deferred exploration and development expenditures and deferred overburden expenditures/stripping costs, net	17	78,475	64,505	2,622,612	1,937,535
Non-current assets held-for-sale	14	172,048	-	5,749,827	-
Other current assets	13	358,037	270,450	11,965,563	8,123,507
Total current assets		2,556,459	1,574,763	85,436,599	47,301,291
Non-current assets					
Dividend receivables from a related party	30	7,146	9,616	238,831	288,831
Long-term loans to a related party	30	16,664	20,888	556,903	627,400
Investments in associates and joint ventures accounted for using the equity method	14	1,645,453	1,689,950	54,990,890	50,761,193
Investments in equity instruments measured at fair value through other comprehensive income	6	164,424	153,415	5,495,041	4,608,143
Investment in equity instrument measured at fair value through profit or loss	6	7,727	-	258,239	-
Investment property, net		1,488	1,549	49,714	46,524
Property, plant and equipment, net	15	3,416,125	2,580,897	114,166,560	77,522,651
Deferred income tax assets, net	20	103,567	165,679	3,461,183	4,976,512
Financial derivative assets, net	6	63,719	9,391	2,129,467	282,078
Deferred exploration and development expenditures and deferred overburden expenditures/stripping costs, net	17	888,847	1,015,594	29,705,179	30,505,498
Mining property rights, net	18	1,276,104	1,358,941	42,647,263	40,818,643
Right-of-use assets, net	16	65,873	71,536	2,201,476	2,148,741
Goodwill	19	431,568	446,748	14,422,945	13,419,014
Other non-current assets	21	300,393	277,693	10,039,109	8,341,101
Total non-current assets		8,389,098	7,801,897	280,362,800	234,346,329
Total assets		10,945,557	9,376,660	365,799,399	281,647,620

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

	Notes	Consolidated financial statements			
		US Dollar'000		Baht'000	
		2021	2020	2021	2020
Liabilities and equity					
Current liabilities					
Short-term loans from financial institutions	22	1,173,907	827,518	39,231,861	24,856,241
Trade accounts payable		98,547	67,425	3,293,416	2,025,238
Accrued interest expenses		33,228	25,336	1,110,469	761,023
Accrued royalty expenses		3,443	22,720	115,072	682,429
Accrued overburden and coal transportation costs		77,367	60,341	2,585,582	1,812,462
Accrued income taxes		99,685	4,141	3,331,470	124,377
Accrued employee benefits		90,636	102,798	3,029,053	3,087,758
Financial derivative liabilities due in one year	6	128,120	20,727	4,281,755	622,587
Current portion of long-term loans from financial institutions, net	24	517,009	675,305	17,278,404	20,284,211
Current portion of debentures, net	25	119,672	133,161	3,999,435	3,999,761
Current portion of deferred unfavourable contract liabilities, net		4,180	7,868	139,684	236,328
Current portion of lease liabilities, net	16	25,806	33,482	862,422	1,005,696
Other current liabilities	23	536,585	229,947	17,932,626	6,906,926
Total current liabilities		2,908,185	2,210,769	97,191,249	66,405,037
Non-current liabilities					
Long-term loans from financial institutions, net	24	2,270,243	2,230,367	75,871,298	66,993,753
Debentures, net	25	1,911,304	1,516,955	63,875,581	45,564,917
Deferred income tax liabilities, net	20	84,701	150,844	2,830,715	4,530,914
Employee benefits obligation		39,701	38,875	1,326,790	1,167,683
Deferred unfavourable contract liabilities, net		-	3,126	-	93,900
Financial derivative liabilities, net	6	52,776	25,983	1,763,754	780,458
Lease liabilities, net	16	25,535	17,474	853,379	524,876
Provision for decommissioning, restoration, and mine and natural gas rehabilitation		340,305	300,788	11,372,946	9,034,797
Other non-current liabilities		209,951	66,452	7,016,554	1,996,034
Total non-current liabilities		4,934,516	4,350,864	164,911,017	130,687,332
Total liabilities		7,842,701	6,561,633	262,102,266	197,092,369

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

	Notes	Consolidated financial statements			
		US Dollar'000		Baht'000	
		2021	2020	2021	2020
Liabilities and equity (continued)					
Equity					
Share capital	26				
Registered share capital					
10,149,163,028 ordinary shares at par of Baht 1 each					
(31 December 2020: 5,074,581,515 ordinary shares at par of Baht 1 each)				10,149,163	5,074,581
Issued and paid-up share capital					
6,766,108,686 ordinary shares at paid-up of Baht 1 each					
(31 December 2020: 5,074,581,515 ordinary shares at paid-up of Baht 1 each)		198,500	147,424	6,766,108	5,074,581
Premium on share capital	26	647,929	443,624	22,138,547	15,372,438
Share-based payments		20,313	1,651	677,687	55,037
Retained earnings					
Appropriated					
- Legal reserve	26	100,397	95,543	3,318,402	3,157,984
- Other reserves	26	121,159	107,317	3,906,838	3,458,754
Unappropriated		1,831,341	1,630,812	61,096,868	54,628,542
Other components of equity	26	(547,482)	(350,806)	(18,627,198)	(19,403,383)
Equity attributable to owners of the Parent		2,372,157	2,075,565	79,277,252	62,343,953
Non-controlling interests		730,699	739,462	24,419,881	22,211,298
Total equity		3,102,856	2,815,027	103,697,133	84,555,251
Total liabilities and equity		10,945,557	9,376,660	365,799,399	281,647,620

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

Banpu Public Company Limited
Statement of Financial Position
As at 31 December 2021

	Notes	Separate financial statements			
		US Dollar'000		Baht'000	
		2021	2020	2021	2020
Assets					
Current assets					
Cash and cash equivalents	10	114,057	216,119	3,811,758	6,491,574
Trade accounts receivable, net	11	7,250	16,111	242,287	483,927
Amounts due from related parties	30	523,165	440,517	17,484,116	13,231,852
Advances to related parties	30	1,497	1,269	50,025	38,123
Inventories, net	12	4,699	5,074	157,027	152,401
Financial derivative assets due in one year	6	-	2,997	-	90,008
Short-term loans to related parties	30	74,603	18,800	2,493,217	564,697
Current portion of long-term loan to related parties	30	79,500	-	2,656,882	-
Other current assets	13	6,131	7,096	204,899	213,138
Total current assets		810,902	707,983	27,100,211	21,265,720
Non-current assets					
Long-term loans to related parties	30	2,955,695	2,283,094	98,779,016	68,577,510
Investments in subsidiaries using cost method	14	2,368,224	2,489,582	79,145,807	74,779,817
Investment in equity instruments measured at fair value through other comprehensive income	6	7,749	6,475	258,967	194,496
Investment property, net		1,020	1,020	34,101	30,650
Property, plant and equipment, net	15	5,011	5,923	167,461	177,901
Right-of-use assets, net	16	2,309	3,430	77,161	103,016
Financial derivative assets, net	6	813	4,245	27,181	127,512
Deferred income tax assets, net	20	5,142	64,459	171,830	1,936,161
Other non-current assets	21	7,399	6,811	247,268	204,579
Total non-current assets		5,353,362	4,865,039	178,908,792	146,131,642
Total assets		6,164,264	5,573,022	206,009,003	167,397,362

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

	Notes	Separate financial statements			
		US Dollar'000		Baht'000	
		2021	2020	2021	2020
Liabilities and equity					
Current liabilities					
Short-term loans from financial institutions	22	812,461	779,045	27,152,378	23,400,240
Trade accounts payable to subsidiaries	30	2,746	6,378	91,758	191,570
Advances from and amounts due to related parties	30	784	1,005	26,202	30,201
Accrued interest expenses		26,419	22,248	882,906	668,255
Financial derivative liabilities due in one year	6	3,989	8,027	133,310	241,111
Current portion of long-term loans from financial institutions, net	24	355,871	428,938	11,893,176	12,884,047
Current portion of debentures, net	25	119,672	133,161	3,999,435	3,999,761
Current portion of lease liabilities, net	16	1,073	1,001	35,873	30,080
Other current liabilities	23	10,676	5,038	356,797	151,312
Total current liabilities		1,333,691	1,384,841	44,571,835	41,596,577
Non-current liabilities					
Long-term loans from financial institutions, net	24	1,506,331	1,563,328	50,341,446	46,957,843
Debentures, net	25	1,911,304	1,516,955	63,875,581	45,564,917
Employee benefits obligation		13,247	16,071	442,729	482,725
Financial derivative liabilities, net	6	22,500	20,748	751,943	623,211
Lease liabilities, net	16	1,022	2,378	34,163	71,414
Other non-current liabilities		1,206	366	40,205	10,969
Total non-current liabilities		3,455,610	3,119,846	115,486,067	93,711,079
Total liabilities		4,789,301	4,504,687	160,057,902	135,307,656
Equity					
Share capital	26				
Registered share capital					
10,149,163,028 ordinary shares at par of Baht 1 each (31 December 2020: 5,074,581,515 ordinary shares at par of Baht 1 each)				10,149,163	5,074,581
Issued and paid-up share capital					
6,766,108,686 ordinary shares at paid-up of Baht 1 each (31 December 2020: 5,074,581,515 ordinary shares at paid-up of Baht 1 each)		198,500	147,424	6,766,108	5,074,581
Premium on share capital	26	647,929	443,624	22,138,547	15,372,438
Retained earnings					
Appropriated					
- Legal reserve	26	19,850	14,996	676,611	516,193
Unappropriated		494,670	474,992	15,706,969	15,053,312
Other components of equity	26	14,014	(12,701)	662,866	(3,926,818)
Total equity		1,374,963	1,068,335	45,951,101	32,089,706
Total liabilities and equity		6,164,264	5,573,022	206,009,003	167,397,362

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

		Consolidated financial statements			
		US Dollar'000		Baht'000	
	Notes	2021	2020	2021	2020
Sales and service income		4,123,592	2,282,635	133,190,083	71,331,752
Cost of sales and services		(2,392,578)	(1,822,239)	(76,916,092)	(56,989,619)
Gross profit		1,731,014	460,396	56,273,991	14,342,133
Dividend income from investment in equity instruments		8,541	1,794	273,817	55,722
Management fee and others		38,610	39,550	1,248,310	1,243,730
Interest income		8,742	9,539	277,888	298,614
Selling expenses		(170,602)	(141,477)	(5,505,622)	(4,437,418)
Administrative expenses		(304,341)	(224,001)	(9,786,939)	(6,981,721)
Investment restructuring expense		-	(30,842)	-	(985,304)
Royalty fee		(294,314)	(182,561)	(9,530,953)	(5,708,659)
Net gains (losses) from changes in fair value of financial instruments		(444,595)	22,681	(14,645,688)	710,863
Net gains on exchange rate		74,003	81,063	2,332,062	2,542,896
Interest expenses		(174,116)	(173,153)	(5,575,548)	(5,419,771)
Other finance costs		(9,557)	(6,375)	(307,046)	(199,448)
Share of profit from associates and joint ventures using the equity method	14	227,137	135,335	7,290,188	4,238,649
Profit (loss) before income taxes		690,522	(8,051)	22,344,460	(299,714)
Income taxes	20	(198,033)	(8,679)	(6,371,877)	(269,466)
Profit (loss) for the year		492,489	(16,730)	15,972,583	(569,180)
Other comprehensive income (expense), net of taxes:					
Items that will not be reclassified to profit or loss					
- Remeasurements of post-employment benefit obligations		312	(1,027)	(35,065)	(29,403)
- Losses from changes in fair value of financial assets measured at fair value through other comprehensive income		(19,530)	(7,928)	(550,393)	(246,703)
- Share of other comprehensive income (expense) from joint ventures for using the equity method		(11,781)	4,966	(344,501)	148,060
- Translation differences		-	-	3,739,834	(86,556)
Total items that will not be reclassified to profit or loss, net of taxes		(30,999)	(3,989)	2,809,875	(214,602)
Items that will be reclassified subsequently to profit or loss					
- Losses on cash flow hedge reserve		(90,885)	(1,351)	(3,149,989)	(36,926)
- Gains (losses) on net investment hedge		88,965	(77,815)	2,709,956	(2,337,323)
- Share of other comprehensive income (expense) from associates and joint ventures using the equity method		(97,853)	42,796	2,464,303	921,864
- Translation differences		(101,420)	194,395	(2,660,098)	6,156,518
Total items that will be reclassified subsequently to profit or loss, net of taxes		(201,193)	158,025	(635,828)	4,704,133
Other comprehensive income (expense) for the year, net of taxes		(232,192)	154,036	2,174,047	4,489,531
Total comprehensive income for the year		260,297	137,306	18,146,630	3,920,351
Attributable to:					
Owners of the parent		303,931	(55,739)	9,851,795	(1,786,317)
Non-controlling interests		188,558	39,009	6,120,788	1,217,137
		492,489	(16,730)	15,972,583	(569,180)
Total comprehensive income attributable to:					
Owners of the parent		109,158	85,348	10,660,443	2,486,999
Non-controlling interests		151,139	51,958	7,486,187	1,433,352
		260,297	137,306	18,146,630	3,920,351
		US Dollar		Baht	
		2021	2020	2021	2020
Earnings (losses) per share					
Basic earnings (losses) per share	28	0.049	(0.009)	1.591	(0.298)
Diluted earnings (losses) per share	28	0.046	(0.009)	1.497	(0.298)

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

Banpu Public Company Limited
Statement of Comprehensive Income
For the year ended 31 December 2021

	Notes	Separate financial statements			
		US Dollar'000		Baht'000	
		2021	2020	2021	2020
Sales		40,058	48,076	1,270,576	1,500,748
Cost of sales		(35,644)	(43,401)	(1,129,005)	(1,355,226)
Gross profit		4,414	4,675	141,571	145,522
Dividend income from subsidiaries		89,311	62,305	2,915,768	1,976,278
Dividend income from investment in equity instruments		160	271	5,011	8,662
Management fee and other income		34,646	25,164	1,119,490	787,273
Interest income		116,644	100,351	3,745,994	3,139,276
Selling expenses		(3,238)	(2,135)	(104,611)	(66,700)
Administrative expenses		(55,920)	(51,006)	(1,805,305)	(1,594,378)
Effect from group restructuring	14	21,544	41,965	675,509	1,312,902
Net losses from changes in fair value of financial instruments		(11,486)	(5,697)	(378,181)	(179,644)
Net gain (losses) on exchange rate		88,449	(11,471)	2,773,852	(349,277)
Interest expenses		(138,773)	(135,852)	(4,439,088)	(4,252,181)
Other financial costs		(4,055)	(3,581)	(129,523)	(112,105)
Profit before income taxes		141,696	24,989	4,520,487	815,628
Income taxes	20	(61,530)	10,218	(1,930,341)	312,888
Profit for the year		80,166	35,207	2,590,146	1,128,516
Other comprehensive income (expense), net of taxes:					
Items that will not be reclassified to profit or loss					
- Remeasurements of post-employment benefit obligations		219	(2,010)	-	(60,355)
- Gains (losses) from changes in fair value of financial assets measured at fair value through other comprehensive income		308	(1,889)	10,964	(56,976)
- Translation differences		-	-	3,739,834	(86,556)
Total items that will not be reclassified to profit or loss, net of taxes		527	(3,899)	3,750,798	(203,887)
Item that will be reclassified subsequently to profit or loss					
- Gains (losses) on cash flow hedge reserve		26,407	(11,229)	838,886	(337,104)
Total item that will be reclassified subsequently to profit or loss, net of taxes		26,407	(11,229)	838,886	(337,104)
Other comprehensive income (expense) for the year, net of taxes		26,934	(15,128)	4,589,684	(540,991)
Total comprehensive income for the year		107,100	20,079	7,179,830	587,525
		US Dollar		Baht	
		2021	2020	2021	2020
Earnings per share					
Basic earnings per share	28	0.013	0.006	0.418	0.188
Diluted earnings per share	28	0.012	0.006	0.394	0.188

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

Consolidated financial statements
US Dollar'000

Attributable to owners of the Parent																	
Other components of equity																	
Other comprehensive income (expense)																	
Issued and paid-up Premium on Treasury Share-based Legal Other Retained earnings Fair value reserve of Cash flow Net on dilution of Surplus Notes share capital share capital stocks payment reserve reserves Unappropriated reserve of financial assets hedge reserve investment hedge Translation differences investments in subsidiaries Other reserve Total other components of equity Non- controlling interests Total equity																	
Opening balance as at 1 January 2021		147,424	443,624	-	1,651	95,543	107,317	1,630,812	43,705	(58,610)	(77,815)	(549,015)	333,217	(42,288)	(350,806)	739,462	2,815,027
Increase in share capital	26	51,076	204,305	-	-	-	-	-	-	-	-	-	-	-	-	-	255,381
Legal reserve	26	-	-	-	-	4,854	-	(4,854)	-	-	-	-	-	-	-	-	-
Other reserves	26	-	-	-	-	-	13,842	(13,842)	-	-	-	-	-	-	-	-	-
Reserve for share-baased compensation to employees		-	-	-	18,662	-	-	-	-	-	-	-	-	-	-	-	18,662
Treasury shares of a subsidiary		-	-	-	-	-	-	-	-	-	-	-	(514)	2,754	2,240	(2,240)	-
Dividend paid	29	-	-	-	-	-	-	(55,853)	-	-	-	-	-	-	-	-	(55,853)
Dividend paid of subsidiaries		-	-	-	-	-	-	-	-	-	-	-	-	-	-	(61,676)	(61,676)
Change in shareholding interests of subsidiaries		-	-	-	-	-	-	-	-	-	-	-	424	-	424	-	424
Redemption of subsidiary's shares from non-controlling interest		-	-	-	-	-	-	(26,392)	-	-	-	-	-	-	-	(95,989)	(122,381)
Fair value of put options over non-controlling interests		-	-	-	-	-	-	-	-	-	-	-	(7,028)	(7,028)	(7,028)	-	(7,028)
Issuance of subsidiary's shares to non-controlling interest		-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3
Profit for the year		-	-	-	-	-	-	303,931	-	-	-	-	-	-	-	188,558	492,489
Other comprehensive income (expense) for the year		-	-	-	-	-	-	(2,461)	(26,984)	(60,248)	88,965	(194,045)	-	-	(192,312)	(37,419)	(232,192)
Closing balance as at 31 December 2021		198,500	647,929	-	20,313	100,397	121,159	1,831,341	16,721	(118,858)	11,150	(743,060)	333,127	(46,562)	(547,482)	730,699	3,102,856
Opening balance as at 1 January 2020		149,961	443,624	(38,138)	1,562	95,976	149,089	1,745,263	44,862	(50,802)	-	(780,509)	312,383	-	(474,066)	604,984	2,678,255
Decrease of share capital	26	(2,537)	-	38,138	-	-	(38,138)	2,537	-	-	-	-	-	-	-	-	-
Legal reserve	26	-	-	-	-	(433)	-	433	-	-	-	-	-	-	-	-	-
Other reserves	26	-	-	-	-	-	(3,634)	3,634	-	-	-	-	-	-	-	-	-
Treasury shares of a subsidiary		-	-	-	-	-	-	-	-	-	-	-	1,296	-	1,296	(2,616)	(1,320)
Warrant issuance of a subsidiary	26	-	-	-	89	-	-	-	-	-	-	-	-	-	-	20	109
Dividend paid	29	-	-	-	-	-	-	(63,758)	-	-	-	-	-	-	-	-	(63,758)
Dividend paid of subsidiaries		-	-	-	-	-	-	-	-	-	-	-	-	-	-	(33,541)	(33,541)
Change in shareholding interests of subsidiaries		-	-	-	-	-	-	(3)	3,597	7	-	(1,532)	14,150	-	16,222	(14,126)	2,093
Issuance of subsidiary's shares to non-controlling interest		-	-	-	-	-	-	-	-	-	-	-	-	-	-	95,883	95,883
Change in shareholding interests of a subsidiary and put options over non-controlling interests from corporatisation		-	-	-	-	-	-	-	-	-	-	-	5,388	(42,288)	(36,900)	36,900	-
Profit (Loss) for the year		-	-	-	-	-	-	(55,739)	-	-	-	-	-	-	-	39,009	(16,730)
Other comprehensive income (expense) for the year		-	-	-	-	-	-	(1,555)	(4,754)	(7,815)	(77,815)	233,026	-	-	142,642	12,949	154,036
Closing balance as at 31 December 2020		147,424	443,624	-	1,651	95,543	107,317	1,630,812	43,705	(58,610)	(77,815)	(549,015)	333,217	(42,288)	(350,806)	739,462	2,815,027

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

Attributable to owners of the parent																	
Other components of equity																	
Other comprehensive income (expense)																	
Surplus																	
Total other components of equity																	
Non-controlling interests																	
Total equity																	

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

Banpu Public Company Limited
Statement of Changes in Equity
For the year ended 31 December 2021

Separate financial statements										
US Dollar'000										
							Other components of equity			
							Other comprehensive income (expense)			
		Issued and		Retained earnings					Total other	
Notes	share capital	Premium on share capital	Treasury stocks	Legal reserve	Other reserve	Unappropriated	Fair value reserve of financial assets	Cash flow hedge reserve	components of equity	Total equity
Opening balance as at 1 January 2021		147,424	443,624	-	14,996	-	474,992	197	(12,701)	1,068,335
Increase of share capital	26	51,076	204,305	-	-	-	-	-	-	255,381
Legal reserve	26	-	-	-	4,854	-	(4,854)	-	-	-
Dividend paid	29	-	-	-	-	-	(55,853)	-	-	(55,853)
Profit for the year		-	-	-	-	-	80,166	-	-	80,166
Other comprehensive income for the year		-	-	-	-	-	219	308	26,715	26,934
Closing balance as at 31 December 2021		198,500	647,929	-	19,850	-	494,670	505	14,014	1,374,963
Opening balance as at 1 January 2020		149,961	443,624	(38,138)	14,996	38,138	503,016	2,086	417	1,112,014
Decrease of share capital	26	(2,537)	-	38,138	-	(38,138)	2,537	-	-	-
Dividend paid	29	-	-	-	-	-	(63,758)	-	-	(63,758)
Profit for the year		-	-	-	-	-	35,207	-	-	35,207
Other comprehensive expense for the year		-	-	-	-	-	(2,010)	(1,889)	(13,118)	(15,128)
Closing balance as at 31 December 2020		147,424	443,624	-	14,996	-	474,992	197	(12,701)	1,068,335

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

Separate financial statements

Baht'000

	Notes	Other components of equity										
		Issued and paid-up share capital	Premium on share capital	Treasury stocks	Retained earnings			Other comprehensive income (expense)			Total other components of equity	Total equity
					Legal reserve	Other reserve	Unappropriated	Fair value reserve of financial assets	Cash flow hedge reserve	Translation differences		
Opening balance as at 1 January 2021		5,074,581	15,372,438	-	516,193	-	15,053,312	5,941	(387,433)	(3,545,326)	(3,926,818)	32,089,706
Increase of share capital	26	1,691,527	6,766,109	-	-	-	-	-	-	-	-	8,457,636
Legal reserve	26	-	-	-	160,418	-	(160,418)	-	-	-	-	-
Dividend paid	29	-	-	-	-	-	(1,776,071)	-	-	-	-	(1,776,071)
Profit for the year		-	-	-	-	-	2,590,146	-	-	-	-	2,590,146
Other comprehensive income for the year		-	-	-	-	-	-	10,964	838,886	3,739,834	4,589,684	4,589,684
Closing balance as at 31 December 2021		6,766,108	22,138,547	-	676,611	-	15,706,969	16,905	451,453	194,508	662,866	45,951,101
Opening balance as at 1 January 2020		5,161,925	15,372,438	(1,157,140)	516,193	1,157,140	15,927,341	62,917	(50,329)	(3,458,770)	(3,446,182)	33,531,715
Decrease of share capital	26	(87,344)	-	1,157,140	-	(1,157,140)	87,344	-	-	-	-	-
Dividend paid	29	-	-	-	-	-	(2,029,534)	-	-	-	-	(2,029,534)
Profit for the year		-	-	-	-	-	1,128,516	-	-	-	-	1,128,516
Other comprehensive expense for the year		-	-	-	-	-	(60,355)	(56,976)	(337,104)	(86,556)	(480,636)	(540,991)
Closing balance as at 31 December 2020		5,074,581	15,372,438	-	516,193	-	15,053,312	5,941	(387,433)	(3,545,326)	(3,926,818)	32,089,706

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

Banpu Public Company Limited
Statement of Cash Flows
For the year ended 31 December 2021

Consolidated financial statements					
		US Dollar'000		Baht'000	
	Notes	2021	2020	2021	2020
Cash flows from operating activities					
Profit (loss) for the year before income taxes		690,522	(8,051)	22,344,460	(299,714)
Adjustment to reconcile profit (loss) before taxes to cash receipts from (payments in) operations					
- Depreciation and amortisation		497,079	432,767	15,895,145	13,542,881
- Write-off of property, plant and equipment	15	2,364	2,857	75,608	89,400
- Write-off of right-of-use assets		4,714	2,326	150,726	72,764
- Write-off of deferred exploration and development expenditures		-	4,492	-	140,571
- Expected credit loss		8,974	2,951	286,962	92,347
- Allowance for slow-moving of spare parts and machinery supplies and coal		4,336	996	138,653	31,169
- Allowance for net realisable value of fuel		1,466	-	46,882	-
- Dividend income from equity instruments		(8,541)	(1,794)	(273,817)	(55,722)
- Interest income		(8,742)	(9,539)	(277,888)	(298,614)
- Interest expenses		174,116	173,153	5,575,548	5,419,771
- Other finance costs		9,557	6,375	307,046	199,448
- Share of profit from associates and joint ventures using the equity method	14	(227,137)	(135,335)	(7,290,188)	(4,238,649)
- Gain from business combination		(71)	-	(2,270)	-
- Net gains on disposal of property, plant and equipment		(3,939)	(2,856)	(125,958)	(89,375)
- Net gains on acquisition of additional interest		-	(11,471)	-	(358,970)
- Investment restructuring expense		-	30,842	-	985,304
- Share based payment expenses		18,662	109	622,650	3,321
- Net (gains) losses from changes in fair value of financial instruments		444,595	(22,681)	14,645,688	(710,863)
- Net (gains) losses on exchange rate		(544,382)	8,523	(18,688,403)	7,558
Cash flow before changes in working capital		1,063,573	473,664	33,430,844	14,532,627
Changes in working capital (excluding effects from business combination)					
- Trade accounts receivable		(137,367)	3,737	(4,392,598)	116,945
- Amounts due from related parties		4	(14)	80	(438)
- Inventories		(8,402)	37,411	(268,672)	1,170,729
- Spare parts and machinery supplies		(13,369)	4,566	(427,502)	142,887
- Other current assets		24,655	(65,712)	788,395	(2,056,372)
- Deferred overburden expenditures stripping costs		44,269	49,270	1,415,594	1,541,841
- Other non-current assets		(96,514)	15,373	(3,086,238)	481,078
- Trade accounts payable		(9,905)	3,715	(316,733)	116,256
- Accrued royalty expenses		(19,277)	12,892	(616,423)	403,438
- Accrued overburden and coal transportation costs		17,026	(13,837)	544,442	(433,011)
- Employee benefits obligation		(6,725)	(13,259)	(215,046)	(414,923)
- Other current liabilities		222,270	(68,076)	7,107,550	(2,130,350)
- Other non-current liabilities		(46,031)	20,811	(1,471,938)	651,253
Cash generated from operating activities		1,034,207	460,541	32,491,755	14,121,960
- Interest paid and financial charges paid		(179,074)	(183,389)	(5,726,267)	(5,738,920)
- Income tax paid		(83,977)	(77,826)	(2,685,341)	(2,435,463)
- Income tax refund		38,243	11,408	1,222,900	356,999
Net cash receipts from operating activities		809,399	210,734	25,303,047	6,304,576

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

Banpu Public Company Limited
Statement of Cash Flows
For the year ended 31 December 2021

	Notes	Consolidated financial statements			
		US Dollar'000		Baht'000	
		2021	2020	2021	2020
Cash flows from investing activities					
Cash payments for financial assets measured at fair value through profit or loss		(66,056)	(35,363)	(2,112,279)	(1,106,639)
Cash receipts from financial assets measured at fair value through profit or loss		54,617	27,969	1,746,493	875,253
Cash receipts from financial assets measured at amortised cost		-	102,334	-	3,202,409
Cash receipts from financial assets measured at fair value through other comprehensive income		2,365	18,924	75,626	592,202
Cash payments for financial assets measured at fair value through other comprehensive income		(7,080)	(11,487)	(226,398)	(359,471)
Cash receipts from short-term loan to a related party	30	1,564	7,101	50,000	222,205
Cash payments for short-term loan to related parties	30	(10,951)	(48,411)	(350,178)	(1,514,973)
Cash receipts from long-term loan to related parties		-	15	-	472
Cash payments for short-term loan from a related party		(5,014)	-	(160,335)	-
Net cash payments for business combination		(84,029)	-	(2,687,004)	-
Net cash payments for acquisition of investment in a subsidiary	14	(394,594)	-	(12,617,972)	-
Cash payments for addition and purchase of investments in associates and joint ventures	14	(97,237)	(85,829)	(3,109,360)	(2,685,897)
Cash payments for investment restructuring		-	(8,243)	-	(257,954)
Cash receipts from disposal of property, plant and equipment		31,976	15,819	1,022,500	495,035
Cash payments for purchase of property, plant and equipment		(281,288)	(629,084)	(8,994,775)	(19,686,366)
Cash payments for right-of-use assets		-	(3,770)	-	(117,977)
Cash payments for deferred exploration and development expenditures		(165,453)	(183,395)	(5,290,707)	(5,739,108)
Interest received		7,851	8,806	251,052	275,572
Cash receipts from dividends from joint ventures		54,493	60,000	1,742,528	1,877,622
Cash receipts from dividends from equity instruments		8,541	1,794	273,116	56,141
Cash receipts from (payments for) placement of restricted deposits at banks		(107,461)	69,247	(3,436,291)	2,166,995
Net cash payments in investing activities		(1,057,756)	(693,573)	(33,823,984)	(21,704,479)
Cash flows from financing activities					
Cash receipts from short-term loans from financial institutions	22	1,766,914	1,389,176	56,500,783	43,472,457
Cash payments of short-term loans from financial institutions	22	(1,368,723)	(1,032,162)	(43,767,793)	(32,300,177)
Cash receipts from long-term loans from financial institutions	24	861,635	1,023,507	27,552,585	32,029,321
Cash payments of long-term loans from financial institutions	24	(1,063,379)	(301,141)	(34,003,777)	(9,423,816)
Cash receipts from debentures	25	679,669	-	21,733,830	-
Cash payments of debentures	25	(129,939)	(170,076)	(4,155,083)	(5,322,314)
Cash receipts from increase of share capital	26	255,381	-	8,457,636	-
Cash payments for redemption of subsidiary's shares from non-controlling interest		(122,381)	-	(4,080,647)	-
Cash payments for treasury stocks		(2,754)	(1,320)	(88,994)	(39,661)
Payments for principal elements of lease payment		(35,116)	(39,116)	(1,122,916)	(1,224,084)
Dividend paid to shareholders	29	(55,853)	(63,758)	(1,776,071)	(2,029,534)
Dividend paid to non-controlling interests of subsidiaries		(61,676)	(33,541)	(2,005,642)	(1,057,673)
Net cash receipts from financing activities		723,778	771,569	23,243,911	24,104,519
Net increase in cash and cash equivalents		475,421	288,730	14,722,974	8,704,616
Exchange differences on cash and cash equivalents		(21,516)	8,543	2,917,475	173,976
Cash and cash equivalents at beginning of the year		730,456	433,183	21,940,785	13,062,193
Cash and cash equivalents at end of the year		1,184,361	730,456	39,581,234	21,940,785

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

Consolidated financial statements				
	Notes	US Dollar'000		Baht'000
		2021	2020	2021
Supplementary information of cash flows				
Significant non-cash transactions are as follows:				
Other payables from purchase of property, plant and equipment		37,793	28,990	1,263,045
Changes in fair value of contingent liabilities from asset acquisition	6	194,973	(7,140)	6,234,681
Options over non-controlling interests from restructuring activities	6	46,562	42,288	1,556,094
Acquisitions and remeasurement of right-of-use assets				
under lease contracts	16	27,946	39,894	893,640

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

	Notes	Separate financial statements			
		US Dollar'000		Baht'000	
		2021	2020	2021	2020
Cash flows from operating activities					
Profit for the year before income taxes		141,696	24,989	4,520,487	815,628
Adjustment to reconcile profit before income taxes to					
cash receipts from (payments in) operations					
- Depreciation and amortisation		2,332	2,454	74,566	76,796
- Write-off of property, plant and equipment	15	-	3	3	84
- Dividend income from subsidiaries		(89,311)	(62,305)	(2,915,768)	(1,976,278)
- Dividend income from equity instruments		(160)	(271)	(5,011)	(8,662)
- Interest income		(116,644)	(100,351)	(3,745,994)	(3,139,276)
- Interest expenses		138,773	135,852	4,439,088	4,252,181
- Other finance costs		4,055	3,581	129,523	112,105
- Effect from group restructuring	14	(21,544)	(41,965)	(675,509)	(1,312,902)
- Gains on investment sold under common control		-	(1,057)	-	(33,074)
- Gains on disposal of property, plant and equipment		(131)	(298)	(4,204)	(9,327)
- Share-based payment expenses		-	26	-	808
- Net (gains) losses from changes in fair value of financial instruments		(6,988)	228	(223,462)	7,137
- Net (gains) losses on exchange rate		(94,767)	20,165	(3,084,037)	603,273
Cash flow before changes in working capital		(42,689)	(18,949)	(1,490,318)	(611,507)
Changes in working capital					
- Trade accounts receivable		8,363	(2,949)	267,431	(92,293)
- Amounts due from related parties		(3,975)	2,029	(127,109)	63,492
- Advances to related parties		(228)	(997)	(7,279)	(31,200)
- Inventories		375	(1,270)	11,995	(39,744)
- Other current assets		(6,041)	(8,591)	(193,169)	(268,859)
- Other non-current assets		142	(1,142)	4,545	(35,749)
- Trade accounts payable to subsidiaries		(3,632)	3,575	(116,146)	111,861
- Advances from and amounts due to related parties		(221)	(185)	(7,081)	(5,796)
- Employee benefits obligation		(1,373)	814	(43,913)	25,474
- Other current liabilities		5,583	(531)	178,544	(16,609)
- Other non-current liabilities		(60)	60	(1,926)	1,866
Cash used in operating activities		(43,756)	(28,136)	(1,524,426)	(899,064)
- Interest paid and other finance costs paid		(128,797)	(138,379)	(4,118,557)	(4,330,382)
Net cash payments in operating activities		(172,553)	(166,515)	(5,642,983)	(5,229,446)

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

	Notes	Separate financial statements			
		US Dollar'000		Baht'000	
		2021	2020	2021	2020
Cash flows from investing activities					
Cash receipt from advance to a related party		-	77,000	-	2,409,615
Cash receipt from short-term loan to a related party	30	18,800	-	601,169	-
Cash payments for short-term loan to related parties	30	(75,493)	(10,000)	(2,414,033)	(312,937)
Cash receipts from long-term loans to related parties	30	-	223,834	-	7,004,602
Cash payments for long-term loans to related parties	30	(680,001)	(386,596)	(21,744,449)	(12,098,022)
Cash payments for additional investments in subsidiaries	14	(8,133)	(500,628)	(260,067)	(15,666,515)
Cash payments for financial assets measured at fair value through other comprehensive income		(780)	-	(24,950)	-
Cash payments for purchase of property, plant and equipment		(58)	(1,563)	(1,843)	(48,907)
Cash receipts from disposal of property, plant and equipment		134	300	4,304	9,374
Interest received		22,257	39,130	711,701	1,224,509
Cash receipts from dividends from subsidiaries		88,971	62,451	2,845,025	1,954,332
Cash receipts from dividends from equity instruments		160	271	5,011	8,662
Net cash payments in investing activities		(634,143)	(495,801)	(20,278,132)	(15,515,287)
Cash flows from financing activities					
Cash receipts from short-term loans from financial institutions	22	1,246,082	1,169,581	39,846,088	36,600,530
Cash payments for short-term loans from financial institutions	22	(1,165,231)	(812,953)	(37,260,707)	(25,440,306)
Cash receipts from short-term loan from a related party	30	-	3,000	-	93,881
Cash payments for short-term loan from a related party	30	-	(10,684)	-	(334,331)
Cash receipts from long-term loans from financial institutions	24	317,000	956,902	10,136,741	29,944,993
Cash payments for long-term loans from financial institutions	24	(430,000)	(224,000)	(13,750,153)	(7,009,789)
Cash receipts from long-term loan from a related party		6,000		191,863	
Cash payments for long-term loan from a related party		(6,000)		(191,863)	
Payments for principal elements of lease payment		(1,092)	(1,115)	(34,907)	(34,904)
Cash receipts from debentures	25	679,669	-	21,733,830	-
Cash payments for debentures	25	(129,939)	(170,076)	(4,155,083)	(5,322,314)
Cash receipts from increase of share capital	26	255,381	-	8,457,636	-
Dividend paid to shareholders	29	(55,853)	(63,758)	(1,776,071)	(2,029,534)
Net cash receipts from financing activities		716,017	846,897	23,197,374	26,468,226
Net increase (decrease) in cash and cash equivalents		(90,679)	184,581	(2,723,741)	5,723,493
Exchange differences on cash and cash equivalents		(11,383)	2,059	43,925	(120,831)
Cash and cash equivalents at beginning of the year		216,119	29,479	6,491,574	888,912
Cash and cash equivalents at end of the year		114,057	216,119	3,811,758	6,491,574
Supplementary information of cash flows					
Significant non-cash transactions are as follows:					
Other payables for purchase of property, plant and equipment		80	25	2,689	785
Note receivables from group restructuring	14.1 b)	151	-	4,727	-

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

1 General information

Banpu Public Company Limited (the Company) is a public limited company which is listed on the Stock Exchange of Thailand. The Company is incorporated and domiciled in Thailand. The address of the Company's registered office is 1550 Thanapoom Tower, 27th Floor, New Petchburi Road, Makkasan, Ratchathewi, Bangkok.

For reporting purposes, the Company and its subsidiaries are referred to as "the Group".

The Group is engaged in the coal mining and power businesses. The Group has operations in Thailand and overseas which are mainly in Indonesia, the People's Republic of China, Australia, Mongolia, Vietnam, Japan, and the United States.

These consolidated and separate financial statements were authorised by the Board of Directors on 23 February 2022.

2 Basis of preparation

The consolidated and separate financial statements have been prepared in accordance with Thai Financial Reporting Standards (TFRS) and the financial reporting requirements issued under the Securities and Exchange Act.

The Company's management has determined that the US Dollar is the Company's functional currency and has presented the consolidated and separate financial statements in US Dollar, in accordance with Thai Accounting Standard 21 (TAS 21), the Effects of Changes in Foreign Exchange Rates. The Company is required to present its consolidated and separate financial statements in Baht by converting the US Dollar to Baht, using the basis as described in Note 4.3 (c) to comply with the regulations of the Stock Exchange of Thailand and the Department of Business Development.

The consolidated and separate financial statements have been prepared under the historical cost convention except for certain accounts as disclosed in the following accounting policies.

The preparation of financial statements in conformity with TFRS requires management to use certain critical accounting estimates and to exercise its judgement in applying the Group's accounting policies. The areas involving a higher degree of judgement or complexity, or areas that are more likely to be materially adjusted due to changes in estimates and assumptions are disclosed in Note 7.

An English version of the consolidated and separate financial statements have been prepared from the statutory financial statements that are in the Thai language. In the event of a conflict or a difference in interpretation between the two languages, the Thai language statutory financial statements shall prevail.

The Group has reclassified comparative figures of note receivables amounting to US Dollar 0.35 million from trade receivables and note receivables, net to investment in debt instruments measured at fair value through other comprehensive income to conform with the current period presentation of the Group.

3 Amended financial reporting standards

3.1 Amended financial reporting standards that are effective for accounting period beginning or after 1 January 2021

Revised Conceptual Framework for Financial Reporting added the following key principals and guidance:

- Measurement basis, including factors in considering difference measurement basis
- Presentation and disclosure, including classification of income and expenses in other comprehensive income
- Definition of a reporting entity, which maybe a legal entity, or a portion of an entity
- Derecognition of assets and liabilities

The amendment also includes the revision to the definition of an asset and liability in the financial statements, and clarification to the prominence of stewardship in the objective of financial reporting.

Amendment to TFRS 3, Business combinations amended the definition of a business which requires an acquisition to include an input and a substantive process that together significantly contribute to the ability to create outputs. The definition of the term 'outputs' is amended to focus on goods and services provided to customers and to exclude returns in the form of lower costs and other economic benefits. In addition, the standard sets out an optional test (the concentration test) to permit a simplified assessment of whether an acquired set of activities and assets is not a business.

Amendment to TFRS 9, Financial instruments and TFRS 7, Financial instruments: disclosures amended to provide relief from applying specific hedge accounting requirements to the uncertainty arising from interest rate benchmark reform such as IBOR. The amendment also requires disclosure of hedging relationships directly affected by the uncertainty.

Amendment to TAS 1, Presentation of financial statements and TAS 8, Accounting policies, changes in accounting estimates and errors amended to definition of materiality. The amendment allows for a consistent definition of materiality throughout the TFRS and the Conceptual Framework for Financial Reporting. It also clarified when information is material and incorporates some of the guidance in TAS 1 about immaterial information.

The Group has adopted these financial reporting standards since 1 January 2021, except the amendment to TFRS 3, Business combinations, that has been early adopted before the effective date as disclosed in the financial statements for the year ended 31 December 2020. However, the adoption of these financial reporting standards for the accounting period beginning on 1 January 2021 has no significant impact to the financial statements for the year ended 31 December 2021.

3.2 Amended financial reporting standards that are effective for accounting period beginning or after 1 January 2022.
The Group has not yet early adopted these standards.

Interest rate benchmark (IBOR) reform - phase 2, amendments to TFRS 9, TFRS 7, TFRS 16 and TFRS 4, and accounting guidance, financial instruments and disclosures for insurance business provide relief measures addressing issues that might affect financial reporting during the reform, including the effects of changes to contractual cash flows or hedging relationship arising from the replacement of one benchmark with an alternative benchmark.

Key relief measures of the phase 2 amendments are as follows:

- When changing the basis for determining contractual cash flows for financial assets and financial liabilities (including lease liabilities), changes that are necessary as a direct result of the IBOR reform and which are considered economically equivalent, will not result in an immediate gain or loss in the statement of income. TFRS 16 has also been amended to require lessees to use a similar practical expedient when accounting for lease modifications that change the basis for determining future lease payments as a result of the IBOR reform.
- Hedge accounting relief measures will allow most TFRS 9 hedge relationships that are directly affected by the IBOR reform to continue. However, additional ineffectiveness might need to be recorded.

TFRS 7 requires additional disclosure about:

- the nature and extent of risks arising from the IBOR reform to which the entity is exposed to
- how the entity manages those risks
- the entity's progress in transitioning from the IBOR to alternative benchmark rates and how the entity is managing this transition.

The Group's management is currently assessing the impact of adoption of these standards.

4 Accounting policies

The principal accounting policies adopted in the preparation of these consolidated and separate financial statements are set out below.

4.1 Principles of consolidation and equity accounting

a) Subsidiaries

Subsidiaries are all entities over which the Group has control. The Group controls an entity when the Group 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. Subsidiaries are consolidated from the date on which control is transferred to the Group until the date that control ceases.

In the separate financial statements, investments in subsidiaries are accounted for using cost method less impairment (if any).

b) Associates

Associates are all entities over which the Group has significant influence but not control or joint control. Investments in associates are accounted for using the equity method of accounting.

In the separate financial statements, investments in associates are accounted for using cost method less impairment (if any).

c) Joint arrangements

Investments in joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations of each investor, rather than the legal structure of the joint arrangements.

Joint operations

A joint operation is a joint arrangement whereby the Group has rights to the assets, and obligations for the liabilities relating to the arrangement. The Group recognises its direct right to the assets, liabilities, revenues and expenses of joint operations and its share of any jointly held or incurred assets, liabilities, revenues, and expenses. These have been incorporated in the Group's financial statement line items.

Joint ventures

A joint venture is a joint arrangement whereby the Group has rights to the net assets of the arrangement. Interests in joint ventures are accounted for using the equity method.

In the separate financial statements, the joint arrangements are accounted for using cost method less impairment (if any).

d) Equity method

The investment is initially recognised at cost which is consideration paid and directly attributable costs.

The Group's subsequently recognises shares of its associates and joint ventures' profits or losses and other comprehensive income in the profit or loss and other comprehensive income, respectively. The subsequent cumulative movements are adjusted against the carrying amount of the investment.

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

e) Changes in ownership interests

The Group treats transactions with non-controlling interests that do not result in a loss of control as transactions with equity owners of the Group. A difference between the amount of the adjustment to non-controlling interests to reflect their relative interest in the subsidiary and any consideration paid or received is recognised within equity.

If the ownership interest in associates and joint ventures is reduced but significant influence and joint control is retained, only a proportionate share of the amounts previously recognised in other comprehensive income is reclassified to profit or loss where appropriate. Profit or loss from reduce of the ownership interest in associates and joint ventures is recognise in profit or loss.

When the Group losses control, joint control or significant influence over investments, any retained interest in the investment is remeasured to its fair value, with the change in carrying amount recognised in profit or loss. The fair value becomes the initial carrying amount of the retained interest which is reclassified to investment in an associate, or a joint venture or a financial asset accordingly.

f) Intercompany transactions on consolidation

Intra-group transactions, balances and unrealised gains on transactions are eliminated. Unrealised gains on transactions between the Group and its associates and joint ventures are eliminated to the extent of the Group's interest in the associates and joint ventures. Unrealised losses are also eliminated in the same manner unless the transaction provides evidence of an impairment of the asset transferred.

4.2. Business combination

The Group applies the acquisition method to account for business combinations with an exception on business combination under common control. The consideration transferred for the acquisition of a subsidiary comprises fair value of the assets transferred, liabilities incurred to the former owners of the acquiree, and equity interests issued by the Group.

Identifiable assets and liabilities acquired, and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date.

On an acquisition-by-acquisition basis, the Group initially recognises any non-controlling interest in the acquiree either at fair value or at the non-controlling interest's proportionate share of the acquiree's net assets.

The excess of the consideration transferred, the amount of any non-controlling interest recognised and the acquisition-date fair value of any previous equity interest in the acquiree (for business combination achieved in stages) over the fair value of the identifiable net assets acquired is recorded as goodwill. In the case of a bargain purchase, the difference is recognised directly in profit or loss.

Acquisition-related cost

Acquisition-related cost are recognised as expenses in consolidated financial statements.

Step-up acquisition

If the business combination is achieved in stages, the acquisition date carrying value of the acquirer's previously held equity interest in the acquiree is re-measured to fair value at the acquisition date; any gains or losses arising from such re-measured are recognised in profit or loss.

Changes in fair value of contingent consideration paid/received

Subsequent changes to the fair value of the contingent consideration that is an asset or liability is recognised in profit or loss. Contingent consideration that is classified as equity is not re-measured.

Business combination under common control

The Group accounts for business combination under common control by measuring acquired assets and liabilities of the acquiree at their carrying values presented in the highest level of the consolidation. The Group retrospectively adjusted the business combination under common control transactions as if the combination had occurred on the later of the beginning of the preceding comparative period and the date the acquiree has become under common control.

Consideration of business combination under common control are the aggregated amount of fair value of assets transferred, liabilities incurred, and equity instruments issued by the acquirer at the date of which the exchange in control occurs.

The difference between consideration under business combination under common control and the acquirer's interests in the carrying value of the acquiree is presented as "surplus arising from business combination under common control" in equity and is derecognised when the investment is disposed of by transferred to retained earnings.

4.3 Foreign currency translation

a) Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which each entity operates (the Functional Currency). The financial statements are presented in US Dollar, which is the Company's functional currency and presentation currency.

b) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transaction. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the profit or loss.

When a gain or loss on a non-monetary item is recognised in other comprehensive income, any exchange component of that gain or loss is recognised in other comprehensive income. Conversely, when a gain or loss on a non-monetary item is recognised in profit and loss, any exchange component of that gain or loss is recognised in profit and loss.

c) Group companies

The results and financial position of all the Group's entities (none of which has the currency of a hyper-inflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- assets and liabilities are translated at the closing rate at the date of respective statement of financial position;
- income and expenses for statement of comprehensive income are translated at average exchange rates; and
- all resulting exchange differences are recognised in other comprehensive income.

Goodwill and fair value adjustments arising on the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the closing rate.

To comply with the regulations of the Stock Exchange of Thailand and Department of Business Development, the Group has to present the financial statements in Baht that are converted from the US Dollar financial statements by using the basis as described in Note 4.3 c).

4.4 Cash and cash equivalents

In the statements of cash flows, cash and cash equivalents includes cash on hand, deposits held at call with banks, other short-term highly liquid investments with original maturities of three months or less and bank overdrafts.

4.5 Trade receivables

Trade receivables are amounts due from customers for goods sold or service performed in the ordinary course of business. They are classified as current.

Trade receivables are recognised initially at the amount of consideration that is unconditionally unless they contain significant financing components, when they are recognised at its present value. The Group holds the trade receivables with the objective to collect the contractual cash flows and therefore measures them subsequently at amortised cost.

The impairment of trade receivables has been disclosed in Note 4.7 f).

4.6 Inventories, spare parts and machinery supplies

Inventories

Inventories consist of coal, fuel and natural gas are valued at the lower of cost or net realisable value. Cost is determined on a weighted average method. The cost of coal comprises direct labour, other direct costs, and related production overhead. The cost of fuel and natural gas comprises both the purchase price and costs directly attributable to the acquisition of fuel and natural gas.

Net realisable value is the estimate of the selling price in the ordinary course of business, less the costs of completion and selling expenses. The Group recognises allowance for slow-moving of coal and fuel based on a specific case.

Spare parts and machinery supplies

Spare parts and machinery supplies are stated at cost less allowance for obsolescence, slow-moving and defective. Cost is determined on a weighted average method. The cost of purchase comprises both the purchase price and costs directly attributable to the acquisition of spare parts and machinery supplies, such as import duties and transportation charge, less all attributable discounts, allowances, or rebates. Spare parts and machinery supplies are charged to production costs in the period in which they are used.

Allowance is made for obsolete, slow-moving, and defective spare parts and machinery supplies on a specific case.

4.7 Financial assets

a) Classification

The Group classifies its debt instrument financial assets in the following measurement categories depending on i) business model for managing the asset and ii) the cash flow characteristics of the asset whether they represent solely payments of principal and interest (SPPI).

- those to be measured subsequently at fair value (either through other comprehensive income or through profit or loss); and
- those to be measured at amortised cost.

The Group reclassifies debt investments when and only when its business model for managing those assets changes.

For investments in equity instruments, the Group has an irrevocable election at the time of initial recognition to account for the equity investment at fair value through profit or loss (FVPL) or at fair value through other comprehensive income (FVOCI) except those that are held for trading, they are measured at FVPL.

b) Recognition and derecognition

Purchases, acquisitions, and sales of financial assets are recognised on trade-date, the date on which the Group commits to purchase or sell the asset. Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or have been transferred and the Group has transferred substantially all the risks and rewards of ownership.

c) Measurement

At initial recognition, the Group measures a financial asset at its fair value plus, in the case of a financial asset not at FVPL, transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at FVPL are expensed in profit or loss.

Financial assets with embedded derivatives are considered in their entirety when determining whether the cash flows are solely payment of principal and interest (SPPI).

d) Debt instruments

Subsequent measurement of debt instruments depends on the Group's business model for managing the asset and the cash flow characteristics of the financial assets. There are three measurement categories into which the Group classifies its debt instruments:

- Amortised cost: Financial assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortised cost. Interest income from these financial assets is included in interest income using the effective interest rate method. Any gain or loss arising on derecognition is recognised directly in profit or loss and presented in other gains (losses) together with foreign exchange gains and losses. Impairment expenses are included in administrative expenses.
- FVOCI: Financial assets that are held for i) collection of contractual cash flows; and ii) for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest, are measured at FVOCI. Movements in the carrying amount are taken through other comprehensive income (OCI), except for the recognition of impairment gains or losses, interest income using the effective interest method, and foreign exchange gains and losses which are recognised in profit or loss. When the financial assets are derecognised, the cumulative gain or loss previously recognised in OCI is reclassified from equity to profit or loss and recognised in other gains (losses). Interest income is included in interest income. Impairment expenses are included in administrative expenses.
- FVPL: Financial assets that do not meet the criteria for amortised cost or FVOCI are measured at FVPL. A gain or loss on a debt investment that is subsequently measured at FVPL is recognised in profit or loss and presented net within net gains (losses) from changes in fair value of financial instruments in the period in which it arises.

e) Equity instruments

The Group measures all equity investments at fair value. Where the Group has elected to present fair value gains and losses on equity instruments in OCI, there is no subsequent reclassification of fair value gains and losses to profit or loss following the derecognition of the investment. Dividends from such investments continue to be recognised in profit or loss as dividend income when the right to receive payments is established.

Changes in the fair value of financial assets at FVPL are recognised in net gains (losses) from changes in fair value of financial instruments in the statement of comprehensive income.

Impairment losses (and reversal of impairment losses) on equity investments are reported together with changes in fair value.

f) Impairment

The Group applies the TFRS 9 simplified approach in measuring the impairment of trade receivables and other receivables, which applies lifetime expected credit loss, from initial recognition, for trade receivables and other receivables.

To measure the expected credit losses, trade receivables have been grouped based on shared credit risk characteristics and the days past due. The expected credit loss rates are based on payment profiles, historical credit losses as well as forward-looking information and factors that may affect the ability of the customers to settle the outstanding balances.

For other financial assets carried at amortised cost and FVOCI, the Group applies TFRS 9 general approach in measuring the impairment of those financial assets. Under the general approach, the 12-month or the lifetime expected credit loss is applied depending on whether there has been a significant increase in credit risk since the initial recognition.

The significant increase in credit risk (from initial recognition) assessment is performed every end of reporting period by comparing i) expected risk of default as of the reporting date and ii) estimated risk of default on the date of initial recognition.

The Group assesses expected credit loss by taking into consideration forward-looking information and past experiences. The expected credit loss is a probability-weighted estimate of credit losses (probability-weighted present value of estimated cash shortfall). The cash shortfall is the difference between all contractual cash flows that are due to the Group and all cash flows expected to receive, discounted at the original effective interest rate.

When measuring expected credit losses, the Group reflects the following:

- probability-weighted estimated uncollectible amounts
- time value of money; and
- supportable and reasonable information as of the reporting date about past experience, current conditions, and forecasts of future situations.

Impairment and reversal of impairment losses are recognised in profit or loss and included in administrative expenses.

4.8 Non-current assets held-for-sale

Non-current assets (or disposal groups) are classified as assets held-for-sale when their carrying amount will be recovered principally through a sale transaction and a sale is considered highly probable. They are measured at the lower of the carrying amount and fair value less costs to sell.

An impairment loss is recognised for write-down of the asset (or disposal group) to fair value less costs to sell. A gain is recognised for any subsequent increases in fair value less costs to sell of an asset (or disposal group), but not in excess of any cumulative impairment loss previously recognised.

4.9 Investment property

Property that is held for long-term rental or for capital appreciation or both, and that is not occupied by the companies in the Group, is classified as investment property. Investment property also includes property that is being constructed or developed for future use as investment property or land held for a currently undetermined future use. The Group's investment property is land held for a currently undetermined future use.

Investment property is measured initially at its cost including related transaction costs. Subsequently, the investment property is carried at cost less accumulated impairment losses.

Subsequent expenditure is capitalised to the asset's carrying amount only when it is probable that future economic benefits associated with the expenditure will flow to the Group and the cost of the item can be measured reliably. All other repair and maintenance costs are expensed when incurred.

4.10 Property, plant and equipment

Property, plant and equipment are initially recorded at cost including contingent consideration arrangement. Subsequently, all plant and equipment are stated at historical cost less accumulated depreciation and allowance for impairment. Subsequent changes in contingent consideration shall be recognised as part of its cost.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognised. All other repairs and maintenance are charged to profit or loss during the financial period in which they are incurred.

Land is not depreciated. Depreciation on other assets is calculated using the straight-line method to allocate their cost to their residual values over their estimated useful lives as follows:

Land improvement	10 years
Buildings, construction and building improvement	depend on period of the mine or 5 to 30 years and 30 years for power plants
Machinery and equipment	5 to 40 years
Furniture	3 and 5 years
Office equipment and tools	3 and 5 years
Motor vehicles	4 and 5 years
Equipment under finance lease	5 to 15 years

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

Where the carrying amount of an asset is greater than its estimated recoverable amount, it is written down immediately to its recoverable amount.

Gains or losses on disposals are determined by comparing proceeds with carrying amount and are recognised in the profit or loss.

Gas exploration and producing assets

Probable reserves represent reserves that are assessed by the Group at the time when there is an acquisition of business. Probable reserves will be classified as gas properties once they are proved reserves and amortised using the unit of production method.

Costs of properties comprise total acquisition costs of natural gas rights or the acquisition costs of the portion of properties, decommissioning costs as well as equipment and support equipment.

Exploratory drilling costs are capitalised and will be classified as deferred exploration and development expenditures if their exploratory wells have identified proved reserves that have been found to be commercially viable. However, if proved reserves are not identified or are not commercially viable, such drilling costs will be expensed in the profit or loss.

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

Development costs, whether relating to the successful or unsuccessful development of wells, are capitalised.

The capitalised acquisition costs of natural gas rights are amortised using the unit of production method based on proved reserves. Depreciation of exploratory wells, development costs and decommissioning costs, except unsuccessful projects, are calculated using the unit of production method based on proved reserves or proved developed reserves. The Group recognises changes in reserve estimates prospectively.

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

Midstream assets

Costs of properties comprise purchase prices and other direct costs necessary to bring the asset to a working condition suitable for its intended use. Depreciation is calculated on the straight-line method over their estimated useful life as follows:

Compressor station and meter station	25 years
Pipelines	40 years

4.11 Goodwill

Goodwill represents the excess of the cost of an acquisition over the fair value of the Group's share of the net assets of the acquired subsidiary, joint venture, or associated undertaking at the date of acquisition. Goodwill on acquisitions of subsidiaries is separately reported in the consolidated statement of financial position. Goodwill on acquisitions of interests in joint ventures or associates is included in interests in joint ventures and investments in associates and is tested for impairment as part of the overall balance.

Separately recognised goodwill is tested annually for impairment and carried at cost less accumulated impairment losses. Impairment losses on goodwill are not reversed. Gains and losses on the disposal of an entity include the carrying amount of goodwill relating to the entity sold.

Goodwill is allocated to cash-generating units for the purpose of impairment testing. The allocation is made to those cash-generating units or group of cash-generating units that are expected to benefit from the business combination in which the goodwill arose, identified according to operating segment.

4.12 Intangible assets

a) Computer software

Computer software development costs recognised as assets are amortised over their estimated useful lives, which do not exceed 5 years.

b) Mining property rights

Mining property rights represent the excess of the cost of an acquisition over the fair value of net assets, which in managements' view represents future economic benefits attributable to the mining rights held by subsidiaries. Mining property rights are amortised using the units of coal production.

c) Deferred unfavourable contract liabilities

Deferred unfavourable contract liabilities are recognised as identifiable liabilities of acquiree as part of the purchase price allocation at the acquisition date. The unfavourable contract liabilities incurred from an excess of the fair value of long-term coal sales contracts than sales values specified in such coal sales contracts. The deferred unfavourable contract liabilities are amortised based on delivered units of coal.

d) Deferred exploration and development expenditures

Exploration expenditures are capitalised on an area of interest basis. Such expenditures comprise net direct costs such as licence, geology and geophysics expenditures and do not include general overheads or administrative expenditures not directly attributable to a particular area of interest. Exploration expenditures are capitalised as deferred expenditures when the following conditions are met:

- a) such costs are expected to be recouped through successful development and exploitation of the area of interest or, by its sales; and
- b) exploration activities in the area of interest have not yet reached the stage which permits a reasonable assessment of the existence of economically recoverable reserves, and active operations in the area are continuing.

Recoupment of exploration expenditure carried forward is dependent upon successful development and commercial exploitation, or sale of the respective area. Each area of interest is reviewed at the end of period. Exploration expenditures in respect of an area of interest, which has been abandoned or for which a decision has been made by the Group against the commercial viability of the area of interest, are written-off in the period the decision is made to the profit or loss.

Development expenditures and incorporated costs in developing an area of interest prior to commencement of operations in the respective area, as long as they meet the criteria for deferral, are capitalised.

Deferred exploration and development expenditure is principally amortised using the units of coal production of each area of interest starting from the commencement of commercial operations.

e) Stripping costs/Overburden costs

The Group recognises the production stripping costs as assets if, and only if, all of the following are met:

- a) It is probable that the future economic benefit associated with the stripping activity will flow to the entity.
- b) The entity can identify the component of the ore body for which access has been improved; and
- c) The costs relating to the stripping activity associated with that component can be measured reliably.

The deferred overburden expenditures/stripping costs shall be initially measured at cost and subsequently stated at cost less accumulated amortisation and impairment losses, if any. Amortisation is calculated using the units of production method.

f) Rights to operate the power plants

The rights to operate the power plants arising from purchase of investments are amortised over the periods of estimated useful life of the power plants.

g) Rights in patents

The rights in patents arising from purchase of investments are amortised over the periods of estimated useful life of the assets.

4.13 Impairment of assets

Assets that have an indefinite useful life are tested annually for impairment, or more frequently if events or changes in circumstances indicate that it might be impaired. Assets that are subject to amortisation are reviewed for impairment whenever there is an indication of impairment. An impairment loss is recognised for the amount by which the carrying amount of the assets exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs of disposal and value in use. Where the reasons for previously recognised impairments no longer exist, the impairment losses on the assets concerned other than goodwill is reversed.

4.14 Leases

Where the Group is the lessee

Leases are recognised as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Group. Each lease payment is allocated between the liability and finance cost. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis.

Contracts may contain both lease and non-lease components. The Group allocates the consideration in the contract to the lease and non-lease components based on their relative stand-alone prices. However, for leases of real estate for which the group is a lessee, it has elected not to separate lease and non-lease components and instead accounts for these as a single lease component.

Assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of the following lease payments:

- fixed payments (including in-substance fixed payments), less any lease incentives receivable
- variable lease payment that are based on an index or a rate
- amounts expected to be payable by the lessee under residual value guarantees
- the exercise price of a purchase option if the lessee is reasonably certain to exercise that option, and
- payments of penalties for terminating the lease, if the lease term reflects the lessee exercising that option.

Lease payments to be made under reasonably certain extension options are also included in the measurement of the liability.

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be determined, the lessee's incremental borrowing rate is used, being the rate that the lessee would have to pay to borrow the funds necessary to obtain an asset of similar value in a similar economic environment with similar terms and conditions.

The group is exposed to potential future increases in variable lease payments based on an index or rate, which are not included in the lease liability until they take effect. When adjustments to lease payments based on an index or rate take effect, the lease liability is reassessed and adjusted against the right-of-use asset. (please delete if the Group does not have variable lease payment based on an index or rate).

Right-of-use assets are measured at cost comprising the following:

- the amount of the initial measurement of lease liability
- any lease payments made at or before the commencement date less any lease incentives received
- any initial direct costs, and
- restoration costs.

Payments associated with short-term leases and leases of low-value assets are recognised on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less. Low-value assets comprise IT-equipment and small items of office furniture.

Where the Group is the lessor

When assets are leased out under a finance lease, the present value of the lease payments is recognised as a receivable. The difference between the gross receivable and the present value of the receivable is recognised as unearned finance income. Lease income is recognised over the term of the lease which reflects a constant periodic rate of return. Initial direct costs are included in initial measurement of the finance lease receivable and reduce the amount of income recognised over the lease term.

Rental income under operating leases (net of any incentives given to lessees) is recognised on a straight-line basis over the lease term. Initial direct costs incurred in obtaining an operating lease are added to the carrying amount of the underlying asset and recognised as expense over the lease term of the same basis as lease income. The respective leased assets are included in the statement of financial position based on their nature.

4.15 Financial liabilities

a) Classification

Financial instruments issued by the Group are classified as either financial liabilities or equity securities by considering contractual obligations.

- Where the Group has an unconditional contractual obligation to deliver cash or another financial asset to another entity, it is considered a financial liability unless there is a predetermined or possible settlement for a fixed amount of cash in exchange of a fixed number of the Group's own equity instruments.
- Where the Group has no contractual obligation or has an unconditional right to avoid delivering cash or another financial asset in settlement of the obligation, it is considered an equity instrument.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the reporting date.

b) Measurement

Financial liabilities are initially recognised at fair value and are subsequently measured at amortised cost.

c) Derecognition and modification

Financial liabilities are derecognised when the obligation specified in the contract is discharged, cancelled, or expired.

Where the terms of a financial liability are renegotiated/modified, the Group assesses whether the renegotiation / modification results in the derecognition of that financial liability. Where the modification results in an extinguishment, the new financial liability is recognised based on fair value of its obligation. The remaining carrying amount of financial liability is derecognised. The difference as well as proceed paid is recognised as other gains/(losses) in profit or loss.

Where the modification does not result in the derecognition of the financial liability, the carrying amount of the financial liability is recalculated as the present value of the renegotiated / modified contractual cash flows discounted at its original effective interest rate. The difference is recognised in other gains/(losses) in profit or loss.

4.16 Borrowing costs

General and specific borrowing costs directly attributable to the acquisition, construction, or production of qualifying assets (assets that take a long time to get ready for its intended use or sale) are added to the cost of those assets less investment income earned from those specific borrowings. The capitalisation of borrowing costs is ceased when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are complete.

Other borrowing costs are expensed in the period in which they are incurred.

4.17 Current and deferred income taxes

The tax expense for the year comprises current and deferred tax. Tax is recognised in profit or loss, except to the extent that it relates to items recognised in other comprehensive income or directly in equity.

Current tax

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the end of reporting period. Management periodically evaluates positions taken in tax returns in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

Deferred income tax

Deferred income tax is recognised on temporary differences arising from differences between the tax base of assets and liabilities and their carrying amounts in the financial statements. However, deferred income tax is not recognised for temporary differences arise from:

- initial recognition of an asset or liability in a transaction other than a business combination that affects neither accounting nor taxable profit or loss is not recognised
- investments in subsidiaries, associates, and joint arrangements where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred income tax is measured using tax rates of the period in which temporary difference is expected to be reversed, based on tax rates and laws that have been enacted or substantially enacted by the end of the reporting period.

Deferred tax assets are recognised only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred tax balances relate to the same taxation authority. Current tax assets and tax liabilities are offset where the entity has a legally enforceable right to offset and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

4.18 Employee benefits

The Group operates various post-employment benefits schemes. The Group has both defined benefit and defined contribution plans.

Short-term employee benefits

Liabilities for short-term employee benefits such as wages, salaries, paid annual leave and paid sick leave, profit-sharing and bonuses that are expected to be settled wholly within 12 months after the end of the period are recognised in respect of employees' service up to the end of the reporting period. They are measured at the amount expected to be paid.

Defined contribution plan

The Group operates a provident fund that is funded by payments from employees and by the relevant Group companies which are managed by trustee. The Group has no legal or constructive obligations to pay further contributions once the contributions have been paid even if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods. Contributions to the provident fund are charged to the profit or loss in the year in which they are due.

Furthermore, the Group contributes to a monthly defined contribution retirement benefit plan administered by the government of the People's Republic of China. The relevant government agencies undertake to assume the retirement benefit obligation payable to all existing and future retired employees under this plan and the Group has no further obligation for post-retirement benefits beyond the contributions made. Contributions to this plan are recognised as an expense in profit or loss when incurred.

Retirement benefits

Employees are entitled to receive benefits reaching normal retirement age under the labour law applicable in Thailand and those countries in which the Group operates, or such other dates of entitlement as may be agreed between the Group and employees. Retirement benefits depend on one or more factors such as age, years of service and compensation.

The liability recognised in the statement of financial position in respect of defined benefit retirement plans is the present value of the defined benefit obligation at the end of the reporting period. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using the interest rates of government securities that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related retirement liability.

Remeasurement of gains and losses arising from experienced adjustments and changes in actuarial assumptions are charged or credited to equity in other comprehensive income in the period in which they arise. They are included in retained earnings in the statements of changes in equity.

Past-service costs are recognised immediately in profit or loss.

Other employee benefits

Other employee benefits of the Indonesian subsidiaries, which consist of long service reward and long leave benefit, are recognised in the consolidated statement of financial position at the present value of the defined benefit obligation. The actuarial gains and losses and the past service costs are recognised immediately in the profit or loss.

Other employee benefits of the Australian subsidiaries, which consist of annual leave, sick leave, and long service leave, are paid monthly in accordance with Coal Mining Industry (Long Service Leave Funding Corporation) and recognised as expenses in profit or loss.

4.19 Share-based payment

The Group operates a number of equity-settled, share-based compensation plans, under which the Group receives services from employees as consideration for equity instruments (warrants) of the Group. The fair value of the employee services received in exchange for the grant of the warrants is recognised as an expense. The total amount to be expensed is determined by reference to the fair value of the warrants granted:

- including any market performance conditions.
- excluding the impact of any service and non-market performance vesting conditions (for example, profitability, sales growth targets and remaining an employee of the entity over a specified period); and
- excluding the impact of any non-vesting conditions (for example, the requirement for employees to save or hold shares for a specific period).

Non-market performance and service conditions are included in assumptions about the number of warrants that are expected to vest. The total expense is recognised over the vesting period, which is the period over which all of the specified vesting conditions are to be satisfied. At the end of each reporting period, the Group revises its estimates of the number of warrants that are expected to vest based on the non-marketing vesting conditions. It recognises the impact of the revision to original estimates, if any, in profit or loss, with a corresponding adjustment to equity.

When the warrants are exercised, the Group issues new share. The proceeds received net of any directly attributable transaction costs are credited to share capital (nominal value) and share premium.

For share-based compensation plans in which the terms of the arrangement provide the Group with the option to settle the awards in cash, the Group assesses the probability of exercising that option, including considering their past practice of settling in cash when determining classification of the awards as equity or liability. The Group shall measure the services received from each employee and the liability incurred at the fair value of the restricted stock units at the grant date and remeasures the fair value of the liability at the end of each reporting period and at the date of settlement, with any changes in fair value recognised in profit or loss for the period.

The grant by the Group of warrants over its equity instruments to the employees of subsidiaries undertakings in the Group is treated as a capital contribution. The fair value of employee services received, measured by reference to the grant date fair value, is recognised over the vesting period as an increase to investment in subsidiary, in separate financial statements undertakings, with a corresponding credit to equity.

4.20 Provisions

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate of the amount can be made.

Provision for environmental rehabilitation is recognised by units of sale at the rate determined by the Group's geologist. The provisioning rate is based on the estimated cost for mine rehabilitation through to the end of the mine. The Group reviews and revises the rate to reflect the actual expenses incurred on a regular basis.

The Group records a provision for decommissioning costs whenever it is probable that there would be an obligation as a result of a past event and the amount of that obligation is reliably estimated by the Group's engineers and management's judgement. The Group recognises provision for decommissioning costs as part of oil and gas properties, using the discounted present value on the estimated eventual costs that relate to the removal of the production facilities and amortised based on the unit of production of the proved reserve or the proved developed reserve. The Group recognises an increase that reflects the passage of time from the unwinding discount in each period, as a finance cost in profit or loss. The provisions are based on the current situation such as regulations, technologies, and prices. The actual results could differ from these estimates as future confirming events occur.

4.21 Share capital

Ordinary shares with discretionary dividends are classified as equity.

Incremental external costs directly attributable to the issue of new shares are shown in equity as a deduction, net of tax, from the proceeds.

Treasury share

Where any Group company purchases the Company's equity share capital (treasury shares), the consideration paid, including any directly attributable incremental costs (net of income taxes) is deducted from equity attributable to the company's equity holders until the shares are cancelled or reissued. Where such shares are subsequently reissued, any consideration received, net of any directly attributable incremental transaction costs and the related income tax effects, is included in equity attributable to the company's equity holders.

4.22 Revenue recognition

Revenue is recorded net of value added tax. They are recognised in accordance with the provision of goods or services, provided that collectability of the consideration is probable.

Multiple element arrangements involving delivery or provision of multiple products or services are separated into distinct performance obligations. Total transaction price of the bundled contract is allocated to each performance obligation based on their relative standalone selling prices or estimated standalone selling prices. Each performance obligation is recognised as revenue on fulfilment of the obligation to the customer. Revenue is recognised as follows.

Revenue from coal sales

The Group recognises revenue from coal sales at a certain point in time when the products is delivered to customers at the delivery point. The transfer of products takes place when the Group delivers products to its destination as specified according to the contracts. Revenue represents the revenue earned from the sale of Group's products with realisable value net of value-added tax, rebate and discounts.

Sales of electricity and steam not under lease agreements

The Group recognises revenue from sales of electricity and steam relating to Power Purchase Agreement and Steam Purchase Agreement at certain points in time when the control of products is transferred to the customer at the delivery point. Revenue represents the revenue earned from the sale of Group's products with realisable value net of value-added tax, rebate, and discounts.

Sales of electricity under lease agreements

Finance lease income under power purchase agreements is recognised on an effective interest method over the period of the agreements.

Service income under finance lease agreements related to the Power Purchase Agreements is recognised when the services have been rendered. Service income comprises income in relation to the availabilities of the power plants, other servicing income and fuel cost received from leases with respect to the leased assets. If the considerations exceed the services rendered, a contract liability is recognised. On the other hand, if the considerations less than the services rendered, a contract asset is recognised.

Revenue from sales of natural gas

Revenues from sales of natural gas are recorded upon transfer of title, according to the terms of related contracts and based on actual volumes sold.

Revenue from pipeline transportation is recognised when services are rendered based on quantities transported and measured according to the underlying contract.

Revenue from freight income

Freight income is recognised when the Group satisfies the performance obligation at a point in time generally when the significant acts have been completed and when transfer of control occurs or for services that are not significant transactions, revenue is recognised as the services are provided.

Revenue from rendering of services

The Group recognised service contracts with a continuous service provision as revenue on a straight-line basis over the contract term, regardless of the payment pattern.

Dividend income

Dividend income is recognised when the group's right to receive payment is established.

Interest income

Interest income is recognised using the effective interest method.

4.23 Dividend distribution

Dividends distribution to the Group's shareholders is recognised as a liability in the consolidated and separate financial statements in the period in which the dividends are approved by the shareholders and interim dividends are approved by the Board of Directors.

4.24 Derivatives and hedging activities

a) Embedded derivative and derivatives that do not qualify for hedge accounting

Embedded derivative that is separately accounted for and derivatives that do not qualify for hedge accounting is initially recognised at fair value. Changes in the fair value are included in “net gains (losses) from changes in fair value of financial instruments”.

Fair value of derivatives is classified as a current or non-current following its remaining maturity.

b) Hedge accounting

Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently remeasured to their fair value at the end of each reporting period. The Group designates certain derivatives as either:

- hedges of the fair value of i) recognised assets or liabilities or ii) unrecognised firm commitments (fair value hedges); or
- hedges of a particular risk associated with the cash flows of i) recognised assets and liabilities and ii) highly probable forecast transactions (cash flow hedges); or
- hedges of a net investment in a foreign operation (net investment hedges).

At inception of the hedge relationship, the Group documents i) the economic relationship between hedging instruments and hedged items including whether changes in the cash flows of the hedging instruments are expected to offset changes in the cash flows of hedged items and ii) its risk management objective and strategy for undertaking its hedge transactions.

The full fair value of a hedging derivative is classified as a current or non-current asset or liability following the maturity of related hedged item.

Cash flow hedges that qualify for hedge accounting

The effective portion of changes in the fair value of derivatives that are designated and qualified as cash flow hedges is recognised in the cash flow hedge reserve within equity. The gain or loss relating to the ineffective portion is recognised immediately in profit or loss.

When forward contracts are used to hedge forecast transactions, the Group generally designates only the change in fair value of the forward contract related to the spot component as the hedging instrument. Gains or losses relating to the effective portion of the change in the spot component of the forward contracts are recognised in the cash flow hedge reserve within equity. The change in the forward element of the contract that relates to the hedged item (‘aligned forward element’) is recognised within other comprehensive income in the costs of hedging reserve within equity.

In some cases, the Group may designate the full change in fair value of the forward contract (including forward points) as the hedging instrument. In such cases, the gains or losses relating to the effective portion of the change in fair value of the entire forward contract are recognised in the cash flow hedge reserve within equity.

Amounts accumulated in equity are reclassified in the periods when the hedged item affects profit or loss.

When a hedging instrument expires, or is sold or terminated, or when a hedge no longer meets the criteria for hedge accounting, any cumulative deferred gain or loss and deferred costs of hedging in equity at that time remains in equity until the forecasted transaction occurs. When the forecasted transaction is no longer expected to occur, the cumulative gain or loss and deferred costs of hedging that were reported in equity are immediately reclassified to profit or loss.

Net investment hedges

Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges.

Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognised in other comprehensive income and accumulated in reserves in equity. The gain or loss relating to the ineffective portion is recognised immediately in profit or loss within net gains (losses) from changes in fair value of financial instruments. Gains and losses accumulated in equity are reclassified to profit or loss when the foreign operation is partially disposed of or sold.

4.25 Financial guarantee contracts

Financial guarantee contracts are recognised as a financial liability at the time the guarantee is issued. The liability is initially measured at fair value and subsequently at the higher of:

- the amount determined in accordance with the expected credit loss model under TFRS 9; and
- the amount initially recognised less the cumulative amount of income recognised in accordance with the principles of TFRS 15.

The fair value of financial guarantees is determined based on the present value of the difference in cash flows between a) the contractual payments required under the debt instrument; and b) the payments that would be required without the guarantee, or the estimated amount that would be payable to a third party for assuming the obligations.

Where guarantees in relation to loans or other payables of associates are provided for no compensation, the fair values are accounted for as contributions and recognised as part of the cost of the investment.

4.26 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker. The Chief Executive Officer is the chief operating decision-maker, responsible for allocating resources, assessing performance of the operating segments, and making strategic decisions.

5 Financial risk management

5.1 Financial risk

The Group's activities expose it to a variety of financial risks, market risk (including foreign exchange risk, interest rate risk and price risk), credit risk and liquidity risk. The Group's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance. The Group uses derivative financial instruments to hedge certain exposures.

Risk management is carried out by a central treasury department under policies approved by the Board of Directors. Group Treasury identifies, evaluates and hedges financial risks in close co-operation with the Group's operating units

5.1.1 Market risk

a) Foreign exchange rate risk

The Group operates internationally and is exposed to foreign exchange rate risk arising from various currency exposures, primarily with respect to Baht, US Dollar, Indonesian Rupiah, Australian Dollar and Chinese Yuan. Foreign exchange risk arises from future commercial transactions, net investment in foreign operations and net monetary assets and liabilities that are denominated in a currency that is not the entity's functional currency.

Instruments used by the Group

The Group uses foreign exchange forward contracts and currency and interest rate swaps contracts to hedge its exposure to foreign exchange rate risk. Under the group's policy, the critical terms of the derivative instruments must align with the hedged items.

Net investment hedges in foreign operations

The Group has adopted accounting policy for net investment hedges in foreign operations. The Group designates certain Baht debentures and short-term loans from financial institutions to be hedging instruments for net investments in subsidiaries whose functional currency is Baht, by using the foreign exchange rate of the debentures and short-term loans from financial institutions at the designated date.

Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognised in other comprehensive income and accumulated as reserves in equity. The gain or loss relating to the ineffective portion is recognised immediately in profit or loss. Gains and losses accumulated in equity are recognised to profit or loss when the foreign operation is disposed.

As at 31 December	Consolidated financial statements	
	2021	2020
Carrying amount of debentures and short-term loans from financial institutions at inception date	US Dollar 801 million	US Dollar 801 million
Debentures and short-term loans from financial institutions in Baht	Baht 26,400 million	Baht 26,400 million
Change in carrying amount of debentures and short-term loans from financial institutions as a result of foreign currency movement at inception date	-	US Dollar 78 million
Change in carrying amount of debentures and short-term loans from financial institutions as a result of foreign currency movement from 1 January	US Dollar (89) million	-
Change in value of hedge item used to determine hedge effectiveness recognised in other comprehensive income	US Dollar 89 million	US Dollar (78) million

Exposure

The Group and the Company's exposure to foreign currency risk that is not entity's functional currency expressed in US Dollar currency, was as follows:

	Consolidated financial statements					
	US Dollar'000			Baht'000		
	USD	THB	IDR	USD	THB	IDR
As at 31 December 2021						
Financial assets						
Cash and cash equivalents	10,413	113,883	-	347,997	3,805,943	-
Trade accounts receivable, net	12,973	7,250	73,528	433,546	242,287	2,457,297
Amounts due from related parties	16,908	137,435	-	565,048	4,593,068	-
Short-term loans to related parties	175,959	9,124	-	5,880,520	304,930	-
Long-term loans to related parties	252,970	784,859	-	8,454,232	26,229,926	-
Financial liabilities						
Short-term loans from financial institutions	174,491	592,461	-	5,831,459	19,800,000	-
Short-term loans from related parties	49,550	-	-	1,655,956	-	-
Trade account payable	7,065	-	85,262	236,107	-	2,849,436
Amounts due to related parties	3,807	-	-	127,238	-	-
Accrued interest expenses	8,310	147,299	-	277,707	4,922,720	-
Long-term loans from financial institutions, net	60,000	158,588	-	2,005,194	5,300,000	-
Debentures, net	-	1,833,339	-	-	61,270,000	-
Long-term loans from related parties	81,070	455,363	-	2,709,351	15,218,198	-
Derivative assets						
Financial derivative assets applying cash flow hedges						
- Foreign exchange forward contracts	120,000	-	-	4,010,388	-	-
- Currency and interest rate swaps contracts	-	253,153	-	-	8,460,350	-

	Consolidated financial statements					
	US Dollar'000			Baht'000		
	USD	THB	IDR	USD	THB	IDR
As at 31 December 2020						
Financial assets						
Cash and cash equivalents	5,190	85,400	34,605	155,887	2,565,158	1,039,423
Trade accounts receivable, net	3,822	20,043	33,647	114,813	602,022	1,010,661
Amounts due from related parties	5,653	121,481	-	169,792	3,648,923	-
Short-term loans to related parties	45,950	-	-	1,380,205	-	-
Long-term loans to related parties	82,335	645,399	-	2,473,105	19,385,924	-
Financial liabilities						
Short-term loans from financial institutions	-	503,045	-	-	15,110,000	-
Trade account payable	2,060	2,265	62,342	61,888	68,028	1,872,559
Accrued interest expenses	5,644	135,824	-	169,543	4,079,767	-
Long-term loans from financial institutions, net	222,897	175,583	-	6,695,169	5,274,008	-
Debentures, net	-	1,450,290	-	-	43,562,504	-
Long-term loans from related parties	126,528	490,956	-	3,800,533	14,746,900	-
Derivative assets						
Financial derivative assets applying						
cash flow hedges						
- Foreign exchange forward contracts	130,000	-	-	3,904,823	-	-
- Currency and interest rate swaps						
contracts	-	348,248	-	-	10,460,350	-
Derivative liabilities						
Financial derivative liabilities recognised at						
fair value through profit or loss						
- Foreign exchange forward contracts	-	65,809	-	-	1,976,707	-

	Separate financial statements	
	US Dollar'000	Baht'000
	THB	THB
As at 31 December 2021		
Financial assets		
Cash and cash equivalents	101,031	3,376,449
Trade accounts receivable, net	7,250	242,287
Amounts due from related parties	137,435	4,593,068
Short-term loans to related parties	9,124	304,930
Long-term loans to related parties	784,859	26,229,926
Financial liabilities		
Short-term loans from financial institutions	592,461	19,800,000
Accrued interest payable	20,665	690,625
Long-term loans from financial institutions, net	158,588	5,300,000
Debentures, net	1,833,339	61,270,000
Derivative assets		
Financial derivative assets applying cash flow hedges		
- Currency and interest rate swaps contracts	253,153	8,460,350
As at 31 December 2020		
Financial assets		
Cash and cash equivalents	74,531	2,238,686
Trade accounts receivables, net	16,111	483,927
Amounts due from related parties	121,478	3,648,839
Long-term loans from financial institutions, net	644,401	19,355,924
Financial liabilities		
Short-term loans from financial institutions	503,045	15,110,000
Long-term from financial institutions, net	175,583	5,274,008
Debentures, net	1,450,290	43,562,504
Derivative assets		
Financial derivative assets applying cash flow hedges		
- Currency and interest rate swaps contracts	348,248	10,460,350
Derivative liabilities		
Financial derivative liabilities recognised at fair value through profit or loss		
- Foreign exchange forward contracts	65,809	1,976,707

The effects of the foreign currency-related hedging instruments on the Group and the Company's financial position and performance are as follows:

	Consolidated financial statements		Separate financial statements	
Foreign exchange forward contracts	US Dollar'000	Baht'000	US Dollar'000	Baht'000
As at 31 December 2021				
Carrying amount - Financial derivative assets	758	25,347	-	-
Notional amount	120,000	4,010,388	-	-
Maturity	February 2022 to September 2022		-	-
Change in intrinsic value of outstanding hedge instrument for the year	(10,807)	(361,170)	-	-
Change in value of hedged item used to determine hedge effectiveness	10,807	361,170	-	-
Weighted average strike rate for outstanding hedging instruments (including forward points)	AUD 1: USD 0.7203		-	-
As at 31 December 2020				
Carrying amount - Financial derivative assets	11,020	330,996	-	-
Notional amount	130,000	3,904,823	-	-
Maturity	January - March 2021		-	-
Change in intrinsic value of outstanding hedge instrument for the year	10,462	314,251	-	-
Change in value of hedged item used to determine hedge effectiveness	(10,462)	(314,251)	-	-
Weighted average strike rate for outstanding hedging instruments (including forward points)	AUD 1: USD 0.7607		-	-

	Consolidated financial statements		Separate financial statements	
Currency and interest rate swaps contracts	US Dollar'000	Baht'000	US Dollar'000	Baht'000
As at 31 December 2021				
Carrying amount - Financial derivative liabilities	19,366	647,205	19,366	647,205
Notional amount	270,735	9,044,926	270,735	9,044,926
Maturity	March 2022 to September 2026		March 2022 to September 2026	
Change in intrinsic value of outstanding hedge instrument for the year	(30,628)	(1,023,571)	(30,628)	(1,023,571)
Change in value of hedged item used to determine hedge effectiveness	30,628	1,023,571	30,628	1,023,571
Weighted average strike rate for outstanding hedging instruments (including forward points)	USD 1: Baht 31.2500		USD 1: Baht 31.2500	
Weighted average strike rate for outstanding hedging instruments (swap rate)	1.595% - 6.390%		1.595% - 6.390%	
As at 31 December 2020				
Carrying amount - Financial derivative assets, net	4,971	149,313	4,971	149,313
Notional amount	348,248	10,460,350	348,248	10,460,350
Maturity	April 2021 to April 2026		April 2021 to April 2026	
Change in intrinsic value of outstanding hedge instrument for the year	(17,575)	(527,910)	(17,575)	(527,910)
Change in value of hedged item used to determine hedge effectiveness	17,575	527,910	17,575	527,910
Weighted average strike rate for outstanding hedging instruments (including forward points)	USD 1: Baht 30.6318		USD 1: Baht 30.6318	
Weighted average strike rate for outstanding hedging instruments (swap rate)	4.82%		4.82%	

Sensitivity

As shown in the table above, the Group is primarily exposed to changes in US Dollar and Baht exchange rates and Australian Dollar and US Dollar. The sensitivity of profit or loss to changes in the exchange rates arises mainly from financial assets and financial liabilities and the impact on other components of equity arises from foreign forward exchange contracts and certain financial liabilities designated as cash flow hedges. Foreign exchange exposure in other currencies do not have material impact to the Group.

	Consolidated financial statements			
	US Dollar'000		Baht'000	
	Impact to net profit before income tax	Impact to other components of equity before income tax	Impact to net profit before income tax	Impact to other components of equity before income tax
As at 31 December 2021				
US Dollar to Baht exchange rate				
- Increase 5%*	69,250	-	2,314,317	-
- Decrease 5%*	(74,782)	-	(2,499,210)	-
Australian Dollar to US Dollar				
- Increase 5%*	7,515	5,714	251,134	190,955
- Decrease 5%*	(8,306)	(6,315)	(277,570)	(211,055)
As at 31 December 2020				
US Dollar to Baht exchange rate				
- Increase 5%*	35,447	-	1,064,737	-
- Decrease 5%*	(38,627)	-	(1,160,249)	-
Australian Dollar to US Dollar				
- Increase 5%*	1,721	17,790	51,706	534,359
- Decrease 5%*	(1,903)	(19,663)	(57,148)	(590,607)

	Separate financial statements			
	US Dollar'000		Baht'000	
	Impact to net profit before income tax	Impact to other components of equity before income tax	Impact to net profit before income tax	Impact to other components of equity before income tax
As at 31 December 2021				
US Dollar to Baht exchange rate				
- Increase 5%*	62,819	-	2,099,404	-
- Decrease 5%*	(69,432)	-	(2,320,394)	-
As at 31 December 2020				
US Dollar to Baht exchange rate				
- Increase 5%*	48,576	-	1,459,079	-
- Decrease 5%*	(53,138)	-	(1,596,108)	-

* Holding all other variables constant

b) Cash flow and fair value interest rate risk

The Group manages interest rate risk by closely monitoring the trend of interest rates in the world's markets as well as in Thailand. The Group allocates its debt portfolio in either short- and long-term contracts or loans with fixed and floating interest rates corresponding to their types of investments. The Company has chosen financial instruments to create an alternative source of funding and to manage its financial structure properly in which it invests. For example, interest rate swaps are being used to manage the proportion of fixed interest rates necessary to meet the market trends.

Following interest rate benchmark reform, there will be cessation in several benchmark interest rates including LIBOR, which is applied by the Group as part of the variable rate calculation. The management is in the process of discussing with the financial institutions to use another benchmark interest rate for the loan agreements and related financial instruments. However, as at 31 December 2021, the impact of such change is immaterial to the Group.

The exposure of the Group's long-term loans and debentures to interest rate changes at the end of the reporting period is provided Note 24 and 25, respectively.

Instruments used by the Group

The Group entered interest rate swaps covering approximately 15% of the variable loan principal outstanding (2020: 35%). The fixed interest rates of the swaps range between 1.17% and 3.42% per annum (2020: 2.62% to 2.78% per annum), and the variable rates of the loans are between 1.55% and 5.85% (2020: 1.25% to 5.36% per annum) at the end of the reporting period.

The swap contracts require settlement of net interest receivable or payable between 90-180 days. The settlement dates coincide with the dates on which interest is payable on the underlying debt.

The effects of the interest rate-related hedging instruments on the Group and the Company's financial position and performance are as follows:

	Consolidated financial statements		Separate financial statements	
	US Dollar'000	Baht'000	US Dollar'000	Baht'000
Interest rate swaps				
As at 31 December 2021				
Carrying amount - Financial derivative liabilities, net	6,495	217,068	6,430	214,879
Notional amount	407,557	13,620,510	376,100	12,569,224
Maturity	March 2022 to September 2027		March 2022 to September 2027	
Change in intrinsic value of outstanding hedge instrument for the year	19,431	649,398	19,496	650,986
Change in value of hedged item used to determine hedge effectiveness	(19,431)	(649,398)	(19,496)	(650,986)
Weighted average strike rate for outstanding hedging instruments (swap rate)	1.17% - 3.42%		1.17% - 3.42%	
As at 31 December 2020				
Carrying amount - Financial derivative liabilities	28,318	850,601	25,927	778,773
Notional amount	918,560	27,590,879	827,000	24,840,682
Maturity	June 2021 - June 2025		June 2021 - June 2025	
Change in intrinsic value of outstanding hedge instrument for the year	(8,433)	(253,297)	(7,307)	(219,474)
Change in value of hedged item used to determine hedge effectiveness	8,433	253,297	7,307	219,474
Weighted average strike rate for outstanding hedging instruments (swap rate)	2.62% - 2.78%		2.78%	

The impact of interest rate hedging instruments on the Group's financial position and performance by entering currency and interest rate swap contracts was disclosed in Note 5.1.1 a) with the hedging of foreign exchange rate risk.

Sensitivity

Profit or loss is sensitive to higher or lower interest expenses from borrowings as a result of changes in interest rates from variable interest rate loan. Other components of equity changes as a result of an increase or decrease in the fair value of the cash flow hedges of interest rate swaps.

	Consolidated financial statements			
	US Dollar'000		Baht'000	
	Impact to net profit before income tax	Impact to other components of equity before income tax	Impact to net profit before income tax	Impact to other components of equity before income tax
As at 31 December 2021				
- Interest rates increase 0.1%*	(2,269)	645	(81,079)	21,546
- Interest rates decrease 0.1%*	2,186	(624)	81,079	(20,867)
As at 31 December 2020				
- Interest rates increase 0.1%*	(2,727)	1,064	(81,914)	31,960
- Interest rates decrease 0.1%*	2,730	(1,067)	82,009	(32,048)
	Separate financial statements			
	US Dollar'000		Baht'000	
	Impact to net profit before income tax	Impact to other components of equity before income tax	Impact to net profit before income tax	Impact to other components of equity before income tax
As at 31 December 2021				
- Interest rates increase 0.1%*	(1,871)	645	(62,515)	21,546
- Interest rates decrease 0.1%*	1,871	(624)	62,515	(20,867)
As at 31 December 2020				
- Interest rates increase 0.1%*	(2,058)	989	(61,813)	29,713
- Interest rates decrease 0.1%*	2,061	(992)	61,908	(29,807)

* Holding all other variables constant

c) **Price risk**

The Group is exposed to coal price risk, fuel price and natural gas price risks from substantial fluctuations in the world market price. The Group uses coal swap contracts, fuel swap contracts, natural gas swap and option contracts and natural gas liquids swap contracts to minimise its exposure to fluctuations in its business operations.

In addition, the Group is exposed to electricity price risk in the United States and Australia since the spot price depends on demand and supply in the market and other factors, such as cost of fuel for electricity generation. The Group entered into electricity forward contracts and electricity swaption to maintain the ability to generate income.

Significant contracts

Coal swap contracts

As at 31 December 2021, the Group has outstanding coal swap contracts with no physical delivery of selling and buying side of 105,000 tons at the average selling price of US Dollar 134.29 per ton. The contracts are due within 1 year.

Natural gas swap, options and natural gas liquids contracts

As at 31 December 2021, the Group has outstanding natural gas swap and options contracts of 208,050,000 MMBTU at the average selling price of US Dollar 3.20 per MMBTU and natural gas liquids swap contracts of 3,741,000 BBL at the average selling price of US Dollar 25.05 per BBL. The contracts are due between 1 - 2 years.

Sensitivity

	Consolidated financial statements			
	US Dollar'000		Baht'000	
	Impact to net profit before income tax	Impact to other components of equity before income tax	Impact to net profit before income tax	Impact to other components of equity before income tax
As at 31 December 2021				
Coal prices				
- Increase 5%*	-	(661)	-	(22,076)
- Decrease 5%*	-	661	-	22,076
Oil and natural gas prices				
- Increase 5%*	(314)	(15,169)	(10,496)	(506,930)
- Decrease 5%*	314	15,169	10,496	506,930
Forward electricity price curve				
- Increase 5%*	(3,009)	(1,657)	(100,570)	(55,368)
- Decrease 5%*	2,998	1,656	100,206	55,344
As at 31 December 2020				
Coal prices				
- Increase 5%*	-	(356)	-	(10,694)
- Decrease 5%*	-	356	-	10,694
Oil and natural gas prices				
- Increase 5%*	(13,075)	(502)	(392,747)	(15,083)
- Decrease 5%*	13,264	502	398,420	15,083

* Holding all other variables constant

5.1.2 Credit risk

a) Risk management

The Group has no significant concentrations of credit risk. The Group has policies in place to ensure that sales of goods and services are made to customers with an appropriate credit history. Derivative counter parties and cash transactions are limited to high credit quality financial institutions. The Group has policies that limit the amount of credit exposure to any financial institutions.

b) Impairment of financial assets

The Group and the Company has financial assets that are subject to the expected credit loss model as follow:

- Cash and cash equivalents
- Trade accounts receivable
- Amount due from related parties
- Short-term loans to related parties and other companies
- Dividend receivables from related parties
- Long-term loan to related parties
- Financial assets measured at amortised cost and fair value through other comprehensive income

Loss allowance for trade accounts receivable and is provided in Note 11. Loss allowance for other financial assets is not material.

5.1.3 Liquidity risk

Prudent liquidity risk management implies maintaining sufficient cash and marketable securities, the availability of funding through an adequate amount of credit facilities and the ability to close out market positions. Due to the dynamic nature of the underlying business, Group Treasury aims at maintaining flexibility in funding by keeping credit lines available.

The tables below analyse the maturity of financial liabilities and financial derivative liabilities, net grouping based on their contractual maturities. The amounts disclosed are the contractual undiscounted cash flows including notional and interest.

	Consolidated financial statements							
	US Dollar'000				Baht'000			
	Within 1 year	1 - 5 years	Over 5 years	Total	Within 1 year	1 - 5 years	Over 5 years	Total
As at 31 December 2021								
Non-derivative financial instruments								
Short-term loans from financial institutions	1,376,200	-	-	1,376,200	45,992,478	-	-	45,992,478
Trade accounts payable	98,547	-	-	98,547	3,293,416	-	-	3,293,416
Other current liabilities	455,149	-	-	455,149	15,211,044	-	-	15,211,044
Long-term loans from financial institutions	560,676	1,737,171	828,592	3,126,439	18,737,720	58,056,091	27,691,461	104,485,272
Debentures	128,132	843,518	1,479,663	2,451,313	4,282,163	28,190,291	49,450,204	81,922,658
Lease liabilities	26,483	13,341	4,363	44,187	885,073	445,871	145,795	1,476,739
Other non-current liabilities	-	235,036	-	235,036	-	7,854,889	-	7,854,889
Total non-derivative financial instruments	2,645,187	2,829,066	2,312,618	7,786,871	88,401,894	94,547,142	77,287,460	260,236,496
Financial derivative liabilities								
Derivatives recognised at FVPL								
- Interest rate swap contracts	4,303	9,110	-	13,413	143,817	304,441	-	448,258
- Electricity forward contracts	4,412	-	-	4,412	147,448	-	-	147,448
- Oil and gas swap contracts	-	6,281	-	6,281	-	209,921	-	209,921
Derivatives applying cash flow hedges								
- Interest rate swap contracts	3,230	3,532	-	6,762	107,943	118,034	-	225,977
- Currency and interest rate swap contracts	2,817	16,286	-	19,103	94,156	544,292	-	638,448
- Coal swap contracts	25,374	-	-	25,374	847,963	-	-	847,963
- Oil and gas swap contracts	91,156	17,381	-	108,537	3,046,435	580,866	-	3,627,301
Total financial derivative liabilities	131,292	52,590	-	183,882	4,387,762	1,757,554	-	6,145,316
As at 31 December 2020								
Non-derivative financial instruments								
Short-term loans from financial institutions	832,231	-	-	832,231	24,997,816	-	-	24,997,816
Trade accounts payable	67,425	-	-	67,425	2,025,238	-	-	2,025,238
Other current liabilities	231,382	-	-	231,382	6,950,049	-	-	6,950,049
Long-term loans from financial institutions	720,268	1,967,303	501,602	3,189,173	21,634,753	59,092,090	15,066,665	95,793,508
Debentures	152,791	691,845	1,159,511	2,004,147	4,589,411	20,781,024	35,828,362	61,198,797
Lease liabilities	34,381	10,668	7,036	52,085	1,032,871	320,439	211,338	1,564,648
Other non-current liabilities	-	66,300	152	66,452	-	1,991,462	4,572	1,996,034
Total non-derivative financial instruments	2,038,478	2,736,116	1,668,301	6,442,895	61,230,138	82,185,015	51,110,937	194,526,090
Financial derivative liabilities								
Derivatives recognised at FVPL								
- Foreign exchange forward contracts	(296)	-	-	(296)	(8,891)	-	-	(8,891)
- Oil and gas swap contracts	(15,499)	5,170	-	(10,329)	(465,539)	155,297	-	(310,242)
- Electricity forward contracts	(3,074)	-	-	(3,074)	(92,335)	-	-	(92,335)
Derivatives applying cash flow hedges								
- Foreign exchange forward contracts	(5,888)	(5,131)	-	(11,019)	(176,867)	(154,128)	-	(330,995)
- Interest rate swap contracts	9,750	18,503	-	28,253	292,862	555,790	-	848,652
- Currency and interest rate swap contracts	(2,541)	(2,577)	(1,140)	(6,258)	(76,325)	(77,400)	(34,237)	(187,962)
- Coal swap contracts	10,374	-	-	10,374	311,597	-	-	311,597
- Oil swap contracts	(1,618)	-	-	(1,618)	(48,601)	-	-	(48,601)
Total financial derivative liabilities	(8,792)	15,965	(1,140)	6,033	(264,099)	479,559	(34,237)	181,223

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Notes to the consolidated and separate financial statements

For the year ended 31 December 2021

	Separate financial statements							
	US Dollar'000				Baht'000			
	Within 1 year	1 - 5 years	Over 5 years	Total	Within 1 year	1 - 5 years	Over 5 years	Total
As at 31 December 2021								
Non-derivative financial instruments								
Short-term loans from financial institutions	818,730	-	-	818,730	27,361,863	-	-	27,361,863
Trade accounts payable	2,746	-	-	2,746	91,758	-	-	91,758
Other current liabilities	9,529	-	-	9,529	318,442	-	-	318,442
Long-term loans from financial institutions	365,528	1,436,906	197,433	1,999,867	12,215,920	48,021,269	6,598,202	66,835,391
Debentures	128,132	843,518	1,479,663	2,451,313	4,282,163	28,190,291	49,450,204	81,922,658
Lease liabilities	1,160	1,070	-	2,230	38,793	35,748	-	74,541
Other non-current liabilities	-	14,377	-	14,377	-	480,476	-	480,476
Total non-derivative financial instruments	1,325,825	2,295,871	1,677,096	5,298,792	44,308,939	76,727,784	56,048,406	177,085,129
Financial derivative liabilities								
Derivatives applying cash flow hedges								
- Interest rate swap contracts	3,164	3,532	-	6,696	105,753	118,034	-	223,787
- Currency and interest rate swap contracts	2,817	16,286	-	19,103	94,156	544,292	-	638,448
Total financial derivative liabilities	5,981	19,818	-	25,799	199,909	662,326	-	862,235
As at 31 December 2020								
Non-derivative financial instruments								
Short-term loans from financial institutions	783,758	-	-	783,758	23,541,814	-	-	23,541,814
Trade accounts payable	6,378	-	-	6,378	191,570	-	-	191,570
Other current liabilities	4,254	-	-	4,254	127,575	-	-	127,575
Long-term loans from financial institutions	448,244	1,283,225	400,321	2,131,790	13,463,960	38,544,359	12,024,491	64,032,810
Debentures	201,201	691,845	1,159,511	2,052,557	6,043,501	20,781,024	34,828,362	61,652,887
Lease liabilities	1,136	2,512	-	3,648	34,110	75,463	-	109,573
Other non-current liabilities	-	-	152	152	-	-	4,572	4,572
Total non-derivative financial instruments	1,444,971	1,977,582	1,559,984	4,982,537	43,402,530	59,400,846	46,857,425	149,660,801
Financial derivative liabilities								
Derivatives recognised at FVPL								
- Foreign exchange forward contracts	603	-	-	603	18,129	-	-	18,129
Derivatives applying cash flow hedges								
- Interest rate swap contracts	7,424	18,503	-	25,927	222,983	555,790	-	778,773
- Currency and interest rate swap contracts	(2,541)	(2,577)	(1,140)	(6,258)	(76,325)	(77,400)	(34,237)	(187,962)
Total financial derivative liabilities	5,486	15,926	(1,140)	20,272	164,787	478,390	(34,237)	608,940

Management monitors rolling forecasts of the Group's liquidity reserve cash and cash equivalents and undrawn borrowing facilities on the basis of expected cash flows. In addition, the Group's liquidity management policy involves projecting cash flows in major currencies and considering the level of liquid assets and maintaining financing plans.

5.1.4 Derivatives

The Group and the Company has financial derivatives in the statement of financial position as below:

	Consolidated financial statements							
	As at 31 December 2021				As at 31 December 2020			
	US Dollar'000		Baht'000		US Dollar'000		Baht'000	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
Current								
<u>Financial derivative recognised at fair value through profit or loss</u>								
Electricity swaption	4,038	-	134,999	-	-	-	-	-
Foreign exchange rate forward	300	-	10,029	-	926	603	27,802	18,129
Natural gas swap	1,549	-	51,778	-	15,484	-	465,102	-
Interest rate swap	-	3,124	-	104,411	-	-	-	-
Electricity forward contracts	-	4,412	-	147,448	3,074	-	92,335	-
<u>Derivative financial instruments used for hedging - cash flow hedge</u>								
Electricity swaption	2,844	-	95,038	-	-	-	-	-
Interest rate swap	-	3,199	-	106,928	-	9,750	-	292,861
Cross currency and interest rate swap	-	855	-	28,571	2,971	-	89,225	-
Foreign exchange rate forward	758	-	25,347	-	5,889	-	176,868	-
Coal swap	1,513	25,374	50,566	847,963	-	10,374	-	311,597
Natural gas swap	9,988	91,156	333,737	3,046,434	-	-	-	-
Fuel swap	-	-	-	-	1,617	-	48,601	-
Total current financial derivatives	20,990	128,120	701,494	4,281,755	29,961	20,727	899,933	622,587
Non-current								
<u>Financial derivative recognised at fair value through profit or loss</u>								
Warrants	120	-	4,012	-	-	-	-	-
Electricity swaption	37,550	-	1,254,882	-	-	-	-	-
Interest rate swap	-	6,614	-	221,024	-	-	4	-
Natural gas swap	-	6,281	-	209,921	15	5,170	437	155,297
<u>Derivative financial instruments used for hedging - cash flow hedge</u>								
Electricity swaption	25,356	-	847,404	-	-	-	-	-
Interest rate swap	693	3,989	23,169	133,309	-	18,568	-	557,740
Foreign exchange rate forward	-	-	-	-	5,131	-	154,128	-
Cross currency and interest rate swap	-	18,511	-	618,634	4,245	2,245	127,509	67,421
Natural gas swap	-	17,381	-	580,866	-	-	-	-
Total non-current financial derivatives	63,719	52,776	2,129,467	1,763,754	9,391	25,983	282,078	780,458
Total financial derivatives	84,709	180,896	2,830,961	6,045,509	39,352	46,710	1,182,011	1,403,045

	Separate financial statements							
	As at 31 December 2021				As at 31 December 2020			
	US Dollar'000		Baht'000		US Dollar'000		Baht'000	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
Current								
<u>Financial derivative recognised at fair value through profit or loss</u>								
Interest rate swap	-	-	-	-	26	603	782	18,129
<u>Derivative financial instruments used for hedging - cash flow hedge</u>								
Interest rate swap	-	3,134	-	104,739	-	7,424	-	222,982
Cross currency and interest rate swap	-	855	-	28,571	2,971	-	89,226	-
Total current financial derivatives	-	3,989	-	133,310	2,997	8,027	90,008	241,111
Non-current								
<u>Financial derivative recognised at fair value through profit or loss</u>								
Warrants	120	-	4,012	-	-	-	-	-
Interest rate swap	-	-	-	-	-	-	4	-
<u>Derivative financial instruments used for hedging - cash flow hedge</u>								
Interest rate swap	693	3,989	23,169	133,309	-	18,503	-	555,791
Cross currency and interest rate swap	-	18,511	-	618,634	4,245	2,245	127,508	67,420
Total non-current financial derivatives	813	22,500	27,181	751,943	4,245	20,748	127,512	623,211
Total financial derivatives	813	26,489	27,181	885,253	7,242	28,775	217,520	864,322

a) Classification

Derivatives are for the purpose of hedging against economic risks, not for speculation. The Group applies hedge accounting for certain derivatives. This qualifies as a cash flow hedge instrument with a hedge ratio based on the relationship of the underlying risk variables between the hedged item and the hedging instrument. However, if a derivative contract does not meet the criteria for hedge accounting, it is classified as held for trading and measured at fair value through profit or loss.

The Group presents fair value of derivative contracts as current and non-current based on each maturity of hedged items.

Fair value of derivatives is classified as a current or non-current following its remaining maturity.

The Group accounting policies for cash flow hedges are disclosed in Note 4.24 and the additional information for derivatives are disclosed in Note 6.

b) Fair value measurement

Method and assumptions used for fair valuation estimate of derivatives are disclosed in Note 6.

c) Hedge effectiveness

Hedge effectiveness is determined at the inception of the hedge relationship, and through periodic prospective effectiveness assessments, to ensure that an economic relationship exists between the hedged item and hedging instrument.

Hedges of foreign currency

For hedges of foreign currency, the Group enters hedge relationships where the critical terms of the hedging instrument match with the terms of the hedged item. The Group therefore performs a qualitative assessment of effectiveness. If changes in circumstances affect the terms of the hedged item such that the critical terms no longer match exactly with the critical terms of the hedging instrument, the Group uses the hypothetical derivative method to assess effectiveness.

In hedges of foreign currency, ineffectiveness may arise if the timing of the forecast transaction changes from what was originally estimated, or if there are changes in the credit risk of the derivative counterparty.

Hedges of interest rate

The Group enters interest rate swaps that have similar critical terms as the hedged item, such as reference rate, reset dates, payment dates, maturities, and notional amount. The Group does not hedge all of its loans; therefore, the hedged item is identified as a proportion of the outstanding loans up to the notional amount of the swaps. As all critical terms matched during the year, there is an economic relationship.

Hedge ineffectiveness for interest rate swaps is assessed using the same principles as for hedges of foreign currency purchases. It may occur due to the credit value/debit value adjustment on the interest rate swaps which is not matched by the loan, and differences in critical terms between the interest rate swaps and loans.

d) Hedging reserve

Hedging reserves comprise hedging costs and cash flow hedge reserves. The cash flow hedge reserve is used to recognise gain/loss relating to the effective portion of the change in fair value of the derivatives for which hedge accounting is applied.

Hedging reserves are listed in other components of equity, which consists of the following hedging instruments.

Consolidated financial statements						
US Dollar'000						
	Electricity Swaption contracts	Natural gas swap contracts	Coal price swap contracts	Currency and interest rate swap contracts	Interest rate swap contracts	Total hedge reserve
Cash flow hedge reserves						
Opening balance as at 1 January 2020	-	-	(102)	(48,468)	(2,232)	(50,802)
Add: Change in fair value of hedging instrument recognised in other comprehensive income	-	-	(11,918)	(3,731)	9,395	(6,254)
Less: Reclassification from other comprehensive income to profit or loss	-	-	1,264	14,398	(16,197)	(535)
Less: Deferred tax	-	-	2,445	(5,082)	1,618	(1,019)
Closing balance as at 31 December 2020	-	-	(8,311)	(42,883)	(7,416)	(58,610)
Add: Change in fair value of hedging instrument recognised in other comprehensive income	7,729	(389,473)	(212,340)	(2,996)	30,557	(566,523)
Less: Reclassification from other comprehensive income to profit or loss	(4,043)	244,781	199,251	15,182	19,337	474,508
Less: Deferred tax	(1,106)	32,998	2,600	2,633	(5,358)	31,767
Closing balance as at 31 December 2021	2,580	(111,694)	(18,800)	(28,064)	37,120	(118,858)

Consolidated financial statements						
Baht'000						
	Electricity Swaption contracts	Natural gas swap contracts	Coal price swap contracts	Currency and interest rate swap contracts	Interest rate swap contracts	Total hedge reserve
Cash flow hedge reserves						
Opening balance as at 1 January 2020	-	-	(3,086)	(1,461,469)	(67,287)	(1,531,842)
Add: Change in fair value of hedging instrument recognised in other comprehensive income	-	-	(351,274)	(107,177)	281,283	(177,168)
Less: Reclassification from other comprehensive income to profit or loss	-	-	39,543	450,571	(506,856)	(16,742)
Less: Deferred tax	-	-	71,848	(152,649)	46,082	(34,719)
Closing balance as at 31 December 2020	-	-	(242,969)	(1,270,724)	(246,778)	(1,760,471)
Add: Change in fair value of hedging instrument recognised in other comprehensive income	253,005	(12,678,803)	(6,844,939)	(671,623)	1,050,620	(18,891,740)
Less: Reclassification from other comprehensive income to profit or loss	(129,270)	7,827,390	6,371,477	915,197	618,322	15,603,116
Less: Deferred tax	(37,492)	1,118,619	88,131	89,246	(181,629)	1,076,875
Closing balance as at 31 December 2021	86,243	(3,732,794)	(628,300)	(937,904)	1,240,535	(3,972,220)

	Separate financial statements					
	US Dollar'000			Baht'000		
	Currency and interest rate swap contracts	Interest rate swap contracts	Total hedge reserve	Currency and interest rate swap contracts	Interest rate swap contracts	Total hedge reserve
Cash flow hedge reserves						
Opening balance as at 1 January 2020	5,123	(6,792)	(1,669)	154,404	(204,733)	(50,329)
Add: Change in fair value of hedging instrument recognised in other comprehensive income	(27,824)	6,376	(21,448)	(856,310)	205,950	(650,360)
Less: Reclassification from other comprehensive income to profit or loss	18,786	(13,680)	5,106	583,579	(424,968)	158,611
Less: Deferred tax	3,490	1,623	5,113	105,547	49,098	154,645
Closing balance as at 31 December 2020	(425)	(12,473)	(12,898)	(12,780)	(374,653)	(387,433)
Add: Change in fair value of hedging instrument recognised in other comprehensive income	9,354	2,418	11,772	321,675	53,130	374,805
Less: Reclassification from other comprehensive income to profit or loss	(4,896)	17,078	12,182	(149,743)	545,352	395,609
Less: Deferred tax	6,151	(3,698)	2,453	181,144	(112,672)	68,472
Closing balance as at 31 December 2021	10,184	3,325	13,509	340,296	111,157	451,453

e) Amounts recognised in profit or loss

In addition to the amounts disclosed in the reconciliation of hedging reserves in d) above, the following amounts were recognised in profit or loss in relation to derivatives:

	Consolidated financial statements		Separate financial statements	
	US Dollar'000	Baht'000	US Dollar'000	Baht'000
For the year ended 31 December 2021				
Net gains on foreign currency forwards not qualifying as hedges included in net gains (losses) from changes in fair value of financial instruments	29,338	938,219	697	17,427
For the year ended 31 December 2020				
Net gains (losses) on foreign currency forwards not qualifying as hedges included in net gains (losses) from changes in fair value of financial instruments	23,216	727,605	(591)	(19,861)

5.2 Capital risk management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern, so that they can continue to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

To maintain or adjust the capital structure, the Group may adjust the amounts of dividends paid to shareholders, return capital to shareholders, issue new shares, or sell assets to reduce debt.

6 Fair value

The following table presents financial assets and liabilities that are measured at fair value, also stated fair value of each financial assets and liabilities, excluding financial assets and financial liabilities measured at amortised cost where the carrying value approximates fair value.

	Consolidated financial statements							
	US Dollar'000				Baht'000			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
As at 31 December 2021								
Financial assets								
Financial derivative assets recognised at fair value through profit or loss								
- Electricity swaption	-	-	41,588	41,588	-	-	1,389,881	1,389,881
- Foreign exchange rate forward	-	300	-	300	-	10,029	-	10,029
- Natural gas swap	-	1,549	-	1,549	-	51,778	-	51,778
- Warrant	120	-	-	120	4,012	-	-	4,012
Derivative financial instruments used for hedging - cash flow hedge								
- Foreign exchange rate forward	-	758	-	758	-	25,347	-	25,347
- Coal price swap	-	1,513	-	1,513	-	50,566	-	50,566
- Interest rate swap	-	693	-	693	-	23,169	-	23,169
- Electricity swaption	-	-	28,200	28,200	-	-	942,442	942,442
- Natural gas swap	-	9,988	-	9,988	-	333,737	-	333,737
Financial assets at fair value through profit or loss								
- Investment in debt instruments	-	15,687	-	15,687	-	524,272	-	524,272
- Investment in equity instruments	-	-	7,727	7,727	-	-	258,239	258,239
Financial assets at fair value through other comprehensive income								
- Note receivables	-	168	-	168	-	5,600	-	5,600
- Investment in equity instruments	6,400	-	158,024	164,424	213,884	-	5,281,157	5,495,041
Total assets	6,520	30,656	235,539	272,715	217,896	1,024,498	7,871,719	9,114,113

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For the year ended 31 December 2021

	Consolidated financial statements							
	US Dollar'000				Baht'000			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
As at 31 December 2021								
Financial liabilities								
Financial derivative liabilities recognised at fair value through profit or loss								
- Interest rate swap	-	9,738	-	9,738	-	325,435	-	325,435
- Natural gas swap	-	6,281	-	6,281	-	209,921	-	209,921
- Electricity forward contracts	-	4,412	-	4,412	-	147,448	-	147,448
Derivative financial instruments used for hedging - cash flow hedge								
- Interest rate swap	-	7,188	-	7,188	-	240,237	-	240,237
- Cross currency and interest rate swap	-	19,366	-	19,366	-	647,205	-	647,205
- Natural gas swap	-	108,537	-	108,537	-	3,627,300	-	3,627,300
- Coal price swap	-	25,374	-	25,374	-	847,963	-	847,963
Other financial liabilities								
- Employee compensation liabilities (included in other current liabilities)	-	-	3,068	3,068	-	-	102,540	102,540
- Employee compensation liabilities (included in other non-current liabilities)	-	-	3,375	3,375			112,782	112,782
- Contingent liabilities from asset acquisition (included in other current liabilities and other non-current liabilities)	-	-	207,533	207,533	-	-	6,935,743	6,935,743
- Put option over non-controlling interest (included in other non-current liabilities)	-	-	46,562	46,562	-	-	1,556,094	1,556,094
Total liabilities	-	180,896	260,538	441,434	-	6,045,509	8,707,159	14,752,668

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	Consolidated financial statements							
	US Dollar'000				Baht'000			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
As at 31 December 2020								
Financial assets								
Financial derivative assets recognised at fair value through profit or loss								
- Interest rate swap	-	-	-	-	-	4	-	4
- Foreign exchange rate forward	-	926	-	926	-	27,802	-	27,802
- Natural gas swap	-	15,499	-	15,499	-	465,539	-	465,539
- Electricity forward contracts	-	3,074	-	3,074	-	92,335	-	92,335
Derivative financial instruments used for hedging - cash flow hedge								
- Foreign exchange rate forward	-	11,020	-	11,020	-	330,996	-	330,996
- Cross currency and interest rate swap	-	7,216	-	7,216	-	216,734	-	216,734
- Fuel swap	-	1,617	-	1,617	-	48,601	-	48,601
Financial assets at fair value through profit or loss								
- Investment in debt instruments	-	11,071	-	11,071	-	332,546	-	332,546
Financial assets at fair value through other comprehensive income								
- Note receivables	-	346	-	346	-	10,392	-	10,392
- Investment in equity instruments	4,488	-	148,927	153,415	134,811	-	4,473,332	4,608,143
Total assets	4,488	50,769	148,927	204,184	134,811	1,524,949	4,473,332	6,133,092
Financial liabilities								
Financial derivative liabilities recognised at fair value through profit or loss								
- Foreign exchange rate forward	-	603	-	603	-	18,129	-	18,129
- Natural gas swap	-	5,170	-	5,170	-	155,297	-	155,297
Derivative financial instruments used for hedging - cash flow hedge								
- Interest rate swap	-	28,318	-	28,318	-	850,601	-	850,601
- Cross currency and interest rate swap	-	2,245	-	2,245	-	67,421	-	67,421
- Coal swap	-	10,374	-	10,374	-	311,597	-	311,597
Other financial liabilities								
- Contingent liabilities from asset acquisition (included in other current liabilities and other non-current liabilities)	-	-	12,560	12,560	-	-	377,266	377,266
- Put option over non-controlling interest (included in other non-current liabilities)	-	-	42,288	42,288	-	-	1,270,200	1,270,200
Total liabilities	-	46,710	54,848	101,558	-	1,403,045	1,647,466	3,050,511

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	Separate financial statements							
	US Dollar'000				Baht'000			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
As at 31 December 2021								
Financial assets								
Financial derivative assets recognised at fair value through profit or loss								
- Warrants	120	-	-	120	4,012	-	-	4,012
Derivative financial instruments used for hedging - cash flow hedge								
- Interest rate swap	-	693	-	693	-	23,169	-	23,169
Financial assets at fair value through other comprehensive income								
- Investment in equity instruments	4,932	-	2,817	7,749	164,826	-	94,141	258,967
Total assets	5,052	693	2,817	8,562	168,838	23,169	94,141	286,148
Financial liabilities								
Derivative financial instruments used for hedging - cash flow hedge								
- Interest rate swap	-	7,123	-	7,123	-	238,048	-	238,048
- Cross currency and interest rate swap	-	19,366	-	19,366	-	647,205	-	647,205
Total liabilities	-	26,489	-	26,489	-	885,253	-	885,253

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	Separate financial statements							
	US Dollar'000				Baht'000			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
As at 31 December 2020								
Financial assets								
Financial derivative assets recognised at fair value through profit or loss								
- Interest rate swap	-	-	-	-	-	4	-	4
- Foreign exchange rate forward	-	26	-	26	-	782	-	782
Derivative financial instruments used for hedging - cash flow hedge								
- Cross currency and interest rate swap	-	7,216	-	7,216	-	216,734	-	216,734
Financial assets at fair value through other comprehensive income								
- Investment in equity instruments	3,658	-	2,817	6,475	109,884	-	84,612	194,496
Total assets	3,658	7,242	2,817	13,717	109,884	217,520	84,612	412,016
Financial liabilities								
Financial derivative liabilities recognised at fair value through profit or loss								
- Foreign exchange rate forward	-	603	-	603	-	18,129	-	18,129
Derivative financial instruments used for hedging - cash flow hedge								
- Interest rate swap	-	25,927	-	25,927	-	778,773	-	778,773
- Cross currency and interest rate swap	-	2,245	-	2,245	-	67,420	-	67,420
Total liabilities	-	28,775	-	28,775	-	864,322	-	864,322

There were no transfers between Level 1,2 and 3 during the year.

Fair value is categorised into hierarchy based on inputs used as follows:

(a) Financial instruments in level 1

The fair value of financial instruments traded in active markets is based on quoted market prices on the statement of financial position date referring to the Stock Exchange of Thailand and Australian Securities Exchange. The quoted market price used for financial assets held by the Group is the closing price. These instruments are included in Level 1.

(b) Financial instruments in level 2

The fair value of financial instruments that are not traded in an active market (for example, over-the-counter derivatives) is determined by using valuation techniques. These valuation techniques maximise the use of observable market data where it is available and rely as little as possible on entity specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in level 2.

Specific valuation techniques used to value financial instruments include:

- Quoted market prices or dealer quotes for similar instruments.
- The fair value of interest rate swaps is calculated as the present value of the estimated future cash flows based on observable yield curves.
- The fair value of forward foreign exchange contracts is determined by using forward exchange rates on the statement of financial position date, with the resulting value discounted back to present value.
- The fair value of coal swap contract, fuel swap contract, natural gas swap contract and electricity forward contracts is determined by using forward price on the statement of financial position date, with the resulting value discounted back to present value.
- Fair value of debt instruments and note receivables is determined from discounted contractual cash flows where discount rate quoted in an active market.
- Other techniques, such as discounted cash flow analysis, are used to determine fair value for the remaining financial instruments.

(c) Financial instruments in level 3

The fair value of financial instruments is not based on observable market data.

The following table presents the significant changes in level 3 items:

	Consolidated financial statements							
	Investment in equity instruments		Contingent liabilities from asset acquisition		Put option over non-controlling interest		Electricity swaption	
	US Dollar'000	Baht'000	US Dollar'000	Baht'000	US Dollar'000	Baht'000	US Dollar'000	Baht'000
Opening balance as at 1 January 2020	174,169	5,251,877	-	-	-	-	-	-
Additions	11,487	359,476	-	-	-	-	-	-
Reclassification	(19,891)	(622,464)	-	-	-	-	-	-
Decrease in investment	(18,924)	(592,197)	-	-	-	-	-	-
Acquisition investment of a subsidiary	-	-	19,700	591,731	-	-	-	-
Change in shareholding interests of a subsidiary and put options over non-controlling interests from corporatisation	-	-	-	-	42,288	1,350,978	-	-
Changes in fair value recognised in other comprehensive income	(4,419)	(138,283)	-	-	-	-	-	-
Changes in fair value recognised as part of its cost of assets	-	-	(7,140)	(223,281)	-	-	-	-
Translation differences	6,505	214,923	-	8,816	-	(80,778)	-	-
Closing balance as at 31 December 2020	148,927	4,473,332	12,560	377,266	42,288	1,270,200	-	-
Addition	52,014	1,663,242	-	-	-	-	-	-
Decrease in investment	(2,365)	(75,636)	-	-	-	-	-	-
Business combination	-	-	-	-	-	-	58,843	1,936,041
Treasury shares of a subsidiary	-	-	-	-	(2,754)	(88,994)	-	-
Changes in fair value recognised to profit or loss	582	18,605	-	-	-	-	8,299	277,368
Change in fair value recognised in other comprehensive income	(17,947)	(573,899)	-	-	-	-	3,700	123,639
Changes in fair value recognised as part of its cost of assets	-	-	194,973	6,234,681	-	-	-	-
Change in fair value recognised in equity	-	-	-	-	7,028	237,013	-	-
Translation differences	(15,460)	33,752	-	323,796	-	137,875	(1,054)	(4,725)
Closing balance at 31 December 2021	165,751	5,539,396	207,533	6,935,743	46,562	1,556,094	69,788	2,332,323

Significant changes in investment in an equity instrument

On 26 August 2021, Banpu Renewable Singapore Pte. Ltd. (BRS), which is a subsidiary of the Group, acquired 100% of Tokumei Kumiai's (TK) interest in Goudou Kaisha Aizu Solar Energy (Nari Aizu), a solar power plant in Japan, from Aizu Energy Pte. Ltd., which is a joint venture of the Group. The purchase price is JPY 4,200 million or equivalent to US Dollar 38.75 million. The investment is classified as financial assets because the Group has no control over the investment accordance with the TK agreement.

The following table summarises the quantitative information about the significant unobservable inputs used in level 3 fair value measurement.

As at 31 December	Fair value US Dollar'000		Unobservable input	Range of inputs	
	2021	2020		2021	2020
Investment in equity instruments measured at FVOCI	165,751	148,927	Discount rate	6.86% - 15.51%	6.57% - 15.66%
Contingent liabilities from assets acquisition	207,533	12,560	Discount rate	5.00%	7.00%
Put option over non-controlling interest	46,452	42,288	Discount rate	8.63%	-
Electricity swaption	69,788	-	Forward electricity price curve	AUD 51.14 per MWh - AUD 63.92 per MWh	-

The unobservable inputs and fair values as at 31 December 2021 are shown as follows:

	Unobservable inputs	Movements	Changes in fair value	
			US Dollar'000	
			Increase in assumption	Decrease in assumption
Investments in equity instruments measured at FVOCI	Discount rate	1.00%	(11,344)	12,880
Contingent liabilities from assets acquisition	Discount rate	1.00%	(2,642)	2,702
Put option over non-controlling interest	Discount rate	1.00%	(5,219)	5,653
Electricity swaption	Forward electricity price curve	5.00%	(4,666)	4,654

The main level 3 inputs used by the Group pertains to the discount rate. It is estimated based on weighted average cost of capital incorporating the average rate of return in the industry that is expected for the given period and forward electricity prices which are refer to an energy consulting firm.

Group's valuation processes

The Groups' finance department has a working team that performs the valuations of financial assets required for financial reporting, including level 3 fair values. The team reports directly to the chief financial officer (CFO) and the audit committee.

7 Critical accounting estimates, assumptions, and judgements

Estimates, assumption, and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

During 2021, the Group makes accounting estimates and assumptions concerning the future. The results of accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are outlined below.

7.1 Coal reserves

The Group estimates coal reserves based on its best estimate of products that can be economically extracted from the relevant mining area. Estimates are supported by geological studies and drilling samples to determine the reserves.

7.2 Estimated impairment of goodwill

The Group annually tests for impairment of goodwill in accordance with the accounting policy stated in Note 4.12. The recoverable amounts of cash-generating units have been determined based on value-in-use calculations. These calculations use cash flow projections based on financial budgets covering the lives of mine in each country and estimation of discount rate used in the calculation of impairment testing over goodwill as discussed in Note 19.

7.3 Estimated recoverable amounts of prepaid taxes

Prepaid taxes are recognised as assets in the financial statements. The Group considers the recoverable amounts of these prepaid taxes by assessing the evidence, including related taxation law and the conformity of the Group's tax management, tax objection, and tax appeals. However, recoverable amounts of prepaid taxes depend on the tax investigation and decision by the related tax bureau and/or tax court. Detail of significant prepaid tax is disclosed in Note 31.5.

7.4 Impairment of financial assets

The loss allowances for financial assets are based on assumptions about default risk and expected loss rates. The Group uses judgement in making these assumptions and selecting the inputs used in the impairment calculation, based on the Group's past history and existing market conditions, as well as forward-looking estimates at the end of each reporting period.

7.5 Estimate of the fair value of the net identifiable assets acquired from the business combination

The identification of fair values of intangible assets which are right in long-term power purchase agreement is based on valuation techniques and significant judgement and assumptions made by the management. The significant assumptions applied by the management are for example selling price per unit, capacity of power plants, growth rate, operating costs, capital expenditures and discount rate as disclosed in Note 32.

7.6 Estimate of the fair value of net identifiable assets acquired from the acquisition of investment in a joint venture and subsidiaries

The identification of fair values of net assets from the acquisition of investment in a joint venture and subsidiaries is based on significant judgement and assumptions made by the management. The significant assumptions applied by the management in the estimation of projected cash flows are the electricity tariffs, capacity of power plants, growth rate, operating costs, capital expenditures and discount rate.

8 Segment information

For the year ended 31 December 2021, the Group has modified the presentation of segment information in order to align with the current business activities. The Group is organised into the following business segments:

- Energy Resources: The Group operates in coal sales and production both domestic and overseas. The Group also operates in gas production in the United States.
- Energy Generation: The Group operates in electricity generation which consists of thermal and renewable energy both domestic and overseas.
- Energy Technology: The Group's operations comprise of solar rooftop, electric vehicle, energy storage and energy management system.

The segment information for the year 2020 included in the financial statements has been adjusted retrospectively for comparative purpose

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	Consolidated financial statements																						
	Million US Dollar																						
	Energy resources								Energy generation														
	Mining				Natural gas				Thermal				Renewable										
	People's Republic of China and				United States				People's Republic of China				Energy technology							Head office		Eliminated entries	
Thailand	Indonesia	Australia	Mongolia	States	Thailand	of China	Japan	Laos	States	of China	Japan	Vietnam	Australia			Total							
For the year ended 31 December 2021																							
Quantity of coal sales (unit: thousand tons)	1,059	20,065	9,816	1,836	-	-	-	-	-	-	-	-	-	-	-	-	32,776	(866)	31,910				
Sales and service income	95	2,097	728	164	891	-	191	-	-	20	29	-	4	6	67	-	4,292	(168)	4,124				
Cost of sales and services	(86)	(912)	(677)	(163)	(410)	-	(190)	-	-	(21)	(11)	-	(2)	(6)	(84)	-	(2,562)	169	(2,393)				
Gross profit (loss)	9	1,185	51	1	481	-	1	-	-	(1)	18	-	2	-	(17)	-	1,730	1	1,731				
Gross profit margin (%)	9%	57%	7%	1%	54%	-	1%	-	-	(5%)	62%	-	50%	0%	(25%)	-	40%		42%				
Share of profit (loss) from associates and joint ventures	-	-	-	129	-	7	(16)	6	113	-	-	5	-	-	(17)	-	227	-	227				
Selling expenses	(6)	(98)	(65)	-	-	-	-	-	-	-	-	-	-	-	(2)	-	(171)	-	(171)				
Administrative expenses	-	(25)	(23)	(2)	(84)	-	(21)	-	-	(2)	(2)	-	-	(12)	(14)	(63)	(248)	-	(248)				
Royalty fee	-	(247)	(47)	-	-	-	-	-	-	-	-	-	-	-	-	-	(294)	-	(294)				
Interest income	120	3	-	-	4	-	5	-	-	1	2	-	-	-	4	115	254	(245)	9				
Profit (loss) from operation before interest expenses and income taxes	123	818	(84)	128	401	7	(31)	6	113	(2)	18	5	2	(12)	(46)	52	1,498	(244)	1,254				

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Consolidated financial statements																						
Million US Dollar																						
Energy resources										Energy generation												
Mining					Natural gas					Thermal					Renewable							
People's Republic of China and					United States					People's Republic of China					Energy technology				Head office	Eliminated entries		Total
Thailand	Indonesia	Australia	Mongolia	States	Thailand	of China	Japan	Laos	States	of China	Japan	Vietnam	Australia	technology	office	Total	entries	Total				
For the year ended																						
31 December 2020																						
Quantity of coal sales (unit: thousand tons)																						
1,193	21,193	12,498	1,397	-	-	-	-	-	-	-	-	-	-	-	-	36,281	(1,614)	34,667				
Sales and service income																						
84	1,193	698	71	120	-	170	-	-	-	27	-	-	-	30	-	2,393	(110)	2,283				
Cost of sales and services																						
(75)	(850)	(658)	(70)	(107)	-	(135)	-	-	-	(10)	-	-	-	(28)	-	(1,933)	111	(1,822)				
Gross profit																						
9	343	40	1	13	-	35	-	-	-	17	-	-	-	2	-	460	1	461				
Gross profit margin (%)																						
11%	29%	6%	1%	11%	-	21%	-	-	-	63%	-	-	-	7%	-	19%		20%				
Share of profit (loss) from																						
associates and joint ventures																						
-	-	-	23	-	17	2	-	103	-	-	1	-	-	(11)	-	135	-	135				
Selling expenses																						
(6)	(68)	(66)	-	-	-	-	-	-	-	-	-	-	-	(1)	-	(141)	-	(141)				
Administrative expenses																						
-	(18)	(18)	(2)	(33)	-	(16)	-	-	-	(1)	-	-	-	(12)	(55)	(155)	-	(155)				
Royalty fee																						
-	(136)	(47)	-	-	-	-	-	-	-	-	-	-	-	-	-	(183)	-	(183)				
Interest income																						
105	3	-	-	2	-	4	-	-	-	2	-	-	-	5	104	225	(215)	10				
Profit (loss) from operation before																						
interest expenses																						
and income taxes																						
108	124	(91)	22	(18)	17	25	-	103	-	18	1	-	-	(17)	49	341	(214)	127				

Banpu Public Company Limited

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For the year ended 31 December 2021

Consolidated financial statements																						
Million US Dollar																						
Energy resources						Energy generation																
Mining			Natural gas			Thermal						Renewable										
People's Republic of China and			United States			People's Republic of China			United States			People's Republic of China			Energy technology			Head office		Eliminated entries		Total
Thailand	Indonesia	Australia	Mongolia	States	Thailand	of China	Japan	Laos	States	of China	Japan	Vietnam	Australia	technology	office	Total	entries	Total				
For the year ended																						
31 December 2020 (continued)																						
Profit from operation before interest																						
expenses and income taxes																						
127																						
Net gains on exchange rate																						
81																						
Net gains from changes in fair value																						
of financial instruments																						
23																						
Investment restructuring expense																						
(31)																						
Others																						
(35)																						
Interest expenses																						
(173)																						
Income taxes																						
(9)																						
Non-controlling interests																						
(39)																						
Losses for the year - owners of the parent																						
(56)																						
Total segmented assets																						
36	881	2,866	580	1,312	-	347	-	-	-	171	-	8	-	35	-	6,236	(21)	6,215				
Total unallocated assets																						
3,162																						
Total assets																						
9,377																						
Timing of revenue recognition																						
- At a point in time																						
84	1,193	698	71	120	-	170	-	-	-	27	-	-	-	30	-	2,393	(110)	2,283				
- Overtime																						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
84	1,193	698	71	120	-	170	-	-	-	27	-	-	-	30	-	2,393	(110)	2,283				

Banpu Public Company Limited

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For the year ended 31 December 2021

	Consolidated financial statements																				
	Million Baht																				
	Energy resources										Energy generation										
	Mining					Natural gas					Thermal					Renewable					
	People's Republic of China and United States					People's Republic of China					People's Republic of China					Energy technology				Head office	Eliminated entries
Thailand	Indonesia	Australia	Mongolia	United States	Thailand	People's Republic of China	Japan	Laos	United States	People's Republic of China	Japan	Vietnam	Australia	Energy technology	Head office	Total	Eliminated entries	Total			
For the year ended 31 December 2021																					
Quantity of coal sales (unit: thousand tons)	1,059	20,065	9,816	1,836	-	-	-	-	-	-	-	-	-	-	-	-	32,776	(866)	31,910		
Sales and service income	3,078	67,990	23,346	5,290	28,722	-	6,114	-	-	674	917	-	121	192	2,142	-	138,586	(5,396)	133,190		
Cost of sales and services	(2,808)	(29,380)	(21,690)	(5,247)	(13,157)	-	(6,114)	-	-	(712)	(347)	-	(67)	(195)	(2,647)	-	(82,364)	5,448	(76,916)		
Gross profit (loss)	270	38,610	1,656	43	15,565	-	-	-	-	(38)	570	-	54	(3)	(505)	-	56,222	52	56,274		
Gross profit margin (%)	9%	57%	7%	1%	54%	-	0%	-	-	(6%)	62%	-	45%	(2%)	(24%)	-	41%		42%		
Share of profit (loss) from associates and joint ventures	-	-	(10)	4,190	-	216	(542)	209	3,607	-	-	160	-	-	(540)	-	7,290	-	7,290		
Selling expenses	(184)	(3,154)	(2,092)	(12)	-	-	-	-	-	(1)	-	-	-	-	(63)	-	(5,506)	-	(5,506)		
Administrative expenses	-	(805)	(740)	(64)	(2,684)	-	(662)	-	-	(58)	(48)	-	(9)	(396)	(436)	(2,047)	(7,949)	-	(7,949)		
Royalty fee	-	(8,036)	(1,495)	-	-	-	-	-	-	-	-	-	-	-	-	-	(9,531)	-	(9,531)		
Interest income	3,846	95	10	2	119	-	146	-	-	43	55	-	-	1	136	3,696	8,149	(7,871)	278		
Profit (loss) from operation before interest expenses and income taxes	3,932	26,710	(2,671)	4,159	13,000	216	(1,058)	209	3,607	(54)	577	160	45	(398)	(1,408)	1,649	48,675	(7,819)	40,856		

Banpu Public Company Limited

Notes to the consolidated and separate financial statements

For the year ended 31 December 2021

Consolidated financial statements																	
Million Baht																	
Energy resources						Energy generation											
Mining			Natural gas			Thermal						Renewable					
People's Republic of China and			United States			People's Republic of China			United States			People's Republic of China			Energy technology		Head office
Thailand	Indonesia	Australia	Mongolia	States	Thailand	of China	Japan	Laos	States	of China	Japan	Vietnam	Australia	technology		Total	Eliminated entries
Total																	
For the year ended 31 December 2021 (continued)																	
Profit from operation before interest expenses and income taxes																	
Net gains on exchange rate																	
Net losses from changes in fair value of financial instruments																	
Others																	
Interest expenses																	
Income taxes																	
Non-controlling interests																	
Profit for the year - owners of the parent																	
Total segmented assets																	
Total unallocated assets																	
Total assets																	
Timing of revenue recognition																	
- At a point in time																	
- Overtime																	

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Notes to the consolidated and separate financial statements

For the year ended 31 December 2021

	Consolidated financial statements																							
	Million Baht																							
	Energy resources										Energy generation													
	Mining					Natural gas					Thermal					Renewable								
	People's Republic of China and United States					People's Republic of China					People's Republic of China					Energy technology				Head office		Eliminated entries		Total
	Thailand	Indonesia	Australia	Mongolia	United States	Thailand	of China	Japan	Laos	United States	of China	Japan	Vietnam	Australia										
For the year ended 31 December 2020																								
Quantity of coal sales (unit: thousand tons)	1,193	21,193	12,498	1,397	-	-	-	-	-	-	-	-	-	-	-	-	-	36,281	(1,614)	34,667				
Sales and service income	2,666	37,300	21,828	2,209	3,721	-	5,297	-	-	-	835	-	-	-	918	-	74,774	(3,442)	71,332					
Cost of sales and services	(2,365)	(26,601)	(20,596)	(2,174)	(3,312)	-	(4,232)	-	-	-	(316)	-	-	-	(847)	-	(60,443)	3,453	(56,990)					
Gross profit	301	10,699	1,232	35	409	-	1,065	-	-	-	519	-	-	-	71	-	14,331	11	14,342					
Gross profit margin (%)	11%	29%	6%	2%	11%	-	20%	-	-	-	62%	-	-	-	8%	-	19%		20%					
Share of profit (loss) from associates and joint ventures	-	-	8	732	-	542	76	-	3,217	-	-	34	-	-	(370)	-	4,239	-	4,239					
Selling expenses	(166)	(2,143)	(2,071)	(11)	-	-	-	-	-	-	-	-	-	-	(46)	-	(4,437)	-	(4,437)					
Administrative expenses	-	(608)	(565)	(68)	(1,028)	-	(503)	-	-	-	(35)	-	(4)	-	(351)	(1,718)	(4,880)	1	(4,879)					
Royalty fee	-	(4,243)	(1,466)	-	-	-	-	-	-	-	-	-	-	-	-	-	(5,709)	-	(5,709)					
Interest income	3,281	93	3	1	50	-	115	-	-	-	76	-	-	-	156	3,254	7,029	(6,730)	299					
Profit (loss) from operation before interest expenses and income taxes	3,416	3,798	(2,859)	689	(569)	542	753	-	3,217	-	560	34	(4)	-	(540)	1,536	10,573	(6,718)	3,855					

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Notes to the consolidated and separate financial statements

For the year ended 31 December 2021

Consolidated financial statements																			
Million Baht																			
Energy resources						Energy generation													
Mining			Natural gas			Thermal					Renewable								
People's Republic of China and			United States			People's Republic of China			United States		People's Republic of China		Energy technology			Head office		Eliminated entries	
Thailand	Indonesia	Australia	Mongolia			Thailand	of China	Japan	Laos	States	of China	Japan	Vietnam	Australia			Total		Total
For the year ended																			
31 December 2020 (continued)																			
Profit from operation before interest																			
expenses and income taxes																			
Net gains on exchange rate																			
Net gains from changes in																			
fair value of financial instruments																			
Investment restructuring expense																			
Others																			
Interest expenses																			
Income taxes																			
Non-controlling interests																			
Losses for the year - owners of the parent																			
Total segmented assets																			
Total unallocated assets																			
Total assets																			
Timing of revenue recognition																			
- At a point in time																			
- Overtime																			

Revenue is allocated to the geographic areas where the sale originated and there is no customer who generates significant revenue to the Group.

9 Financial assets and financial liabilities

The Group has classified financial assets and liabilities as follows:

As at 31 December 2021	Consolidated financial statements		Separate financial statements	
	US Dollar'000	Baht'000	US Dollar'000	Baht'000
Financial assets				
Financial assets measured at amortised cost				
Cash and cash equivalents	1,184,361	39,581,234	114,057	3,811,758
Trade accounts receivable, net	472,940	15,805,596	7,250	242,287
Amounts due from related parties	2,068	69,096	523,165	17,484,116
Advances to related parties	-	-	1,497	50,025
Short-term loans to related parties	69,260	2,314,662	74,603	2,493,217
Other current assets	222,651	7,440,983	91	3,035
Dividend receivables from a related party	31,337	1,047,306	-	-
Long-term loans to related parties	16,664	556,903	3,035,195	101,435,898
Other non-current assets	71,263	2,381,613	245	8,195
Financial assets measured at fair value through profit or loss				
Investments in debt instruments	15,687	524,272	-	-
Investments in equity instruments	7,727	258,239	-	-
Financial assets measured at fair value through				
Note receivables	168	5,600	-	-
Investments in equity instruments	164,424	5,495,041	7,749	258,967
Derivative assets				
Held for trading at fair value through profit or loss	43,557	1,455,700	120	4,012
Apply hedge accounting	41,152	1,375,261	693	23,169
Financial liabilities				
Financial liabilities measured at amortised cost				
Short-term loans from financial institutions	1,173,907	39,231,861	812,461	27,152,378
Trade account payable	98,547	3,293,416	2,746	91,758
Advance from and amounts due to related parties	-	-	784	26,202
Accrued interest expenses	33,228	1,110,469	26,419	882,906
Long-term loans from financial institutions, net	2,787,252	93,149,702	1,862,202	62,234,622
Debentures, net	2,030,976	67,875,016	2,030,976	67,875,016
Lease Liabilities	51,341	1,715,801	2,095	70,036
Other current liabilities	419,512	14,020,364	9,529	318,442
Other non-current liabilities	17,481	584,229	1,206	40,205
Financial liabilities measured at FVPL				
Employee compensation liabilities	6,443	215,322	-	-
Contingent liabilities from asset acquisition	207,533	6,935,743	-	-
Put option over non-controlling interest	46,562	1,556,094	-	-
Derivative liabilities				
Held for trading at fair value through profit or loss	20,431	682,804	-	-
Apply hedge accounting	160,465	5,362,705	26,489	885,253

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Notes to the consolidated and separate financial statements

For the year ended 31 December 2021

As at 31 December 2020	Consolidated financial statements		Separate financial statements	
	US Dollar'000	Baht'000	US Dollar'000	Baht'000
Financial assets				
Financial assets measured at amortised cost				
Cash and cash equivalents	730,456	21,940,785	216,119	6,491,574
Trade accounts receivable, net	248,754	7,471,862	16,111	483,927
Investments in debt instruments	156	4,676	-	-
Amounts due from related parties	1,104	33,166	440,517	13,231,852
Advances to related parties	-	-	1,269	38,123
Short-term loans to related parties	61,130	1,836,164	18,800	564,697
Other current assets	123,398	3,706,491	455	13,661
Dividend receivables from a related party	35,435	1,064,348	-	-
Long-term loans to related parties	20,888	627,400	2,283,094	68,577,510
Other non-current assets	41,450	1,245,047	297	8,917
Financial assets measured at fair value through profit or loss				
Investments in debt instruments	11,071	332,546	-	-
Financial assets measured at fair value through other comprehensive income				
Note receivables	346	10,392	-	-
Investments in equity instruments	153,415	4,608,143	6,475	194,496
Derivative assets				
Held for trading at fair value through profit or loss	19,473	584,895	-	-
Apply hedge accounting	19,879	597,116	7,242	217,520
Financial liabilities				
Financial liabilities measured at amortised cost				
Short-term loans from financial institutions	827,518	24,856,241	779,045	23,400,240
Trade account payable	67,425	2,025,238	6,378	191,570
Advance from and amounts due to related parties	-	-	1,005	30,201
Accrued interest expenses	25,336	761,023	22,248	668,255
Long-term from financial institutions, net	2,905,672	87,277,964	1,992,266	59,841,890
Debentures, net	1,650,116	49,564,678	1,650,116	49,564,678
Other current liabilities	335,135	10,066,442	5,255	157,843
Other non-current liabilities	83,926	2,520,908	2,439	73,222
Financial liabilities measured at FVPL				
Contingent liabilities from asset acquisition	12,560	377,266	-	-
Put option over non-controlling interest	42,288	1,270,200	-	-
Derivative liabilities				
Held for trading at fair value through profit or loss	5,773	173,426	603	18,128
Apply hedge accounting	40,937	1,229,619	28,172	846,194

As at 31 December 2021 and 2020, the financial assets and liabilities measured at amortised cost approximated the fair value except debentures, as disclosed in Note 25.

Financial assets at fair value through other comprehensive income

Amounts recognised in profit or loss and other comprehensive income

The following gains/(losses) were recognised in profit or loss and other comprehensive income during the year as follows:

	Consolidated financial statements		Separate financial statements	
	US Dollar'000	Baht'000	US Dollar'000	Baht'000
For the year ended 31 December 2021				
Gains/(losses) recognised in				
other comprehensive income	(26,984)	(753,938)	308	10,964
Dividends from equity investments at FVOCI				
recognised in profit or loss related to investments				
held at the end of the reporting period	8,541	273,817	160	5,011
For the year ended 31 December 2020				
Losses recognised in				
other comprehensive income	(1,157)	(40,022)	(1,889)	(56,976)
Dividends from equity investments at FVOCI				
recognised in profit or loss related to investments				
held at the end of the reporting period	1,794	55,722	271	8,662

10 Cash and cash equivalents

	Consolidated financial statements				Separate financial statements			
	US Dollar'000		Baht'000		US Dollar'000		Baht'000	
	2021	2020	2021	2020	2021	2020	2021	2020
As at 31 December								
Cash on hand	1,074	559	35,883	16,796	16	19	525	565
Deposits held at call								
with banks	959,078	583,621	32,052,281	17,530,293	114,041	216,100	3,811,233	6,491,009
Fixed deposits with banks	224,209	146,276	7,493,070	4,393,696	-	-	-	-
Total cash and cash equivalents	1,184,361	730,456	39,581,234	21,940,785	114,057	216,119	3,811,758	6,491,574

As at 31 December 2021, the interest rates on deposits held at call with banks and fixed deposits with banks were 0.13% to 2.02% per annum and 0.01% to 6.12% per annum (2020: 0.02% to 1.00% per annum and 0.15% to 6.00% per annum). These fixed deposits have an original maturity of three months.

11 Trade accounts receivable, net

	Consolidated financial statements				Separate financial statements			
	US Dollar'000		Baht'000		US Dollar'000		Baht'000	
	2021	2020	2021	2020	2021	2020	2021	2020
As at 31 December								
Trade accounts receivable								
- third parties	477,968	255,326	15,973,648	7,669,279	7,250	16,111	242,287	483,927
Less Expected credit losses	(5,028)	(6,572)	(168,052)	(197,417)	-	-	-	-
Trade accounts receivable, net	472,940	248,754	15,805,596	7,471,862	7,250	16,111	242,287	483,927

Trade accounts receivable can be analysed as follows:

	Consolidated financial statements				Separate financial statements			
	US Dollar'000		Baht'000		US Dollar'000		Baht'000	
	2021	2020	2021	2020	2021	2020	2021	2020
As at 31 December								
Trade accounts receivable								
under credit term	453,620	231,420	15,159,936	6,951,249	7,250	15,303	242,287	459,670
Trade accounts receivable								
due for payment								
- Less than 3 months	15,036	13,235	502,510	397,531	-	808	-	24,257
- Over 3 months but less than								
6 months	640	1,667	21,395	50,066	-	-	-	-
- Over 6 months but less than								
12 months	3,571	2,154	119,341	64,691	-	-	-	-
- Over 12 months	5,101	6,850	170,466	205,742	-	-	-	-
Total trade accounts								
receivable	477,968	255,326	15,973,648	7,669,279	7,250	16,111	242,287	483,927
Less Expected credit losses	(5,028)	(6,572)	(168,052)	(197,417)	-	-	-	-
Trade accounts receivable, net	472,940	248,754	15,805,596	7,471,862	7,250	16,111	242,287	483,927

12 Inventories, net

As at 31 December	Consolidated financial statements				Separate financial statements			
	US Dollar'000		Baht'000		US Dollar'000		Baht'000	
	2021	2020	2021	2020	2021	2020	2021	2020
Coal	100,035	85,362	3,343,160	2,564,033	8,553	8,928	285,837	268,172
Fuel	3,514	7,646	117,438	229,664	-	-	-	-
Natural gas	2,991	2,878	99,947	86,447	-	-	-	-
Others	330	422	11,017	12,676	-	-	-	-
Good in transits - coal	19,500	9,637	651,704	289,468	-	-	-	-
Total	126,370	105,945	4,223,266	3,182,288	8,553	8,928	285,837	268,172
<u>Less</u> Allowance for								
slow-moving of coal	(7,583)	(4,069)	(253,415)	(122,212)	(3,854)	(3,854)	(128,810)	(115,771)
Allowance for net								
realisable value								
of fuel	(1,953)	(487)	(65,277)	(14,632)	-	-	-	-
Inventories, net	116,834	101,389	3,904,574	3,045,444	4,699	5,074	157,027	152,401

13 Other current assets

As at 31 December	Consolidated financial statements				Separate financial statements			
	US Dollar'000		Baht'000		US Dollar'000		Baht'000	
	2021	2020	2021	2020	2021	2020	2021	2020
Prepaid expenses	59,076	33,695	1,974,327	1,012,106	4,535	4,651	151,564	139,702
Advance for prepayment	14,660	42,815	489,951	1,286,034	34	169	1,146	5,080
Value added tax receivables	20,108	14,644	672,003	439,875	1,350	1,478	45,112	44,382
Prepaid income tax	4,092	648	136,744	19,449	155	343	5,188	10,312
Restricted deposits at banks								
(Note 14.1 f)	161,412	74,014	5,394,381	2,223,164	-	-	-	-
Other receivables	46,579	48,282	1,556,651	1,450,261	57	455	1,889	13,662
Long service leave coal								
industry fund receivable								
in Australia	49,374	55,293	1,650,083	1,660,828	-	-	-	-
Others	2,736	1,059	91,423	31,790	-	-	-	-
Total other current assets	358,037	270,450	11,965,563	8,123,507	6,131	7,096	204,899	213,138

14 Investments in subsidiaries, associates, and joint ventures

Investments in associates and joint ventures accounted for using the equity method are as follows:

As at 31 December	Consolidated financial statements (Equity method)			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
Associates				
Urban Mobility Tech Co., Ltd.	10,414	3,063	348,023	92,000
Durapower Holdings Pte. Ltd.	34,174	34,174	1,142,103	1,026,498
FOMM Corporation	19,020	21,162	635,650	635,650
Global Engineering Co., Ltd.	9,949	11,071	332,480	332,527
Port Kembla Coal Terminal Ltd.	86	90	2,876	2,716
GEPP Sa-ard Co., Ltd.	359	400	12,000	12,000
Beyond Green Co., Ltd.	8,977	-	300,000	-
Joint ventures				
BLCP Power Ltd.	182,202	202,722	6,089,170	6,089,170
Hebi Zhong Tai Mining Co., Ltd.	48,320	48,320	1,614,862	1,451,404
Shanxi Gaohe Energy Co., Ltd.	308,933	308,933	10,324,501	9,279,443
Shanxi Luguang Power Co., Ltd.	71,203	69,687	2,379,602	2,093,182
Hongsa Power Company Limited	391,759	435,879	13,092,534	13,092,534
Phu Fai Mining Company Limited	25	28	836	836
Aura Land Development Pte. Ltd.	2,791	3,106	93,290	93,290
Aizu Energy Pte. Ltd.	11,505	32,370	384,484	972,304
Sunseap Group Pte. Ltd.	-	173,742	-	5,218,720
Hokkaido Solar Estate G.K.	1,807	2,011	60,396	60,396
Digital Energy Solutions Corporation	-	169	-	5,087
PT. Nusantara Timur Unggul	491	491	16,403	14,742
Nakoso IGCC Management Co., Ltd	80,443	-	2,688,394	-
EVOLT Technology Co., Ltd	2,693	-	90,000	-
Investments in associates and joint ventures				
- cost method	1,185,151	1,347,418	39,607,604	40,472,499
<u>Add</u> Cumulative equity account of investments				
in associates and joint ventures	460,302	342,532	15,383,286	10,288,694
Total investments in associates and joint ventures	1,645,453	1,689,950	54,990,890	50,761,193

As at 31 December 2021 and 2020, under the conditions of loans for project finance of joint ventures, the Group pledged its investments in two joint ventures with a cost of US Dollar 370.82 million, as collateral for loans from financial institutions of such joint ventures.

As at 31 December 2021, a subsidiary, who is the shareholder of a joint venture, guarantee for loans from financial institutions amounting to CNY 534 million or equivalent to USD Dollar 84 million of a joint venture.

Investments in subsidiaries are as follows:

As at 31 December	Separate financial statements (Equity method)			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
Subsidiaries				
Banpu Minerals Co., Ltd.	102,434	102,434	3,423,345	3,076,830
BP Overseas Development Co., Ltd.	388,472	517,963	12,982,706	15,558,109
Banpu Power Public Company Limited	687,198	687,198	22,966,067	20,641,416
Banpu Engineering Services Co., Ltd.	7,787	7,787	260,256	233,913
BOG Co., Ltd.	991,454	991,454	33,134,285	29,780,395
Banpu Innovation & Ventures Co., Ltd.	4,110	3,518	137,342	105,661
Banpu NEXT Co., Ltd.	185,769	178,228	6,208,386	5,353,456
Banpu Vietnam Limited Liability Company	1,000	1,000	33,420	30,037
Total investments in subsidiaries	2,368,224	2,489,582	79,145,807	74,779,817

14.1 Changes in investments in subsidiaries, associates and joint ventures

Movements of investments in associates and joint ventures are as follows:

For the year ended 31 December	Consolidated financial statements (Equity method)			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
Opening balance	1,689,950	1,493,705	50,761,193	45,041,190
Addition and purchase of investments	97,237	85,829	3,109,360	2,685,897
Decrease in investment	(17,593)	-	(562,569)	-
Dividend received from joint ventures	(69,596)	(72,681)	(2,225,488)	(2,274,467)
Reclassification to non-current asset held-for-sale	(172,048)	-	(5,501,596)	-
Add Share of profit from and associates joint ventures	227,137	135,335	7,290,188	4,238,649
Share of other comprehensive income (expense) from associates and joint ventures				
- Gains (Losses) on fair value of equity instruments	(10,819)	4,969	(309,927)	148,060
- Cash flow hedge reserve	31,344	(11,506)	934,787	(343,103)
- Remeasurement of post-employment benefit obligations	(962)	(3)	(34,574)	-
- Translation differences	(129,197)	54,302	1,529,516	1,264,967
Closing balance	1,645,453	1,689,950	54,990,890	50,761,193

Movements of investments in subsidiaries are as follows:

For the year ended 31 December	Separate financial statements (Equity method)			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
Opening balance	2,489,582	1,954,274	74,779,817	58,929,179
Addition of investments	8,133	500,628	260,067	15,666,515
Share-based payment of a subsidiary	-	(25)	-	(808)
Effect from group restructuring	-	41,965	-	1,312,902
Disposal of investments under common control	(129,491)	(7,260)	(4,140,739)	(228,818)
Translation differences	-	-	8,246,662	(899,153)
Closing balance	2,368,224	2,489,582	79,145,807	74,779,817

Significant transactions of investments during the year

a) Addition of investments

Separate financial statements

The Company additionally invested in Banpu Next Co., Ltd., a subsidiary, in proportion to the original investment amounting to Baht 236 million or equivalent to US Dollar 7.54 million. The Company has fully paid for this investment.

b) Group restructuring

Separate financial statements

On 15 June 2021, the Company entered into a Share Purchase Agreement with Banpu Minerals Co., Ltd., a direct subsidiary to dispose its 25% shareholding in BP Overseas Development Co., Ltd., another direct subsidiary, with the selling price of Baht 4,726.72 million or equivalent to US Dollar 151.03 million. The Company received a promissory note of the value equal to the selling price. The promissory note bears an interest rate of 4.25% per annum with the maturity date in June 2026. The Company recognised the difference between the selling price and net book value of the investment amounting to US Dollar 21.54 million in the separate statement of comprehensive income during the year.

c) **Reclassification to non-current asset held-for-sale**

Consolidated financial statements

During the year, the Group classified an investment in Sunseap Group Pte. Ltd. which is a joint venture as non-current assets held-for-sale at a net book value of US Dollar 172.05 million, which is lower than the selling price less the cost of selling. Management assesses that it is highly probable to sell such investment and it meets the classification criteria for non-current assets held-for-sale. The Group completely sold this investment on 23 February 2022 (Note 33.3).

d) **Acquisition of investments**

Consolidated financial statements - Investment in a joint venture

Banpu Power Investment Co., Ltd, a subsidiary of the Group, purchased ordinary shares for 33.50% of Nakoso IGCC Management Co., Ltd (NIMCO), which holds 40% ownership in the Nakoso IGCC Power Plant, a 543 MW integrated gasification combined cycle, located in Fukushima, Japan. The purchase consideration paid was JPY 8,630.94 million or equivalent to US Dollar 78.02 million. The Group has classified investment in NIMCO as an investment in a joint venture.

The Group completely measured the fair value of the identifiable assets acquired and completed the purchase price allocation. Details of investment are as follows:

	Million JPY	Million US Dollar
Portion of estimated fair value of net assets acquired	2,722.08	24.61
Right to operate the power plant (Presented in investment in a joint venture)	5,908.86	53.41
Purchase considerations	8,630.94	78.02

Right to operate the power plant will be amortised by straight-line method over the periods of estimated useful life of the power plants.

Consolidated financial statements - Investment in an associate

On 21 September 2021, Banpu Next Co., Ltd., which is a subsidiary of the Group, invested in newly issued shares of Beyond Green Co., Ltd. (BYG) which is the authorised Club Car distributor registered in Thailand for the consideration of Baht 300 million or equivalent to US Dollar 8.84 million. As a result, the Group has a 30% of shareholding in this company. The Group has classified the investment in BYG as an investment in an associate and fully paid for this investment.

Consolidated financial statements - Investment in a subsidiary

On 1 November 2021, the Group completely purchased shareholding in Temple Generation Intermediate Holdings, LLC which holds 100% interest in Temple 1 gas-fired power plant located in Texas USA, with generation capacity of 768 MW. The total consideration is USD 440.96 million. This acquisition is an asset acquisition because substantially all of the fair value of the gross assets acquired is concentrated in property plant and equipment of the power plant amounting to USD 452.93 million (Note 15) the remaining is recognised in other related asset and liabilities.

e) *Dividend income from an associate and joint ventures*

For the year ended 31 December	Million US Dollar		Million Baht	
	2021	2020	2021	2020
BLCP Power Ltd.	5.68	6.23	181.78	195.05
Hongsa Power Company Limited	19.38	11.39	619.74	356.41
Phu Fai Mining Company Limited	2.57	6.72	82.24	210.42
Shanxi Gaohe Energy Company Limited	22.30	48.30	713.18	1,511.47
Hebi Zhong Tai Mining Co., Ltd.	1.89	-	60.06	-
Aizu Energy Pte. Ltd	17.54	-	560.89	-
Global Engineering Co., Ltd.	0.24	0.04	7.60	1.12
Total dividend income from an associate and joint ventures	69.60	72.68	2,225.49	2,274.47

Banpu Power Public Company Limited, a subsidiary, has provided the Standby Letters of Credit, issued by commercial banks under the subsidiary's name amounting to Baht 1,600 million or equivalent to US Dollar 47.17 million and US Dollar 22 million as a guarantee for lenders of Hongsa Power Company Limited (2020: Baht 1,600 million or equivalent to US Dollar 53.27 million and US Dollar 22 million). However, the Group considered that there are no financial liabilities expected from this financial guarantee.

f) Significant restrictions

As at 31 December	Million US Dollar		Million Baht	
	2021	2020	2021	2020
Deposits held at banks as reserve for letter of guarantee of borrowings of subsidiaries in the People's Republic of China ⁽¹⁾	6	3	194	90
Deposits held at banks as reserve for bank guarantee of subsidiaries in Australia ⁽¹⁾	161,406	74,011	5,394,187	2,223,074
Deposits held at banks as reserve for bank guarantee of a subsidiary in Australia ⁽²⁾	10,378	-	346,848	-
Restricted cash used in mine closure activities of subsidiaries in Indonesia ⁽²⁾	32,266	29,701	1,078,317	892,119
	204,056	103,715	6,819,546	3,115,283

⁽¹⁾ Presented in other current assets

⁽²⁾ Presented in other non-current assets

14.2 Material subsidiaries

As at 31 December, the Group had the following significant subsidiaries:

Name of company	Country	Business	Proportion of ordinary shares held by the Group (%)		Proportion of ordinary shares held by non-controlling interests (%)	
			2021	2020	2021	2020
PT. Indo Tambangraya Megah Tbk. and its subsidiaries	Indonesia	Investment in coal mining	67.13	67.13	32.87	32.87
Banpu Australia Co., Pty Ltd. and its subsidiaries	Australia	Investment in coal mining	100.00	100.00	-	-
Banpu Power Public Company Limited and its subsidiaries	Thailand	Investment in power business	78.66	78.66	21.34	21.34
Banpu North America Corporation and its subsidiaries	United States	Natural gas business	100.00	100.00	-	-

List of subsidiaries of the Group is disclosed in Note 14.6.

14.3 Non-controlling interests

Set out below are the summarised financial information for each subsidiary that has non-controlling interests that are material to the Group. The amounts disclosed for each subsidiary are before inter-company eliminations.

Summarised statement of financial position

	PT Indo Tambangraya Megah Tbk.				Banpu Power Public Company Limited			
	US Dollar'000		Baht'000		US Dollar'000		Baht'000	
	2021	2020	2021	2020	2021	2020	2021	2020
As at 31 December								
Current assets	988,717	419,940	33,042,818	12,613,785	295,708	250,309	9,882,516	7,518,569
Current liabilities	(365,435)	(207,300)	(12,212,805)	(6,226,689)	(328,193)	(135,398)	(10,968,162)	(4,066,978)
Total current net assets	623,282	212,640	20,830,013	6,387,096	(32,485)	114,911	(1,085,646)	3,451,591
Non-current assets	678,214	738,691	22,665,845	22,188,144	1,966,324	1,536,894	65,714,349	46,163,826
Non-current liabilities	(98,406)	(105,041)	(3,288,727)	(3,155,128)	(428,473)	(117,123)	(14,319,516)	(3,518,027)
Total non-current net assets	579,808	633,650	19,377,118	19,033,016	1,537,851	1,419,771	51,394,833	42,645,799
Net assets	1,203,090	846,290	40,207,131	25,420,112	1,505,366	1,534,682	50,309,187	46,097,390
Accumulated non-controlling interest	384,043	267,118	12,834,675	8,023,454	330,772	355,125	11,054,367	10,666,924

Summarised statement of comprehensive income

	PT Indo Tambangraya Megah Tbk.				Banpu Power Public Company Limited			
	US Dollar'000		Baht'000		US Dollar'000		Baht'000	
	2021	2020	2021	2020	2021	2020	2021	2020
For the year ended 31 December								
Revenue	2,096,720	1,192,606	67,047,034	37,321,050	212,167	175,930	6,784,497	5,505,511
Profit before income tax	621,394	72,555	19,870,380	2,270,514	101,058	130,490	3,231,538	4,083,515
Income tax expense	(145,741)	(34,725)	(4,660,372)	(1,086,676)	(1,789)	(9,602)	(57,203)	(300,491)
Post-tax profit from continuing operations	475,653	37,830	15,210,008	1,183,838	99,269	120,888	3,174,335	3,783,024
Other comprehensive income (expense)	(13,645)	(6,184)	(436,340)	(193,509)	109,494	22,566	3,501,289	706,177
Total comprehensive income	462,008	31,646	14,773,668	990,329	208,763	143,454	6,675,624	4,489,201
Total comprehensive income allocated to non-controlling interests	151,759	8,180	4,852,809	255,975	21,994	43,117	703,290	1,349,301
Dividend paid to non-controlling interests	35,090	21,292	1,162,812	661,114	13,159	12,249	422,843	390,871

Summarised statement of cash flows

	PT Indo Tambangraya Megah Tbk.			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
For the years ended 31 December				
Cash flow from operating activities				
Cash generated from operations	678,608	235,464	21,699,916	7,368,540
Income tax paid	(60,891)	(62,721)	(1,947,118)	(1,962,772)
Net cash generated from operating activities	617,717	172,743	19,752,798	5,405,768
Net cash used in investing activities	(24,683)	(44,837)	(789,291)	(1,403,116)
Net cash used in financing activities	(134,189)	(55,178)	(4,290,975)	(1,726,724)
Net increase in cash and cash equivalents	458,845	72,728	14,672,532	2,275,928
Cash and cash equivalents at beginning of the year	231,459	159,209	6,952,357	4,800,788
Exchange gains (losses) on cash and cash equivalents	666	(478)	1,467,259	(124,359)
Cash and cash equivalents at ending of the year	690,970	231,459	23,092,148	6,952,357
	Banpu Power Public Company Limited			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
For the years ended 31 December				
Cash flow from operating activities				
Cash generated from (used in) operations	(3,573)	35,525	(114,263)	1,111,701
Interest paid	(5,148)	(7,418)	(164,632)	(232,130)
Income tax paid	(2,775)	(8,776)	(88,751)	(274,644)
Net cash generated from (used in) operating activities	(11,496)	19,331	(367,646)	604,927
Net cash generated from (used in) investing activities	(502,002)	13,691	(16,052,562)	428,442
Net cash generated from (used in) financing activities	524,563	(71,496)	16,774,009	(2,237,362)
Net increase (decrease) in cash and cash equivalents	11,065	(38,474)	353,801	(1,203,993)
Cash and cash equivalents at beginning of the year	72,212	110,855	2,169,033	3,342,710
Exchange gains (losses) on cash and cash equivalents	(4,436)	(169)	112,020	30,316
Cash and cash equivalents at ending of the year	78,841	72,212	2,634,854	2,169,033

14.4 Investments in associates

The Group has interests in a number of individually immaterial associates that are accounted for using the equity method.

	Consolidated financial statements			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
Aggregate carrying amount of individually immaterial associates	58,310	58,484	1,948,709	1,756,678
Aggregate amounts of the reporting entity's share of:				
Loss from continuing activities	(12,605)	(9,494)	(406,722)	(298,343)
Other comprehensive income (expense)	(3,836)	52	50,327	6,263
Total comprehensive expense	(16,441)	(9,442)	(356,395)	(292,080)

14.5 Investments in joint ventures

Below are the joint ventures that are material to the Group. These joint ventures have share capital consisting solely of ordinary shares, which are held directly by the Group, which has voting rights in proportion to the ordinary shares.

Name of company	Country	Business	Measurement method	Percent of ownership interest	
				2021 %	2020 %
BLCP Power Ltd.	Thailand	Power production and trading	Equity	50.00	50.00
Hongsa Power Company Limited	Laos	Power concession	Equity	40.00	40.00*
Shanxi Gaohe Energy Co., Ltd.	People's Republic of China	Coal mining and trading	Equity	45.00	45.00*

Shareholder agreements of the Group's joint ventures determine the management structure including strategic financial decisions and operations which required unanimous votes from all shareholders or their representatives. The Group has classified these as investments in joint ventures.

Commitments and contingent liabilities in respect of joint ventures

	Consolidated financial statements			
	Million US Dollar		Million Baht	
	2021	2020	2021	2020
Letter of guarantee	2	2	68	68

Commitments relating to its joint ventures to the Group are disclosed in Note 31.2.

Summarised financial information for joint ventures

Set out below are the summarised financial information for the joint ventures that are material to the Group. The information disclosed reflects the amounts presented in the financial statements of the relevant joint ventures (not the Group's shares of those amounts). They have been amended to reflect adjustments made using the equity method, including fair value adjustments and modifications for differences in the accounting policies of the Group and its joint ventures.

Summarised statement of financial position

	US Dollar'000					
	BLCP Power Limited		Hongsa Power Company Limited		Shanxi Gaohe Energy Co., Ltd.	
	2021	2020	2021	2020	2021	2020
As at 31 December						
Current assets						
Cash and cash equivalents	78,694	145,995	149,162	154,519	76,987	19,061
Deposits at financial institutions used as collateral	-	-	86,587	80,440	43,522	20,794
Current portion of lease accounts receivable, net	16,428	19,041	197,523	187,943	-	-
Other current assets	196,733	132,055	232,318	228,094	564,581	103,683
Total current assets	291,855	297,091	665,590	650,996	685,090	143,538
Non-current assets						
Lease accounts receivable	243,893	255,664	2,098,780	2,350,326	-	-
Property, plant and equipment, net	82,669	85,868	131,504	142,443	667,934	663,065
Mining property rights, net	-	-	-	-	677,667	729,694
Other non-current assets	81,041	149,154	462,811	460,512	34,520	76,148
Total non-current assets	407,603	490,686	2,693,095	2,953,281	1,380,121	1,468,907
Current liabilities						
Current portion of long-term loans from financial institutions, net	49,846	50,931	226,122	228,414	41,834	15,326
Other current liabilities	59,979	47,011	91,244	90,570	578,107	443,214
Total current liabilities	109,825	97,942	317,366	318,984	619,941	458,540
Non-current liabilities						
Long-term loans from financial institutions, net	323,718	381,566	1,485,449	1,838,056	10,446	-
Other non-current liabilities	30,427	41,077	42,064	57,453	82,213	92,554
Total non-current liabilities	354,145	422,643	1,527,513	1,895,509	92,659	92,554
Net assets	235,488	267,192	1,513,806	1,389,784	1,352,611	1,061,351

As at 31 December	Baht'000					
	BLCP Power Limited		Hongsa Power Company Limited		Shanxi Gaohe Energy Co., Ltd.	
	2021	2020	2021	2020	2021	2020
Current assets						
Cash and cash equivalents	2,629,952	4,385,275	4,984,993	4,641,309	2,572,900	572,534
Deposits at financial institutions used as collateral	-	-	2,893,727	2,416,174	1,454,493	624,606
Current portion of lease accounts receivable, net	549,037	571,923	6,601,210	5,645,274	-	-
Other current assets	6,574,815	3,966,589	7,764,038	6,851,274	18,868,243	3,114,340
Total current assets	9,753,804	8,923,787	22,243,968	19,554,031	22,895,636	4,311,480
Non-current assets						
Lease accounts receivable	8,150,866	7,679,418	70,141,004	70,596,987	-	-
Property, plant and equipment, net	2,762,794	2,579,216	4,394,854	4,278,561	22,322,277	19,916,557
Mining property rights, net	-	-	-	-	22,647,539	21,917,849
Other non-current assets	2,708,396	4,480,142	15,467,084	13,832,434	1,153,662	2,287,269
Total non-current assets	13,622,056	14,738,776	90,002,942	88,707,982	46,123,478	44,121,675
Current liabilities						
Current portion of long-term loans from financial institutions, net	1,665,850	1,529,832	7,556,981	6,860,894	1,398,083	460,346
Other current liabilities	2,004,496	1,412,074	3,049,352	2,720,456	19,320,277	13,312,849
Total current liabilities	3,670,346	2,941,906	10,606,333	9,581,350	20,718,360	13,773,195
Non-current liabilities						
Long-term loans from financial institutions, net	10,818,638	11,461,131	49,643,567	55,209,871	349,101	-
Other non-current liabilities	1,016,866	1,233,830	1,405,785	1,725,727	2,747,560	2,780,044
Total non-current liabilities	11,835,504	12,694,961	51,049,352	56,935,598	3,096,661	2,780,044
Net assets	7,870,010	8,025,696	50,591,225	41,745,065	45,204,093	31,879,916

Summarised statement of comprehensive income

	US Dollar'000					
	BLCP Power Limited		Hongsa Power Company Limited		Shanxi Gaohe Energy Co., Ltd.	
	2021	2020	2021	2020	2021	2020
For the years ended 31 December						
Sales and service income	448,999	445,353	649,913	626,436	1,145,587	594,784
Cost of sales and services	(389,220)	(374,683)	(277,353)	(244,426)	(510,520)	(370,224)
Depreciation and amortisation	(853)	(747)	(2,175)	(2,106)	(192,972)	(133,221)
Interest income	392	827	2,123	2,599	1,893	700
Interest expense	(15,882)	(19,901)	(108,166)	(125,653)	(9,548)	(8,412)
Income taxes	(19,864)	(28,832)	(19,893)	-	(117,176)	(35,382)
Profit for the year	13,529	34,082	267,138	243,165	317,264	48,245
Other comprehensive income (expense) for the year	(34,124)	(6,530)	(94,664)	(3,608)	23,558	54,827
Total comprehensive income (expense) for the year	(20,595)	27,552	172,474	239,557	340,822	103,072
Dividend paid to shareholders of joint ventures	11,109	12,184	48,452	28,473	49,562	107,332
	Baht'000					
	BLCP Power Limited		Hongsa Power Company Limited		Shanxi Gaohe Energy Co., Ltd.	
	2021	2020	2021	2020	2021	2020
For the years ended 31 December						
Sales and service income	14,357,682	13,936,738	20,782,341	19,603,498	36,632,560	18,612,986
Cost of sales and services	(12,446,135)	(11,725,217)	(8,868,950)	(7,648,982)	(16,324,950)	(11,585,686)
Depreciation and amortisation	(27,276)	(23,381)	(69,560)	(65,891)	(6,170,704)	(4,168,936)
Interest income	12,535	25,876	67,882	81,340	60,530	21,893
Interest expense	(507,860)	(622,764)	(3,458,826)	(3,932,162)	(305,318)	(263,234)
Income taxes	(635,195)	(902,252)	(636,107)	-	(3,746,950)	(1,107,219)
Profit for the year	432,700	1,084,107	8,536,386	7,587,222	10,273,461	1,509,804
Other comprehensive income (expense) for the year	(238,386)	(251,893)	1,830,054	(480,837)	4,635,555	1,596,522
Total comprehensive income for the year	194,314	832,214	10,366,440	7,106,385	14,909,016	3,106,326
Dividend paid to shareholders of joint ventures	350,000	400,000	1,520,280	903,825	1,584,839	3,358,826

Reconciliation of the summarised financial information

Reconciliation of the summarised financial information presented to the carrying amount of its interest in joint ventures.

	US Dollar'000					
	BLCP Power Limited		Hongsa Power Company Limited		Shanxi Gaohe Energy Co., Ltd.	
	2021	2020	2021	2020	2021	2020
Net assets as at 1 January	267,192	251,824	1,389,784	1,178,700	1,061,351	1,065,611
Profit for the year	13,529	34,082	267,138	243,165	317,264	48,245
Other comprehensive income (expense)	(34,124)	(6,530)	(94,664)	(3,608)	23,558	54,827
Dividend paid	(11,109)	(12,184)	(48,452)	(28,473)	(49,562)	(107,332)
Net assets as at 31 December	235,488	267,192	1,513,806	1,389,784	1,352,611	1,061,351
Ownership percentage in joint ventures						
by the Group	50%	50%	40%	40%	45%	45%
Interests in joint ventures	117,744	133,596	605,522	555,914	608,675	477,608
Impacts of change in functional currency of joint ventures	-	-	21,188	65,307	-	-
Carrying value as at 31 December	117,744	133,596	626,710	621,221	608,675	477,608

	Baht'000					
	BLCP Power Limited		Hongsa Power Company Limited		Shanxi Gaohe Energy Co., Ltd.	
	2021	2020	2021	2020	2021	2020
Net assets as at 1 January	8,025,696	7,593,482	41,745,065	35,542,505	31,879,916	32,132,416
Profit for the year	432,700	1,084,107	8,536,386	7,587,222	10,273,461	1,509,804
Other comprehensive income (expense)	(238,386)	(251,893)	1,830,054	(480,837)	4,635,555	1,596,522
Dividend paid	(350,000)	(400,000)	(1,520,280)	(903,825)	(1,584,839)	(3,358,826)
Net assets as at 31 December	7,870,010	8,025,696	50,591,225	41,745,065	45,204,093	31,879,916
Ownership percentage in joint ventures						
by the Group	50%	50%	40%	40%	45%	45%
Interests in joint ventures	3,935,005	4,012,848	20,236,490	16,698,026	20,341,842	14,345,962
Impacts of change in functional currency of joint ventures	-	-	708,087	1,961,655	-	-
Carrying value as at 31 December	3,935,005	4,012,848	20,944,577	18,659,681	20,341,842	14,345,962

Individually immaterial joint ventures

In addition to the investment in joint ventures disclosed above, the Group also has investments in a number of individually immaterial joint ventures that are accounted for using the equity method.

	Consolidated financial statements			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
Aggregate carrying amount of individually immaterial joint ventures	234,015	399,041	7,820,756	11,986,024
Aggregate amounts of the reporting entity's share of:				
Profit (loss) from continuing activities	(16,646)	8,811	(557,052)	280,637
Other comprehensive expense	(82,659)	(37,560)	(1,337,440)	(1,298,149)
Total comprehensive expense	(99,305)	(28,749)	(1,894,492)	(1,017,512)

14.6 List of subsidiaries and associates and joint arrangements

			Percentage of direct shareholding	
			2021	2020
Name of company	Country	Business	%	%
<u>Direct shareholding</u>				
Banpu Minerals Co., Ltd.	Thailand	Coal trading and investment in coal mining	100.00	100.00
BP Overseas Development Co., Ltd.	Mauritius	Investment in coal mining and trading	75.00 ⁽⁶⁾	100.00
Banpu Power Public Company Limited	Thailand	Investment in power	78.66	78.66
BOG Co., Ltd.	Thailand	Investment in power	100.00	100.00
Banpu Engineering Services Co., Ltd.	Thailand	Investment in renewable energy	100.00	100.00
Banpu Innovation & Ventures Co., Ltd.	Thailand	Research and development	100.00	100.00
Banpu Next Co., Ltd.	Thailand	Investment in clean energy	50.00 ⁽⁵⁾	50.00 ⁽⁵⁾
Banpu Vietnam Limited Liability Company	Vietnam	Coal and power management	100.00	100.00
<u>Indirect shareholding</u>				
Banpu Minerals Co., Ltd. and its subsidiaries, an associate and a joint venture as follow:				
<u>Subsidiaries</u>				
1) Banpu Coal Sales Co., Ltd.	Thailand	Coal trading	100.00	100.00
2) Banpu International Limited	Thailand	Coal trading and project feasibility study	100.00	100.00

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Name of company	Country	Business	Percentage of direct shareholding	
			2021 %	2020 %
3) Banpu Coal Investment Company Limited and its subsidiary	Mauritius	Investment in coal mining	100.00	100.00
- Banpu Minerals (Singapore) Pte. Ltd.	Singapore	Investment in coal mining	50.00 ⁽²⁾	50.00 ⁽²⁾
4) Banpu Minerals (Singapore) Pte. Ltd. and subsidiaries	Singapore	Investment in coal mining	50.00 ⁽²⁾	50.00 ⁽²⁾
- PT. Indo Tambangraya Megah Tbk (ITM) and subsidiaries	Indonesia	Investment in coal mining	67.13	67.13
- PT. Indominco Mandiri (IMM)	Indonesia	Coal mining and trading	100.00	100.00
- PT. Kitadin (KTD)	Indonesia	Coal mining and trading	100.00	100.00
- PT. Trubaindo Coal Mining (TCM)	Indonesia	Coal mining and trading	100.00	100.00
- PT. Bharinto Ekatama (BEK)	Indonesia	Coal mining and trading	100.00	100.00
- PT. Jorong Barutama Greston (JBG)	Indonesia	Coal mining and trading	100.00	100.00
- PT. Tambang Raya Usaha Tama	Indonesia	Coal mining and trading	100.00	100.00
- PT. ITM Energi Utama	Indonesia	Investment in power	99.99	99.99
- PT. Energi Batubara Perkasa	Indonesia	Coal Trading	100.00	100.00
- PT. Nusa Persada Resources	Indonesia	Coal mining and trading	100.00	100.00
- PT. ITM Bhinneka Power (formerly named PT. ITM Banpu Power)	Indonesia	Investment in power	70.00 ⁽⁴⁾	70.00 ⁽⁴⁾
- PT. ITM Batubara Utama	Indonesia	Investment in coal mining	100.00	100.00
- PT. Tepian Indah Sukses	Indonesia	Coal mining and trading	100.00	100.00
- PT. Gasemas	Indonesia	Fuel trading	98.70	98.00
- PT. Sentral Mutiara Energy and its subsidiary	Indonesia	Coal mining and trading	100.00	100.00
- PT. Graha Panca Karsa	Indonesia	Coal mining and trading	70.00	75.00
- PT. ITM Indonesia and joint arrangement	Indonesia	Coal mining and trading	100.00	100.00
<u>Joint arrangement - Joint venture</u>				
- PT. Nusantara Timur Unggul	Indonesia	Logistic service	33.34 ⁽¹⁾	33.34 ⁽¹⁾
- BMS Coal Sales Pte. Ltd.	Singapore	Coal trading and provide service in mining	100.00	100.00
- Banpu (Shanghai) Trading Co., Ltd.	People's Republic of China	Coal trading	-	100.00
- Banpu (Beijing) Trading Ltd.	People's Republic of China	Coal trading	100.00	100.00
- Hunnu Coal Pty Ltd. and subsidiaries	Australia	Investment in coal mining and trading	100.00	100.00
- Hunnu Resources LLC and subsidiaries	Mongolia	Coal trading	100.00	100.00
- Munkh Sumber Uul LLC	Mongolia	Coal mining and trading	100.00	100.00
- Golden Gobi Mining LLC	Mongolia	Coal mining and trading	-	100.00
- Bilegt Khairkhan Uul LLC	Mongolia	Coal mining and trading	100.00	100.00
- Hunnu Power LLC	Mongolia	Coal trading	-	100.00
- Munkhnoyon Suvrager LLC	Mongolia	Business consult in coal mining and trading	100.00	100.00
- Hunnu Investments Pte Ltd. and a subsidiary	Singapore	Coal trading	100.00	100.00
- Hunnu Altai LLC and subsidiaries	Mongolia	Coal mining and trading	100.00	100.00
- Hunnu Global Altai LLC	Mongolia	Coal mining and trading	80.00	80.00
- Hunnu Altai Minerals LLC	Mongolia	Coal mining and trading	100.00	100.00
<u>Associate</u>				
5) BP Overseas Development Co., Ltd.	Mauritius	Investment in coal mining and trading	25.00 ⁽⁶⁾	-

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Name of company	Country	Business	Percentage of direct shareholding	
			2021 %	2020 %
<u>Joint arrangement - Joint venture</u>				
6) Hebi Zhong Tai Mining Co., Ltd.	People's Republic of China	Coal mining and trading	40.00 ⁽¹⁾	40.00 ⁽¹⁾
BP Overseas Development Co., Ltd.				
A subsidiary is as follows:				
Asian American Coal Inc.	British Virgin Islands	Investment in coal mining	100.00	100.00
and subsidiaries and a joint venture as follows:				
<u>Subsidiaries</u>				
- Banpu Singapore Pte. Ltd. and subsidiaries	Singapore	Coal trading	100.00	100.00
- Banpu Australia Co. Pty Ltd. and subsidiaries	Australia	Investment in coal mining	100.00	100.00
- AFE Investments Pty Ltd.	Australia	Investment in coal mining	100.00	100.00
- Banpu Australia Resources Pty. Ltd.	Australia	Investment in coal mining	100.00	100.00
- Banpu Energy Australia Pty. Ltd. and subsidiaries	Australia	Investment in renewable energy	100.00	100.00
- Airly Solar Pty Limited	Australia	Renewable energy	100.00	100.00
- Banpu Energy Hold Trust and subsidiaries	Australia	Investment in renewable energy	80.00 ⁽⁷⁾	-
- FS NSW Project No. 1 HT Pty Ltd.	Australia	Investment in renewable energy	100.00	-
- FS NSW Project No. 1 Hold Trust	Australia	Investment in renewable energy	100.00	-
- Manildra Prop Hold Pty Ltd.	Australia	Investment in renewable energy	100.00	-
- Manildra Hold Trust	Australia	Investment in renewable energy	100.00	-
- Banpu Energy Holding Pty Ltd.	Australia	Investment in renewable energy	100.00	-
- Centennial Coal Co., Ltd. and subsidiaries,	Australia	Investment in coal mining and trading	100.00	100.00
an associate and joint ventures as follow:				
<u>Subsidiaries</u>				
- Centennial Wallarah Pty Ltd.	Australia	Investment in coal mining	100.00	100.00
- Centennial Inglenook Pty Ltd.	Australia	Coal mining and trading	100.00	100.00
- Centennial Coal Services and Marketing Pty Ltd.	Australia	Sales and marketing	100.00	100.00
- Centennial Northern Coal Services Pty Ltd.	Australia	Mining Services	100.00	100.00
- Centennial Airly Pty Ltd.	Australia	Coal mining and trading	100.00	100.00
- Berrima Coal Pty Ltd.	Australia	Coal mining and trading	100.00	100.00
- Centennial Angus Place Pty Ltd.	Australia	Coal mining and trading	100.00	100.00
- Centennial Coal Infrastructure Pty Ltd.	Australia	Coal mining and trading	100.00	100.00
- Centennial Fassifern Pty Ltd. and a subsidiary	Australia	Coal mining and trading	100.00	100.00
- Powercoal Pty Ltd. and subsidiaries	Australia	Investment in coal mining and trading	100.00	100.00
- Elcom Collieries Pty Ltd.	Australia	Coal mining and trading	100.00	100.00
- Huntley Colliery Pty Ltd.	Australia	Coal mining and trading	100.00	100.00
- Mandalong Pastoral Management Pty Ltd.	Australia	Investment in coal mining and trading	100.00	100.00
- Collieries Superannuation Pty Ltd.	Australia	Manage provident fund	100.00	100.00
- Powercoal Superannuation Pty Ltd.	Australia	Manage provident fund	100.00	100.00
- Centennial Northern Mining Services Pty Ltd.	Australia	Coal service provider	100.00	100.00
- Centennial Mandalong Pty Ltd.	Australia	Coal mining and trading	100.00	100.00
- Centennial Mannering Pty Ltd.	Australia	Coal mining and trading	100.00	100.00
- Centennial Munmorah Pty Ltd.	Australia	Coal mining and trading	100.00	100.00
- Centennial Myuna Pty Ltd.	Australia	Coal mining and trading	100.00	100.00
- Centennial Springvale Holdings Pty Ltd.	Australia	Coal mining and trading	100.00	100.00
and subsidiaries				

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Name of company	Country	Business	Percentage of direct shareholding	
			2021 %	2020 %
- Centennial Springvale Pty Ltd.	Australia	Coal mining and trading	100.00	100.00
- Boulder Mining Pty Ltd.	Australia	Coal mining and trading	100.00	100.00
- Springvale Coal Pty Ltd.	Australia	Coal mining and trading	100.00	100.00
- Springvale Coal Sales Pty Ltd.	Australia	Coal trading	100.00	100.00
- Centennial Newstan Pty Ltd.	Australia	Coal mining and trading	100.00	100.00
- Charbon Coal Pty Ltd.	Australia	Coal mining and trading	100.00	100.00
- Coalex Pty Ltd. and subsidiaries	Australia	Coal mining and trading	100.00	100.00
- Clarence Coal Investment Pty Ltd.	Australia	Coal mining and trading	100.00	100.00
- Clarence Coal Pty Ltd.	Australia	Coal mining and trading	100.00	100.00
- Clarence Colliery Pty Ltd.	Australia	Coal mining and trading	100.00	100.00
- Hartley Valley Coal Company Pty Ltd.	Australia	Coal mining and trading	100.00	100.00
- Centennial Clarence Pty Ltd.	Australia	Coal mining and trading	100.00	100.00
- Ivanhoe Coal Pty Ltd.	Australia	Coal mining and trading	100.00	100.00
- Powercoal Employee Entitlements Company Pty Ltd.	Australia	Manage provident fund	100.00	100.00
- Centennial Drilling Services Pty Ltd.	Australia	Coal mining and trading	100.00	100.00
- Springvale Joint Venture	Australia	Coal mining and trading	100.00	100.00
- Angus Place Joint Venture	Australia	Coal mining and trading	100.00	100.00
<u>Associate</u>				
- Port Kembla Coal Terminal Ltd	Australia	Port service	16.66	16.66
<u>Joint arrangement - Joint ventures</u>				
- Charbon Joint Venture	Australia	Coal mining and trading	95.00 ⁽¹⁾	95.00 ⁽¹⁾
- Clarence Joint Venture	Australia	Coal mining and trading	85.00 ⁽¹⁾	85.00 ⁽¹⁾
<u>Joint arrangement - Joint venture</u>				
- Shanxi Gaohe Energy Co., Ltd.	People's Republic of China	Coal mining and trading	45.00 ⁽¹⁾	45.00 ⁽¹⁾
Banpu Power Public Company Limited				
Subsidiaries, an associate, joint ventures are as follows:				
<u>Subsidiaries</u>				
1) Banpu Coal Power Limited	Thailand	Investment in power	100.00	100.00
a subsidiary and a joint venture are as follows:				
<u>Subsidiary</u>				
- Power Vietnam Co., Ltd.	Thailand	Investment in power	100.00	100.00
<u>Joint arrangement - Joint venture</u>				
- BLCP Power Limited	Thailand	Power production and trading	50.00 ⁽¹⁾	50.00 ⁽¹⁾
2) Banpu Power International Limited and subsidiaries:	Mauritius	Investment in power	100.00	100.00
- Banpu Power Investment Co., Ltd.	Singapore	Investment in power	100.00	100.00
and subsidiaries and joint ventures as follows:				
<u>Subsidiaries</u>				
- Shijiazhuang Chengfeng Cogen Co., Ltd.	People's Republic of China	Power and steam production and trading	100.00	100.00
- Zouping Peak Pte. Ltd. and a subsidiary	Singapore	Investment in power	100.00	100.00
- Zouping Peak CHP Co., Ltd.	People's Republic of China	Power and steam production and trading	70.00	70.00
- Pan-Western Energy Corporation LLC and a subsidiary	Cayman Islands	Investment in power	100.00	100.00

Banpu Public Company Limited

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Name of company	Country	Business	Percentage of direct shareholding	
			2021 %	2020 %
- Tangshan Banpu Heat & Power Co., Ltd.	People's Republic of China	Power and steam production and trading	87.92 ⁽³⁾	87.92 ⁽³⁾
- Banpu Investment (China) Ltd. and subsidiaries	People's Republic of China	Investment in power	100.00	100.00
- Banpu Power Trading (Shandong) Co., Ltd.	People's Republic of China	Investment in power	-	100.00
- Tangshan Banpu Heat & Power Co., Ltd.	People's Republic of China	Power and steam production and trading	12.08 ⁽³⁾	12.08 ⁽³⁾
- Banpu Power Trading (Hebei) Co., Ltd.	People's Republic of China	Power purchase and trading	-	100.00
<u>Joint arrangement - Joint ventures</u>				
- Shanxi Lu Guang Power Co., Ltd.	People's Republic of China	Power and steam production and trading	30.00 ⁽¹⁾	30.00 ⁽¹⁾
- Nakoso IGCC Management Co., Ltd.	Japan	Investment in power	33.50	-
3) Banpu Power (Japan) Co., Ltd.	Thailand	Investment in renewable energy	100.00	100.00
4) Banpu Power US Corporation and a subsidiary	United States	Investment in power	100.00	-
- BKV-BPP Power LLC and a subsidiary	United States	Investment in power	50.00 ⁽⁸⁾	-
- Temple Generation Intermediate Holdings II, LLC and a subsidiary as follow	United States	Investment in power	100.00	-
- Temple Generation I, LLC	United States	Power and steam production and trading	100.00	-
<u>Associates</u>				
5) PT. ITM Banpu Power	Indonesia	Investment in power	-	30.00
6) Banpu Next Co., Ltd.	Thailand	Investment in clean energy	50.00 ⁽⁵⁾	50.00 ⁽⁵⁾
<u>Joint arrangement - Joint ventures</u>				
7) Hongsa Power Company Limited	Laos	Power concession	40.00 ⁽¹⁾	40.00 ⁽¹⁾
8) Phu Fai Mining Company Limited	Laos	Mining concession	37.50 ⁽¹⁾	37.50 ⁽¹⁾
BOG Co., Ltd.				
A subsidiary is as follows;				
Banpu North America Corporation and a subsidiary	United States	Natural gas business	100.00	100.00
- BKV Corporation and its subsidiaries and a joint venture	United States	Natural gas business	96.30	96.30
<u>Subsidiaries</u>				
- Kalnin Ventures, LLC	United States	Natural gas business	100.00	100.00
- BKV Oil & Gas Capital Partners L.P.,	United States	Natural gas business	100.00	100.00
and subsidiaries as follows:				
- BKV Chaffee Corners, LLC	United States	Natural gas business	100.00	100.00
- BKV Chelsea, LLC	United States	Natural gas business	100.00	100.00
- BKV Operating, LLC	United States	Natural gas business	100.00	100.00
- BKV Barnett, LLC	United States	Natural gas business	100.00	100.00
<u>Joint arrangement - Joint venture</u>				
- BKV-BPP Power LLC	United States	Natural gas business	50.00 ⁽⁸⁾	-

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			Percentage of direct shareholding	
			2021	2020
Name of company	Country	Business	%	%
Banpu Engineering Services Co., Ltd.				
and a subsidiary as follows:				
Banpu Energy Services (Thailand) Co., Ltd.	Thailand	Investment in renewable energy	100.00	100.00
and joint ventures as follows:				
- Aura Land Development Pte. Ltd.	Singapore	Investment in renewable energy	75.00 ⁽¹⁾	75.00 ⁽¹⁾
- Hokkaido Solar Estate G.K.	Japan	Investment property	60.00 ⁽¹⁾	60.00 ⁽¹⁾
Banpu Innovation & Ventures Co., Ltd.				
A subsidiary is as follows:				
Banpu Innovation & Ventures (Singapore) Pte. Ltd.			100.00	100.00
and a subsidiary as follows:				
- Banpu Innovation & Ventures LLC	United States	Research and development	100.00	100.00
Banpu Next Co., Ltd. ⁽⁶⁾				
Its subsidiaries, associates and joint ventures are:				
<u>Subsidiaries</u>				
1) BPIN Investment Co., Ltd. and its associate	Mauritius	Investment in renewable energy	100.00	100.00
- Durapower Holding Pte. Ltd.	Singapore	Energy storage system	47.68	47.68
2) BRE Singapore Pte. Ltd. and its subsidiaries				
- BPP Vinh Chau Wind Power Limited Liability Company	Vietnam	Investment in renewable energy	100.00	100.00
- EI Wind Mui Dinh Ltd.	Vietnam	Power and steam production and trading	100.00	-
3) Banpu Japan K.K.and its subsidiary	Japan	Investment in renewable energy	100.00	100.00
- Digital Energy Solutions Corporation	Japan	Power and purchase and trading	100.00	-
4) Banpu Renewable Singapore Pte. Ltd. and subsidiaries, an associate, and a joint venture	Singapore	Investment in renewable energy	100.00	100.00
<u>Subsidiaries</u>				
- Banpu Power Trading GK	Japan	Power and purchase and trading	100.00	100.00
- Banpu Renewable Australia Pty Limited	Australia	Renewable energy	100.00	-
and its associate as follows:				
- Banpu Energy Hold Trust	Australia	Investment in renewable energy	20.00 ⁽⁷⁾	-
<u>Associate</u>				
- Global Engineering Co., Ltd.	Japan	Virtual power plant and power trading	19.82	19.90
<u>Joint arrangement - Joint venture</u>				
- Digital Energy Solutions Corporation	Japan	Power and purchase and trading	-	49.00 ⁽¹⁾
5) BPP Renewable Investment (China) Co., Ltd.	People's Republic of China	Investment in renewable energy	100.00	100.00
and subsidiaries as follow:				
- Anqiu Huineng Renewable Energy Co., Ltd.	People's Republic of China	Solar power generation	100.00	100.00
- Weifang Tian'en Jinshan Comprehensive Energy Co., Ltd.	People's Republic of China	Solar power generation	100.00	100.00
- Dongping County Haoyuan Solar Power Generation Co., Ltd.	People's Republic of China	Solar power generation	100.00	100.00
- Anqiu County Hui'en PV Technology Co., Ltd.	People's Republic of China	Solar power generation	100.00	100.00
- Jiaxing Deyuan Energy - Saving Technology Co., Ltd.	People's Republic of China	Solar power generation	100.00	100.00

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Name of company	Country	Business	Percentage of direct shareholding	
			2021 %	2020 %
- Feicheng Xingyu Solar Power PV Technology Co., Ltd.	People's Republic of China	Solar power generation	100.00	100.00
- Jiangsu Jixin Electric Power Co., Ltd.	People's Republic of China	Solar power generation	100.00	100.00
6) Banpu Next Green Leasing Co., Ltd.	Thailand	Investment in energy and leasing	100.00	100.00
7) Banpu Next Ecoserve Company Limited	Thailand	Energy management business	100.00	-
8) Banpu Renewable Australia Pty Limited	Australia	Renewable energy	-	100.00
<u>Associates</u>				
9) Urban Mobility Tech Co., Ltd.	Thailand	Electric vehicle business	39.74 ⁽⁹⁾	30.66 ⁽¹¹⁾
10) FOMM Corporation	Japan	Electric vehicle business	21.45	21.45
11) Beyond Green Co.Ltd	Thailand	Electronic utility vehicle distributor	30.00	-
12) PT. ITM Bhinneka Power (formerly named PT. ITM Banpu Power)	Indonesia	Investment in power	30.00 ⁽⁴⁾	-
13) GEPP Sa-ard Co., Ltd.	Thailand	Trash management services	25.00	25.00
<u>Joint arrangement - Joint ventures</u>				
14) Aizu Energy Pte. Ltd.	Singapore	Investment in renewable energy	75.00 ⁽¹⁾	75.00 ⁽¹⁾
15) Evolt Technology Co., Ltd	Thailand	Electric vehicle charging system service business	15.79 ⁽¹⁾	-

Percentage of shareholding by the Group

- (1) Shareholder agreements of the Group's joint ventures have determined the management structure including strategic financial decisions and operations which required unanimous votes/consents from all shareholders or their representatives. The Group has classified these as investments in joint ventures.
- (2) The Group owns 100% shareholding in Banpu Minerals (Singapore) Pte. Ltd., which is held by Banpu Mineral Co., Ltd. and Banpu Coal Investment Company Limited in the proportion of 50% each.
- (3) The Group owns 100% shareholding in Tangshan Banpu Heat & Power Co., Ltd. of which 12.08% shareholding held by Banpu Investment (China) Ltd. and 87.92% shareholding held by Pan-Western Energy Corporation LLC.
- (4) PT. ITM Bhinneka Power (formerly named PT. ITM Banpu Power) owned by PT. Indo Tambangraya Megah Tbk and Banpu Power Public Company Limited in the proportion of 70% and 30% respectively.
- (5) The Group owns 100% shareholding in Banpu Next Co., Ltd., which is held by the Company and Banpu Power Public Company Limited in the proportion of 50% each.
- (6) The Group owns 100% shareholding in BP Overseas Development Co., Ltd., which is held by the Company in the proportion of 75% and by Banpu Minerals Co., Ltd. in the proportion of 25%.
- (7) The Group owns 100% shareholding in Banpu Energy Hold Trust, which is held by Banpu Energy Australia Pty Ltd. in the proportion of 80% and Banpu Renewable Australia Pty Limited in the proportion of 20%.
- (8) The Group owns 100% shareholding in BKV-BPP Power LLC, which is held by Banpu Power US Corporation and Banpu North America Corporation in the proportion of 50% each.

Preference shares held by the Group

- (9) The Group holds investments in Urban Mobility Tech Co., Ltd. by newly issued preference shares which are entitled to dividends and voting rights equal to the number of ordinary shares in the proportion of 39.74 of total registered shares (2020: 30.66 of total registered shares).

15 Property, plant and equipment, net

	Consolidated financial statements								
	US Dollar'000								
	Land	Land improvement	Building and infrastructures	Machinery and equipment and power plants and components of power plants and gas exploration and producing assets and pipelines	Furniture and office equipment	Tools	Motor vehicles	Construction in progress	Total
As at 1 January 2020									
Cost	48,168	183,807	313,960	3,038,801	31,390	29,291	7,222	51,852	3,704,491
<u>Less</u> Accumulated depreciation	-	(128,529)	(200,127)	(1,376,460)	(19,890)	(24,170)	(5,453)	-	(1,754,629)
Net book amount	48,168	55,278	113,833	1,662,341	11,500	5,121	1,769	51,852	1,949,862
For the year ended 31 December 2020									
Opening net book amount	48,168	55,278	113,833	1,662,341	11,500	5,121	1,769	51,852	1,949,862
Impact of change in accounting policies	-	-	-	(6,195)	-	-	-	-	(6,195)
Additions	3,392	468	9,511	714,302	4,891	1,536	4,823	32,350	771,273
Disposals - Net book value	(919)	-	(287)	(190)	(191)	(88)	-	-	(1,675)
Reclassification	619	9,937	13,041	26,518	(5,395)	1,045	83	(46,146)	(298)
Write-off	-	-	(113)	(1,601)	(36)	(16)	-	(1,091)	(2,857)
Translation differences	4,290	(449)	5,765	80,556	(3)	41	76	672	90,948
Depreciation charge	-	(4,554)	(12,155)	(197,378)	(2,852)	(2,095)	(1,127)	-	(220,161)
Closing net book amount	55,550	60,680	129,595	2,278,353	7,914	5,544	5,624	37,637	2,580,897
As at 31 December 2020									
Cost	55,550	193,738	345,800	3,976,392	30,348	31,571	11,642	37,637	4,682,678
<u>Less</u> Accumulated depreciation	-	(133,058)	(216,205)	(1,698,039)	(22,434)	(26,027)	(6,018)	-	(2,101,781)
Net book amount	55,550	60,680	129,595	2,278,353	7,914	5,544	5,624	37,637	2,580,897

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For the year ended 31 December 2021

Consolidated financial statements									
US Dollar'000									
	Land	Land improvement	Building and infrastructures	Machinery and equipment and power plants and components of power plants and gas exploration and producing assets and pipelines	Furniture and office equipment	Tools	Motor vehicles	Construction in progress	Total
For the year ended 31 December 2021									
Opening net book amount	55,550	60,680	129,595	2,278,353	7,914	5,544	5,624	37,637	2,580,897
Additions	20	-	149	220,161	858	1,430	2,230	48,797	273,645
Increase from purchase of investment in a subsidiary (Note 14.1 d))	1,030	-	-	451,707	47	142	-	-	452,926
Increase from business combinations	2,309		15	191,078	21	46	-	-	193,469
Increase from the change in fair value of contingent liabilities from an asset acquisition (Note 6)	-	-	-	194,973	-	-	-	-	194,973
Disposals - Net book value	(4,263)	-	(3)	(9,785)	(205)	-	(50)	-	(14,306)
Reclassification	-	5,012	3,050	62,954	513	256	62	(25,658)	46,189
Write-off	-	-	(392)	(833)	(134)	(91)	17	(931)	(2,364)
Translation differences	(2,341)	2	1,727	(32,281)	(35)	(132)	(161)	(936)	(34,157)
Depreciation charge	-	(5,172)	(12,150)	(251,334)	(2,569)	(2,069)	(1,853)	-	(275,147)
Closing net book amount	52,305	60,522	121,991	3,104,993	6,410	5,126	5,869	58,909	3,416,125
As at 31 December 2021									
Cost	52,305	197,464	350,537	4,984,217	29,675	32,486	13,136	58,909	5,718,729
<u>Less</u> Accumulated depreciation	-	(136,942)	(228,546)	(1,879,224)	(23,265)	(27,360)	(7,267)	-	(2,302,604)
Net book amount	52,305	60,522	121,991	3,104,993	6,410	5,126	5,869	58,909	3,416,125

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	Consolidated financial statements								
	US Dollar'000								
	Land	Land improvement	Building and infrastructures	Machinery and equipment and power plants and components of power plants and gas exploration and producing assets and pipelines	Furniture and office equipment	Tools	Motor vehicles	Construction in progress	Total
As at 1 January 2020									
Cost	1,452,460	5,542,509	9,467,163	91,632,018	946,537	883,255	217,775	1,563,565	111,705,282
<u>Less</u> Accumulated depreciation	-	(3,875,651)	(6,034,650)	(41,505,720)	(599,804)	(728,858)	(164,458)	-	(52,909,141)
Net book amount	1,452,460	1,666,858	3,432,513	50,126,298	346,733	154,397	53,317	1,563,565	58,796,141
For the year ended 31 December 2020									
Opening net book amount	1,452,460	1,666,858	3,432,513	50,126,298	346,733	154,397	53,317	1,563,565	58,796,141
Impact of change in accounting policies	-	-	-	(186,803)	-	-	-	-	(186,803)
Additions	106,150	14,655	297,619	22,353,131	153,071	48,077	150,934	1,012,353	24,135,990
Disposals - Net book value	(28,750)	-	(8,984)	(5,960)	(5,960)	(2,763)	-	-	(52,417)
Reclassification	19,369	310,958	408,092	829,837	(168,833)	32,703	2,597	(1,444,067)	(9,344)
Write-off	-	-	(3,525)	(50,090)	(1,137)	(506)	-	(34,142)	(89,400)
Translation differences	119,336	(27,300)	147,303	1,545,408	3,097	180	(2,662)	32,801	1,818,163
Depreciation charge	-	(142,522)	(380,372)	(6,176,710)	(89,240)	(65,572)	(35,263)	-	(6,889,679)
Closing net book amount	1,668,565	1,822,649	3,892,646	68,435,111	237,731	166,516	168,923	1,130,510	77,522,651
As at 31 December 2020									
Cost	1,668,565	5,819,340	10,386,820	119,439,286	911,565	948,306	349,680	1,130,510	140,654,072
<u>Less</u> Accumulated depreciation	-	(3,996,691)	(6,494,174)	(51,004,175)	(673,834)	(781,790)	(180,757)	-	(63,131,421)
Net book amount	1,668,565	1,822,649	3,892,646	68,435,111	237,731	166,516	168,923	1,130,510	77,522,651

	Consolidated financial statements								
	Baht'000								
	Land	Land improvement	Building and infrastructures	Machinery and equipment and power plants and components of power plants and gas exploration and producing assets and pipelines	Furniture and office equipment	Tools	Motor vehicles	Construction in progress	Total
For the year ended 31 December 2021									
Opening net book amount	1,668,565	1,822,649	3,892,646	68,435,111	237,731	166,516	168,923	1,130,510	77,522,651
Additions	654	-	4,753	7,040,108	27,447	45,742	71,312	1,560,394	8,750,410
Increase from purchase of investment in a subsidiary (Note 14.1 d))	32,936	-	-	14,444,280	1,503	4,541	-	-	14,483,260
Increase from business combinations	73,822	-	490	6,110,113	663	1,482	11	-	6,186,581
Increase from the change in fair value of contingent liabilities from an asset acquisition (Note 6)	-	-	-	6,234,681	-	-	-	-	6,234,681
Disposals - Net book value	(136,328)	-	(80)	(312,910)	(6,554)	(15)	(1,605)	-	(457,492)
Reclassification	-	160,262	97,531	2,013,089	16,392	8,195	1,983	(820,465)	1,476,987
Write-off	-	-	(12,548)	(26,651)	(4,273)	(2,919)	547	(29,764)	(75,608)
Translation differences	108,381	205,129	482,659	7,867,686	23,461	13,928	14,205	128,042	8,843,491
Depreciation charge	-	(165,393)	(388,508)	(8,036,944)	(82,159)	(66,150)	(59,247)	-	(8,798,401)
Closing net book amount	1,748,030	2,022,647	4,076,943	103,768,563	214,211	171,320	196,129	1,968,717	114,166,560
As at 31 December 2021									
Cost	1,748,030	6,599,241	11,714,926	166,572,021	991,730	1,085,672	439,004	1,968,717	191,119,341
<u>Less</u> Accumulated depreciation	-	(4,576,594)	(7,637,983)	(62,803,458)	(777,519)	(914,352)	(242,875)	-	(76,952,781)
Net book amount	1,748,030	2,022,647	4,076,943	103,768,563	214,211	171,320	196,129	1,968,717	114,166,560

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For the year ended 31 December 2021

	Separate financial statements								
	US Dollar'000								
	Land	Land improvement	Building and infrastructures	Machinery and equipment	Furniture and office equipment	Tools	Motor vehicles	Construction in progress	Total
As at 1 January 2020									
Cost	2,028	2,680	3,781	13,203	5,771	283	849	290	28,885
<u>Less</u> Accumulated depreciation	-	(2,588)	(2,181)	(13,159)	(4,326)	(252)	(673)	-	(23,179)
Net book amount	2,028	92	1,600	44	1,445	31	176	290	5,706
For the year ended 31 December 2020									
Opening net book amount	2,028	92	1,600	44	1,445	31	176	290	5,706
Additions	-	-	17	-	705	19	-	644	1,385
Disposals - Net book value	-	-	-	-	(1)	-	-	-	(1)
Reclassification	-	-	696	-	156	6	-	(858)	-
Write-off	-	-	-	-	-	-	-	(3)	(3)
Depreciation charge	-	(27)	(287)	(40)	(683)	(10)	(117)	-	(1,164)
Closing net book amount	2,028	65	2,026	4	1,622	46	59	73	5,923
As at 31 December 2020									
Cost	2,028	2,669	4,494	2,777	6,571	267	595	73	19,474
<u>Less</u> Accumulated depreciation	-	(2,604)	(2,468)	(2,773)	(4,949)	(221)	(536)	-	(13,551)
Net book amount	2,028	65	2,026	4	1,622	46	59	73	5,923

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For the year ended 31 December 2021

	Separate financial statements								
	US Dollar'000								
	Land	Land improvement	Building and infrastructures	Machinery and equipment	Furniture and office equipment	Tools	Motor vehicles	Construction in progress	Total
For the year ended 31 December 2021									
Opening net book amount	2,028	65	2,026	4	1,622	46	59	73	5,923
Additions	-	-	15	-	95	3	-	-	113
Disposals - Net book value	-	-	-	-	(3)	-	-	-	(3)
Reclassification	-	-	6	-	1	-	-	(7)	-
Depreciation charge	-	(4)	(368)	(1)	(598)	(14)	(37)	-	(1,022)
Closing net book amount	2,028	61	1,679	3	1,117	35	22	66	5,011
As at 31 December 2021									
Cost	2,028	1,380	4,468	885	5,619	138	360	66	14,944
Less Accumulated depreciation	-	(1,319)	(2,789)	(882)	(4,502)	(103)	(338)	-	(9,933)
Net book amount	2,028	61	1,679	3	1,117	35	22	66	5,011

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For the year ended 31 December 2021

	Separate financial statements								
	Baht'000								
	Land	Land improvement	Building and infrastructures	Machinery and equipment	Furniture and office equipment	Tools	Motor vehicles	Construction in progress	Total
As at 1 January 2020									
Cost	61,153	80,820	114,008	398,117	174,011	8,544	25,586	8,769	871,008
<u>Less</u> Accumulated depreciation	-	(78,034)	(65,771)	(396,847)	(130,426)	(7,605)	(20,267)	-	(698,950)
Net book amount	61,153	2,786	48,237	1,270	43,585	939	5,319	8,769	172,058
For the year ended 31 December 2020									
Opening net book amount	61,153	2,786	48,237	1,270	43,585	939	5,319	8,769	172,058
Additions	-	-	541	-	22,065	582	-	20,143	43,331
Disposals - Net book value	-	-	-	-	(47)	-	-	-	(47)
Reclassification	-	-	21,783	-	4,870	190	-	(26,843)	-
Write-off	-	-	-	-	-	-	-	(84)	(84)
Translation differences	(237)	23	(722)	44	(390)	(22)	127	239	(938)
Depreciation charge	-	(847)	(8,987)	(1,213)	(21,382)	(321)	(3,669)	-	(36,419)
Closing net book amount	60,916	1,962	60,852	101	48,701	1,368	1,777	2,224	177,901
As at 31 December 2020									
Cost	60,916	80,167	134,993	83,395	197,359	8,001	17,870	2,224	584,925
<u>Less</u> Accumulated depreciation	-	(78,205)	(74,141)	(83,294)	(148,658)	(6,633)	(16,093)	-	(407,024)
Net book amount	60,916	1,962	60,852	101	48,701	1,368	1,777	2,224	177,901

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For the year ended 31 December 2021

	Separate financial statements								
	Baht'000								
	Land	Land improvement	Building and infrastructures	Machinery and equipment	Furniture and office equipment	Tools	Motor vehicles	Construction in progress	Total
For the year ended 31 December 2021									
Opening net book amount	60,916	1,962	60,852	101	48,701	1,368	1,777	2,224	177,901
Additions	-	-	471	-	3,039	98	-	-	3,608
Disposals - Net book value	-	-	-	-	(100)	-	-	-	(100)
Reclassification	-	-	194	-	17	-	-	(211)	-
Write-off	-	-	(3)	-	-	-	-	-	(3)
Translation differences	6,860	215	6,353	9	4,756	138	147	241	18,719
Depreciation charge	-	(134)	(11,752)	(44)	(19,106)	(451)	(1,177)	-	(32,664)
Closing net book amount	67,776	2,043	56,115	66	37,307	1,153	747	2,254	167,461
As at 31 December 2021									
Cost	67,776	46,133	149,311	29,562	187,787	4,597	12,041	2,254	499,461
Less Accumulated depreciation	-	(44,090)	(93,196)	(29,496)	(150,480)	(3,444)	(11,294)	-	(332,000)
Net book amount	67,776	2,043	56,115	66	37,307	1,153	747	2,254	167,461

As at 31 December 2021, assets with net book value of CNY 771.84 million or equivalent to US Dollar 121.27 million were mortgaged and pledged as collateral for long-term loans from financial institutions of a subsidiary in the People's Republic of China (2020: CNY 391.68 million or equivalent to US Dollar 60.23 million) as described in Note 24.

As at 31 December 2021 and 2020, the Group has capital commitments which are shown in Note 31.2.

16 Leases

The carrying amount of balances in relation to leases is as follow:

	Consolidated financial statements				Separate financial statements			
	US Dollar'000		Baht'000		US Dollar'000		Baht'000	
	2021	2020	2021	2020	2021	2020	2021	2020
As at 31 December								
Properties	39,373	37,576	1,315,845	1,128,674	2,304	3,366	77,005	101,085
Equipment	14,262	15,577	476,634	467,900	-	-	-	-
Motor vehicles	12,238	18,383	408,997	552,167	5	64	156	1,931
Total right-of-use assets, net	65,873	71,536	2,201,476	2,148,741	2,309	3,430	77,161	103,016
Lease liabilities, net								
Current	25,806	33,482	862,422	1,005,696	1,073	1,001	35,873	30,080
Non-current	25,535	17,474	853,379	524,876	1,022	2,378	34,163	71,414
Total lease liabilities, net	51,341	50,956	1,715,801	1,530,572	2,095	3,379	70,036	101,494

The amounts charged to profit or loss and cash flows relating to leases are as follows:

For the year ended 31 December 2021	Consolidated financial statements		Separate financial statements	
	US Dollar'000	Baht'000	US Dollar'000	Baht'000
Depreciation charge of right-of-use assets				
- Properties	4,333	138,544	1,061	33,933
- Equipment	7,984	255,305	-	-
- Motor vehicles	21,043	672,882	60	1,906
Total depreciation charge	33,360	1,066,731	1,121	35,839
Addition to the right-of-use assets during the year	27,946	893,640	-	-
Total cash outflow for leases	35,116	1,122,916	1,092	34,907
Interest expense (included in finance cost)	1,735	55,311	134	4,274
Expense relating to short-term leases (included in cost of sales and administrative expenses)	446	14,233	-	-
Expense relating to leases of low-value assets that are not shown above as short-term leases (included in administrative expenses)	4	127	-	-

For the year ended 31 December 2020	Consolidated financial statements		Separate financial statements	
	US Dollar'000	Baht'000	US Dollar'000	Baht'000
Depreciation charge of right-of-use assets				
- Properties	4,987	156,069	1,044	32,684
- Equipment	4,947	154,804	-	-
- Motor vehicles	22,969	718,781	63	1,983
Total depreciation charge	32,903	1,029,654	1,107	34,667
Addition to the right-of-use assets during the year	39,894	1,248,405	233	7,310
Total cash outflow for leases	39,116	1,224,086	1,115	34,904
Interest expense (included in finance cost)	3,173	97,747	177	5,530
Expense relating to short-term leases (included in cost of sales and administrative expenses)	480	15,001	-	-
Expense relating to leases of low-value assets that are not shown above as short-term leases (included in administrative expenses)	3	87	-	-
Expense relating to variable lease payments not included in lease liabilities (included in administrative expenses)	(72)	(2,252)	-	-

17 Deferred exploration and development expenditures and deferred overburden expenditures/stripping costs, net

As at 31 December	Consolidated financial statements			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
Current portion:				
- Deferred longwall development costs	78,475	64,505	2,622,612	1,937,535
	78,475	64,505	2,622,612	1,937,535
Non-current portion:				
- Deferred exploration and development expenditures	803,832	886,310	26,863,969	26,622,175
- Deferred stripping costs	85,015	129,284	2,841,210	3,883,323
	888,847	1,015,594	29,705,179	30,505,498
Total	967,322	1,080,099	32,327,791	32,443,033

Movement of the deferred exploration and development expenditures and deferred overburden expenditures/stripping costs is as follows:

	Consolidated financial statements			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
As at 1 January				
Cost	6,025,406	5,345,529	180,985,715	161,189,067
<u>Less</u> Accumulated amortisation	(4,945,307)	(4,328,298)	(148,542,682)	(130,515,491)
Net book amount	1,080,099	1,017,231	32,443,033	30,673,576
For the year ended 31 December				
Opening net book amount	1,080,099	1,017,231	32,443,033	30,673,576
Additions	509,617	575,340	16,296,077	18,004,508
Amortisation	(544,134)	(8,144)	(17,399,832)	(254,852)
Reclassification	(45,612)	(558,638)	(1,458,550)	(17,481,835)
Translation differences	(32,648)	54,310	2,447,063	1,501,636
Net book amount	967,322	1,080,099	32,327,791	32,443,033
As at 31 December				
Cost	6,100,593	6,025,406	203,881,207	180,985,715
<u>Less</u> Accumulated amortisation	(5,133,271)	(4,945,307)	(171,553,416)	(148,542,682)
Net book amount	967,322	1,080,099	32,327,791	32,443,033

The majority of additions and amortisation represents overburden expenditures. The Group presents the amortisation incurred during the year under cost of sales in the consolidated statements of comprehensive income.

18 Mining property rights, net

	Consolidated financial statements			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
For the year ended 31 December				
Opening net book value	1,358,941	1,317,836	40,818,643	39,738,016
Amortisation	(37,138)	(40,691)	(1,187,559)	(1,273,361)
Translation differences	(45,699)	81,796	3,016,179	2,353,988
Closing net book amount	1,276,104	1,358,941	42,647,263	40,818,643

19 Goodwill

	Consolidated financial statements			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
For the year ended 31 December				
Opening net book value	446,748	397,593	13,419,014	11,989,012
Addition from business combination (Note 32)	2,911	17,509	95,784	525,930
Translation differences	(18,091)	31,646	908,147	904,072
Closing net book amount	431,568	446,748	14,422,945	13,419,014

Goodwill is not considered as taxable expenses for the Group.

Goodwill allocation for each material cash generation unit (CGU) is presented as follows:

	Consolidated financial statements			
	2021		2020	
	Mining		Mining	
	Australia	Mongolia	Australia	Mongolia
US Dollar'000	354,005	38,506	372,046	38,506
Baht'000	11,830,809	1,286,870	11,175,198	1,156,612

Impairment tests for goodwill

The Group tests impairment of goodwill annually. Goodwill mainly arose from the acquisition of a group of mining businesses in Australia and Mongolia by comparing the carrying amount to the recoverable amount for each cash-generating unit, which is determined based on value-in-use model. These calculations use cash flow projections based on the approved financial budgets by management. The key assumptions applied in the cash flow projections include the lives of mine, the coal prices in each country, foreign exchange rate forecasts and estimated cost and expenses and discount rates. Cash inflow is calculated from the estimated revenue which is based on the coal reserve production plan of each mine and forecasted selling prices which are refer to an energy research and consulting firm. Cash outflow is used the inflation rate for the five-year period and the constant inflation rate for periods beyond five years. The discount rates used are WACC in each country as detailed below:

	Consolidated financial statements			
	2021		2020	
	Coal		Coal	
	Australia	Mongolia	Australia	Mongolia
Discount rate	8.50%	12.67%	8.50%	12.67%

For the year ended 31 December 2021, if the discount rate used in the calculation of goodwill arising from acquisition of mining business in Australia increased by 1.26% per annum, the recoverable amounts will be equal to the carrying amount.

20 Deferred income taxes and income tax

Corporate income tax is calculated based on the net profit (tax base) which excludes the interests in associates and joint ventures. The rates are as follows:

	Income tax rate (%)									
	Thailand	Australia	Indonesia	Japan	Singapore	Mauritius	People's Republic of China	Mongolia	USA	Vietnam
2021	20	30	22	23.2	17	15	12.5-25	10-25	21	20
2020	20	30	25	23.2	17	15	0-25	10-25	21	20

20.1 Deferred income tax assets and deferred income tax liabilities

The analysis of deferred tax assets and deferred tax liabilities is as follows:

	Consolidated financial statements			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
Deferred tax assets:	103,567	165,679	3,461,183	4,976,512
Deferred tax liabilities:	(84,701)	(150,844)	(2,830,715)	(4,530,914)
Deferred income taxes, net	18,866	14,835	630,468	445,598

	Separate financial statements			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
Deferred tax assets:	5,142	64,459	171,830	1,936,161

The movements in deferred tax assets and liabilities during the year are as follows:

	Consolidated financial statements				
	US Dollar'000				
	At 1 January 2021	Charged (credited) to profit or loss	Charged (credited) to other comprehensive income or expense	Translation differences	At 31 December 2021
Deferred tax assets:					
Employee benefit obligation	6,328	1,101	(686)	(1)	6,742
Loss carried forward	274,312	55,934	-	1,560	331,806
Financial derivative	15,087	(5,231)	34,074	190	44,120
Depreciation and amortisation	42,036	2,536	-	(115)	44,457
Investments in joint ventures	23,297	188	(6,993)	-	16,492
Provision for mine rehabilitation	3,751	691	-	-	4,442
Provision for decommissioning	6,852	(1,444)	-	(1)	5,407
Allowance for slow moving of spare parts	1,635	376	-	-	2,011
Other reserves	36,067	(781)	-	(18)	35,268
Others	84,088	(11,668)	(1,531)	5,476	76,365
Total	493,453	41,702	24,864	7,091	567,110
Deferred tax liabilities:					
Investments in joint ventures	(16,206)	(12,339)	-	2,231	(26,314)
Mining property rights	(292,827)	8,556	-	(4,110)	(288,381)
Financial derivative	(2,321)	2,319	-	-	(2)
Depreciation and amortisation	(219,588)	(1,966)	-	15	(221,539)
Fair value uplift from the acquisition of power plant in the People's Republic of China	(2,943)	-	-	(23)	(2,966)
Amortisation of fair value of building and equipment from the acquisition of power plants	1,310	79	-	(11)	1,378
Connection fee	(558)	183	-	(192)	(567)
Tax effect of currency translation on tax base	58,036	(59,271)	-	-	(1,235)
Others	(3,521)	(4,994)	-	(103)	(8,618)
Total	(478,618)	(67,433)	-	(2,193)	(548,244)
Net	14,835	(25,731)	24,864	4,898	18,866

Deferred income tax assets are recognised for tax loss and carried forwards only to the extent that realisation of the related tax benefit through the future taxable profits is probable. The Group did not recognise deferred income tax assets amounting to US Dollar 113.54 million from tax losses of US Dollar 567.70 million that could be carried forward against future taxable income, these tax losses will be expired in 2026 (2020: The Group did not recognised deferred income tax assets amounting to US Dollar 94.10 million from tax losses of US Dollar 470.51 million that could be carried forward against future taxable income, these tax losses will be expired in 2025).

	Consolidated financial statements					
	US Dollar'000					
	At 1 January 2020	Charged (credited) to profit or loss	Charged (credited) to other comprehensive income or expense	Corporatisation of gas business	Translation differences	At 31 December 2020
Deferred tax assets:						
Employee benefit obligation	14,435	(8,088)	5	-	(24)	6,328
Loss carried forward	250,249	2,153	-	-	21,910	274,312
Financial derivative	15,405	(101)	(217)	-	-	15,087
Depreciation and amortisation	46,531	(5,332)	-	-	837	42,036
Investments in joint ventures	23,297	-	-	-	-	23,297
Provision for mine rehabilitation	7,370	(3,619)	-	-	-	3,751
Provision for decommissioning	985	5,867	-	-	-	6,852
Allowance for slow moving of spare parts	1,978	(343)	-	-	-	1,635
Other reserves	37,008	(3,963)	-	-	3,022	36,067
Others	73,159	12,242	891	908	(3,112)	84,088
Total	470,417	(1,184)	679	908	22,633	493,453
Deferred tax liabilities:						
Investments in joint ventures	(20,388)	(648)	4,857	-	(27)	(16,206)
Mining property rights	(292,579)	12,305	-	-	(12,553)	(292,827)
Financial derivative	-	(2,321)	-	-	-	(2,321)
Depreciation and amortisation	(218,716)	14,520	-	-	(15,392)	(219,588)
Fair value uplift from the acquisition of power plant in the People's Republic of China	(2,826)	-	-	-	(117)	(2,943)
Amortisation of fair value of building and equipment from the acquisition of power plants	1,202	108	-	-	-	1,310
Connection fee	(686)	175	-	-	(47)	(558)
Tax effect of currency translation on tax base	47,422	10,614	-	-	-	58,036
Others	(4,411)	1,169	-	-	(279)	(3,521)
Total	(490,982)	35,922	4,857	-	(28,415)	(478,618)
Net	(20,565)	34,738	5,536	908	(5,782)	14,835

	Consolidated financial statements				
	Baht'000				
	At 1 January 2021	Charged (credited) to profit or loss	Charged (credited) to other comprehensive income or expense	Translation differences	At 31 December 2021
Deferred tax assets:					
Employee benefit obligation	190,064	32,008	(19,950)	23,208	225,330
Loss carried forward	8,239,540	1,626,232	-	1,223,166	11,088,938
Financial derivative	453,157	(152,076)	990,671	182,728	1,474,480
Depreciation and amortisation	1,262,643	73,733	-	149,379	1,485,755
Investments in joint ventures	699,784	5,468	(203,340)	49,234	551,146
Provision for mine rehabilitation	112,659	20,099	-	15,692	148,450
Provision for decommissioning	205,803	(41,992)	-	16,878	180,689
Allowance for slow moving of spare parts	49,099	10,940	-	7,165	67,204
Other reserves	1,083,340	(22,709)	-	118,026	1,178,657
Others	2,525,755	(339,234)	(44,521)	410,124	2,552,124
Total	14,821,844	1,212,469	722,860	2,195,600	18,952,773
Deferred tax liabilities:					
Investments in joint ventures	(486,775)	(358,738)	-	(33,905)	(879,418)
Mining property rights	(8,795,641)	248,747	-	(1,090,743)	(9,637,637)
Financial derivative	(69,717)	67,417	-	2,225	(75)
Depreciation and amortisation	(6,595,787)	(57,170)	-	(750,859)	(7,403,816)
Fair value uplift from the acquisition of power plant in the People's Republic of China	(88,391)	-	-	(10,722)	(99,113)
Amortisation of fair value of building and equipment from the acquisition of power plants	39,341	2,306	-	4,395	46,042
Connection fee	(16,749)	5,326	-	(7,529)	(18,952)
Tax effect of currency translation on tax base	1,743,241	(1,723,276)	-	(61,245)	(41,280)
Others	(105,768)	(145,197)	-	(37,091)	(288,056)
Total	(14,376,246)	(1,960,585)	-	(1,985,474)	(18,322,305)
Net	445,598	(748,116)	722,860	210,126	630,468

	Consolidated financial statement					
	Baht'000					
	At 1 January 2020	Charged (credited) to profit or loss	Charged (credited) to other comprehensive income or expense	Corporatisation of gas business	Translation differences	At 31 December 2020
Deferred tax assets:						
Employee benefit obligation	435,263	(253,894)	158	-	8,537	190,064
Loss carried forward	7,546,017	67,569	-	-	625,954	8,239,540
Financial derivative	464,521	(3,177)	(6,817)	-	(1,370)	453,157
Depreciation and amortisation	1,403,082	(167,372)	-	-	26,933	1,262,643
Investments in joint ventures	702,507	-	-	-	(2,723)	699,784
Provision for mine rehabilitation	222,244	(113,622)	-	-	4,037	112,659
Provision for decommissioning	29,715	184,135	-	-	(8,047)	205,803
Allowance for slow moving of spare parts	59,647	(10,781)	-	-	233	49,099
Other reserves	1,115,933	(124,398)	-	-	91,805	1,083,340
Others	2,206,013	384,281	27,969	28,488	(120,996)	2,525,755
Total	14,184,942	(37,259)	21,310	28,488	624,363	14,821,844
Deferred tax liabilities:						
Investments in joint ventures	(614,766)	(20,348)	152,448	-	(4,109)	(486,775)
Mining property rights	(8,822,378)	386,249	-	-	(359,512)	(8,795,641)
Financial derivative	-	(72,858)	-	-	3,141	(69,717)
Depreciation and amortisation	(6,595,162)	455,781	-	-	(456,406)	(6,595,787)
Fair value uplift from the acquisition of power plant in the People's Republic of China	(85,229)	-	-	-	(3,162)	(88,391)
Amortisation of fair value of building and equipment from the acquisition of power plants	36,243	3,358	-	-	(260)	39,341
Connection fee	(20,676)	5,503	-	-	(1,576)	(16,749)
Tax effect of currency translation on tax base	1,429,969	333,181	-	-	(19,909)	1,743,241
Others	(133,050)	36,825	-	-	(9,543)	(105,768)
Total	(14,805,049)	1,127,691	152,448	-	(851,336)	(14,376,246)
Net	(620,107)	1,090,432	173,758	28,488	(226,973)	445,598

	Separate financial statements			
	US Dollar'000			
	At 1 January 2021	Charged (credited) to profit or loss	Charged (credited) to other comprehensive income or expense	At 31 December 2021
Deferred tax assets:				
Employee benefit obligation	3,214	(510)	(55)	2,649
Financial derivative	4,307	(1,653)	2,435	5,089
Tax effect of currency translation on tax base	55,961	(59,268)	-	(3,307)
Others	977	(99)	(167)	711
Total	64,459	(61,530)	2,213	5,142

	Separate financial statements			
	US Dollar'000			
	At 1 January 2020	Charged (credited) to profit or loss	Charged (credited) to other comprehensive income or expense	At 31 December 2020
Deferred tax assets:				
Employee benefit obligation	2,532	180	502	3,214
Financial derivative	(715)	(91)	5,113	4,307
Tax effect of currency translation on tax base	45,740	10,221	-	55,961
Others	593	(92)	476	977
Total	48,150	10,218	6,091	64,459

Separate financial statements					
Baht'000					
	At 1 January 2021	Charged (credited) to profit or loss	Charged (credited) to other comprehensive income or expense	Translation differences	At 31 December 2021
Deferred tax assets:					
Employee benefit obligation	96,546	(15,329)	-	7,331	88,548
Financial derivative	129,360	(50,917)	68,472	23,137	170,052
Tax effect of currency translation on tax base	1,680,941	(1,861,095)	-	69,682	(110,472)
Others	29,314	(3,001)	(6,105)	3,494	23,702
Total	1,936,161	(1,930,342)	62,367	103,644	171,830
Separate financial statements					
Baht'000					
	At 1 January 2020	Charged (credited) to profit or loss	Charged (credited) to other comprehensive income or expense	Translation differences	At 31 December 2020
Deferred tax assets:					
Employee benefit obligation	76,343	5,524	15,089	(410)	96,546
Financial derivative	(21,571)	(2,398)	154,644	(1,315)	129,360
Tax effect of currency translation on tax base	1,379,276	312,633	-	(10,968)	1,680,941
Others	17,864	(2,871)	14,346	(25)	29,314
Total	1,451,912	312,888	184,079	(12,718)	1,936,161

20.2 Income taxes

Income taxes for the year ended 31 December consist of:

	Consolidated financial statements			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
Current tax:				
Current tax on profit for the year	164,698	39,069	5,371,777	1,223,041
Withholding tax for dividends	7,604	4,348	251,984	136,857
Total current taxes	172,302	43,417	5,623,761	1,359,898
Deferred tax:				
Origination and reversal of temporary differences	25,731	(34,738)	748,116	(1,090,432)
Total deferred tax	25,731	(34,738)	748,116	(1,090,432)
Total tax expenses	198,033	8,679	6,371,877	269,466
	Separate financial statements			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
Current tax:				
Current tax on profit for the year	-	-	-	-
Withholding tax for dividends	-	-	-	-
Total current taxes	-	-	-	-
Deferred tax:				
Origination and reversal of temporary differences	61,530	(10,218)	1,930,341	(312,888)
Total deferred tax	61,530	(10,218)	1,930,341	(312,888)
Total tax expenses	61,530	(10,218)	1,930,341	(312,888)

The tax on the Group's profit before tax differs from the theoretical amount that would arise using the basic tax rate of the home country of the company as follows:

	Consolidated financial statements			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
Profit (loss) before tax	690,522	(8,051)	22,344,460	(299,714)
Tax calculated at a tax rate of 20% (2020: 20%)	138,104	(1,610)	4,468,892	(59,943)
Tax effect of:				
Income not subject to tax	(21,739)	(19,784)	(695,135)	(619,113)
Expenses not deductible for tax purpose	15,148	5,851	484,397	183,103
Tax losses for which no deferred income tax asset was recognised	11,595	41,571	370,772	1,300,900
Utilisation of previously unrecognised tax losses	(5,724)	(6,556)	(183,050)	(205,151)
Recognition of previously unrecognised tax losses	-	-	-	-
Deferred income tax assets (liabilities)				
from exchange rate translation	36,927	1,607	1,180,805	50,293
Tax assessment	1,855	1,476	59,318	46,190
Withholding tax for dividends	7,604	4,348	243,166	136,052
Tax effect from different tax rates of foreign entities	(10,802)	(10,591)	(345,417)	(331,431)
Others	25,065	(7,633)	788,129	(231,434)
Tax expense	198,033	8,679	6,371,877	269,466
	Separate financial statements			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
Profit (loss) before tax	141,696	24,989	4,520,487	815,631
Tax calculated at a tax rate of 20% (2020: 20%)	28,339	4,998	904,097	163,126
Tax effect of:				
Income not subject to tax	(17,894)	(20,909)	(572,206)	(654,295)
Expenses not deductible for tax purpose	2,487	930	79,532	29,090
Tax losses for which no deferred income tax asset was recognised	-	-	-	-
Utilisation of previously unrecognised tax losses	-	-	-	-
Recognition of previously unrecognised tax losses	9,771	3,075	312,439	96,229
Deferred income tax assets (liabilities)				
from exchange rate translation	38,803	1,688	1,240,822	52,826
Tax assessment	-	-	-	-
Withholding tax for dividends	-	-	-	-
Tax effect from different tax rates of foreign entities	-	-	-	-
Others	24	-	(34,343)	136
Tax expense	61,530	(10,218)	1,930,341	(312,888)

21 Other non-current assets

	Consolidated financial statements				Separate financial statements			
	US Dollar'000		Baht'000		US Dollar'000		Baht'000	
	2021	2020	2021	2020	2021	2020	2021	2020
As at 31 December								
Value added tax receivable	97,304	31,741	3,251,893	953,396	-	-	-	-
Prepaid income tax	45,054	80,038	1,505,699	2,404,103	457	943	15,282	28,329
Deposits	28,619	13,317	956,448	399,990	245	296	8,195	8,889
Restricted deposits at banks								
(Note 14.1 f)	42,644	29,701	1,425,165	892,119	-	-	-	-
Accrued income	14,718	71,737	491,885	2,154,788	-	-	-	-
Rights to operate the								
power plants, net	14,702	6,810	491,336	204,573	-	-	-	-
Others	57,352	44,349	1,916,683	1,332,132	6,697	5,572	223,791	167,361
Total other non-current assets	300,393	277,693	10,039,109	8,341,101	7,399	6,811	247,268	204,579

22 Short-term loans from financial institutions

Movements of short-term loans from financial institutions are as follows:

	Consolidated financial statements				Separate financial statements			
	US Dollar'000		Baht'000		US Dollar'000		Baht'000	
	2021	2020	2021	2020	2021	2020	2021	2020
As at 31 December								
US Dollar loans	394,491	276,000	13,183,837	8,290,240	220,000	276,000	7,352,378	8,290,240
Baht loans	766,010	536,337	25,600,000	16,110,000	592,461	503,045	19,800,000	15,110,000
Foreign currency loans	13,406	15,181	448,024	456,001	-	-	-	-
Total	1,173,907	827,518	39,231,861	24,856,241	812,461	779,045	27,152,378	23,400,240
Opening balance	827,518	454,861	24,856,241	13,715,865	779,045	409,305	23,400,240	12,342,176
Cash flows:								
Additions	1,766,914	1,389,176	56,500,783	43,472,457	1,246,082	1,169,581	39,846,088	36,600,530
Repayments of loans	(1,368,723)	(1,032,162)	(43,767,793)	(32,300,177)	(1,165,231)	(812,953)	(37,260,707)	(25,440,306)
Other non-cash movements:								
- Net (gains) losses on								
exchange rate	(37,623)	13,112	(1,203,066)	410,303	(47,435)	13,112	(1,516,809)	410,303
- Translation differences	(14,179)	2,531	2,845,696	(442,207)	-	-	2,683,566	(512,463)
Closing net book amount	1,173,907	827,518	39,231,861	24,856,241	812,461	779,045	27,152,378	23,400,240

Consolidated financial statements

As at 31 December 2021, short-term loans from financial institutions are unsecured liabilities and bore interest at the rates of 1.00% to 4.57% per annum (31 December 2020: 1.28% to 4.90% per annum). The repayments are due within one year.

Separate financial statements

As at 31 December 2021, short-term loans from financial institutions are unsecured liabilities and bore interest at the rates of 1.00% to 2.00% per annum (2020: 1.28% to 1.98% per annum). The repayments are due within one year.

The fair value of short-term loans approximates their carrying amount, as short-term loans from financial institutions had a short period of maturity.

23 Other current liabilities

	Consolidated financial statements				Separate financial statements			
	US Dollar'000		Baht'000		US Dollar'000		Baht'000	
	2021	2020	2021	2020	2021	2020	2021	2020
As at 31 December								
Accrued expenses	381,728	180,297	12,757,319	5,415,609	9,448	4,228	315,753	126,997
Contingent liabilities from								
an asset acquisition (Note 6)	65,000	-	2,172,294	-				
Value added tax payable	22,265	4,296	744,086	129,052	8	18	282	552
Withholding tax payable	12,871	7,058	430,148	212,007	1,139	766	38,073	23,003
Other payables for purchase of								
property, plant and equipment	37,793	28,990	1,263,045	870,773	81	26	2,689	760
Advance from customer	9,350	7,679	312,462	230,642	-	-	-	-
Others	7,578	1,627	253,272	48,843	-	-	-	-
Total other current liabilities	536,585	229,947	17,932,626	6,906,926	10,676	5,038	356,797	151,312

24 Long-term loans from financial institutions, net

	Consolidated financial statements				Separate financial statements			
	US Dollar'000		Baht'000		US Dollar'000		Baht'000	
	2021	2020	2021	2020	2021	2020	2021	2020
As at 31 December								
<u>Current portion</u>								
Long-term loans from								
financial institutions, net	517,009	531,729	17,278,404	15,971,608	355,871	428,938	11,893,176	12,884,047
Private placement notes, net	-	143,576	-	4,312,603	-	-	-	-
Total current portion, net	517,009	675,305	17,278,404	20,284,211	355,871	428,938	11,893,176	12,884,047
<u>Non-current portion</u>								
Long-term loans from								
financial institutions, net	2,270,243	2,151,115	75,871,298	64,613,248	1,506,331	1,563,328	50,341,446	46,957,843
Private placement notes, net	-	79,252	-	2,380,505	-	-	-	-
Total non-current portion, net	2,270,243	2,230,367	75,871,298	66,993,753	1,506,331	1,563,328	50,341,446	46,957,843
Total long-term loans from								
financial institutions, net	2,787,252	2,905,672	93,149,702	87,277,964	1,862,202	1,992,266	62,234,622	59,841,890

Long-term loans from financial institutions

For the year ended 31 December	Consolidated financial statements				Separate financial statements			
	US Dollar'000		Baht'000		US Dollar'000		Baht'000	
	2021	2020	2021	2020	2021	2020	2021	2020
Long-term US Dollar loans	1,928,424	2,165,598	64,447,729	65,048,297	1,712,000	1,825,000	57,214,869	54,817,708
Long-term foreign currency loans	875,968	529,863	29,274,721	15,915,533	158,588	176,448	5,300,000	5,300,000
Total	2,804,392	2,695,461	93,722,450	80,963,830	1,870,588	2,001,448	62,514,869	60,117,708
<u>Less</u> Deferred financing service fee	(17,140)	(12,617)	(572,748)	(378,974)	(8,386)	(9,182)	(280,247)	(275,818)
	2,787,252	2,682,844	93,149,702	80,584,856	1,862,202	1,992,266	62,234,622	59,841,890
<u>Less</u> Current portion of long-term loans from financial institutions	(517,009)	(531,729)	(17,278,404)	(15,971,608)	(355,871)	(428,938)	(11,893,176)	(12,884,047)
Long-term loans from financial institutions, net	2,270,243	2,151,115	75,871,298	64,613,248	1,506,331	1,563,328	50,341,446	46,957,843

Movements in long-term loans from financial institutions of the Group are as follows:

For the year ended 31 December	Consolidated financial statements				Separate financial statements			
	US Dollar'000		Baht'000		US Dollar'000		Baht'000	
	2021	2020	2021	2020	2021	2020	2021	2020
Opening net balance	2,682,844	1,929,926	80,584,856	58,195,007	1,992,266	1,261,032	59,841,890	38,025,180
Cash flows:								
Additions	861,635	1,023,507	27,552,585	32,029,320	317,000	956,902	10,136,741	29,944,993
Increase from business combinations	130,965		4,309,001					
Repayment of loans	(832,513)	(301,141)	(26,621,350)	(9,423,816)	(430,000)	(224,000)	(13,750,153)	(7,009,789)
Financing service fees	(11,775)	(9,244)	(376,545)	(289,277)	(2,501)	(6,867)	(79,953)	(214,892)
Other non-cash movements:								
Amortisation of deferred financing service fees	7,618	3,827	243,578	119,774	3,297	2,652	105,436	82,991
Net (gains) losses on exchange rate	(17,504)	2,547	(559,733)	79,700	(17,860)	2,547	(571,121)	79,690
Translation differences	(34,018)	33,422	8,017,310	(125,852)	-	-	6,551,782	(1,066,283)
Closing net balance	2,787,252	2,682,844	93,149,702	80,584,856	1,862,202	1,992,266	62,234,622	59,841,890

As at 31 December 2021, long-term loans of subsidiaries were unsecured loans from banks, except long-term loans of a subsidiary in China are secured over assets as described in Note 15.

Details of long-term loans are shown as follow:

Million US Dollar (Original currency)				
No.	2021	2020	Interest rate	Due of loan payment
1	120	120	BBA LIBOR plus applicable fixed margin	Repayment on 25 April 2024.
	120	120		
Million Australian Dollar (Original currency)				
No.	2021	2020	Interest rate	Due of loan payment
1	-	380	BBSY plus applicable fixed margin	Repayment on 18 December 2022.
2	-	132	BBSY plus applicable fixed margin	Revolving loan
3	400	-	BBSY plus applicable fixed margin	Repayment annually commencing 30 September 2022 to expiry of agreement on 30 September 2026.
4	62	-	Fixed rate	Repayment on 22 March 2022
5	109	-	Fixed rate	Repayment on 10 May 2023
7	12	-	Fixed rate	Repayment on 21 June 2022
	583	512		
Million Baht (Original currency)				
No.	2021	2020	Interest rate	Due of loan payment
1	-	700	THB FIX plus applicable fixed margin	Repayment every 6 months commencing 27 June 2019 to expiry of agreement on 27 December 2021.
2	1,500	1,500	THB FIX plus applicable fixed margin	Repayment every 6 months commencing 21 February 2022 to expiry of agreement on 21 August 2025.
3	1,500	1,500	THB FIX plus applicable fixed margin	Repayment every 6 months commencing 20 June 2022 to expiry of agreement on 20 December 2025.
4	5,000	-	BOBOR plus applicable fixed margin	Repayment every 6 months commencing 27 October 2024 to expiry of agreement on 27 October 2031.
	8,000	3,700		

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No.	Million CNY (Original currency)		Interest rate	Due of loan payment
	2021	2020		
1	18.02	26.03	LPR plus applicable fixed margin	Repayment every 3 months commencing 29 March 2019 to expiry of agreement on 21 January 2024.
2	79.61	97.33	LPR plus applicable fixed margin	Repayment every 6 months commencing 30 May 2020 to expiry of agreement on 30 May 2022.
3	15.61	31.22	Fixed rate	Repayment every 3 months commencing 23 May 2019 to expiry of agreement on 23 May 2022.
4	21.40	5.11	Fixed rate	Repayment every 3 months commencing 11 August 2020 to expiry of agreement on 1 July 2023.
5	64.15	12.96	LPR plus applicable fixed margin	Repayment every 3 months an expiry of agreement on 29 August 2031
6	142.20	179.39	Fixed rate	Repayment every 3 months an expiry of agreement on 22 August 2027
	340.99	352.40		

Long-term loans of the Company were unsecured loans denominated in US Dollar as details below:

No.	Million THB Baht (Original currency)		Interest rate	Due of loan payment
	2021	2020		
1	5,300	-	BBA LIBOR plus applicable fixed margin	Repayment every 3 months commencing 23 December 2020 to expiry of agreement on 22 December 2022
	5,300	-		

No.	Million US Dollar (Original currency)		Interest rate	Due of loan payment
	2021	2020		
1	20.00	40.00	BBA LIBOR plus applicable fixed margin	Repayment annually commencing 27 June 2018 to expiry of agreement on 26 June 2022.
2	100.00	100.00	BBA LIBOR plus applicable fixed margin	Repayment of principal as agreement expires on 26 December 2022.
3	90.00	90.00	BBA LIBOR plus applicable fixed margin	Repayment of principal as agreement expires on 29 March 2024.
4	50.00	50.00	BBA LIBOR plus applicable fixed margin	Repayment every 3 months commencing 16 September 2019 to expiry of agreement on 14 September 2023.
5	11.70	15.00	BBA LIBOR plus applicable fixed margin	Repayment every 6 months commencing 6 February 2021 to expiry of agreement on 6 February 2025.
6	66.30	85.00	BBA LIBOR plus applicable fixed margin	Repayment every 6 months commencing 6 February 2021 to expiry of agreement on 6 February 2025.
7	-	60.00	BBA LIBOR plus applicable fixed margin	Repayment of principal as agreement expires on 22 December 2021.
8	32.00	96.00	BBA LIBOR plus applicable fixed margin	Repayment every 6 months commencing 22 March 2020 to expiry of agreement on 23 March 2022.
9	-	240.00	BBA LIBOR plus applicable fixed margin	Repayment of principal as agreement expires on 22 December 2021.
10	250.00	-	BBA LIBOR plus applicable fixed margin	Repayment annually commencing 22 December 2023 to expiry of agreement on 22 December 2028
11	40.00	50.00	BBA LIBOR plus applicable fixed margin	Repayment annually commencing 26 June 2021 to expiry of agreement on 26 June 2025.
12	75.00	80.00	BBA LIBOR plus applicable fixed margin	Repayment every 6 months commencing 18 June 2020 to expiry of agreement on 17 December 2025.
13	100.00	100.00	BBA LIBOR plus applicable fixed margin	Revolving loan maturity in 2025.
14	52.00	56.00	BBA LIBOR plus applicable fixed margin	Repayment every 6 months commencing 10 September 2019 to expiry of agreement on 10 September 2025.
15	80.00	80.00	BBA LIBOR plus applicable fixed margin	Repayment every 3 months commencing 16 April 2020 to expiry of agreement on 11 April 2024.
16	200.00	200.00	BBA LIBOR plus applicable fixed margin	Repayment annually commencing 23 April 2023 to expiry of agreement on 22 April 2025.
17	45.00	48.00	BBA LIBOR plus applicable fixed margin	Repayment every 6 months commencing 30 January 2021 to expiry of agreement on 30 January 2027.
18	100.00	33.00	BBA LIBOR plus applicable fixed margin	Revolving loan maturity in 2023
19	300.00	300.00	BBA LIBOR plus applicable fixed margin	Repayment annually commencing 23 September 2023 to expiry of agreement on 23 September 2027.
20	100.00	100.00	BBA LIBOR plus applicable fixed margin	Repayment of principal as agreement expires on 22 July 2025.
	1,712.00	1,823.00		

The effective interest rates are as follows:

As at 31 December	Consolidated financial statements		Separated financial statements	
	2021	2020	2021	2020
	% per annum	% per annum	% per annum	% per annum
Loans from financial institutions	1.55 - 5.85	1.24 - 5.36	1.55 - 3.47	1.70 - 3.49

All long-term loans from financial institutions bear floating rates. The fair value of long-term loans equalled their carrying amount. As the interest rates of long-term loans vary with the market interest rates, the impact of discounting is not significant. The fair value is based on discounted cash flows using a discount rate based on the current lending rate as at the reporting date and are within level 2 of the fair value hierarchy.

Maturities of long-term loans from financial institutions are as follows:

As at 31 December	Consolidated financial statements				Separate financial statements			
	US Dollar'000		Baht'000		US Dollar'000		Baht'000	
	2021	2020	2021	2020	2021	2020	2021	2020
Within 1 year	519,247	534,037	17,353,199	16,040,910	356,588	430,000	11,917,140	12,915,953
Later than 1 year but not later than 5 years	1,531,018	1,716,548	51,166,468	51,560,120	924,000	1,226,448	30,879,988	36,838,954
Later than 5 years	754,127	444,876	25,202,783	13,362,800	590,000	345,000	19,717,741	10,362,801
Total loans	2,804,392	2,695,461	93,722,450	80,963,830	1,870,588	2,001,448	62,514,869	60,117,708

The Group is required to comply with certain criteria and conditions; for example, maintaining debt to equity ratio.

Private Placement Notes

The US Private Placement Notes are unsecured liabilities and senior debt notes to the institutional investor in the United States. During the year 2021, the Group fully paid the liabilities for US Dollar 225 million.

25 Debentures, net

	Consolidated and separate financial statements			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
As at 31 December				
US Dollar debentures	200,000	200,000	6,683,980	6,007,420
Baht debentures	1,833,339	1,451,538	61,270,000	43,600,000
Total	2,033,339	1,651,538	67,953,980	49,607,420
<u>Less</u> Deferred financing service fee	(2,363)	(1,422)	(78,964)	(42,742)
	2,030,976	1,650,116	67,875,016	49,564,678
<u>Less</u> Current portion of debentures	(119,672)	(133,161)	(3,999,435)	(3,999,761)
Debentures, net	1,911,304	1,516,955	63,875,581	45,564,917

Movements of debentures are as follows:

	Consolidated and separate financial statements			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
For the year ended 31 December				
Opening net balance	1,650,116	1,819,907	49,564,678	54,877,478
Cash flows:				
Additions	679,669	-	21,733,830	-
Repayment of debentures	(129,939)	(170,076)	(4,155,083)	(5,322,314)
Financing service fee	(1,314)	-	(42,021)	-
Other non-cash movements:				
Amortisation of deferred financing fee	372	345	11,935	10,807
Net gains (losses) on exchange rate	(167,928)	(60)	(5,369,841)	(1,906)
Translation differences		-	6,131,518	613
Closing net balance	2,030,976	1,650,116	67,875,016	49,564,678

Debentures are unsecured liabilities. However, the Group is required to comply with certain procedures and conditions; for example, maintaining debt to equity ratio.

In February 2021, the Company has issued unsubordinated and unsecured debentures representing in Baht, totalling Baht 5,670 million or equivalent to US Dollar 188.96 million which comprise Baht 2,000 million, or equivalent to US Dollar 66.65 million, bearing a fixed interest rate of 3.33% per annum, and Baht 3,670 million, or equivalent to US Dollar 122.31 million, bearing a fixed interest rate of 3.78% per annum. Interest is due for payment every six months. Debenture terms are 7 years and 10 years, respectively.

In August 2021, the Company has issued unsubordinated and unsecured debentures representing in Baht, totalling Baht 16,000 million or equivalent to US Dollar 490.71 million. There are 4 tranches which are 3-year debenture amounting to Baht 2,000 million or equivalent to US Dollar 61.34 million with fixed interest rate of 1.58% per annum, 5-year debenture amounting to Baht 3,945 million or equivalent to US Dollar 120.99 million with fixed interest rate of 2.90% per annum, 7-year debenture amounting to Baht 4,010 million or equivalent to US Dollar 122.98 million with fixed interest rate of 3.30% per annum and 10-year debenture amounting to Baht 6,045 million or equivalent to US Dollar 185.39 million with fixed interest rate of 3.80% per annum.

All debentures bear fixed interest rates. The weighted average effective interest rate of debentures of the Group after recognising the effect from interest rate swap contracts is 4.10% per annum (2020: 4.42% per annum).

As at 31 December 2021, the fair value of debentures are Baht 70,015 million or equivalent to US Dollar 2,095.02 million (2020: Baht 51,252 million or equivalent to US Dollar 1,706 million). The valuation technique used to measure fair value of debenture is level 2 which is calculated based on the market price of each debenture published in the Thai Bond Market Association.

Maturities of debentures are as follows:

	Consolidated and separate financial statements			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
As at 31 December				
Within 1 year	119,689	133,169	4,000,000	4,000,000
Later than 1 year but not later than 5 years	757,273	694,326	25,307,985	20,855,565
Later than 5 years	1,156,377	824,043	38,645,995	24,751,855
Total debentures	2,033,339	1,651,538	67,953,980	49,607,420

26 Equity

(a) Increase in paid-up share capital and warrants offering

At the Extraordinary General Shareholders' meeting no. 1/2021 dated 9 August 2021, the shareholders approved the increase the Company's registered share capital, Right Offering and Warrants. The shareholders approved the increase of the Company's registered capital of Baht 5,074,581,513 by issuing 5,074,581,513 ordinary shares with Baht 1 par value per share. The registration of increase registered capital with the Ministry of Commerce was completed on 20 August 2021. The details are as follow:

- 1,691,527,171 ordinary shares were offered as the right to buy new ordinary shares to the existing shareholders at ratio of 3 existing shares to 1 new share at Baht 5 each. Total share subscription for 1,691,527,171 shares was received and the additional paid-up share capital was registered with the Ministry of Commerce on 28 September 2021.
- Not more than 1,691,527,171 ordinary shares will be issued by granting the Company's warrants (BANPU-W4) to existing shareholders who take right to buy new share as aforementioned with free of charge at ratio of 1 new share to 1 warrant but not more than 1,691,527,171 warrants. Warrants were granted on 1 October 2021 and can be exercised to buy 1 new share at Baht 5 each within 1 year after grant date.
- Not more than 1,691,527,171 ordinary shares will be issued by granting the Company's warrants (BANPU-W5) to existing shareholders who take right to buy new share as aforementioned with free of charge at ratio of 1 new share to 1 warrant but not more than 1,691,527,171 warrants. Warrants were granted on 1 October 2021 and can be exercised to buy 1 new share at Baht 7.50 each within 2 years after grant date.

	Number of registered shares	Issued and paid-up share capital		Share premium	Treasury shares	Total
		Number of shares	Ordinary shares			
		Shares	US Dollar'000	US Dollar'000	US Dollar'000	US Dollar'000
As at 1 January 2020	5,161,925,515	5,161,925,515	149,961	443,624	(38,138)	555,447
<u>Less</u> Decreased in registered share capital	(87,344,000)	(87,344,000)	(2,537)	-	38,138	35,601
As at 31 December 2020	5,074,581,515	5,074,581,515	147,424	443,624	-	591,048
Increased in registered share capital	5,074,581,513	1,691,527,171	51,076	204,305	-	255,381
As at 31 December 2021	10,149,163,028	6,766,108,686	198,500	647,929	-	846,429

	Number of registered shares	Issued and paid-up share capital		Share premium	Treasury shares	Total
	Shares	Share	Baht'000	Baht'000	Baht'000	Baht'000
As at 1 January 2020	5,161,925,515	5,161,925,515	5,161,925	15,372,438	(1,157,140)	19,377,223
<u>Less</u> Decreased in registered share capital	(87,344,000)	(87,344,000)	(87,344)	-	1,157,140	1,069,796
As at 31 December 2020	5,074,581,515	5,074,581,515	5,074,581	15,372,438	-	20,447,019
Increased in registered share capital	5,074,581,513	1,691,527,171	1,691,527	6,766,109	-	8,457,636
As at 31 December 2021	10,149,163,028	6,766,108,686	6,766,108	22,138,547	-	28,904,655

(b) Legal reserve

The movement of legal reserve is as follows:

	Consolidated and separate financial statements					
	US Dollar'000			Baht'000		
	Company	Subsidiaries	Total	Company	Subsidiaries	Total
At 1 January 2020	14,996	80,980	95,976	516,193	2,655,326	3,171,519
Appropriation during the year	-	(433)	(433)	-	(13,535)	(13,535)
At 31 December 2020	14,996	80,547	95,543	516,193	2,641,791	3,157,984
At 1 January 2021	14,996	80,547	95,543	516,193	2,641,791	3,157,984
Appropriation during the year	4,854	-	4,854	160,418	-	160,418
At 31 December 2021	19,850	80,547	100,397	676,611	2,641,791	3,318,402

Under the Public Company Act, the Company is required to set aside a statutory reserve of at least 5% of its net profit after accumulated deficit brought forward (if any) until the reserve reaches not less than 10% of the registered capital. The legal reserve is non-distributable. During the year ended 31 December 2021, the Company has set aside legal reserve totalling of Baht 160.42 million or equivalent to US Dollar 4.85 million. As at 31 December 2021, the legal reserve has fully recognised at 10% of registered capital.

(c) Other reserves

As at 31 December 2021 and 2020, other reserves of the Group comprised reserves resulting from holding a joint venture in the People's Republic of China. These reserves are in accordance with the regulation of a government unit in the People's Republic of China with the objective of future development, safety, and transformation.

(d) Other components of equity

Movements of other components of equity are as follows:

	Consolidated financial statements													
	US Dollar'000							Baht'000						
	Surplus on dilution of investments in subsidiaries	Fair value reserve of financial assets	Cash flow hedge reserve	Net investment hedge	Translation differences	Other reserve	Total	Surplus on dilution of investments in subsidiaries	Fair value reserve of financial assets	Cash flow hedge reserve	Net Investment hedge	Translation differences	Other reserve	Total
Opening balance as at 1 January 2021, net of taxes	333,217	43,705	(58,610)	(77,815)	(549,015)	(42,288)	(350,806)	11,993,743	1,312,742	(1,760,471)	(2,337,323)	(27,261,096)	(1,350,978)	(19,403,383)
Change in shareholding interests of subsidiaries	424	-	-	-	-	-	424	14,243	-	-	-	-	-	14,243
Fair value of put options over non-controlling interests	-	-	-	-	-	(7,028)	(7,028)	-	-	-	-	-	(237,013)	(237,013)
Treasury shares of a subsidiary	(514)	-	-	-	-	2,754	2,240	(16,657)	-	-	-	-	88,994	72,337
Share of other comprehensive income (expense)	-	(26,496)	(92,015)	88,965	(194,045)	-	(223,591)	-	(874,350)	(2,615,071)	2,796,637	1,182,349	-	489,565
Tax charge to other comprehensive income (expense)	-	(488)	31,767	-	-	-	31,279	-	(15,386)	956,685	-	-	-	941,299
Translation differences	-	-	-	-	-	-	-	-	135,798	(553,363)	(86,681)	-	-	(504,246)
Closing balance as at 31 December 2021, net of taxes	333,127	16,721	(118,858)	11,150	(743,060)	(46,562)	(547,482)	11,991,329	558,804	(3,972,220)	372,633	(26,078,747)	(1,498,997)	(18,627,198)

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	Consolidated financial statements													
	US Dollar'000													Baht'000
	Surplus on dilution of investments in subsidiaries	Fair value reserve of financial assets	Cash flow hedge reserve	Net investment hedge	Translation differences	Other reserve	Total	Surplus on dilution of investments in subsidiaries	Fair value reserve of financial assets	Cash flow hedge reserve	Net Investment hedge	Translation differences	Other reserve	Total
Opening balance as at 1 January 2020, net of taxes	312,383	44,862	(50,802)	-	(780,509)	-	(474,066)	11,341,274	1,352,764	(1,531,843)	-	(34,248,763)	-	(23,086,568)
Change in shareholding interests of subsidiaries	14,150	3,597	7	-	(1,532)	-	16,222	440,649	112,549	218	-	(47,916)	-	505,500
Change in shareholding interests of a subsidiary and put options over non-controlling interests from corporatisation	5,388	-	-	-	-	(42,288)	(36,900)	172,151	-	-	-	-	(1,350,978)	(1,178,827)
Treasury shares of a subsidiary	1,296	-	-	-	-	-	1,296	39,669	-	-	-	-	-	39,669
Share of other comprehensive income (expense)	-	(5,818)	(6,796)	(77,815)	233,026	-	142,597	-	(172,528)	(194,128)	(2,437,553)	7,035,583	-	4,231,374
Tax charge to other comprehensive income (expense)	-	1,064	(1,019)	-	-	-	45	-	33,236	(40,821)	-	-	-	(7,585)
Translation differences	-	-	-	-	-	-	-	-	(13,279)	6,103	100,230	-	-	93,054
Closing balance as at 31 December 2020, net of taxes	333,217	43,705	(58,610)	(77,815)	(549,015)	(42,288)	(350,806)	11,993,743	1,312,742	(1,760,471)	(2,337,323)	(27,261,096)	(1,350,978)	(19,403,383)

	Separate financial statements						
	US Dollar'000			Baht'000			
	Fair value reserve of financial assets	Cash flow Hedge reserve	Total	Fair value reserve of financial assets	Cash flow Hedge reserve	Translation differences	Total
Opening balance as at 1 January 2021, net of taxes	197	(12,898)	(12,701)	5,941	(387,433)	(3,545,326)	(3,926,818)
Share of other comprehensive income	493	23,954	24,447	14,433	770,176	-	784,609
Tax charge to other comprehensive income (expense)	(185)	2,453	2,268	(5,620)	72,655	-	67,035
Translation differences	-	-	-	2,151	(3,945)	3,739,834	3,738,040
Closing balance as at 31 December 2021, net of taxes	505	13,509	14,014	16,905	451,453	194,508	662,866
Opening balance as at 1 January 2020, net of taxes	2,086	(1,669)	417	62,917	(50,329)	(3,458,770)	(3,446,182)
Share of other comprehensive expense	(2,365)	(16,342)	(18,707)	(73,492)	(514,602)	-	(588,094)
Tax charge to other comprehensive income (expense)	476	5,113	5,589	14,790	160,111	-	174,901
Translation differences	-	-	-	1,726	17,387	(86,556)	(67,443)
Closing balance as at 31 December 2020, net of taxes	197	(12,898)	(12,701)	5,941	(387,433)	(3,545,326)	(3,926,818)

27 Expenses by nature

For the year ended 31 December	Consolidated financial statements				Separate financial statements			
	US Dollar'000		Baht'000		US Dollar'000		Baht'000	
	2021	2020	2021	2020	2021	2020	2021	2020
Staff costs	424,648	378,801	13,579,020	11,854,078	31,499	25,325	1,007,243	792,526
Depreciation and amortisation	885,511	846,021	28,316,070	26,475,134	2,332	2,454	74,566	76,796
Write-off of assets	7,078	7,349	226,334	229,957	47	-	1,503	-
Allowance for net realisable of fuel	1,466	-	46,822	-	-	-	-	-
(Reverse) allowance for slow-moving of spare parts and machinery supplies and coal	4,336	996	138,653	31,169	-	-	-	-
Expected credit loss	8,974	2,951	286,962	92,347	-	-	-	-

28 Earnings (losses) per share

	Consolidated financial statements		Separate financial statements	
	2021	2020*	2021	2020*
For the year ended 31 December				
US Dollar				
Net profit (loss) attributable to ordinary				
shareholders of the Parent (US Dollar'000)	303,931	(55,739)	80,166	35,207
Basic earnings (losses) per share (US Dollar)	0.049	(0.009)	0.013	0.006
Diluted earnings (losses) per share (US Dollar)	0.046	(0.009)	0.012	0.006
Baht				
Net profit (loss) attributable to ordinary				
shareholders of the Parent (Baht'000)	9,851,795	(1,786,317)	2,590,146	1,128,516
Basic earnings (losses) per share (Baht)	1.591	(0.298)	0.418	0.188
Diluted earnings (losses) per share (Baht)	1.497	(0.298)	0.394	0.188
Weighted average number of shares				
Weighted average number of shares outstanding,				
excluding treasury shares (Thousand shares)	6,193,447	5,991,954	6,193,447	5,991,954
Adjustments for diluted earnings per share				
calculation				
- Warrants (Thousand shares)	387,026	-	387,026	-
Weighted average number of shares and potential				
ordinary shares used in calculating diluted				
earnings (losses) per share (Thousand shares)	6,580,473	5,991,954	6,580,473	5,991,954

* Earnings (losses) per share for the year ended 31 December 2020 has been represented due to the right offering in order to be comparable with 2021.

29 Dividend paid

At the Annual General Shareholders' meeting on 2 April 2021, the shareholders approved a payment of final dividends of 2020 of Baht 0.15 per share for 5,074,478,566 shares, totalling of Baht 761.17 million or equivalent to US Dollar 24.73 million. The Thailand Securities Depository Company Limited notified the Company that certain shareholders were not entitled to receive dividend totalling Baht 0.02 million or equivalent to US Dollar 502. Such dividends were paid to the shareholders on 30 April 2021.

At the Board of Directors' meeting on 25 August 2021, the meeting approved a payment of interim dividend of 2021 of Baht 0.20 per share for 5,074,493,756 shares, totalling of Baht 1,014.90 million or equivalent to US Dollar 31.12 million. The Thailand Securities Depository Company Limited notified the Company that certain shareholders were not entitled to receive dividend totalling Baht 0.02 million or equivalent to US Dollar 538.30. Such dividends were paid to the shareholders on 23 September 2021.

At the Board of Directors' meeting on 8 April 2020, the Board approved a payment of interim dividend of 2019 of Baht 0.25 per share for 5,073,554,474 shares, totalling of Baht 1,268.39 million or equivalent to US Dollar 39.53 million. The Thailand Securities Depository Company Limited notified the Company that certain shareholders were not entitled to receive dividend totalling Baht 0.26 million or equivalent to US Dollar 0.01 million. Such dividends were paid to the shareholders on 30 April 2020 and at the Annual General Shareholders' meeting on 19 June 2020, the shareholders acknowledged such interim dividend payment.

At the Board of Directors' meeting on 28 August 2020, the Board approved a payment of interim dividend of 2020 of Baht 0.15 per share for 5,074,302,006 shares, totaling of Baht 761.15 million or equivalent to US Dollar 24.23 million. The Thailand Securities Depository Company Limited notified the Company that certain shareholders were not entitled to receive dividend totaling Baht 0.04 million or equivalent to US Dollar 1.33 thousand. Such dividends were paid to the shareholders on 25 September 2020.

30 Related party transactions

Enterprises and individuals that directly, or indirectly through one or more intermediaries, control, or are controlled by, or are under common control with, the Company, including holding companies, subsidiaries and fellow subsidiaries are related parties of the company. Associates and individuals owning, directly or indirectly, an interest in the voting power of the company that gives them significant influence over the enterprise, key management personnel, including directors and officers of the company and close members of the family of these individuals and companies associated with these individuals also constitute related parties.

In considering each possible related party relationship, attention is directed to the substance of the relationship, and not merely the legal form.

The pricing policies for transactions between subsidiaries, joint ventures and related parties are:

- Coal sales and purchase within the Group are generally set based on international indices as benchmarks adjusted for coal specifications and the location of deliveries.
- Management income represents service fee charged between the Group and joint ventures for rendering the management services in the normal course of business. The fees are based on the service provided in accordance with the conditions in the agreement.
- Marketing Service Agreement to overseas subsidiaries for rendering the marketing consultant and management in transportation. The fees are based on a certain percentage of gross revenue of coal exports which is comparable to other companies.
- The prices of other sales and services charged between the Company and subsidiaries approximate to those charged to third parties.
- For loans to joint ventures and an associate and interest income, the Group charges interest by considering the average cost of borrowing and market interest rate.
- Advance to/from related parties represent the advance payment for related parties which will be reimbursed within the normal credit term.

Significant transactions carried out with related parties are as follows:

30.1 Transactions during the years are as follows:

	Consolidated financial statements			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
For the year ended 31 December				
Interest income from associates and joint ventures	2,700	1,785	86,461	55,810
Management income from joint ventures	847	921	27,093	28,687

For the year ended 31 December	Separate financial statements			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
Purchases of goods from subsidiaries	26,700	33,199	847,541	1,036,780
Cost of service from a subsidiary	4,348	5,346	138,780	166,945
Dividend from subsidiaries	89,311	62,305	2,915,768	1,976,278
Interest income from subsidiaries	116,341	99,826	3,736,291	3,122,662
Interest expense to a subsidiary	155	443	4,963	13,968
Management income from subsidiaries	34,751	23,628	1,122,257	739,222
Management expense to subsidiaries	2,613	4,162	83,802	130,242

30.2 Amount due from and dividend receivables from related parties comprised:

As at 31 December	Consolidated financial statements			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
Interest receivable - associates and joint ventures	2,016	1,048	67,346	31,496
Other receivables - joint ventures	52	56	1,750	1,670
Total amounts due from related parties	2,068	1,104	69,096	33,166
Dividends receivable from joint ventures				
- Current portion	24,191	25,819	808,475	775,517
- Non-current portion	7,146	9,616	238,831	288,831
Total dividends receivable from joint ventures	31,337	35,435	1,047,306	1,064,348

As at 31 December	Separate financial statements			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
Interest receivables - subsidiaries	516,088	437,621	17,247,608	13,144,875
Other receivables - subsidiaries	7,077	2,896	236,508	86,977
Total amounts due from related parties	523,165	440,517	17,484,116	13,231,852

30.3 Advances to and loans to related parties consist of:

	Consolidated financial statements			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
As at 31 December				
Short-term loans to				
- an associate	17,412	9,583	581,924	287,849
- joint ventures	51,848	51,547	1,732,738	1,548,315
Total short-term loans to related parties	69,260	61,130	2,314,662	1,836,164
Long-term loans to related party	16,664	20,888	556,903	627,400

Movements of short-term loans and long-term loans to related parties are as follows:

For the year ended 31 December	Consolidated financial statements							
	Short-term loans to a related parties				Long-term loans to related party			
	US Dollar'000		Baht'000		US Dollar'000		Baht'000	
	2021	2020	2021	2020	2021	2020	2021	2020
Opening balance	61,130	19,195	1,836,164	578,781	20,888	20,132	627,400	607,048
Cash flows:								
Addition	10,951	48,411	350,178	1,514,973	-	-	-	-
Repayment	(1,564)	(7,101)	(50,000)	(222,205)	-	-	-	-
Other non-cash movements:								
Repayment with inventories and services	(63)	-	(2,011)	-	(3,324)	(15)	(106,293)	(472)
Allowance doubtful loan	(1,381)	(2,350)	(44,175)	(73,540)	-	-	-	-
Translation differences	187	2,975	224,506	38,155	(900)	771	35,796	20,824
Closing balance	69,260	61,130	2,314,662	1,836,164	16,664	20,888	556,903	627,400

As at 31 December 2021, short-term loans to an associate and joint ventures represent CNY loan of 90 million or equivalent to US Dollar 14.14 million and US Dollar loan of 55.12 million (2020: Baht loan of 56.19 million or equivalent to US Dollar 1.87 million, CNY loan of 90 million or equivalent to US Dollar 13.84 million and US Dollar loan of 45.42 million). Such loans bore interest at the rates between of 3.35% to 5.00% per annum (2020: 3.35% to 5.00% per annum). The loan period is 1 year.

As at 31 December 2021, long-term loans to an overseas associate represent Australian Dollar loan of 22.95 million or equivalent to US Dollar 16.66 million (2020: Australian Dollar loan of 27.38 million or equivalent to US Dollar 20.89 million). Such loans bore no interest rate (2020: no interest rate).

As at 31 December	Separate financial statements			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
Advances to subsidiaries - Current portion	1,497	1,269	50,025	38,123
Short-term loans to subsidiaries	74,603	18,800	2,493,217	564,697
Long-term loans to subsidiaries				
- Current portion	79,500	-	2,656,882	-
- Non-current portion	2,955,695	2,283,094	98,779,016	68,577,510
Long-term loans to subsidiaries	3,035,195	2,283,094	101,435,898	68,577,510

Movements of short-term loans and long-term loans to subsidiaries are as follows:

For the year ended 31 December	Separate financial statements							
	Short-term loans to a related party				Long-term loans to related parties			
	US Dollar'000		Baht'000		US Dollar'000		Baht'000	
	2021	2020	2021	2020	2021	2020	2021	2020
Opening balance	18,800	-	564,697	-	2,283,094	2,129,886	68,577,510	64,224,592
Cash flows:								
Addition	75,493	10,000	2,414,033	312,937	680,001	386,596	21,744,449	12,098,022
Repayment	(18,800)	-	(601,169)	-	-	(223,834)	-	(7,004,602)
Other non-cash movements:								
Transfer loan type	-	8,800	-	275,385	-	(8,800)	-	(275,385)
Group restructuring (Note 14)	-	-	-	-	151,035	-	4,829,646	-
Converting accrued interest to principal	-	-	-	-	1,856	-	59,335	-
Losses on exchange rate	(890)	-	(28,454)	-	(80,791)	(754)	(2,583,422)	(23,614)
Translation differences	-	-	144,110	(23,625)	-	-	8,808,380	(441,503)
Closing balance	74,603	18,800	2,493,217	564,697	3,035,195	2,283,094	101,435,898	68,577,510

As at 31 December 2021, short-term loans to subsidiaries represent US Dollar loan of 50.96 million, Australian Dollar loan of 20 million or equivalent to US Dollar 14.52 million and Baht loan of 304.93 million or equivalent to US Dollar 9.12 million (2020: US Dollar loan of 18.80 million). Such loans bore interest at the rate between 4.25% to 5.00% per annum (2020: 4.50% per annum). The repayment for principal and interest is due within 1 year.

As at 31 December 2021, long-term loans to subsidiaries represent US Dollar loan of 2,133.43 million, Australian Dollar loan of 161.03 million or equivalent to US Dollar 116.91million and Baht loan of 26,229.93 million or equivalent to US Dollar 784.86 million (2020: US Dollar loan of 1,638.69 million and Baht loans of 19,355.92 million or equivalent to US Dollar 644.40 million). Such loans bore interest at the rates between 4.25% to 5.00% per annum (2020: 4.25% to 5.17% per annum).

The fair value of loans to related parties are based on discounted cash flows using a discount rate based on current lending rate as at the reporting date and are within level 2 of the fair value hierarchy.

The fair value of short-term loans to subsidiaries equals their carrying amount, as short-term loans to subsidiaries had a short period of maturity. The fair value of long-term loans to subsidiaries are based on discounted cash flows using a discount rate based upon the current lending rate.

30.4 Trade accounts payable, advances from and loan from related parties consist of:

	Separate financial statements			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
As at 31 December				
Trade accounts payable to subsidiaries	2,746	6,378	91,758	191,570
Other payables - a subsidiary	784	813	26,202	24,440
Advances from subsidiaries	-	192	-	5,761
Total advances from and amounts due to related parties	784	1,005	26,202	30,201

As at 31 December 2021 and 2020, the Company has no short-term and long-term loan from a subsidiary.

30.5 Key management compensation is presented as follows:

	Consolidated financial statements			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
For the year ended 31 December				
Salaries and short-term employee benefits	4,501	2,681	146,507	83,690
Post-employment benefits	44	80	1,400	2,506
Share-based payment	-	27	-	849
	4,545	2,788	147,907	87,045

	Separate financial statements			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
For the year ended 31 December				
Salaries and short-term employee benefits	4,024	2,023	130,994	63,349
Post-employment benefits	22	59	704	1,842
Share-based payment	-	5	-	165
	4,046	2,087	131,698	65,356

31 Commitment and significant contracts and contingent liabilities

31.1) Outstanding letters of guarantee and letters of credit with banks at the reporting date

As at 31 December	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
	Million	Million	Million	Million
	(Original currency)	(Original currency)	(Original currency)	(Original currency)
Letters of guarantee				
- US Dollar	23	24	-	-
- Baht	1,651	1,654	45	47
- Indonesian Rupiah	269,143	318,208	-	-
- Australian Dollar	380	382	-	-
- Chinese Yuan	1	1	-	-
Letters of credit				
- US Dollar	-	8	-	6

The obligations of joint ventures with banks are disclosed in Note 14.5.

31.2) Capital commitments

As at 31 December, the Group had capital commitments that were not recognised in the consolidated financial statements as follows:

As at 31 December	Consolidated financial statements			
	US Dollar'000		Baht'000	
	2021	2020	2021	2020
Property, plant and equipment	91,480	72,321	3,057,269	2,172,321
Investments in joint ventures	-	275	-	8,260
Investments in solar power plants	79,039	31,658	2,641,483	950,905
	170,519	104,254	5,698,752	3,131,486

31.3) Coal supply Agreement Commitment

As at 31 December 2021, a group of Indonesian subsidiaries had coal supply commitments in accordance with the Coal Supply Agreement for 15.80 million tonnes (2020: 15.80 million tonnes) at the market price. The coal will be delivered within 2024.

31.4) Significant contracts

On 9 December 2021, a subsidiary entered into Sale and Purchase Agreement (SPA) for the acquisition of 100% in Ha Tinh Solar Power Joint Stock Company that holds an interest in Ha Tinh solar farm with the capacity of 50 MW located in Vietnam. The purchase consideration in US Dollar 23.9 million or equivalent to Baht 788 million. This transaction remains subject to contain adjustments, conditions precedents outlined in the SPA and customary approvals with completion expected to take place.

31.5) Significant litigation**Tax audit of Indonesian subsidiaries**Prepaid income taxes

As at 31 December 2021 and 2020, the subsidiaries in Indonesia have outstanding prepaid taxes related to results of tax investigations which consisted of various corporate income taxes, withholding taxes, value added taxes and related taxes as following. Recoverability of these prepaid taxes are subject to decisions by the respective tax authorities i.e. Directorate General of Tax (DGT), Tax Court or Supreme Court depending on the stage of tax dispute resolution of each tax case.

Fiscal year	Company	Descriptions	US Dollar'000		Baht'000		Status as at the date of the financial statements
			2021	2020	2021	2020	
2012	TCM	Overpayment of corporate income tax of US Dollar 5.5 million.	-	2,883	-	86,597	The Supreme Court result was in favour of TCM in October 2020, for deduction cost TCM submitted Contra Memory to the Supreme Court in November 2020 for marketing fee.
2012	KTD	Overpayment of corporate income tax of US Dollar 6.2 million	-	6,181	-	185,659	The Supreme Court result was in favour of KTD in March 2021.
2012	JBG	Overpayment of corporate income tax of US\$1.9 million	169	-	5,648	-	JBG submitted Judicial Review to the Supreme Court in October 2020 and received Contra Memory from DGT in November 2020.
2013	IMM	Underpayment of withholding tax 23/26 of Indonesian Rupiah 33.8 billion (equivalent to US Dollar 2.4 million)	2,369	-	79,172	-	IMM submitted Judicial Review to the Supreme Court in March 2017 and received Contra Memory from DGT for tax period March, October and November in December 2021.

Fiscal year	Company	Descriptions	US Dollar'000		Baht'000		Status as at the date of the financial statements
			2021	2020	2021	2020	
2013	TCM, JBG, KTD	Underpayment of withholding tax 23/26, domestic VAT and offshore VAT of Indonesian Rupiah 79.8 billion (equivalent to US Dollar 4.8 million)	141	913	4,712	27,424	<u>KTD</u> The Supreme Court result was fully partially in favour of KTD for withholding tax 26 related to demurrage in December 2019 to March 2021. The Supreme Court result was partially in unfavourable to of KTD regarding withholding tax 23 in related to deduction cost in September 2020-August 2021 and awaiting Judicial Review result from supreme court for fiscal period December 2013 July 2020. <u>TCM</u> The Supreme Court result was fully in favour of TCM regarding withholding tax 26 related to marketing fee in June - November 2019. <u>JBG</u> The Supreme Court result was fully in favour of JBG related to domestic VAT in December 2020 - April 2021. The Supreme Court result was fully in favour of JBG related to offshore VAT in August 2020 - February 2021.
2015	IMM	Overpayment of corporate income tax of US Dollar 3.1 million and underpayment of other taxes (withholding tax 23/26, domestic VAT and offshore VAT) in total amount of Indonesian Rupiah 94.3 billion (equivalent to US Dollar 6.7 million)	5,812	9,284	194,236	278,864	Submitted Judicial Review to the Supreme Court related to corporate income tax in August 2021 and received Contra Memory from DGT in October 2021 Submitted Judicial Review to the Supreme Court related to offshore VAT in August 2021 and received Contra Memory from DGT in September to October 2021. DGT submitted Judicial Review to Supreme Court regarding domestic VAT in April 2021 and IMM submitted Contra Memory to the Supreme Court in May 2021.

Fiscal year	Company	Descriptions	US Dollar'000		Baht'000		Status as at the date of the financial statements
			2021	2020	2021	2020	
							Submitted Judicial Review to the Supreme Court regarding withholding tax 23 in August 2021 and received Contra Memory from DGT in September 2021. Submitted Judicial Review to the Supreme Court related to withholding tax 26 in August 2021 and received Contra Memory from DGT in September 2021.
2016	IMM	Underpayment of withholding tax 26 of Indonesian Rupiah 27.7 billion (equivalent to US Dollar 1.9 million)	-	1,966	-	59,053	The tax court result was in favour of IMM in October 2021
2018	IMM	Overpayment of corporate income tax of US Dollar 4.0 million	3,988	3,975	133,279	119,397	Submitted tax appeal letter to tax court in September 2021.
2019-2020	IMM	Underpayment of land and building tax of Indonesian Rupiah 99.5 billion (equivalent to US Dollar 7.1 million)	6,977	7,058	233,171	212,002	Submitted tax appeal letter to tax court in February 2022.
2019	IMM, BEK	Overpayment of corporate income tax of US\$4.1 million.	4,145	-	138,525	-	Submitted objection to DGT in July 2021.
		Total	23,601	32,260	788,743	968,996	

Additionally, as at 31 December 2021, various taxes of seven Indonesian subsidiaries for fiscal years 2017 - 2019 are still in the process of audit by the DGT. The Group's management believes that the tax audit result, objection, appeal, lawsuit, and reconsideration results will not have a material impact on the consolidated financial statements.

32 Business combination

32.1 Investment in EI Wind Mui Dinh Ltd.

On 25 June 2021, Banpu Renewable Singapore Pte. Ltd., a subsidiary, purchased 100% ordinary shares of EI Wind Mui Dinh Ltd. (ELMD), a 37.6 MW wind farm, located in Ninh Tuan, Vietnam. On the same date, the Group fully paid for this investment with a purchase consideration of US Dollar 17.51 million. The estimated fair value of net assets acquired approximates the purchase consideration which mainly are property, plant and equipment, right to operate the power plant and trade accounts payable and other payables. In addition, the Group provided a short-term loan to ELMD amounting to US Dollar 39.26 million on the same date as the acquisition date.

The Group has completed the purchase price allocation. Details of fair value of net assets acquired and the consideration paid are as follows:

	VND'000	US Dollar'000
Cash	64,524,760	2,804
Trade and other receivables	19,159,554	833
Other current assets	3,437,347	149
Property, plant and equipment	1,029,779,217	44,753
Right to operate the power plant	190,063,209	8,261
Other assets	11,764,657	511
Trade and other payables	(909,845,282)	(39,541)
Other current liabilities	(5,938,597)	(258)
Fair value of net assets acquired	402,944,865	17,512
Purchase consideration	402,944,865	17,512

Right to operate the power plant will be amortised by straight-line method over the periods of estimated useful life of the power plants.

32.2 Investment in solar farms Beryl Hold Trust and Manildra Hold Trust

On 30 July 2021, the Group purchased all ordinary class units and shares in Beryl Hold Trust Group and Manildra Hold Trust Group, which own solar farms in New South Wales, Australia with a capacity of 110.9 MW and 55.9 MW, respectively. The total consideration payment was Australian Dollar 91.73 million, or equivalent to US Dollar 67.76 million. The Group has a 100% of holding interest in this investment and fully paid for this investment.

Details of fair value of net assets acquired and the consideration paid are as follows:

	Australian Dollar'000	US Dollar'000
Cash	12,411	9,168
Trade accounts receivables	458	339
Other current assets	1,361	1,006
Derivative asset	79,658	58,843
Property, plant and equipment	175,322	129,510
Intangible assets	27,196	20,089
Other non-current assets	5,600	4,137
Trade accounts payable and other payable	(2,117)	(1,564)
Borrowings	(195,299)	(144,267)
Other liabilities	(16,802)	(12,412)
Fair value of net assets acquired	87,788	64,849
Goodwill	3,941	2,911
Purchase consideration	91,729	67,760

As at 31 December 2021, the Group is in the process of determining fair value of net assets acquired and reviewing purchase price allocation (PPA). This is expected to be finalised within 12 months from the acquisition date. However, the estimated fair value may be adjusted to reflect new information obtained about facts and circumstances that existed as of the acquisition date.

33 Events occurring after the reporting date

33.1 Sale and Purchase Agreement

On 25 January 2022, a subsidiary of the Group entered into the Sale and Purchase Agreement (SPA) for the acquisition of 100% holding interest in Licogi 16 Gia Lai Investment Renewable Energy Joint Stock Company (LCE Gia Lai) which owns 15 MW Chu Ngoc solar power plant and Licogi 16 Nin Thuan Investment Renewable Energy Joint Stock Company (LCE Ninh Thuan) which owns 35 MW Nhon Hai solar power plant. The purchase consideration is US Dollar 26.69 million. This transaction remains subject to certain adjustments, conditions precedents outlined in the SPA and customary approvals with completion expected to take place.

33.2 Issuance of debentures

On 27 January 2022, the Company has issued Baht unsubordinated and unsecured debentures totaling Baht 12,000 million or equivalent to US Dollar 359.06 million. There are 5 tranches which are 1) 3-year debenture amounting to Baht 2,000 million or equivalent to US Dollar 59.84 million with fixed interest rate of 1.76 per annum, 2) 6-year debenture amounting to Baht 1,000 million or equivalent to US Dollar 29.92 million with fixed interest rate of 3.11 per annum, 3) 8-year debenture amounting to Baht 2,000 million or equivalent to US Dollar 59.84 million with fixed interest rate of 3.58 per annum, 4) 10-year debenture amounting to Baht 3,000 million or equivalent to US Dollar 89.77 million with fixed interest rate of 3.89 per annum, and 5) 12-year debenture amounting to Baht 4,000 million or equivalent to US Dollar 119.69 million with fixed interest rate of 4.12 per annum. Debentures require certain conditions the Company has to comply, for example, maintaining certain financial ratio.

33.3 Completion of sale of investment in a joint venture

On 23 February 2022, BPIN Investment Co., Ltd, which is a subsidiary of the Group, completed its sale of total investment of 47.50% in Sunseap Group Pte, Ltd (Sunseap), a joint venture of the Group. The total consideration is SGD 469.19 million or equivalent to US Dollar 347.54 million. As at 31 December 2021, the Group presented this investment as non-current assets held-for-sale with a net book value of US Dollar 172 million.