



DEF/NE THE SUSTA/NABLE FUTURE

Financial Report 2019
Electricity Generating Public Company Limited



DEF/NE
THE
SUSTA/NABLE
FUTURE



Contents

2

Financial Overview

4

Statement of Directors'
Responsibilities

5

Independent
Auditor's Report

11

Report and
Consolidated
Financial Statements

81

Management Discussion
and Analysis

Financial Overview

Consolidated Financial Statements

	2019	2018	2017	2016	2015
FINANCIAL PERFORMANCE (Million Baht)					
Sales and service income	37,511	35,522	30,018	22,794	15,914
Dividend and other income	2,895	2,652	2,268	1,888	1,893
Net gain on disposal investments in subsidiary and joint ventures	-	9,819	-	-	1,079
Net gain on disposal investment in marketable securities	-	4,358	-	-	-
Net gain on dissolutions of subsidiary and joint ventures	649	395	-	-	-
Cost of sales and services	28,420	26,606	21,332	14,840	9,934
Administrative expenses and income taxes	4,360	6,414	3,480	4,091	3,610
Finance costs	1,254	4,009	(210)	3,610	6,657
Share of profit (loss) from investments in associates and joint ventures	6,405	5,488	5,773	6,062	5,948
Profit (loss) from discontinued operation, net of income tax	-	-	-	-	115
Net Profit (loss) attributable to Non-controlling interests	67	43	45	60	87
Fx gain (loss)	(300)	(89)	(1,594)	178	(342)
Net Profit (loss) attributable to owners of the parent	13,059	21,073	11,818	8,321	4,319
Operating profit (loss) ⁽¹⁾	10,368	23,372	9,268	9,157	7,920
FINANCIAL POSITION (Million Baht)					
Total assets	208,523	206,428	200,332	197,255	179,812
Total liabilities	103,416	105,578	113,476	114,657	102,062
Equity attributable to the owners	104,491	100,239	86,238	81,973	77,242
Non-controlling interests	616	611	618	625	508
Issued and paid-up share capital	5,265	5,265	5,265	5,265	5,265
PER SHARE DATA (Baht)					
Earnings per share	24.81	40.03	22.45	15.81	8.20
Book Value	198.48	190.40	163.81	155.70	146.72
Dividend	6.50 ⁽²⁾	9.50	7.00	6.50	6.25
RATIO ANALYSIS					
Liquidity ratio (Time)	2.87	1.51	2.26	1.49	1.22
Cashflows liquidity ratio (Time)	0.49	0.44	0.71	0.62	0.36
Gross profit ratio (%)	24.24	25.10	28.94	34.90	37.58
Earnings ratio (%)	27.52	36.19	31.05	27.06	17.24
Return on equity ratio (%)	12.76	22.60	14.05	10.45	5.74
Return on assets ratio (%)	6.29	10.36	5.95	4.41	2.54
Debt to equity ratio (Time)	0.98	1.05	1.31	1.39	1.31

Remarks:

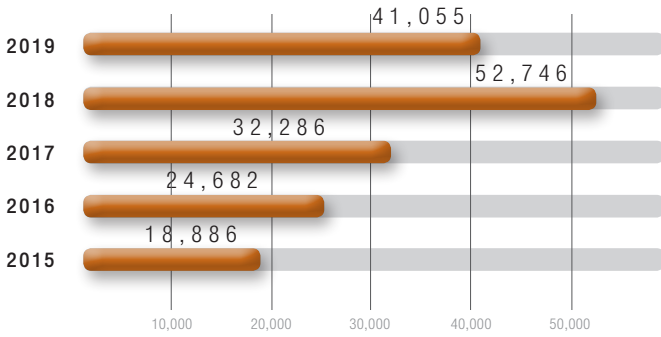
- (1) Net Profit (loss) attributable to owners of the parent before the effects of Foreign Exchange (FX) gain (loss), Deferred Tax, Impairment, Lease Income^(1.1) and Income from service concession^(1.2).
- (1.1) TFRIC 4 Determining whether an arrangement contains a lease.
- (1.2) TFRIC 12 Service concession arrangements.
- (2) Subject to the approval of the 2019 Shareholders' Annual General Meeting for the appropriation of net profit and the payment of dividend.

DEFINE THE SUSTAINABLE FUTURE



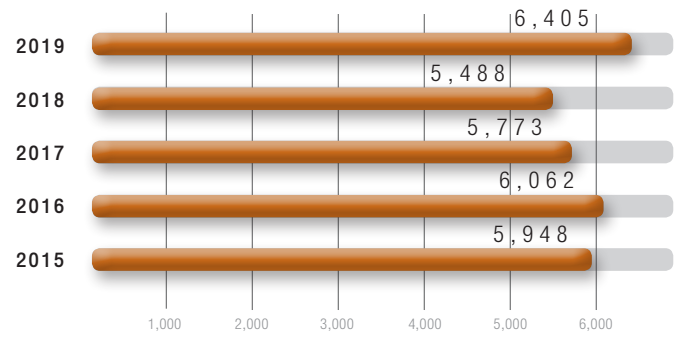
Total Revenues

Unit : Million Baht



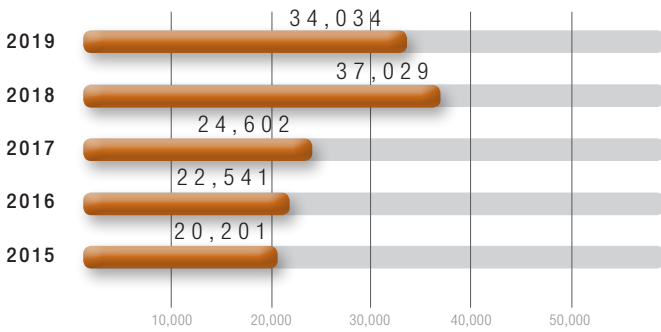
Share of profit from investments in associates and joint ventures

Unit : Million Baht



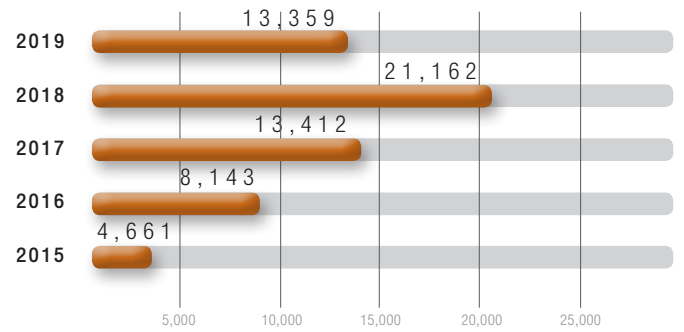
Total Expenses excluding Currency Exchange Gains or Losses

Unit : Million Baht



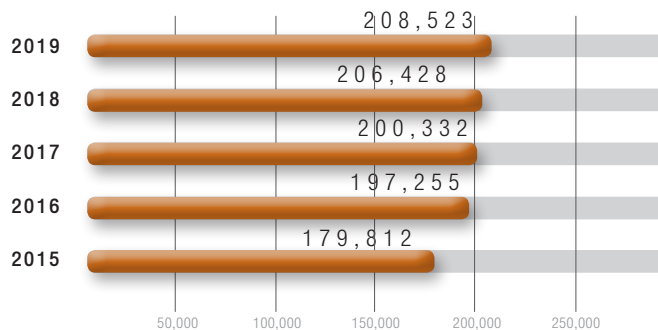
Net Profit excluding Currency Exchange Gains or Losses

Unit : Million Baht



Total Assets

Unit : Million Baht



Statement of Directors' Responsibilities

According to the Public Limited Companies Act B.E. 2535, the Accounting Act B.E. 2543, the Securities and Exchange Act B.E. 2535, and the Notification of Capital Market Supervisory Board re: "Disclosure of Financial Statements and Performance of Listed Companies", the Board of Directors is responsible for preparing the company's true and fair financial statements.

To adhere with such responsibilities, the Electricity Generating Public Company Limited's (EGCO), Board of Directors has issued the company's accounting, finance and budget regulation, B.E. 2550, that Management must comply with. The Audit Committee has reviewed to ensure that EGCO's financial statements are justified and prudently prepared, are in compliance with laws and regulations, and that appropriate accounting policies are consistently applied. The Audit Committee also has reviewed EGCO's internal control systems to ensure their adequacy and effectiveness as a means to safeguard the company's assets from unauthorized use and to prevent fraud.

EGCO has prepared both consolidated and separate financial statements for the year ending December 31, 2019, in compliance with the Thai Financial Reporting Standards under the Accounting Profession Act B.E. 2547. The appropriate accounting policies were consistently applied, and financial statements were prepared in a prudent and justified manner with significant information adequately disclosed in the financial statement notes. The consolidated and separate financial statements were audited by the auditor with unqualified opinions.

The Board of Directors' opinion is that both the consolidated and separate financial statements for 2019 fairly present EGCO's financial position, operating results and cash flows, in all material respects and in a reliable manner, and that such statements were in compliance with the Financial Reporting Standards and all governing laws and regulations.



Mr. Jakgrich Pibulpaioj
President

Independent Auditor' Report

To the shareholders of Electricity Generating Public Company Limited

My opinion

In my opinion, the consolidated financial statements of Electricity Generating Public Company Limited (the Company) and its subsidiaries (the Group) and the separate financial statements of the Company present fairly, in all material respects, the consolidated and separate financial position of the Group and of the Company as at 31 December 2019 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 (TFRSs).

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 2019;
- the consolidated and separate statements of income for the year then ended;
- 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 a summary of significant accounting policies.

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 Federation of Accounting Professions under the Royal Patronage of his Majesty the King's Code of Ethics for Professional Accountants together with the ethical requirements 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 judgment, were of most significance in my audit of the consolidated and separate financial statements of the current period. These matters were addressed in the context of my audit of the consolidated and separate financial statements as a whole, and in forming my opinion thereon, and I do not provide a separate opinion on these matters.

Key audit matter	How my audit addressed the key audit matter
<p><i>Impairment assessment of goodwill</i></p> <p>Refer to Note 17 Goodwill, as at 31 December 2019, the Group had goodwill of Baht 10,012 million less a allowance for impairment of Baht 1,913 million, as resulting in net book value of Baht 8,099 million, which represents 3.88% of the total consolidated assets. Goodwill arose from the acquisitions of electricity generation businesses in Thailand and other countries. Net balance of goodwill amounting to Baht 7,895 million arose from the acquisition of an electricity generation business in the Philippines and the remaining Baht 204 million arose from the acquisitions of electricity generation businesses in Thailand.</p> <p>Management tests the impairment of goodwill annually. The impairment test is performed at level of cash generating unit (CGU) and calculates its recoverable amount by applying the value-in-use model. This model involves significant judgments made by management in respect to the future operating results of business, projected cash flows and the discount rate to be applied to the projected cash flows. Key assumptions applied in the value-in-use model are electricity tariffs, assumed capacity of the power plants, growth rates, expected changes to operating expenditures, capital structure and the discount rate to be applied to the projected cash flows.</p> <p>As a result of management's impairment testing, the recoverable amount of goodwill arising from the acquisition of the electricity generation businesses in Thailand is lower than the carrying value. Therefore, the Group recognised an additional impairment loss of Baht 61 million in the 2019 consolidated financial statements.</p> <p>I focused on the valuation of goodwill arising from the acquisition of the electricity generation business in the Philippines due to its significant value and the fact that the determination of value-in-use depends on a number of assumptions. Those assumptions involve management's significant judgments in assessing the feasibility of future business plans.</p>	<p>I carried out the following procedures to assess the impairment testing of goodwill arising from the acquisition of the electricity generation business in the Philippines which prepared by the management.</p> <ul style="list-style-type: none"> • Satisfied myself as to the appropriateness of management's identification of the CGUs. • Held discussions with management to understand the basis for the assumptions applied and evaluated whether the goodwill impairment testing process and assumptions had been applied consistently across the Group. • Challenged management's significant assumptions used in the goodwill impairment testing, especially the electricity tariffs, assumed capacity of the power plants, growth rate, operating expenditures, and discount rate. My procedures included comparing those assumptions to the underlying agreements, external sources, foreign exchange rate forecasts and the approved business plan. • Assessed reasonableness of the business plan by comparing the 2019 plan with actual results. • Assessed the discount rate, taking into account independently obtained data from available public information of companies in the industry to assure whether the discount rate applied by the management was within the acceptable range. • Tested the sensitivity analysis of key assumptions in the model prepared by the management in order to assess factors to be sensitive to assumptions and the potential impact of range possible outcomes. <p>As a result of the procedures performed, the key assumptions applied by the management are within the reasonable range and consistent with supporting evidence.</p>

Key audit matter	How my audit addressed the key audit matter
<p>Acquisition of investment in a joint venture</p> <p>Refer to Note 13.1.3 Investments in joint ventures, during the year ended 31 December 2019, the Group acquired an investment in a joint venture which operates a cogeneration power plant in the Republic of Korea with a total purchase consideration of Baht 25,450 million. Management determined that the acquisition is an investment in a joint venture by applying the definition in TFRS 11 “Joint arrangement”. In addition, the management, as required by TAS 28 “Investments in Associates and Joint Venture”, has to determine fair value of the net identifiable assets acquired and review purchase price allocation (PPA) in accordance with the concepts in TFRS 3 “Business combination”. The fair value of net identifiable assets is presented as part of investment cost.</p> <p>Management engaged the external valuer to appraise the fair value of net identifiable assets acquired. The fair value of net identifiable assets acquired was Baht 24,105 million, mainly comprised a licence for operating a power plant of Baht 10,681 million and favourable contract assets of Baht 3,853 million. The valuation of net assets acquired was performed as part of the purchase price allocation.</p> <p>I focused on the identification of the fair values of licence for operating a power plant and favourable contract assets arising from the acquisition of investment because the external valuer applied the discounted cash flows that the model involves significant estimation and judgment made by the management to assess the future cash flows and discounted rate applied for the future cash flows.</p>	<p>I carried out the following procedures in order to obtain evidence of the management’s assessment of acquisition of investment and determination of fair value of net identifiable assets acquired:</p> <ul style="list-style-type: none"> • Read the share purchase agreement to understand the key terms and conditions and confirmed our understanding of the transaction with the management. • Reviewed management’s assessment that the acquisitions of investment should be accounted for as the investment in a joint venture and in line with the accounting for the business combination. • Assessed the appropriateness of the identifiable assets acquired and the liabilities assumed at the acquisition date and also evaluated management’s procedures for determining the fair values of the net identifiable assets acquired. • Evaluated the competency, qualifications, experience and objectivity of management’s experts. • Tested the calculation of fair values of licence for operating a power plant, and favourable contract assets and also challenged management’s significant assumptions applied in the estimation of future cash flows, for example the electricity tariffs, assumed capacity of the power plant, LNG price forecast, LNG consumption, operating expenditures, and capital structure by comparing those assumptions to the underlying agreements and external sources. • Assessed the discount rate, taking into account independently obtained data from available public information of companies in the industry. <p>As a result of the procedures performed, I determined that the acquisition of investment in a cogeneration power plant in the Republic of Korea is an investment in a joint venture in accordance with the definition set out in TFRS 11. The assumptions applied in identifying the fair values of licence for operating a power plant and favourable contract assets were reasonable and in line with the accounting for the business combination.</p>

Key audit matter	How my audit addressed the key audit matter
<p><i>Impairment assessment of investments in joint ventures</i></p> <p>Refer to Note 13.1.3 Investments in Joint Ventures, the Company, as the holding company, invests in shareholding interests of seven direct joint ventures which mainly generate and sell electricity under long-term power purchase agreements. As at 31 December 2019, the net cost of investments in these joint ventures in the separate statement of financial position was Baht 27,433 million. However, these investments are accounted under the equity method of accounting in the consolidated financial statements.</p> <p>As at 31 December 2019, the net cost of investment in a joint venture presented in the separate financial statements was higher than its net equity value. Management considered this as an impairment indicator of investment in a joint venture and therefore performed impairment testing on this investment by applying the value-in-use model in the calculation of recoverable amount. This model involves management's significant judgments with respect to the future operating results of business, projected cash flows and discount rate to be applied to the projected cash flows. Key assumptions applied in the value-in-use model are electricity tariff, assumed capacity of the power plant, growth rate, expected changes to operating expenditures, and the discount rate to be applied to the projected cash flows.</p> <p>As a result of management's impairment testing, the recoverable amount of this investment is lower than the carrying value. Therefore, the Company recognised provision for impairment of such investment in a joint venture amounting to Baht 2,830 million in the 2019 separate financial statements.</p> <p>I focused on the value of the investment in a joint venture which is a coal-fired power plant in Thailand because the joint venture's carrying value of Baht 10,434 million is significant and the determination of value-in-use depends on a number of assumptions. Those assumptions involve management's significant judgments in assessing the feasibility of future business plans.</p>	<p>I carried out the following procedures to assess the impairment testing of the investment in a joint venture which is a coal-fired power plant which prepared by the management.</p> <ul style="list-style-type: none"> Assessed the appropriateness of management's identification of the indicators for impairment of investment in a joint venture. Held discussions with management to understand the basis for assumptions applied to the cash flow projections. Challenged management's significant assumptions applied in the impairment testing of investment in a joint venture, especially the electricity tariffs, assumed capacity of the power plant, growth rate, operating expenditures and discount rate. My procedures included comparing those assumptions to the underlying agreements, external sources, foreign exchange rate forecasts and the approved business plan. Assessed reasonableness of the business plan by comparing the 2019 plan with actual results. Assessed the discount rate, taking into account independently obtained data from available public information of companies in the industry to assure whether the discount rate applied by management was within the acceptable range. <p>As a result of the procedures performed, I noted that the key assumptions applied by management in the assessment of the recoverable amount were reasonable and consistent with supporting evidence.</p>

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 TFRSs, 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 and the Company's financial reporting process.

Auditor's responsibilities for the audit of the consolidated and separate financial statements

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

As part of an audit in accordance with TSAs, I exercise professional judgment and maintain professional 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 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.

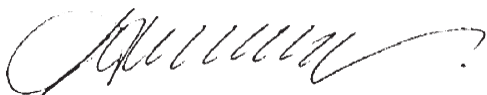
- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group and the Company's ability to continue as a going 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.




Amornrat Pearmpoonvatanasuk
Certified Public Accountant (Thailand) No. 4599
Bangkok
20 February 2020

Statement of Financial Position

Electricity Generating Public Company Limited As at 31 December 2019

	Notes	Consolidated financial statements		Separate financial statements	
		2019 Baht	2018 Baht	2019 Baht	2018 Baht
Assets					
Current assets					
Cash and cash equivalents	7	20,487,547,927	34,876,629,903	4,026,384,871	2,922,235,474
Short-term investments	8	765,325,096	101,390,962	138,000,000	-
Short-term investments used as collateral	9	3,932,986,104	4,374,850,539	-	-
Trade receivables, net	10	2,083,716,501	2,117,332,435	-	-
Trade receivable from a related party	37.2	1,529,774,011	1,490,725,069	-	-
Trade receivable from a related party for services under power purchase agreements	37.3	1,969,311,396	2,187,833,559	-	-
Current portion of lease receivable under power purchase agreements from a related party, net	37.4	1,355,511,717	1,353,186,019	-	-
Current portion of dividend receivable from a related party	13.5	-	306,232,048	-	306,232,048
Current portion of long-term loans to related parties	37.6	-	-	1,862,358,255	172,000,000
Amounts due from related parties	37.5	204,521,268	315,017,502	824,492,617	170,023,043
Fuel and spare parts and supplies, net	11	2,533,919,504	3,004,168,342	-	413,038
Other current assets	12	931,650,273	1,225,673,154	50,863,224	58,130,561
Total current assets		35,794,263,797	51,353,039,532	6,902,098,967	3,629,034,164
Non-current assets					
Lease receivables under power purchase agreements from a related party, net	37.4	16,817,262,696	17,646,390,680	-	-
Interest receivables and dividend receivables from related parties	13.5, 37.6	1,085,415,861	7,193,913,158	1,312,323,573	7,420,820,870
Long-term loans to related parties, net	37.6	1,231,200,000	1,231,200,000	49,889,026,121	3,710,162,357
Investments in subsidiaries, net	13.2	-	-	15,772,110,177	64,249,221,126
Investments in associates	13.3	14,573,577,102	14,381,824,053	3,357,625,000	3,197,133,625
Investment in joint ventures, net	13.4	72,707,152,764	41,554,497,037	27,432,963,101	25,615,336,100
Investment property, net	14	519,210,182	448,602,691	719,908,547	669,885,990
Property, plant and equipment, net	15	52,781,655,445	56,361,353,014	727,243,766	706,010,781
Intangible assets, net	16	3,603,529,378	4,347,194,064	-	-
Goodwill, net	17	8,098,933,815	8,159,983,769	-	-
Deferred tax assets, net	23	629,838,569	686,007,678	-	-
Other non-current assets	18	680,565,046	3,063,802,943	379,576,889	377,876,107
Total non-current assets		172,728,340,858	155,074,769,087	99,590,777,174	105,946,446,956
Total assets		208,522,604,655	206,427,808,619	106,492,876,141	109,575,481,120

For Director 

The notes to the consolidated and separate financial statements on pages 21 to 80 are an integral part of these financial statements.

Statement of Financial Position

Electricity Generating Public Company Limited As at 31 December 2019

	Notes	Consolidated financial statements		Separate financial statements	
		2019 Baht	2018 Baht	2019 Baht	2018 Baht
Liabilities and equity					
Current liabilities					
Short-term loans from financial institutions	19	37,580,625	121,365,000	-	-
Trade payables		2,768,701,129	3,973,789,834	-	-
Trade payables to related parties	37.2	93,428,778	107,401,816	-	-
Amounts due to related parties	37.5	46,068,016	23,399,164	3,565,806	17,227,624
Payable for acquisition of investment in a joint venture	13.1.3	1,240,000,000	-	1,240,000,000	-
Current portion of long-term loans from financial institutions, net	21	5,754,330,228	27,225,628,439	936,080,312	8,930,198,090
Other current liabilities	20	2,538,629,810	2,493,568,228	573,159,669	544,262,037
Total current liabilities		12,478,738,586	33,945,152,481	2,752,805,787	9,491,687,751
Non-current liabilities					
Long-term loans from financial institutions, net	21	78,986,495,241	59,555,729,159	33,900,450,635	33,740,019,458
Debenture	22	4,786,803,360	5,084,006,560	4,786,803,360	5,084,006,560
Retirement benefit obligations		602,699,376	398,279,041	233,409,750	161,294,981
Provision for decommissioning costs	24	1,982,621,801	1,375,071,901	115,490,000	115,490,000
Deferred tax liabilities, net	23	3,053,843,649	3,602,293,107	-	-
Other non-current liabilities	25	1,524,995,640	1,616,926,556	20,649,926	19,836,342
Total non-current liabilities		90,937,459,067	71,632,306,324	39,056,803,671	39,120,647,341
Total liabilities		103,416,197,653	105,577,458,805	41,809,609,458	48,612,335,092

The notes to the consolidated and separate financial statements on pages 21 to 80 are an integral part of these financial statements.

Siraporn Anon



Statement of Financial Position

Electricity Generating Public Company Limited As at 31 December 2019

	Note	Consolidated financial statements		Separate financial statements	
		2019 Baht	2018 Baht	2019 Baht	2018 Baht
Liabilities and equity (continued)					
Equity					
Share capital					
Authorised share capital					
- 530,000,000 ordinary shares at par of					
Baht 10 per share					
		5,300,000,000	5,300,000,000	5,300,000,000	5,300,000,000
Issued and paid-up share capital					
- 526,465,000 ordinary shares paid-up at					
Baht 10 per share					
		5,264,650,000	5,264,650,000	5,264,650,000	5,264,650,000
		8,601,300,000	8,601,300,000	8,601,300,000	8,601,300,000
		47,373,035	47,373,035	47,373,035	47,373,035
		(218,688,716)	(218,688,716)	-	-
Retained earnings					
Appropriated					
	26	530,000,000	530,000,000	530,000,000	530,000,000
		97,171,751,541	87,760,338,805	50,362,962,532	46,626,311,459
Other components of equity					
		(6,905,974,725)	(1,745,589,813)	(123,018,884)	(106,488,466)
Total equity attributable to the owners					
of the parent					
		104,490,411,135	100,239,383,311	64,683,266,683	60,963,146,028
Non-controlling interests					
		615,995,867	610,966,503	-	-
Total equity					
		105,106,407,002	100,850,349,814	64,683,266,683	60,963,146,028
Total liabilities and equity					
		208,522,604,655	206,427,808,619	106,492,876,141	109,575,481,120

The notes to the consolidated and separate financial statements on pages 21 to 80 are an integral part of these financial statements.

Siriporn Anon



Statement of Income

Electricity Generating Public Company Limited For the year ended 31 December 2019

	Notes	Consolidated financial statements		Separate financial statements	
		2019 Baht	2018 Baht	2019 Baht	2018 Baht
Sales and services income	27	31,208,995,946	29,020,473,935	-	-
Lease income under power purchase agreements		6,301,947,319	6,501,727,385	-	-
Costs of sales and services	28	(27,887,748,128)	(26,076,398,118)	-	-
Costs of lease under power purchase agreements		(532,371,620)	(529,698,744)	-	-
Gross profit		9,090,823,517	8,916,104,458	-	-
Dividend and other income	29	2,894,966,633	2,651,990,811	10,142,792,749	5,825,290,248
Net gain on disposal of investments in joint ventures		-	9,818,715,117	-	-
Net gain on disposal of investment in marketable securities		-	4,358,525,905	-	4,358,525,905
Net gain on dissolutions of subsidiaries and a joint venture		649,112,418	395,316,889	641,664,225	-
Loss on impairment of assets	30	(610,766,408)	(2,963,776,496)	(2,830,000,000)	(3,156,577,205)
Net gain (losses) on currency exchange		(299,880,275)	(89,130,586)	(31,845,343)	8,975,037
Administrative expenses		(2,890,248,805)	(2,511,896,198)	(1,299,507,406)	(698,089,849)
Finance costs	31	(1,253,470,310)	(4,009,454,063)	667,009,869	(1,572,500,140)
Share of profit from investments in associates and joint ventures, net	13.1	6,404,977,057	5,488,408,391	-	-
Profit before income tax expense		13,985,513,827	22,054,804,228	7,290,114,094	4,765,623,996
Income tax expense	32	(858,898,670)	(938,347,089)	-	-
Profit for the year		13,126,615,157	21,116,457,139	7,290,114,094	4,765,623,996
Profit attributable to:					
Owners of the parent		13,059,235,793	21,072,883,487	7,290,114,094	4,765,623,996
Non-controlling interests		67,379,364	43,573,652	-	-
Profit for the year		13,126,615,157	21,116,457,139	7,290,114,094	4,765,623,996
Basic earnings per share - owners of the parent	33	24.81	40.03	13.85	9.05

The notes to the consolidated and separate financial statements on pages 21 to 80 are an integral part of these financial statements.

Siriporn Anon



Statement of Comprehensive Income

Electricity Generating Public Company Limited For the year ended 31 December 2019

	Note	Consolidated financial statements		Separate financial statements	
		2019 Baht	2018 Baht	2019 Baht	2018 Baht
Profit for the year		13,126,615,157	21,116,457,139	7,290,114,094	4,765,623,996
Other comprehensive income (expense)					
Items that will not be reclassified subsequently to profit or loss					
- Remeasurements of post-employment benefit obligations, net of income tax		(59,047,220)	(14,028,950)	(16,530,418)	(20,431,374)
- Share of other comprehensive income (expense) of associates and joint ventures accounted for using the equity method, net of income tax	13.1	(3,493,773)	32,602,166	-	-
Items that will be reclassified subsequently to profit or loss					
- Reclassification of gain on available-for-sale investment to profit or loss, net of income tax		-	(2,395,523,768)	-	(2,395,523,768)
- Share of other comprehensive income (expense) of associates and joint ventures accounted for using the equity method, net of income tax	13.1	(2,582,977,096)	4,832,795	-	-
- Exchange difference on translation		(2,514,866,823)	301,186,916	-	-
Other comprehensive expense for the year, net of tax		(5,160,384,912)	(2,070,930,841)	(16,530,418)	(2,415,955,142)
Total comprehensive income for the year		<u>7,966,230,245</u>	<u>19,045,526,298</u>	<u>7,273,583,676</u>	<u>2,349,668,854</u>
Total comprehensive income attributable to:					
Owners of the parent		7,898,850,881	19,002,032,264	7,273,583,676	2,349,668,854
Non-controlling interests		67,379,364	43,494,034	-	-
Total comprehensive income for the year		<u>7,966,230,245</u>	<u>19,045,526,298</u>	<u>7,273,583,676</u>	<u>2,349,668,854</u>

The notes to the consolidated and separate financial statements on pages 21 to 80 are an integral part of these financial statements.

Siraporn Anon



Statement of Changes in Equity

Electricity Generating Public Company Limited For the year ended 31 December 2019

	Consolidated financial statements														
	Attributable to owners of the parent							Other components of equity							
	Retained earnings							Other comprehensive income (expense)							
	Notes	Issued and paid-up share capital	Premium on share capital	Premium on treasury stock	Surplus from acquisition of non-controlling interests	Appropriated reserve - legal	Unappropriated	Available-for-sale investments	Remeasurements of post-employment benefit obligations	Share of other comprehensive income (expense) of associates and joint ventures	Exchange difference on translation	Total other components of equity	Total owners of the parent	Non-controlling interests	Total equity
	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht
Opening balance as at 1 January 2018		8,601,300,000	47,373,035	(218,688,716)	530,000,000	71,688,431,168	2,395,523,768	(99,385,932)	(108,015,691)	(1,862,880,735)	325,261,410	86,238,326,897	618,152,547	86,856,479,444	
Changes in equity for the year		-	-	-	-	21,072,883,487	(2,395,523,768)	(13,949,332)	37,434,961	301,186,916	(2,070,851,223)	19,002,032,264	43,494,034	19,045,526,298	
Total comprehensive income for the year		-	-	-	-	(5,000,975,850)	-	-	-	-	(5,000,975,850)	(5,000,975,850)	-	(5,000,975,850)	
Dividends paid	34	-	-	-	-	-	-	-	-	-	-	-	(50,680,078)	(50,680,078)	
Dividends paid of subsidiaries		-	-	-	-	-	-	-	-	-	-	-	-	-	
Closing balance as at 31 December 2018		8,601,300,000	47,373,035	(218,688,716)	530,000,000	87,760,338,805	-	(113,315,264)	(70,580,730)	(1,561,693,819)	(1,745,589,813)	100,239,383,311	610,966,503	100,850,349,814	
Opening balance as at 1 January 2019		8,601,300,000	47,373,035	(218,688,716)	530,000,000	87,760,338,805	-	(113,315,264)	(70,580,730)	(1,561,693,819)	(1,745,589,813)	100,239,383,311	610,966,503	100,850,349,814	
Retrospective adjustments from changes in accounting policy	3	-	-	-	-	(94,360,036)	-	-	-	-	-	(94,360,036)	-	(94,360,036)	
Opening balance as at 1 January 2019 after adjustment		8,601,300,000	47,373,035	(218,688,716)	530,000,000	87,665,978,769	-	(113,315,264)	(70,580,730)	(1,561,693,819)	(1,745,589,813)	100,145,023,275	610,966,503	100,755,989,778	
Changes in equity for the year		-	-	-	-	13,059,235,793	-	(69,047,220)	(2,586,470,869)	(2,514,866,823)	(5,160,384,912)	7,898,850,881	67,379,364	7,966,230,245	
Total comprehensive income for the year		-	-	-	-	(3,553,463,021)	-	-	-	-	-	(3,553,463,021)	-	(3,553,463,021)	
Dividends paid	34	-	-	-	-	-	-	-	-	-	-	-	(62,350,000)	(62,350,000)	
Dividends paid of subsidiaries		-	-	-	-	-	-	-	-	-	-	-	-	-	
Closing balance as at 31 December 2019		8,601,300,000	47,373,035	(218,688,716)	530,000,000	97,171,751,541	-	(172,362,484)	(2,657,051,599)	(4,076,560,642)	(6,905,974,725)	104,490,411,135	615,995,867	105,106,407,002	

The notes to the consolidated and separate financial statements on pages 21 to 80 are an integral part of these financial statements.



Surapan

Statement of Changes in Equity

Electricity Generating Public Company Limited For the year ended 31 December 2019

	Note	Separate financial statements																
		Retained earnings						Other components of equity										
		Issued and paid-up share capital		Premium on share capital		Premium on treasury stock		Appropriated - legal reserve		Unappropriated		Available-for-sale investments		Remeasurements of post-employment benefit obligations		Total other components of equity		Total equity
		Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht		
Opening balance as at 1 January 2018		5,264,650,000	8,601,300,000	47,373,035	530,000,000	46,861,663,313	2,395,523,768	(86,057,092)	2,309,466,676								63,614,453,024	
Changes in equity for the year																		
Total comprehensive income for the year		-	-	-	-	4,765,623,996	(2,395,523,768)	(20,431,374)	(2,415,955,142)									2,349,668,854
Dividends paid	34	-	-	-	-	(5,000,975,850)	-	-	-									(5,000,975,850)
Closing balance as at 31 December 2018		5,264,650,000	8,601,300,000	47,373,035	530,000,000	46,626,311,459	-	(106,488,466)	(106,488,466)									60,963,146,028
Opening balance as at 1 January 2019		5,264,650,000	8,601,300,000	47,373,035	530,000,000	46,626,311,459	-	(106,488,466)	(106,488,466)									60,963,146,028
Changes in equity for the year																		
Total comprehensive income for the year		-	-	-	-	7,290,114,094	-	(16,530,418)	(16,530,418)									7,273,583,676
Dividends paid	34	-	-	-	-	(3,553,463,021)	-	-	-									(3,553,463,021)
Closing balance as at 31 December 2019		5,264,650,000	8,601,300,000	47,373,035	530,000,000	50,362,962,532	-	(123,018,884)	(123,018,884)									64,683,266,683

The notes to the consolidated and separate financial statements on pages 21 to 80 are an integral part of these financial statements.



Surapan

Statement of Cash Flows

Electricity Generating Public Company Limited For the year ended 31 December 2019

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Notes	Baht	Baht	Baht	Baht
Cash flows from operating activities				
Profit before income tax expense	13,985,513,827	22,054,804,228	7,290,114,094	4,765,623,996
Adjustments to reconcile profit before income tax expense to net cash provided by operations:				
- Depreciation and amortisation	3,066,936,298	3,165,223,851	39,976,983	57,638,073
- Allowance for obsolescence of spare parts and lower of net realisable value of fuel	44,954,606	31,209,312	413,038	43,949
- Allowance for doubtful accounts	1,860,000	-	-	-
- Retirement benefit expenses	189,454,881	57,338,711	81,916,184	15,684,949
- Reversal of retirement benefit obligations	-	-	-	(12,724,331)
- Interest income	(584,353,285)	(698,956,645)	(1,646,731,588)	(313,510,524)
- Interest expense and other finance costs	4,252,157,102	4,351,481,013	1,641,676,706	1,826,245,871
- Unrealised losses (gains) on exchange rates	(2,197,751,334)	(22,537,864)	(1,628,686,766)	55,962,577
- Loss on impairment of investment in a subsidiary and joint ventures	13.1	296,549,767	-	2,243,056,302
- Net gains on disposal of investments in joint ventures	-	(9,818,715,117)	-	-
- Net gains on disposal of investment in marketable securities	-	(4,358,525,905)	-	(4,358,525,905)
- Net gains on dissolutions of subsidiaries and a joint venture	(649,112,418)	(395,316,889)	(641,664,225)	-
- Losses on impairment of property, plant and equipment	15	3,576,015	-	913,520,903
- Losses on impairment of intangible assets	16	249,590,672	-	-
- Losses on impairment of goodwill	17	61,049,954	1,347,000,000	-
- Net losses (gains) on write-off and disposal of equipment	(540,081)	422,067,585	(714,632)	(531,836)
- Reversal of provision for decommissioning costs	24	-	(371,086,000)	(321,686,000)
- Reversal of advance received for purchase of spare parts	-	-	-	(23,922,430)
- Dividends received from subsidiaries and joint ventures	13.5	-	(8,226,594,068)	(5,255,131,565)
- Share of profit from investments in associates and joint ventures, net	13.1	(6,404,977,057)	(5,488,408,391)	-
Cash flows before changes in operating assets and liabilities	12,314,908,947	11,892,354,385	(260,294,274)	(408,255,971)
Changes in operating assets and liabilities: (excluding the effects of acquisition or disposal of subsidiaries)				
- Trade receivables and trade receivable from a related party	(26,093,893)	(301,390,572)	-	-
- Trade receivable from a related party for services under power purchase agreements	218,522,163	(483,459,716)	-	-
- Lease receivable under power purchase agreement from a related party	818,690,305	587,328,190	-	-
- Amounts due from related parties	110,496,234	(70,536,649)	3,191,625	10,120,241
- Fuel and spare parts and supplies	425,294,232	(513,146,159)	-	4,964
- Other current assets	221,925,673	160,142,340	(14,353,464)	22,319,852
- Other non-current assets	(49,571,568)	(40,135,799)	15,098,256	(2,181,600)
- Trade payables and trade payables to related parties	(1,226,929,489)	836,758,587	-	-
- Amounts due to related parties	23,024,845	24,497,087	(13,661,818)	17,125,974
- Retirement benefit paid	(56,746,577)	(70,458,889)	(26,331,833)	(28,115,220)
- Other current liabilities and other non-current liabilities	(210,832,780)	51,371,805	87,958,859	(70,981,525)
Cash generated from (used in) operations	12,562,688,092	12,073,324,610	(208,392,649)	(459,963,285)
- Withholding tax refunded	9,642,728	147,048,975	7,146,812	147,048,975
- Tax paid	(1,142,685,323)	(998,066,156)	-	-
Net cash receipts from (payments in) operating activities	11,429,645,497	11,222,307,429	(201,245,837)	(312,914,310)

The notes to the consolidated and separate financial statements on pages 21 to 80 are an integral part of these financial statements.

Statement of Cash Flows

Electricity Generating Public Company Limited For the year ended 31 December 2019

	Notes	Consolidated financial statements		Separate financial statements	
		2019 Baht	2018 Baht	2019 Baht	2018 Baht
Cash flows from investing activities					
Addition of investments in a subsidiary, an associate and joint ventures	13.1	(4,750,905,370)	(2,167,607,218)	(160,491,375)	(1,992,617,474)
Acquisition of investments in joint ventures	13.1	(25,002,033,933)	-	(1,980,000,000)	-
Cash payment in advance for additional share capital of a joint venture		-	(2,427,830,235)	-	-
Cash receipts from disposal of investments in joint ventures		-	26,424,224,132	-	24,583,971
Cash receipts from redemptions of a subsidiary and an associate' shares	13.1	60,273,867	-	-	486,910,915
Cash receipt from dissolution of a subsidiary	13.1.1	-	-	24,767,294	-
Net cash receipt from short-term investments used as collateral		417,823,723	177,148,086	-	-
Interest received		496,711,425	786,952,481	332,066,128	149,900,610
Net cash receipt from (payments for) short-term investments		(672,111,258)	359,659,394	(138,000,000)	-
Net cash receipts from long-term investments in marketable securities		-	5,226,016,728	-	5,226,016,728
Cash payments for purchases of investment property		(50,022,557)	-	(50,022,557)	-
Cash payments for purchases of property, equipment and construction in progress		(275,784,171)	(1,160,591,985)	(80,380,585)	(72,845,012)
Cash receipts from disposal of property and equipment		20,205,921	28,155,867	1,356,736	627,963
Cash payments for purchases of intangible assets		(2,907,000)	(16,339,800)	-	-
Cash receipt from land expropriation		-	11,778,584	-	-
Cash payment for long-term loans to a related party	37.6	-	-	-	(60,000,000)
Cash receipts from long-term loans to related parties	37.6	-	-	239,035,023	180,000,000
Dividends received from subsidiaries and joint ventures	13.5	11,942,565,979	4,378,120,772	13,060,337,300	5,969,463,415
Net cash receipts from (payment in) investing activities		(17,816,183,374)	31,619,686,806	11,248,667,964	9,912,041,116
Cash flows from financing activities					
Interest paid		(3,873,543,133)	(4,231,503,535)	(337,454,317)	(1,688,698,724)
Proceeds from short-term loans from financial institutions	19.1	3,235,241,533	3,393,645,067	-	500,000,000
Payments on short-term loans from financial institutions	19.1	(3,313,028,758)	(4,427,983,750)	-	(1,650,000,000)
Proceeds from long-term loans from financial institutions	21.3	20,219,362,773	12,280,888,007	7,609,105,000	7,243,639,000
Payments on long-term loans from financial institutions	21.3	(19,055,327,830)	(17,601,645,272)	(13,615,180,000)	(7,833,457,500)
Payments on deferred financing fee and other financing fee		(86,908,267)	(76,979,754)	(46,621,279)	-
Dividends paid to shareholders and non-controlling interest		(3,615,472,211)	(5,050,481,522)	(3,553,122,134)	(4,999,801,450)
Net cash payments in financing activities		(6,489,675,893)	(15,714,060,759)	(9,943,272,730)	(8,428,318,674)
Net increase (decrease) in cash and cash equivalents		(12,876,213,770)	27,127,933,476	1,104,149,397	1,170,808,132
Beginning balance		34,876,629,903	6,786,801,686	2,922,235,474	1,751,427,342
Effect of exchange rate changes		(1,512,868,206)	961,894,741	-	-
Ending balance		20,487,547,927	34,876,629,903	4,026,384,871	2,922,235,474
Cash and cash equivalents are made up as follows:					
- Cash in hand and deposits at financial institutions - maturities within three months		2,782,622,655	29,990,556,664	18,327,883	196,984,082
- Short-term investments in promissory notes - maturities within three months		17,704,925,272	4,886,073,239	4,008,056,988	2,725,251,392
		20,487,547,927	34,876,629,903	4,026,384,871	2,922,235,474

The notes to the consolidated and separate financial statements on pages 21 to 80 are an integral part of these financial statements.

Sungpan Anon



Statement of Cash Flows

Electricity Generating Public Company Limited For the year ended 31 December 2019

	Notes	Consolidated financial statements		Separate financial statements	
		2019 Baht	2018 Baht	2019 Baht	2018 Baht
Non-cash transactions					
- Reclassification of spare parts to property, plant and equipment		-	7,838,245	-	-
- Payables for purchases of property, plant and equipment (included retention)		10,678,071	32,727,299	766,500	19,295,013
- Reclassification of advance payments for spare parts to property, plant and equipment		77,749,385	-	-	-
- Reclassification of advance payment for investment to investment in joint ventures		2,427,830,235	728,520,362	-	728,520,362
- Reclassification of advance rental income to property, plant and equipment		-	128,552,187	-	-
- Payable for acquisition of investment in a joint venture	13.1.3	1,240,000,000	-	1,240,000,000	-
- Receivable from disposal of property, plant and equipment		-	16,075,000	-	-
- Net of payments on long-term loans from financial institutions with dividends received from a subsidiary	13.5	-	-	283,013,231	-
- Net of interest paid on long-term loans from financial institutions with dividends received from a subsidiary	13.5	-	-	562,656,546	-
- Net of payments on long-term loans from financial institutions with long-term loans to a subsidiary	37.6	-	-	272,698,616	-
- Net of interest paid on long-term loans from financial institutions with long-term loans to a subsidiary	37.6	-	-	672,783,066	-
- Net of payments on additional share capital of a joint venture with long-term loans to a subsidiary	37.6	-	-	34,483,896	-
- Net of payments on additional share capital of a joint venture with interest receivable from long-term loans to a subsidiary		-	-	578,526,104	-
- Net of payments on additional share capital of a joint venture with dividends received from a subsidiary	13.5	-	-	814,617,001	-
- Note receivable for share capital return in advance from a subsidiary	37.6	-	-	49,094,007,879	-

The notes to the consolidated and separate financial statements on pages 21 to 80 are an integral part of these financial statements.

Sungpan Anon

Notes to the Consolidated and Separate Financial Statements

Electricity Generating Public Company Limited For the year ended 31 December 2019

1 General information

Electricity Generating Public Company Limited (the Company) is a public limited company which is listed on the Stock Exchange of Thailand and is incorporated and resident in Thailand. The address of its registered office is 222, EGCO Tower, 14th and 15th floor, Vibhavadi Rangsit Road, Tungsonghong, Laksi, Bangkok 10210.

The Company is listed on the Stock Exchange of Thailand. For reporting purposes, the Company and its subsidiaries are referred to as the Group.

The principal business operation of the Group is the generation of electricity for sales to the government sector and industrial users.

These consolidated and separate financial statements were authorised for issue by the president on 20 February 2020.

2 Accounting policies

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

2.1 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 consolidated and separate financial statements have been prepared under the historical cost convention except as disclosed in the accounting policies below.

The preparation of financial statements in conformity with Thai generally accepted accounting principles requires the use of certain critical accounting estimates. It also requires management to exercise its judgment in the process of applying the Group's accounting policies and to disclose the areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the consolidated and separate financial statements are disclosed in Note 4.

Comparative figures have been reclassified to conform with changes in presentation in the current period.

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.

2.2 New and amended financial reporting standards that are relevant and have significant impacts to the Group

2.2.1 New and amended financial reporting standards that are effective for accounting period beginning or after 1 January 2019

Commencing from 1 January 2019, the Group adopted new and amended Thai Financial Reporting Standards effective for the period beginning on or after 1 January 2019 and relevant to the Group. The adoption of these standards do not have significant impact to the Group, except Thai Financial Reporting Standard (TFRS) 15 "Revenue from contracts with customers" as described in Note 3.

2.2.2 New and amended financial reporting standards that are effective for accounting period beginning or after 1 January 2020 and have not been early adopted by the Group

a) Financial instruments

The new financial standards relate to financial instruments are:

TAS 32	Financial Instruments: Presentation
TFRS 7	Financial Instruments: Disclosures
TFRS 9	Financial Instruments
TFRIC 16	Hedges of a Net Investment in a Foreign Operation
TFRIC 19	Extinguishing Financial Liabilities with Equity Instruments

These new standards address the classification, measurement, derecognition of financial assets and financial liabilities, impairment of financial assets, hedge accounting, and presentation and disclosure of financial instruments.

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

b) TFRS 16, Leases

Where the Group is a lessee, TFRS 16, Leases will result in almost all leases being recognised on the balance sheet as the distinction between operating and finance leases is removed. A right-of-use asset and a lease liability will be recognised, with exception on short-term and low-value leases.

The Group's management is currently assessing the impact of adoption of this standard.

2.3 Group accounting - investments in subsidiaries, associates and joint arrangements**2.3.1 Subsidiaries**

Subsidiaries are all entities (including structured 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 fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases.

The Group applies the acquisition method to account for business combinations except business combinations under common control. The consideration transferred for the acquisition of a subsidiary is the fair value of the assets transferred, the liabilities incurred to the former owners of acquiree and the equity interests issued by the Group. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement. Acquisition-related costs are expensed as incurred. Identifiable assets acquired and liabilities 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 recognises any non-controlling interest in the acquiree at the non-controlling interest's proportionate share of the acquiree's net assets.

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-measurements are recognised in profit or loss.

Any contingent consideration to be transferred by the Group is recognised at fair value at the acquisition date. Subsequent changes to the fair value of the contingent consideration that is deemed to be an asset or liability is recognised either in profit or loss or as a change to other comprehensive income. Contingent consideration that is classified as equity is not re-measured, and its subsequent settlement is accounted for within equity.

The excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the fair value of the identifiable net assets acquired is recorded as goodwill. If the total of consideration transferred, non-controlling interest recognised and previously held interest measured is less than the fair value of the net assets of the subsidiary acquired in the case of a bargain purchase, the difference is recognised directly in profit or loss.

Intercompany transactions, balances and unrealised gains or loss on transactions between Group companies are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the transferred asset. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

A list of the Group's subsidiaries is shown in Note 13.

2.3.2 Transaction with non-controlling interests

The Group treats transactions with non-controlling interests as transactions with equity owners of the Group. For purchases from non-controlling interests, the difference between any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded in equity. Gains or losses on disposals to non-controlling interests are also recorded in equity.

2.3.3 Disposal of subsidiaries

When the Group ceases to have control it shall cease to consolidate its subsidiaries. Any retained interest in the entity is re-measured to its fair value, with the change in carrying amount recognised in profit or loss. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognised in other comprehensive income in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities.

2.3.4 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.

A list of the Group's principal associates is shown in Note 13.

2.3.5 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 financial statements line item.

Joint venture

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.

A list of the Group's joint ventures is shown in Note 13.

2.3.6 Accounting under equity method

Under the equity method, the investment is initially recognised at cost, and the carrying amount is increased or decreased to recognise the investor's share of the profit or loss of the investee after the date of acquisition. The Group's investment in associates and joint ventures includes goodwill identified on acquisition.

If the ownership interest in associates and joint ventures is reduced but significant influence 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.

The Group's share of its associates and joint ventures' post-acquisition profits or losses is recognised in the profit or loss, and its share of post-acquisition movements in other comprehensive income is recognised in other comprehensive income. The cumulative post-acquisition 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, together with any long-term interests that, in substance, form part of the entity's net investment 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.

The Group determines at each reporting date whether there is any objective evidence that the investments in the associates and joint ventures are impaired. If this is the case, the Group calculates the amount of impairment as the difference between the recoverable amount of the investments and its carrying value and recognises the amount adjacent to share of profit (loss) of associates and joint ventures in profit or loss.

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 unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of associates and joint ventures have been changed where necessary to ensure consistency with the policies adopted by the Group.

2.3.7 Separate financial statements

In the separate financial statements, investments in subsidiaries, associates and joint ventures are accounted for at cost less impairment. Cost is adjusted to reflect changes in consideration arising from contingent consideration amendments. Cost also includes direct attributable costs of investment.

A test for impairment on investments in subsidiaries, associates and joint ventures is carried out when there is a factor indicating that investments might be impaired. If the carrying value of the investments is higher than its recoverable amount, impairment loss is charged to the profit or loss.



2.4 Foreign currency translation

2.4.1 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 the entity operates (the functional currency). The financial statements are presented in Thai Baht, which is the functional and presentation currency of the Group.

2.4.2 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.

2.4.3 Group companies

The results and financial position of each of 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 for each statement of financial position presented are translated at the closing rate at the date of that statement of financial position;
- Income and expenses of each statement of income and statement of comprehensive income are translated at average exchange rates; and
- All resulting exchange differences are recognised in other comprehensive income.

Goodwill arose on or after 1 January 2013 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 at the date of that statement of financial position.

2.5 Accounting for Derivatives

The Group is party to derivative financial instruments, which mainly comprise foreign currency forward contracts, interest rate swap contracts, cross currency swap contracts, and cross currency interest rate swap.

Foreign currency forward contracts protect the Group from movements in exchange rates by determining the future exchange rate that assets or liabilities in foreign currencies will be received or paid. Foreign currency forward contracts are recognised in the financial statements on the contract date. Any fee, premiums or discounts arising from foreign currency forward contracts are amortised over the contract's period.

Interest rate swap contracts protect the Group from movements in interest rates. Any differential to be paid or received on the interest rate swap contracts is recognised as a component of finance costs as incurred. Gains and losses from early cancellation of interest rate swap contracts is recognised in profit or loss.

Disclosure about financial instruments to which the Group is a party is provided in Note 38.

2.6 Cash and cash equivalents

In the statements of cash flows, cash and cash equivalents includes cash in hand, deposits held at call, other short-term highly liquid investments with maturities of three months or less from acquisition date.

2.7 Trade receivables

Trade receivables are recognised initially at original invoice amount and subsequently measured at the remaining amount less allowance for doubtful receivables based on a review of all outstanding amounts at the year end. The amount of the allowance is the difference between the carrying amount of the receivable and the amount expected to be collectible. Bad debts are recognised in profit or loss as part of administrative expenses.



2.8 Fuel and spare parts and supplies

2.8.1 Fuel

Fuel includes coal and diesel. Fuel is stated at the lower of cost or net realisable value. Cost is determined by the moving average basis method.

2.8.2 Spare parts and supplies

Spare parts that do not meet definitions of property, plant and equipment are stated at cost less allowance for obsolescence. Cost is determined by the moving average basis method.

The allowance for capital spare parts that are used for specific plant equipment in power plants is made on a specific basis.

The allowance for common spare parts is made on an aging analysis.

2.9 Non-current assets held-for-sale

Non-current assets (or disposal Group) are classified as assets held-for-sale when their carrying amount is to 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.

2.10 Other investments

Investments other than investments in subsidiaries, associates and joint ventures are classified as trading investments; held-to-maturity investments; available-for-sale investments; and general investments. The classification is dependent on the purpose for which the investments were acquired. Management determines the appropriate classification of its investments at the time of the purchase and re-evaluates such designation on a regular basis.

- Investments that are acquired principally for the purpose of generating a profit from short-term fluctuations in price are classified as trading investments and included in current assets.
- Investments with fixed maturity that the management has the intent and ability to hold to maturity are classified as held-to-maturity investments.
- Investments intended to be held for an indefinite period of time, which may be sold in response to liquidity needs or changes in interest rates, are classified as available-for-sale investments.
- Investments in non-marketable equity securities are classified as general investments.

All categories of investment are initially recognised at cost, which is equal to the fair value of consideration paid plus transaction cost.

Trading investments and available for sale investments are subsequently measured at fair value. The unrealised gains and losses of trading investments are recognised in profit or loss. The unrealised gains and losses of available-for-sale investments are recognised in other comprehensive income.

Held-to-maturity investments are carried at amortised cost using the effective interest method less impairment.

General investments are carried at cost less impairment.

A test for impairment is carried out when there is a factor indicating that an investment might be impaired. If the carrying value of the investment is higher than its recoverable amount, impairment loss is charged to profit or loss.

On disposal of an investment, the difference between the net disposal proceeds and the carrying amount is charged or credited to the profit or loss. In the event that investment in debt or equity securities are partially disposed, the carrying amount of the disposed part is determined by the weighted average carrying amount of the total holding of the investment.

2.11 Investment property

Land and buildings of the Group that are held for long-term rental or for capital appreciation or both, and that are not occupied by the companies in the Group, are 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.

Investment property is measured initially at its cost including related transaction costs. Subsequently, the investment property is carried at cost less accumulated depreciation and impairment (if any).

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. When part of an investment property is replaced, the carrying amount of the replaced part is derecognised.

Surajan Singh

2.12 Property, plant and equipment

Property, plant and equipment are initially recorded at cost. Subsequently, plant and equipment are stated at historical cost less accumulated depreciation and impairment (if any). The costs of property, plant and equipment comprise both the purchase price and any costs directly attributable to bringing the assets to location and condition necessary for them to be capable of operating in the manner intended by management. These can include the initial estimate of the costs of dismantling and removing the item and restoring the site on which they are located, the obligation for which the Group incurs either when the items are acquired or as a consequence of having used the items during a particular period.

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 when incurred.

Depreciation is calculated using the straight-line method to allocate their cost to their residual value over their estimated useful lives, except land which is considered to have an indefinite life, as follows:

	<u>Years</u>
Buildings and structures	10 to 20
Power plants	21 to 50
Substation and transmission system	20 to 25
Capital spare parts	5 to 25
Operating and maintenance equipment	5
Office equipment, furniture and computers	3 to 10
Motor vehicles	5

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 asset is greater than its estimated recoverable amount, it is written down immediately to its recoverable amount.

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

Borrowing costs that are attributable to the acquisition or construction of a qualifying asset are capitalised as part of the cost of that asset, during the period of time required to complete and prepare the asset for its intended use. All other borrowing costs are recognised as expenses in the statement of income. Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

All other borrowing costs are recognised in profit or loss.

2.13 Goodwill

Goodwill represents the excess of the consideration transferred over the fair value of the Group's share of the net identifiable assets liabilities and contingent liabilities of the acquired subsidiary undertaking or joint venture or associate at the date of acquisition.

Goodwill on acquisitions of subsidiaries is separately reported in the consolidated statement of financial position. Goodwill on acquisitions of joint ventures or associates is included in investments in joint ventures or associates and is tested for impairments part of the overall balance.

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 groups of cash generating units that are expected to benefit from the business combination in which the goodwill arose, identified according to operating segment.

Sumanan Moya

2.14 Intangible assets

2.14.1 Right in Power Purchase Agreements and Right to use the transmission facilities

The right in Power Purchase Agreements (PPA) arising on the acquisitions of businesses, are amortised by using straight-line method over the periods of the PPA which are between 15 and 25 years.

The right to use transmission facilities is an expenditure paid to acquire a right to use the transmission facilities which are amortised by using straight-line method over the useful life of 15 to 25 years, which is in accordance with the PPA.

2.14.2 Licences for operating power plants

Licences for operating power plants arising on the acquisitions of businesses, which are amortised by using straight-line method over the periods of the licences for operating power plants, which are 25 to 35 years.

2.14.3 Favourable contract assets

Favourable contract assets are recognised as identifiable assets of an acquiree as part of the purchase price allocation at the acquisition date. The favourable contract assets incurred from an excess of the fair value of long-term liquefied natural gas purchase contracts than purchase values specified in such contracts. The favourable contract assets are amortised based on unit of liquefied natural gas used in electricity generation.

2.14.4 Development expenditure

Development expenditure is recognised as intangible assets when the Group can reliably measure the expenditure attributable to its development and can demonstrate that it is technically, financially, commercially, and resourcefully feasible; and the Group intends to and has the ability to complete the development for the purpose of using or selling.

Development costs previously recognised as an expense are not recognised as an asset in a subsequent period.

Capitalised development costs are amortised when the asset is ready to use or sell by applying a straight-line method over the period of its expected benefit.

2.15 Impairment of assets

Assets that have an indefinite useful life, for example goodwill, are not subject to amortisation and are tested annually for impairment. Assets that are subject to amortisation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. 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 to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest level for which there are separately identifiable cash flows. Non-financial assets other than goodwill that suffered an impairment are reviewed for possible reversal of the impairment at each reporting date.

2.16 Long-term lease

The determination of whether an arrangement is or contains a lease shall be based on the substance of the arrangement, and not merely the legal form. It requires an assessment of whether (a) the fulfilment of the arrangement is dependent on the use of specific assets and (b) the arrangement conveys a right to use such assets.

If the arrangement is a lease or contains a lease, payments and other consideration required by the arrangement shall be separated into those for the lease and those for other elements (e.g. for services and the cost of inputs) on the basis of their relative fair values. The lease element of the arrangement shall be classified as a finance lease or an operating lease.

Leases - where the Group is the lessee

Leases of assets where the lessee has substantially all the risks and rewards of ownership are classified as finance leases. Finance leases are capitalised at the inception of the lease at the lower of the fair value of the leased assets and the present value of the minimum lease payments. Each lease payment is allocated between the liability and finance charges so as to achieve a constant rate on the liabilities balance outstanding. The corresponding rental obligations, net of finance charges, are included in other long-term payables. The interest element of the finance cost is charged to profit or loss over the lease period so as to achieve a constant periodic rate of interest on the remaining balance of the liability for each period. The asset acquired under finance leases is depreciated over the shorter period of the useful life of the asset and the lease term.

Leases in which a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) are charged to profit or loss on a straight-line basis over the period of the lease.

Leases - where the Group is the lessor

Lease in which a significant portion of the risk and rewards of ownership are retained by the lessee are classified as finance lease. 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 (interest income from finance lease receivable) is recognised over the term of the lease using the net investment method, which reflects a constant periodic rate of return. The recognition follows accounting policy in Note 2.22.

Lease in which a significant portion of the risk and rewards of ownership are retained by the lessor are classified as operating lease. Assets leased out under operating leases are included in property, plant and equipment in the statement of financial position. They are depreciated over their expected useful lives on a basis consistent with other similar property, plant and equipment owned by the Group. The recognition follows accounting policy in Note 2.22.

2.17 Borrowings

Borrowings are recognised initially at the fair value, net of the transaction costs incurred. Borrowings are subsequently stated at amortised cost using the effective interest rate method; any difference between the proceeds (net of transaction costs) and the redemption value is recognised in profit or loss over the period of the borrowings.

Fees paid on the establishment of loan facilities are recognised as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. In this case, the fee is deferred until the draw-down occurs. To the extent there is no evidence that it is probable that some or all of the facility will be drawn down, the fee is capitalised as a pre-payment for liquidity services and amortised over the period of the facility to which it relates.

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

2.18 Current and deferred income taxes

The tax expense for the period 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. In this case the tax is also recognised in other comprehensive income or directly in equity, respectively.

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the end of reporting period in the countries where the entities within the Group operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations 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 is recognised, using the liability method, on temporary differences arising from differences between the tax base of assets and liabilities and their carrying amounts in the financial statements. However, the deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantively enacted by the end of the reporting period and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

Deferred income 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 income tax is provided on temporary differences arising from investments in associates and joint ventures, except 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 assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income tax assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

2.19 Employee benefits

The Group has post-employment benefits consisting of both defined benefit and defined contribution plans. A defined contribution plan is a pension plan under which the Group pays fixed contributions into a separate entity. The Group has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods. A defined benefit plan is a pension plan that is not a defined contribution plan. Typically defined benefit plans define an amount of pension benefit that an employee will receive on retirement, usually dependent on one or more factors such as age of employee, years of service and compensation.

2.19.1 Defined contribution plan - provident fund

The Group operates a provident fund that is a defined contribution plan. The assets are held in a separate fund which is managed by an external fund manager in accordance with the Provident Fund Act B.E. 2530. The provident fund is contributed by employees and by the Group. Contributions to the provident fund are charged to the profit or loss when they are due.

2.19.2 Defined benefit plan - retirement benefits

The Group provides for post-employment benefits, payable to employees under the labour laws applicable in Thailand and other countries in which the Group has its operations. The liability in respect of employee benefits is the present value of the defined benefit obligation which is calculated by an independent actuary in accordance with the actuarial technique. The present value of the defined benefit obligation is determined by discounting estimated future cash flows using yields on government bonds that match the terms of the related liability. The estimated future cash flows shall reflect employee salaries, turnover rate, mortality, length of service and other factors. Remeasurement gains or losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity in other comprehensive income in the period in which they arise. Past-service costs are recognised immediately in profit or loss.

2.20 Provisions

2.20.1 General 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 the amount has been reliably estimate.

2.20.2 Provision for decommissioning costs

The Group recognises provision for decommissioning costs, which are provided at the onset of completion of the project, for the estimate of the eventual costs that relate to the removal. The recognised provision for decommissioning costs are based on future removal cost estimates and incorporate many assumptions such as abandonment times and future inflation rate and discounted to present value at the discount rate estimated by the management. Those are included as part of cost.

2.21 Treasury stock

Treasury stock presented in statements of financial position is carried at cost and shown as a deduction from total equity. Gains on disposal of treasury stock are determined by reference to its carrying amount and are taken to premium on treasury stock. Losses on disposal of treasury stock are determined by reference to its carrying amount and are taken out of premium on treasury stock and retained earnings consecutively.

Siraporn Anon

2.22 Revenue recognition

Revenue are 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 as details below.

Revenue under the Power Purchase Agreements (PPA)

(a) Revenue under the PPA which are not classified as lease

- The Group recognises Capacity Payments or Availability Payments which are the revenue for maintaining availabilities of power plants as agreed with EGAT and industrial customers in accordance with terms of PPA. The Group recognises this revenue in profit or loss when rendering services to customer according to the agreements. If the Group receives consideration above the services rendered, the Group recognises the excess consideration as a contract liability. On the other hand, if the Group receives consideration less than the services rendered, the Group recognises the consideration as a contract asset.
- Energy Payments are recognised at a point in time when the controls over the products are transferred to the customers at destinations as stated in the agreements. The revenue from Energy Payments are recognised based on transaction price net of output tax, rebates and discounts.

(b) Revenue under the Power Purchase Agreements which are classified as lease

- Finance lease income under the power purchase agreements is recognized on an effective interest method over the period of the agreements. Rental income from operating lease under the power purchase agreements is recognised on a straight-line basis over the period of the agreements.
- Service income under finance and operating lease agreements related to power purchase agreements, which comprises revenue for maintaining availabilities of power plants, other service income and Energy Payments received from financial lease receivables and operating lease receivables with respect to the leased assets, is recognised when the services are rendered. If the Group receives consideration above the services rendered, the Group recognises the excess consideration as a contract liability. On the other hand, if the Group receives consideration less than the services rendered, the Group recognises the consideration as a contract asset.
- Contingent rents are recognised in profit or loss in the period in which they are incurred. Contingent rent is that portion of lease payments that is not fixed in amount but varies based on a future factor, such as the amount of use or production.

Other service income

The Group recognises income from other services, net of value added tax. The Group will recognise when there was probable to receive payment when service rendered.

The Group recognises income from service contract which has continuous service attribute on straight-line basis regardless of payment terms in contract.

Interest income

Interest income are recognised on an accrual basis unless collectability is in doubt.

Dividend income

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

2.23 Government grants

Government grants are recognised at their fair value where there is a reasonable assurance that the grant will be received and the Group will comply with all attached conditions.

Government grants relating to the compensation of costs are deferred and recognised in profit or loss to match the costs they are intended to compensate.

Government grants relating to the purchase of assets are included in non-current liabilities as other liabilities and are credited to profit or loss on a straight-line basis over the expected lives of the related assets.

2.24 Dividends distribution

Dividends distribution to the group's shareholders is recognised as liability in the financial statements in the period in which the dividends are approved by the Company's shareholders and interim dividend are approved by the Board of Directors.

3 Changes in accounting policies

The Group has adopted the new Thai Financial Reporting Standards (TFRS) 15, "Revenue from contracts with customers" from 1 January 2019 under the modified retrospective approach and the comparative figures have not been restated. The Group, associates and joint ventures of the Group applied practical expedient related to completed contracts and contract modifications, as allowed by TFRS 15.

The Group's subsidiaries, associates and joint ventures principally generate revenues from sales of electricity and lease income under power purchase agreements, including service income under power purchase agreements. The adoption of TFRS 15 mainly affects the accounting treatment on revenue recognition as follows:

- Service income under power purchase agreements in relation to the availabilities of the power plants of a subsidiary and a joint venture, as agreed with the Electricity Generating Authority of Thailand (EGAT) and in accordance with terms of the Power Purchase Agreement. This service income is recognised in profit or loss over time as the services rendered, and
- Sales of electricity of associates under the power purchase agreements with PT Perusahaan Listrik Negara (Persero) (PLN), Government Electricity Generating Authority of the Republic of Indonesia, these sales of electricity are recognised in profit or loss at a point that the control of goods is transferred to the customer.

If the Group's subsidiaries, associates and joint ventures receive consideration exceeded the electricity delivered or service rendered, the excess consideration is recognised as contract liability. On the other hand, if the Group's subsidiaries, associates and joint ventures receive consideration less than the electricity delivered or service rendered, the difference is recognised as contract asset.

Impact from adoption of TFRS 15 are as follows:

	Consolidated financial statements		
	As at 31 December 2018 as previously reported Baht	Adjustments Baht	As at 1 January 2019 as restated Baht
Statement of financial position			
Investments in associates	14,381,824,053	(59,049,291)	14,322,774,762
Investments in joint ventures, net	41,554,497,037	(30,458,056)	41,524,038,981
Other current liabilities	2,493,568,228	4,852,689	2,498,420,917
Retained earnings	87,760,338,805	(94,360,036)	87,665,978,769

The following tables show the amounts by each financial statements line item in the current year from the adoption of the new revenue standard compared to the previous revenue standards.

	Consolidated financial statements		
	Balance as reported Baht	Impacts from TFRS 15 Baht	Balance under the previous revenue standards Baht
Statement of financial position			
Investments in associates	14,573,577,102	68,946,367	14,642,523,469
Investments in joint ventures, net	72,707,152,764	20,343,695	72,727,496,459
Other current liabilities	2,538,629,810	(2,000,342)	2,536,629,468
Retained earnings	97,171,751,541	91,290,404	97,263,041,945

Consolidated financial statements			
For the year ended 31 December 2019			
	Balance as reported Baht	Impacts from TFRS 15 Baht	Balance under the previous revenue standards Baht
Statement of income			
Sales and services income	31,208,995,946	(2,852,347)	31,206,143,599
Share of profit from investments in associates and joint ventures, net	6,404,977,057	(217,285)	6,404,759,772
Profit for the year	13,126,615,157	(3,069,632)	13,123,545,525
Profit for the year attributable to:			
Owners of the parent	13,059,235,793	(3,069,632)	13,056,166,161
Non-controlling interests	67,379,364	-	67,379,364
Basic earnings per share	24.81	(0.01)	24.80

4 Critical accounting estimates and judgments

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

During the year 2019, The Group makes estimates and assumptions concerning the future. The resulting 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.

4.1 Impairment of goodwill

Goodwill arising from the acquisition of investment in electricity generation businesses in each country is tested annually for impairment by comparing the carrying amount to the recoverable amount for each cash-generating unit which is determined based on value-in-use calculations. These calculations use a cash flow projection covering the remaining periods of Power Purchase Agreements of the Group in each country and the tariffs and capacity stated in the agreements. Discount rates used are based on WACC of each country (refer to note 17).

4.2 Impairment of intangible assets with finite useful life

The Group tests impairment of intangible assets with finite useful life whenever events or changes in circumstances indicate that the carrying amount of asset is greater than its estimated recoverable amount by applying the value-in-use model. The value-in-use model involves management's significant judgments with respect to the future operating results of business, projected cash flow which refer to financial projection covering the remaining periods of Power Purchase Agreement, and appropriate discount rate to be applied to the projected cash flows. Key assumptions applied in the value-in-use model are electricity tariff, assumed capacity of the power plants, growth rate, future operating expenses, and the discount rate to be applied to the projected cash flows (refer to note 16).

4.3 Impairment of investments in subsidiaries, associates and joint ventures

The Group tests impairment of investments in subsidiaries, associates and joint ventures when events or changes in circumstances indicate that the carrying value of the investment is higher than its recoverable amount by applying the value-in-use model. The value-in-use model involves management's significant judgments with respect to the future operating results of business, projected cash flows, appropriate discount rate to be applied to the projected cash flows. Key assumptions applied in the value-in-use model are electricity tariff, assumed capacity of the power plants, growth rate, expected changes to operating expenditures, and the discount rate to be applied to the projected cash flows (refer to note 13).

4.4 Fair value estimation on acquisition of investment in a joint venture

The Group estimates fair value of net assets acquired under business combination since the valuation methodology and assumptions used in the financial model involved significant management judgment. Key assumptions applied include the electricity tariffs, assumed capacity of the power plants, LNG price forecast, LNG consumption, operating expenditures, and capital structure (refer to note 13).

5 Capital risk management

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

In order to maintain or adjust the capital structure, the Group has alternative practices include returning capital to shareholders, issuing new shares or selling assets to reduce debt.

6 Segment information - consolidated financial statements

The Group has two segments report which are comprised of electricity generation and other businesses. Electricity generation is to operate electricity for sales to the government and industrial users. Other businesses are maintenance and operating services for power plants and coal mining business. The segment information is presented on the same basis that used for internal reporting purpose as provided to the chief operating decision maker (the President).

Consolidated financial statements						
For the year ended 31 December 2019						
	Electricity generation Baht	Other businesses Baht	Management Discussion and Analysis report Baht	Adjustments Baht		Total Baht
Sales and services income	39,554,261,808	786,543,446	40,340,805,254	(9,131,809,308)	(4),(5),(8),(9)	31,208,995,946
Lease income under power purchase Agreements	-	-	-	6,301,947,319	(5)	6,301,947,319
Costs of sales and services	(28,890,193,566)	(673,180,448)	(29,563,374,014)	1,675,625,886	(5),(8),(9)	(27,887,748,128)
Cost of lease under power purchase Agreements	-	-	-	(532,371,620)	(5)	(532,371,620)
Segment results	10,664,068,242	113,362,998	10,777,431,240	(1,686,607,723)		9,090,823,517
Dividend and other income	2,626,618,177	10,951,985	2,637,570,162	257,396,471	(4),(8),(9)	2,894,966,633
Net gain from dissolution a subsidiary and a joint venture	649,112,418	-	649,112,418	-		649,112,418
Loss on impairment of assets	(610,766,408)	-	(610,766,408)	-		(610,766,408)
Currency exchange gains (losses), net	2,806,026,012	(826,059)	2,805,199,953	(3,105,080,228)	(1),(2),(3),(5),(9)	(299,880,275)
Administrative expenses	(3,700,759,398)	(60,155,151)	(3,760,914,549)	870,665,744	(7),(8),(9)	(2,890,248,805)
Finance costs	(5,722,868,903)	-	(5,722,868,903)	4,469,398,593	(2),(9)	(1,253,470,310)
Share of profit (loss) from investments in associates and joint ventures, net	6,899,075,924	(2,494,083)	6,896,581,841	(491,604,784)	(1),(5),(6),(7)	6,404,977,057
Profit before income tax expense	13,610,506,064	60,839,690	13,671,345,754	314,168,073		13,985,513,827
Deferred tax income	227,565,798	7,318,362	234,884,160	24,325,111	(5),(6),(9)	259,209,271
Income tax expense	(1,089,451,397)	(20,095,720)	(1,109,547,117)	(8,560,824)	(9)	(1,118,107,941)
Profit for the year	12,748,620,465	48,062,332	12,796,682,797	329,932,360		13,126,615,157
Attributable to:						
Owners of the parent	12,748,620,465	48,062,332	12,796,682,797	262,552,996	(5)	13,059,235,793
Non-controlling interests	-	-	-	67,379,364	(3),(5),(9)	67,379,364
Property, plant and equipment, net	52,714,762,565	66,892,880	52,781,655,445	-		52,781,655,445
Total assets	207,647,622,930	874,981,725	208,522,604,655	-		208,522,604,655
Timing of revenue recognition						
At a point in time	8,520,539,530	-	8,520,539,530	(6,164,102,196)	(4),(5),(8),(9)	2,356,437,334
Over time	31,033,722,278	786,543,446	31,820,265,724	(2,967,707,112)	(5),(8),(9)	28,852,558,612
Total revenue	39,554,261,808	786,543,446	40,340,805,254	(9,131,809,308)		31,208,995,946

(1) Net currency exchange gains (losses) and finance costs of associates and joint ventures

(2) Net currency exchange gains (losses) and finance costs of subsidiaries

(3) Net currency exchange gains (losses) of non-controlling interests

(4) Adder income

(5) Impact of the adoption of TFRIC 4 "Determining whether an arrangement contains a lease"

(6) Deferred tax of subsidiaries, associates and joint ventures

(7) Amortisation of rights in long-term power purchase agreements and fair value uplift of assets from business combination

(8) Related party transaction of subsidiaries, associates and joint ventures

(9) Non-controlling interests

Siraporn Ong



Consolidated financial statements						
For the year ended 31 December 2018						
	Electricity generation Baht	Other businesses Baht	Management Discussion and Analysis report Baht	Adjustments Baht	Total Baht	
Sales and services income	36,908,373,024	1,244,421,718	38,152,794,742	(9,132,320,807)	(4),(5),(8),(9)	29,020,473,935
Lease income under power purchase agreements	-	-	-	6,501,727,385	(5)	6,501,727,385
Costs of sales and services	(26,777,178,149)	(976,660,433)	(27,753,838,582)	1,677,440,464	(5),(8),(9)	(26,076,398,118)
Cost of lease under power purchase agreements	-	-	-	(529,698,744)	(5)	(529,698,744)
Segment results	10,131,194,875	267,761,285	10,398,956,160	(1,482,851,702)		8,916,104,458
Dividend and other income	1,197,988,554	9,785,195	1,207,773,749	1,444,217,062	(4),(8),(9)	2,651,990,811
Net gain on disposal of investment in joint ventures	9,818,715,117	-	9,818,715,117	-		9,818,715,117
Net gain on disposal of long-term investment in marketable securities	4,358,525,905	-	4,358,525,905	-		4,358,525,905
Net gain from dissolution a subsidiary and a joint venture	395,316,889	-	395,316,889	-		395,316,889
Loss on impairment of assets	(2,963,776,496)	-	(2,963,776,496)	-		(2,963,776,496)
Currency exchange gains (losses), net	92,495,636	496,451	92,992,087	(182,122,673)	(1),(2),(3),(5),(9)	(89,130,586)
Administrative expenses	(2,896,662,793)	(72,862,172)	(2,969,524,965)	457,628,767	(7),(8),(9)	(2,511,896,198)
Finance costs	(4,511,256,117)	-	(4,511,256,117)	501,802,054	(2),(9)	(4,009,454,063)
Share of profit from investments in associates and joint ventures, net	5,971,967,381	83,409,352	6,055,376,733	(566,968,342)	(1),(5),(6),(7)	5,488,408,391
Profit before income tax expense	21,594,508,951	288,590,111	21,883,099,062	171,705,166		22,054,804,228
Deferred tax income (expense)	(23,196,690)	2,487,001	(20,709,689)	127,165,045	(5),(6),(9)	106,455,356
Income tax expense	(995,281,446)	(42,394,251)	(1,037,675,697)	(7,126,748)	(9)	(1,044,802,445)
Profit for the year	20,576,030,815	248,682,861	20,824,713,676	291,743,463		21,116,457,139
Attributable to:						
Owners of the parent	20,576,030,815	248,682,861	20,824,713,676	248,169,811	(5)	21,072,883,487
Non-controlling interests	-	-	-	43,573,652	(3),(5),(9)	43,573,652
Property, plant and equipment, net	56,273,589,724	87,763,290	56,361,353,014	-		56,361,353,014
Total assets	205,478,038,508	949,770,111	206,427,808,619	-		206,427,808,619

(1) Net currency exchange gains (losses) and finance costs of associates and joint ventures

(2) Net currency exchange gains (losses) and finance costs of subsidiaries

(3) Net currency exchange gains (losses) of non-controlling interests

(4) Adder income

(5) Impact of the adoption of TFRIC 4 "Determining whether an arrangement contains a lease"

(6) Deferred tax of subsidiaries, associates and joint ventures

(7) Amortisation of rights in long-term power purchase agreements and fair value uplift of assets from business combination

(8) Related party transaction of subsidiaries, associates and joint ventures

(9) Non-controlling interests

Revenue reported in segment information for the year ended 31 December 2018 was disaggregated under Thai Accounting Standard (TAS) 18, Revenue. Consequently, disaggregated revenue of the current and comparative year cannot be comparable. However, the comparative disaggregated revenue information is described in Note 3

Geographical information

In presenting geographical information, revenue is based on the geographical location of customers and fixed assets (Property, plant and equipment) are based on the geographical location of the assets.

As at 31 December	Sales and services income		Property, plant and equipment, net	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Thailand	26,304,849,572	24,793,155,364	28,803,498,067	30,011,910,656
Philippines	10,329,346,318	9,733,248,535	18,694,209,821	20,338,809,950
Australia	876,747,375	995,797,421	5,283,947,557	6,010,632,408
Total	37,510,943,265	35,522,201,320	52,781,655,445	56,361,353,014

The Group's main customer is a related party which arises from electricity generation totalling 61.70% of all the Group's revenue.

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7 Cash and cash equivalents

As at 31 December	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Cash in hand	1,665,796	1,541,258	10,037	10,037
Deposits held at call with financial institutions	2,209,307,224	3,493,677,499	18,317,846	196,974,045
Fixed deposits with financial institutions	571,649,635	26,495,337,907	-	-
Short-term investments in promissory notes with maturities within three months	17,704,925,272	4,886,073,239	4,008,056,988	2,725,251,392
Total cash and cash equivalents	20,487,547,927	34,876,629,903	4,026,384,871	2,922,235,474

As at 31 December 2019, the interest rates on deposits with financial institutions were 0.10% to 0.50% per annum (As at 31 December 2018: 0.10% to 0.75% per annum). The interest rates on short-term investments in promissory notes with maturities within three months were 0.75% to 2.00% per annum (As at 31 December 2018: 0.90% to 2.08% per annum).

8 Short-term investments

Separate financial statements

As at 31 December 2019, short-term investments are comprised of promissory notes with maturity over three months but not later than one year amounting to Baht 138 million. Short-term investments bear an interest rate 1.40% per annum (As at 31 December 2018: None).

Consolidated financial statements

As at 31 December 2019, short-term investments are comprised of promissory notes and investment in Government bond with maturity over three months but not later than one year amounting to US Dollar 0.08 million, Korean Won 17,040 million and Baht 319 million, totalling Baht 765 million. (As at 31 December 2018: US Dollar 0.07 million and Baht 99 million, totalling Baht 101 million). Short-term investments bear an interest rate from 1.35% to 1.80% per annum (As at 31 December 2018: interest rate from 1.10% to 3.41% per annum).

9 Short-term investments used as collateral

As at 31 December 2019, Short-term investments used as collateral are cash reserve for the purpose of repayment of principals and payment of interests due within one year amounting to Baht 1,952 million (As at 31 December 2018: Baht 2,591 million) and the remaining balances of Baht 1,981 million represented collateralised deposits maintained in accordance with the loan agreements (As at 31 December 2018: Baht 1,784 million). These cash reserves are provided from the proceeds of sales of electricity and could be used subject to certain lender approvals.

Short-term investments used as collateral are comprised of deposits at financial institutions, promissory notes and government bond amounting to US Dollar 16 million, Japanese Yen 128 million and Baht 3,425 million, totalling Baht 3,933 million (As at 31 December 2018: US Dollar 16 million, Japanese Yen 314 million and Baht 3,781 million, totalling Baht 4,375 million).

10 Trade receivables, net

As at 31 December	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Trade receivables	2,105,002,206	2,138,727,919	-	-
<u>Less</u> Allowance for doubtful accounts	(21,285,705)	(21,395,484)	-	-
Trade receivables, net	2,083,716,501	2,117,332,435	-	-

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Trade receivables as at 31 December can be analysed as follows:

	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Not overdue	2,052,160,617	2,040,588,280	-	-
Overdue below 3 months	-	8,363,203	-	-
Overdue 3 - 6 months	-	68,380,952	-	-
Overdue 6 - 12 months	-	-	-	-
Overdue over 12 months	52,841,589	21,395,484	-	-
	2,105,002,206	2,138,727,919	-	-
<u>Less</u> Allowance for doubtful accounts	(21,285,705)	(21,395,484)	-	-
Trade receivables, net	2,083,716,501	2,117,332,435	-	-

11 Fuel and spare parts and supplies, net

As at 31 December	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Fuel	921,003,452	1,326,840,808	-	-
Other specific spare parts	1,386,048,004	1,452,516,014	-	-
Common spare parts	905,660,424	938,214,610	3,832,526	3,832,526
Spare parts in transit	-	1,046,000	-	-
	3,212,711,880	3,718,617,432	3,832,526	3,832,526
<u>Less</u> Allowance for obsolescence	(678,792,376)	(714,449,090)	(3,832,526)	(3,419,488)
Fuel and spare parts and supplies, net	2,533,919,504	3,004,168,342	-	413,038

12 Other current assets

As at 31 December	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Withholding tax receivables	37,798,837	24,700,357	22,256,198	14,663,208
Value added tax receivables	440,171,506	587,666,677	17,305,992	10,334,912
Prepaid insurance premium	109,115,835	78,178,867	-	-
Accrued income	55,433,490	77,051,029	-	-
Interest receivables	22,892,589	19,934,804	4,589,149	8,805,424
Advanced payments for spare parts	15,711,784	95,018,427	-	-
Cross currency swap contract receivables	2,783,952	2,286,251	-	-
Interest rate swap contract receivables	39,564,212	21,984,510	2,547,768	21,984,510
Others	208,178,068	318,852,232	4,164,117	2,342,507
Total other current assets	931,650,273	1,225,673,154	50,863,224	58,130,561

Siraporn Anon

13 Investments in subsidiaries, associates and joint ventures

As at 31 December	Notes	Consolidated financial statements		Separate financial statements	
		2019 Baht	2018 Baht	2019 Baht	2018 Baht
Investments in subsidiaries		-	-	15,785,180,177	64,912,277,428
<u>Less</u> Allowance for impairment		-	-	(13,070,000)	(663,056,302)
Investments in subsidiaries, net	13.2	-	-	15,772,110,177	64,249,221,126
Investments in associates	13.3	14,573,577,102	14,381,824,053	3,357,625,000	3,197,133,625
Investments in joint ventures		73,003,702,531	41,554,497,037	31,842,963,101	27,195,336,100
<u>Less</u> Allowance for impairment		(296,549,767)	-	(4,410,000,000)	(1,580,000,000)
Investments in joint ventures, net	13.4	72,707,152,764	41,554,497,037	27,432,963,101	25,615,336,100
Total investments in subsidiaries, associates and joint ventures, net		87,280,729,866	55,936,321,090	46,562,698,278	93,061,690,851

13.1 The movements of the investments in subsidiaries, associates and joint ventures can be analysed as follows:

For the years ended 31 December	Notes	Consolidated financial statements	
		2019 Baht	2018 Baht
Opening net book value - previously reported		55,936,321,090	51,793,614,452
Retrospective adjustment from change in accounting policy	3	(89,507,347)	-
Opening net book value after adjustment - restated		55,846,813,743	51,793,614,452
Increase in share capital of an associate	13.1.2	160,491,375	-
Decrease in share capital of an associate	13.1.2	(60,273,867)	-
Additions of investment in joint ventures	13.1.3	4,590,413,995	2,390,648,257
Acquisitions of investment in joint ventures	13.1.3	28,669,864,168	-
Disposal of investment in a joint venture		-	(15,915,328)
Loss on dissolution of a joint venture		-	(34,484,286)
Impairment of investment in a joint venture	13.1.3	(296,549,767)	-
Share of profit from investments in associates and joint ventures, net		6,404,977,057	5,488,408,391
Share of other comprehensive income (expense) of associates and joint ventures accounted for using the equity method			
- Unrealised gain on investments in marketable securities-available-for-sale of a joint venture, net of income tax		5,265,873	3,681,256
- Remeasurements of post-employment benefit obligations, net of income tax		(3,493,773)	32,602,166
- Exchange difference on translation		(2,588,242,969)	(58,444,896)
Dividends received from joint ventures	13.5	(5,448,535,969)	(3,663,788,922)
Closing net book value		87,280,729,866	55,936,321,090

For the years ended 31 December	Notes	Separate financial statements	
		2019 Baht	2018 Baht
Opening net book value		93,061,690,851	93,161,553,403
Increase in share capital of a subsidiary		-	500,000,000
Increase in share capital of an associate	13.1.2	160,491,375	439,030,125
Increase in share capital of a joint venture	13.1.3	1,427,627,001	1,715,658,511
Acquisition of investment in a joint venture	13.1.3	3,220,000,000	-
Decrease in share capital of a subsidiary		-	(486,910,915)
Dissolution of a subsidiary	13.1.1	(48,477,110,949)	-
Disposal of investment in a joint venture		-	(24,583,971)
Impairment of investment in subsidiaries		-	(663,056,302)
Impairment of investment in a joint venture	13.1.3	(2,830,000,000)	(1,580,000,000)
Closing net book value		46,562,698,278	93,061,690,851

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13.1.1 The significant movement of the investments in subsidiaries during the year ended 31 December 2019:

Direct holding by the Company

North Pole Investment Company Limited (North Pole)

On 27 December 2018, North Pole was completely registered for the dissolution with Ministry of Finance and Economic Development of Republic of Mauritius. On 1 June 2019 and 17 June 2019, North Pole transferred note receivable issued by EGCO Plus amounting to Baht 49,094 million and cash amounting to US Dollar 0.795 million (equivalent to Baht 25 million) respectively to the Company in purpose of capital redemption of North Pole, totalling Baht 49,119 million. North Pole process of liquidation was completed on 1 October 2019. Therefore, the Company wrote off investment in North Pole, net of allowance for impairment, amounting to Baht 48,477 million in separate statement of financial position as at 31 December 2019 and recognised net gain on dissolution of a subsidiary amounting to Baht 642 million in separate statement of income for the year ended 31 December 2019.

13.1.2 The significant movement of the investments in associates during the year ended 31 December 2019:

Direct holding by the Company

Xayaburi Power Company Limited (XPCL)

During the year ended 31 December 2019, the Company paid for additional share capital in the same proportion as its original investment totalling Baht 160 million.

Indirect holding by the Company

Star Energy Geothermal Pte. Ltd. (SEG)

During the year ended 31 December 2019, SEG registered for capital reduction of US Dollar 10 Million (equivalent to Baht 301 million). The Group received cash in the same proportion as its original investment totalling US Dollar 2 million (equivalent to Baht 60 million).

13.1.3 The significant movement of the investments in joint ventures during the year ended 31 December 2019:

Direct holding by the Company

Thai Pipeline Network Company Limited (TPN)

On 4 September 2019, the Company and Biggas Technology Company Limited (BIGGAS) entered into the Share Purchase and Subscription Agreement to acquire 7,739,998 issued and paid-up ordinary shares of TPN from BIGGAS at Baht 2,902 million and subscribed for 3,185,000 new ordinary shares at a par value of Baht 100 per share, totalling Baht 318 million. As a result, the Company has a 44.6% shareholding interest in TPN and classified the investment in TPN as an investment in a joint venture. TPN is a limited company incorporated in Thailand that operates an oil transportation service business with a pipeline transportation system to the northeastern region and oil depot services.

On 25 September 2019, the Company and BIGGAS entered into the Shareholders Agreement. The Company also made a first payment for the acquisition of the investment amounting to Baht 1,662 million and fully paid for the new ordinary shares on the same date. However, the Company will make the final payment amounting to Baht 1,240 million to BIGGAS when BIGGAS completes all terms and conditions as specified in the Share Purchase and Subscription Agreement within 30 April 2020. The Company recognised a contingent purchase consideration of Baht 1,240 million as a payable for acquisition of investment in a joint venture under current liabilities in the consolidated and separate statement of financial position as at 31 December 2019.



The detail of purchase consideration and portion of net assets acquired at acquisition date are described below:

	Consolidated financial statements
	Million Baht
Portion of estimated fair value of net assets acquired	1,059
Purchase price over the estimated fair value of net assets ⁽¹⁾ (presented in investments in joint ventures)	2,161
Total purchase consideration	3,220
Purchase consideration consisted of	
- Consideration paid at acquisition date	1,980
- Contingent consideration (payable for acquisition of investment in a joint venture) ⁽²⁾	1,240
	3,220

- (1) As at 31 December 2019, the Company has been under the process of determining fair value of the acquired net assets and reviewing purchase price allocation (PPA). Therefore, the purchase price over the estimated fair value of net assets may be subject to further adjustments depending on the determination of fair value and the result of the PPA, which is expected to be finalised within 12 months from the acquisition date.
- (2) Contingent consideration of Baht 1,240 million is estimated based on estimated fair value of future payment as specified in the Share Purchase and Subscription Agreement.

Nam Theun 1 Power Company Limited (NT1PC)

During the year ended 31 December 2019, NT1PC called for payment on additional share capital. The Company paid for additional share capital in the same proportion as its original investment totalling US Dollar 47 million (equivalent to Baht 1,428 million).

BLCP Power Company Limited (BLCP)

The Company recognised loss on impairment amounting to Baht 2,830 million in separate statement of income for the year ended 31 December 2019 to decrease carrying amount of investment in BLCP to its recoverable amount which is determined based on value-in-use calculation. Management of the Company calculated value-in-use from discounted cash flow projection that covered the remaining Power Purchase Agreement (PPA) period.

Natural Energy Development Co., Ltd. (NED)

The Company recognised loss on impairment amounting to Baht 297 million in consolidated statement of income for the year ended 31 December 2019 to decrease carrying amount of investment in NED to its recoverable amount which is determined based on value-in-use calculation. Management of the Company calculated value-in-use from discounted cash flow projection that covered the remaining Power Purchase Agreement (PPA) period.

Indirect holding by the Company

Paju Energy Service Co., Ltd (Paju)

On 15 November 2018, the Group entered into the Share Purchase Agreement with SK E&S Co., Ltd. (the seller) to acquire a 49% shareholding interest in Paju, a company that operates a cogeneration power plant in South Korea, at a purchase consideration of Korean Won 896,668 million (equivalent to Baht 25,450 million). The acquisition was completed on 15 January 2019 and the Group made a full payment to the seller on the same date.



The detail of investment is described below:

	Consolidated financial statements
	Million Baht
Portion of estimated fair value of net assets acquired	9,571
Licence for operating power plant (presented in investments in joint ventures)	10,681
Favourable contract assets (presented in investments in joint ventures)	3,853
Goodwill (presented in investments in joint ventures)	1,345
Total purchase consideration	25,450

Licence for operating power plant is amortised by straight-line method over the useful life of power plant and favourable contract assets are amortised based on unit of liquefied natural gas used in electricity generation.

San Buenaventura Power Ltd., Co. (SBPL)

During the year ended 31 December 2019, SBPL called for payment on additional share capital and the Group paid for additional share capital in the same proportion as its original investment totalling Peso 5,274 million (equivalent to Baht 3,151 million).

E&E Engineering and Service Co., Ltd. (E&E)

On 8 August 2018, the Group entered into the Shareholders' Agreement with EDL-GEN Operation and Maintenance Service Sole Company Limited (EDL-Gen O&M) to establish E&E to provide operating and maintenance services to Nam Theun 1 Hydropower Plant Project and other services in Lao People's Democratic Republic. The Group has an indirect portion of 40% in E&E. In addition, E&E was completely established on 15 November 2018. However, as at 31 December 2018, E&E did not call for its registered share capital.

On 17 May 2019 and 24 October 2019, E&E called for its registered share capital in the same proportion as its original investment totalling Laos Kip 2,240 million (equivalent to Baht 8 million) and Laos Kip 960 million (equivalent to Baht 4 million), respectively. As at 31 December 2019, the Group fully paid for such share capital.



13.2 Investments in subsidiaries

The details of the investments in subsidiaries are as follows:

Business	Separate financial information									
	Portion of ordinary shares directly held by parent		Portion of ordinary shares held by the Group		Cost Method		Dividend income			
	2019 %	2018 %	2019 %	2018 %	2019 Million Baht	2018 Million Baht	2019 Million Baht	2018 Million Baht	2019 Million Baht	2018 Million Baht
Subsidiaries incorporated in Thailand										
Khanom Electricity Generating Co., Ltd.	99.99	99.99	-	-	-	8,005	8,005	1,447	940	
EGCO Engineering and Service Co., Ltd.	99.99	99.99	-	-	-	400	400	74	171	
EGCO Green Energy Co., Ltd.	74.00	74.00	-	-	-	129	129	-	13	
- Roi-EI Green Co., Ltd.	-	-	95.00	95.00	-	-	-	-	-	
EGCO Cogeneration Co., Ltd.	80.00	80.00	-	-	-	892	892	248	180	
Theppana Wind Farm Co., Ltd.	90.00	90.00	-	-	-	150	150	-	-	
SPP Two Co., Ltd.	99.99	99.99	-	-	-	266	266	28	35	
SPP Three Co., Ltd.	99.99	99.99	-	-	-	301	301	29	20	
SPP Four Co., Ltd.	99.99	99.99	-	-	-	224	224	19	3	
SPP Five Co., Ltd.	99.99	99.99	-	-	-	371	371	41	58	
Yanhee EGCO Holding Co., Ltd.	100.00	100.00	-	-	-	5	5	404	199	
- Solarco Co., Ltd.	-	-	99.98	99.98	-	-	-	-	-	
Klongluang Utilities Co., Ltd.	99.99	99.99	-	-	-	1,000	1,000	-	-	
Banpong Utilities Co., Ltd.	99.99	99.99	-	-	-	2,000	2,000	326	-	
Chaiyaphum Wind Farm Co., Ltd.	90.00	90.00	-	-	-	1,532	1,532	-	-	

		Separate financial information									
		Portion of ordinary shares directly held by parent		Portion of ordinary shares held by the Group		Cost Method		Dividend income			
Business		2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
		%	%	%	%	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht
Investment in energy related business	North Pole Investment Company Limited (North Pole) (incorporated in the Republic of Mauritius)	-	100.00	-	-	-	49,127	-	-	-	-
Investment in energy related business	EGCO Plus Co., Ltd. (EGCO Plus) (incorporated in Thailand)	100.00	100.00	-	-	510	510	-	-	1,661	-
Investment in energy related business	- New Growth Plus B.V. (incorporated in the Netherlands)	-	-	100.00	-	-	-	-	-	-	-
Investment in energy related business	- Gen Plus B.V. (incorporated in the Netherlands)	-	-	100.00	-	-	-	-	-	-	-
Investment in energy related business	- Phoenix Power B.V. (incorporated in the Netherlands)	-	-	100.00	-	-	-	-	-	-	-
Investment in energy related business	- Millennium Energy B.V. (incorporated in the Netherlands)	-	-	100.00	-	-	-	-	-	-	-
Investment in energy related business	- South Pacific Power Pty Limited (incorporated in Australia)	-	-	100.00	-	-	-	-	-	-	-
Wind electricity generation plant	- Boco Rock Wind Farm Pty Ltd (incorporated in Australia)	-	-	100.00	-	-	-	-	-	-	-
Investment in energy related business	- New Growth B.V. (incorporated in the Netherlands)	-	-	100.00	-	-	-	-	-	-	-
Investment in energy related business	- Evergreen Power Ventures B.V. (incorporated in the Netherlands)	-	-	100.00	-	-	-	-	-	-	-
Investment in energy related business	- Pearl Energy Philippines Operating, Inc. (PEPOI) (incorporated in Cayman Islands, migrated to the Netherlands and operated in the Philippines)	-	-	100.00	-	-	-	-	-	-	-
Power plant operation and maintenance services	- Quezon Power, Inc. (QPI) (incorporated in Cayman Islands, migrated to the Netherlands and operated in the Philippines)	-	-	100.00	-	-	-	-	-	-	-
Investment in energy related business	- Electricity generation	-	-	100.00	-	-	-	-	-	-	-
Investment in energy related business	- Management services	-	-	100.00	-	-	-	-	-	-	-
Investment in energy related business	- Investment in energy related business	-	-	100.00	-	-	-	-	-	-	-
Investment in energy related business	- Investment in energy related business	-	-	100.00	-	-	-	-	-	-	-
Investment in energy related business	- Investment in energy related business	-	-	100.00	-	-	-	-	-	-	-
Investment in energy related business	- Investment in energy related business	-	-	100.00	-	-	-	-	-	-	-
Investment in energy related business	- Investment in energy related business	-	-	100.00	-	-	-	-	-	-	-
	Total investments in subsidiaries					15,785	64,912	4,277	-	4,277	1,619
	Less: Allowance for impairment (Note 13.1.1)					(13)	(663)	-	-	-	-
	Total investments in subsidiaries, net					15,772	64,249	4,277	-	4,277	1,619



Singaporean company

All subsidiaries undertakings are included in the consolidation. The proportion of the voting rights in the subsidiary undertakings held directly by the parent company do not differ from the proportion of ordinary shares held. The parent company further does not have any shareholdings in the preference shares of subsidiary undertaking included in the Group.

As at 31 December 2019 and 2018, under the terms and conditions of loan agreement, the common share were pledged as collateral for its long-term loans in each subsidiary.

- Khanom Electricity Generating Co., Ltd.
- Solarco Co., Ltd.
- Chaiyaphum Wind Farm Co., Ltd.
- Klongluang Utilities Co., Ltd.
- Banpong Utilities Co., Ltd.

As at 31 December 2019 and 2018, total non-controlling interest is immaterial.

As at 31 December 2019 and 2018, dividends receivables from subsidiaries amounting to Baht 227 million were recognised in the separate financial statements.



13.3 Investments in associates

The details of investments in associates are as follows:

Consolidated financial statements										
Business	Portion of ordinary shares held by the Group		Cost Method		Equity Method		Dividend income			
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
	%	%	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht
	12.50	12.50	3,357	3,197	3,502	3,197	-	-	-	-
Hydropower electricity generation										
	20.00	20.00	6,557	6,617	7,250	7,350	-	-	-	-
Investment in geothermal energy power plant business										
	20.07 ^(b)	20.07 ^(b)	3,506	3,506	3,822	3,835	-	-	-	-
Investment in geothermal energy power plant business										
Total investments in associates			13,420	13,320	14,574	14,382	-	-	-	-
Separate financial statements										
Business	Portion of ordinary shares held by the Company		Cost Method		Dividend income					
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
	%	%	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht
	12.50	12.50	3,357	3,197	3,197	-	-	-	-	-
Hydropower electricity generation										
Total investments in associates			3,357	3,197	3,197	-	-	-	-	-

Associate incorporated in the Lao People's Democratic Republic
Xayaburi Power Company Limited (XPCL)^(a)

Associate incorporated in the Republic of Indonesia
Star Energy Geothermal Pte. Ltd. (SEG) and its subsidiaries

Associate incorporated in the Netherlands
Star Energy Geothermal (Salak - Darajat) B.V. (SEGSD) and its subsidiaries

Total investments in associates

Associate incorporated in the Lao People's Democratic Republic
Xayaburi Power Company Limited (XPCL)^(a)

Total investments in associates

^(a) The Company reclassified the investment in Xayaburi Power Company Limited (XPCL) from other long-term investments to investment because of the significant influence of the Company in XPCL through the director appointed as the Company's representative. However, the reclassification does not have significant impact on the consolidated and separate financial statements.

^(b) The Group has invested 11.89% in Star Phoenix Geothermal JV B.V. (SPGJV), which is an associate of Phoenix Power B.V., and invested more 8.18% through SEG. As a result, the Group has indirect holding 20.07% in SEGSD.

^(c) All associates are the limited companies and there is no quoted market price for all shares of associates. The Group has no contingent liability related to the Group's interests in associates.

Summarised financial information for associates

The Group also has interests in immaterial associates that are accounted for using the equity method as follow:

	2019 Million Baht	2018 Million Baht
Aggregate carrying amount of individually immaterial associates	14,574	14,382
Aggregate amounts of associates' share of:		
Net profit	873	657
Other comprehensive expense	(722)	(27)
Total comprehensive income	151	630

Siraporn Chaiyaporn

13.4 Investments in joint ventures

The details of investments in joint ventures are as follows:

Consolidated financial statements									
Business	Portion of ordinary shares held by the Group		Cost Method		Equity Method		Dividend Income		2018 Million Baht
	2019 %	2018 %	2019 Million Baht	2018 Million Baht	2019 Million Baht	2018 Million Baht	2019 Million Baht	2018 Million Baht	
Joint ventures incorporated in Thailand									
Gulf Electric Public Co., Ltd. (GEC) and its subsidiaries	50.00	50.00	6,673	6,673	14,291	14,055	1,075	1,461	
BLCP Power Ltd. (BLCP)	50.00	50.00	10,434	10,434	5,104	6,741	2,002	1,050	
Natural Energy Development Co., Ltd. (NED)	66.67*	66.67*	1,961	1,961	2,836	2,563	357	340	
G-Power Source Co., Ltd. (GPS)	60.00*	60.00*	734	734	944	874	73	76	
Thai Pipeline Network Company Limited (TPN)	44.60*	-	3,220	-	3,220	-	-	-	
Joint ventures incorporated in the Philippines									
Kaillayan Power Inc. (KPI)	49.00*	49.00*	2	2	-	1	-	-	
San Buenaventura Power Ltd., Co. (SBPL)	49.00*	49.00*	4,454	1,303	4,411	1,113	-	-	
Joint ventures incorporated in the Lao People's Democratic Republic									
Nam Theun 1 Power Company Limited (NT1PC)	25.00*	25.00*	3,251	1,824	3,066	1,884	-	-	
Nam Theun 2 Power Company Limited (NT2PC)	35.00*	35.00*	5,570	5,570	8,915	8,471	443	710	
E&E Engineering and Service Co., Ltd (E&E)	40.00*	-	12	-	10	-	-	-	
Joint venture incorporated in the Republic of Indonesia									
PT Manambang Muara Enim (MME)	40.00*	40.00*	6,029	6,029	5,802	5,852	-	27	
Joint venture incorporated in Republic of Korea									
Paju Energy Service Co., Ltd (Paju)	49.00*	-	25,450	-	24,405	-	1,499	-	
Total investments in joint ventures			67,790	34,530	73,004	41,554	5,449	3,664	
Less Allowance for impairment			(4,410)	(1,580)	(297)	-	-	-	
Total investments in joint ventures, net			63,380	32,950	72,707	41,554	5,449	3,664	

Separate financial statements						
Business	Portion of ordinary shares held by the Company		Cost Method		Dividend income	
	2019	2018	2019	2018	2019	2018
	%	%	Million Baht	Million Baht	Million Baht	Million Baht
Joint ventures incorporated in Thailand						
Gulf Electric Public Co., Ltd. (GEC) and its subsidiaries	50.00	50.00	6,673	6,673	1,075	1,461
BLCP Power Ltd. (BLCP)	50.00	50.00	10,434	10,434	2,002	1,050
Natural Energy Development Co., Ltd. (NED)	66.67*	66.67*	1,961	1,961	357	340
G-Power Source Co., Ltd. (GPS)	60.00*	60.00*	734	734	73	76
Thai Pipeline Network Company Limited (TPN)	44.60*	-	3,220	-	-	-
Joint ventures incorporated in the Lao People's Democratic Republic						
Nam Theun 1 Power Company Limited (NT1PC)	25.00*	25.00*	3,251	1,823	-	-
Nam Theun 2 Power Company Limited (NTPC)	35.00*	35.00*	5,570	5,570	443	710
Total investments in joint ventures			31,843	27,195	3,950	3,637
Less: Allowance for impairment			(4,410)	(1,580)	-	-
Total investments in joint ventures, net			27,433	25,615	3,950	3,637

* Shareholder Agreements assigned the structure of the business operation and the strategic, operating and financing decisions which required unanimous consent from all parties.

There is no quoted market price for all shares of joint ventures. The Group has no contingent liability related to the group's interest in joint ventures.

As at 31 December 2019 and 2018, under the terms and conditions of loan agreements of GPS, their common shares were pledged as collateral for their long-term loans.

As at 31 December 2019 and 2018, dividends receivable from joint ventures amounting to Baht 813 million and Baht 7,307 million, respectively, were recognised in the consolidated and separate financial statements.

Summarised financial information for joint ventures

13.4.1 Individually material 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 amounting 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 accounting policies are as follows:

Summarised statement of financial position

As at 31 December	GEC and its subsidiaries		NTPC		PAJU		Total	
	2019 Million Baht	2018 Million Baht	2019 Million Baht	2018 Million Baht	2019 Million Baht	2018 Million Baht	2019 Million Baht	2018 Million Baht
Current								
Cash and cash equivalents	4,145	3,265	259	321	6,297	-	10,701	3,586
Other current assets	7,347	7,612	3,867	3,420	5,905	-	17,119	11,032
Total current assets	11,492	10,877	4,126	3,741	12,202	-	27,820	14,618
Current financial liabilities								
Other current liabilities	(867)	(1,116)	(4,374)	(4,074)	(1,114)	-	(6,355)	(5,190)
Total current liabilities	(1,169)	(1,342)	(453)	(395)	(3,670)	-	(5,292)	(1,737)
Non-current								
Non-current assets	19,946	21,448	30,094	33,445	75,284	-	125,324	54,893
Non-current financial liabilities	-	(609)	(2,597)	(7,197)	(26,336)	-	(28,933)	(7,806)
Other non-current liabilities	(820)	(1,147)	(1,326)	(1,318)	(9,304)	-	(11,450)	(2,465)
Total non-current liabilities	(820)	(1,756)	(3,923)	(8,515)	(35,640)	-	(40,383)	(10,271)
Net assets	28,582	28,111	25,470	24,202	47,062	-	101,114	52,313

Summarised statement of comprehensive income

For the years ended 31 December	GEC and its subsidiaries			NTPC			PAJU			Total		
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht
Revenue	13,851	13,605	8,271	8,836	32,488	-	54,610	-	54,610	-	22,441	22,441
Depreciation and amortisation	(798)	(1,070)	(1,338)	(1,380)	(3,026)	-	(5,162)	-	(5,162)	-	(2,450)	(2,450)
Interest income	91	77	41	25	92	-	224	-	224	-	102	102
Interest expense	(78)	(157)	(720)	(1,017)	(743)	-	(1,541)	-	(1,541)	-	(1,174)	(1,174)
Profit before income tax	3,258	3,606	4,352	4,717	3,438	-	11,048	-	11,048	-	8,323	8,323
Income tax expense	(647)	(776)	(228)	(211)	(932)	-	(1,807)	-	(1,807)	-	(987)	(987)
Net profit	2,611	2,830	4,124	4,506	2,506	-	9,241	-	9,241	-	7,336	7,336
Other comprehensive income (expense)	10	7	(1,591)	(118)	(1,579)	-	(3,160)	-	(3,160)	-	(111)	(111)
Total comprehensive income	2,621	2,837	2,533	4,388	927	-	6,081	-	6,081	-	7,225	7,225
Dividends received from joint ventures	2,150	2,922	1,266	2,028	3,059	-	6,475	-	6,475	-	4,950	4,950

Reconciliation of the summarised financial information

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

Summarised financial information	GEC and its subsidiaries			NTPC			PAJU			Total		
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht
Opening net assets	28,111	28,196	24,203	21,842	-	-	52,314	-	52,314	-	50,038	50,038
Net assets at acquisition date	-	-	-	-	49,194	-	49,194	-	49,194	-	-	-
Net profit	2,611	2,830	4,124	4,506	2,506	-	9,241	-	9,241	-	7,336	7,336
Other comprehensive income (expense)	10	7	(1,591)	(118)	(1,579)	-	(3,160)	-	(3,160)	-	(111)	(111)
Dividends	(2,150)	(2,922)	(1,266)	(2,028)	(3,059)	-	(6,475)	-	(6,475)	-	(4,950)	(4,950)
Closing net assets	28,582	28,111	25,470	24,202	47,062	-	101,114	-	101,114	-	52,313	52,313
Group's share in joint ventures (%)	50.00	50.00	35.00	35.00	49.00	-	-	-	-	-	-	-
Group's share in joint ventures	14,291	14,055	8,915	8,471	23,060	-	46,266	-	46,266	-	22,526	22,526
Goodwill	-	-	-	-	1,345	-	1,345	-	1,345	-	-	-
Joint ventures' carrying amount	14,291	14,055	8,915	8,471	24,405	-	47,611	-	47,611	-	22,526	22,526

13.4.2 Individually immaterial joint ventures

In addition to the interests in joint ventures disclosed above, the Group also has interests in a number of individually immaterial joint ventures that are accounted for using the equity method are as follows:

	2019 Million Baht	2018 Million Baht
Aggregate carrying amount of individually immaterial joint ventures	25,096	19,028
Aggregate amounts of the Group's share of:		
Net profit	1,555	1,839
Other comprehensive income (expense)	(539)	42
Total comprehensive income	1,016	1,881

13.5 Dividends receivable from subsidiaries and joint ventures

The movements of the dividends receivable can be analysed as follows:

	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Opening balance	7,306,566,413	8,020,898,263	7,533,474,125	8,247,805,975
Dividends declared by subsidiaries	-	-	4,277,093,501	1,618,814,560
Dividends declared by joint ventures	5,448,535,969	3,663,788,922	3,949,500,567	3,636,317,005
Dividends received from subsidiaries and joint ventures	(11,942,565,979)	(4,378,120,772)	(13,060,337,300)	(5,969,463,415)
Net of dividends received from a subsidiary with				
- Principal repayment of the Company	-	-	(283,013,231)	-
- Interest repayment of the Company	-	-	(562,656,546)	-
- Payment on additional share capital of a joint venture	-	-	(814,617,001)	-
Closing balance	812,536,403	7,306,566,413	1,039,444,115	7,533,474,125
Current portion	-	306,232,048	-	306,232,048
Non-current portion	812,536,403	7,000,334,365	1,039,444,115	7,227,242,077
Total dividends receivable from subsidiaries and joint ventures	812,536,403	7,306,566,413	1,039,444,115	7,533,474,125

14 Investment property, net

As at 31 December	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Book value	519,210,182	448,602,691	719,908,547	669,885,990
Fair value	961,227,225	941,621,925	1,202,965,041	1,183,901,333

As at 31 December 2019, investment property of the Group amounting to Baht 519 million are land held for a currently undetermined future use or land and building held for rent of a third party (2018: Baht 449 million). Investment property of the Company amounting to Baht 221 million is land for rent of a subsidiary (2018: Baht 221 million).



15 Property, plant and equipment, net

		Consolidated financial statements					Total
		Land	Buildings and land improvements	Power plants, substation, transmission system and spare parts	Office equipment, furniture, computers and motor vehicles	Construction in progress	Baht
		Baht	Baht	Baht	Baht	Baht	Baht
As at 1 January 2018							
Cost		1,693,957,209	6,220,431,767	75,953,750,279	689,971,932	737,905,890	85,296,017,077
Less: Accumulated depreciation		-	(2,269,032,193)	(19,952,938,562)	(511,969,145)	-	(22,733,939,900)
Less: Allowance for impairment		-	(84,359,973)	(754,166,796)	-	-	(838,526,769)
Net book value		1,693,957,209	3,867,039,601	55,246,644,921	178,002,787	737,905,890	61,723,550,408
For the year ended 31 December 2018							
Opening net book value		1,693,957,209	3,867,039,601	55,246,644,921	178,002,787	737,905,890	61,723,550,408
Additions		-	9,677,832	132,451,642	18,493,013	214,091,404	374,713,891
Disposals, net		-	-	(163,187,775)	(1,379,092)	-	(164,566,867)
Write-offs, net		-	(152,072)	(274,633,120)	(264,359)	(12,660)	(275,062,211)
Transfer, net		-	186,847,321	614,037,160	(4,307,344)	(796,577,137)	-
Transfer to intangible asset		-	-	-	-	(7,584,000)	(7,584,000)
Decrease in decommissioning costs		-	-	(100,568,279)	-	-	(100,568,279)
Depreciation		-	(186,527,226)	(2,434,267,207)	(55,149,444)	-	(2,675,943,877)
Allowance for impairment of assets		-	-	(1,616,776,496)	-	-	(1,616,776,496)
Exchange difference on translation		-	(16,681,785)	(872,074,208)	1,073,391	(8,726,953)	(896,409,555)
Closing net book value		1,693,957,209	3,860,203,671	50,531,626,638	136,468,952	139,096,544	56,361,353,014
As at 31 December 2018							
Cost		1,693,957,209	6,375,153,875	74,424,587,001	654,377,031	139,096,544	83,287,171,660
Less: Accumulated depreciation		-	(2,430,590,231)	(21,526,488,615)	(517,908,079)	-	(24,474,986,925)
Less: Allowance for impairment		-	(84,359,973)	(2,366,471,748)	-	-	(2,450,831,721)
Net book value		1,693,957,209	3,860,203,671	50,531,626,638	136,468,952	139,096,544	56,361,353,014

	Consolidated financial statements					Total Baht
	Land Baht	Buildings and land improvements Baht	Power plants, substation, transmission system and spare parts Baht	Office equipment, furniture, computers and motor vehicles Baht	Construction in progress Baht	
As at 1 January 2019						
Cost	1,693,957,209	6,375,153,875	74,424,587,001	654,377,031	139,096,544	83,287,171,660
Less: Accumulated depreciation	-	(2,430,590,231)	(21,526,488,615)	(517,908,079)	-	(24,474,986,925)
Less: Allowance for impairment	-	(84,359,973)	(2,366,471,748)	-	-	(2,450,831,721)
Net book value	1,693,957,209	3,860,203,671	50,531,626,638	136,468,952	139,096,544	56,361,353,014
For the year ended 31 December 2019						
Opening net book value	1,693,957,209	3,860,203,671	50,531,626,638	136,468,952	139,096,544	56,361,353,014
Additions	-	13,456,156	235,806,248	20,594,351	61,627,573	331,484,328
Disposals, net	-	-	(2,378,153)	(792,238)	-	(3,170,391)
Write-offs, net	-	-	(313,166)	(38,643)	(68,640)	(420,449)
Transfer, net	(16,889,050)	107,667,898	40,056,504	17,217,200	(164,941,602)	-
Transfer to investment property, net	-	(4,731,981)	-	-	-	(21,621,031)
Increase in decommissioning costs	-	-	602,268,487	-	-	602,268,487
Depreciation	-	(166,413,827)	(2,375,485,163)	(51,727,350)	-	(2,593,626,340)
Allowance for impairment of assets	-	-	(3,576,015)	-	-	(3,576,015)
Exchange difference on translation	-	(148,331,013)	(1,740,291,901)	(871,072)	(1,542,172)	(1,891,036,158)
Closing net book value	1,677,068,159	3,661,850,904	47,287,713,479	120,851,200	34,171,703	52,781,655,445
As at 31 December 2019						
Cost	1,677,068,159	6,208,024,555	72,615,139,733	631,086,824	34,171,703	81,165,490,974
Less: Accumulated depreciation	-	(2,461,813,678)	(22,970,715,331)	(510,235,624)	-	(25,942,764,633)
Less: Allowance for impairment	-	(84,359,973)	(2,356,710,923)	-	-	(2,441,070,896)
Net book value	1,677,068,159	3,661,850,904	47,287,713,479	120,851,200	34,171,703	52,781,655,445

As at 1 January 2019

Cost
Less: Accumulated depreciation
Less: Allowance for impairment

Net book value

For the year ended 31 December 2019

Opening net book value
Additions
Disposals, net
Write-offs, net
Transfer, net
Transfer to investment property, net
Increase in decommissioning costs
Depreciation
Allowance for impairment of assets
Exchange difference on translation

Closing net book value

As at 31 December 2019

Cost
Less: Accumulated depreciation
Less: Allowance for impairment

Net book value

		Separate financial statements						
		Land Baht	Buildings and land improvements Baht	Power plants, substation, spare parts and transmission system Baht	Office equipment, furniture, computers and motor vehicles Baht	Construction in progress Baht	Total Baht	
As at 1 January 2018								
Cost		189,041,766	910,507,734	4,907,325,084	313,496,793	40,981,438	6,361,352,815	
Less: Accumulated depreciation		-	(752,915,295)	(3,261,921,386)	(241,628,862)	-	(4,256,465,543)	
Less: Allowance for impairment		-	(84,359,973)	(420,462,952)	-	-	(504,822,925)	
Net book value		189,041,766	73,232,466	1,224,940,746	71,867,931	40,981,438	1,600,064,347	
For the year ended 31 December 2018								
Opening net book value		189,041,766	73,232,466	1,224,940,746	71,867,931	40,981,438	1,600,064,347	
Additions		-	85,000	-	7,820,662	69,295,875	77,201,537	
Disposals, net		-	-	(19)	(46,353)	-	(46,372)	
Write-offs, net		-	-	(11)	(49,744)	-	(49,755)	
Transfer, net		-	-	-	126,355	(126,355)	-	
Depreciation		-	(34,362,932)	(384,000)	(22,891,141)	-	(57,638,073)	
Allowance for impairment of assets		-	-	(913,520,903)	-	-	(913,520,903)	
Closing net book value		189,041,766	38,954,534	311,035,813	56,827,710	110,150,958	706,010,781	
As at 31 December 2018								
Cost		189,041,766	910,592,734	4,903,614,531	259,633,862	110,150,958	6,373,033,851	
Less: Accumulated depreciation		-	(787,278,227)	(3,258,594,863)	(202,806,152)	-	(4,248,679,242)	
Less: Allowance for impairment		-	(84,359,973)	(1,333,983,855)	-	-	(1,418,343,828)	
Net book value		189,041,766	38,954,534	311,035,813	56,827,710	110,150,958	706,010,781	

Separate financial statements						
	Land Baht	Buildings and land improvements Baht	Power plants, substation, spare parts and transmission system Baht	Office equipment, furniture, computers and motor vehicles Baht	Construction in progress Baht	Total Baht
As at 1 January 2019						
Cost	189,041,766	910,592,734	4,903,614,531	259,633,862	110,150,958	6,373,033,851
Less: Accumulated depreciation	-	(787,278,227)	(3,258,594,863)	(202,806,152)	-	(4,248,679,242)
Less: Allowance for impairment	-	(84,359,973)	(1,333,983,855)	-	-	(1,418,343,828)
Net book value	189,041,766	38,954,534	311,035,813	56,827,710	110,150,958	706,010,781
For the year ended 31 December 2019						
Opening net book value	189,041,766	38,954,534	311,035,813	56,827,710	110,150,958	706,010,781
Additions	-	2,965,000	-	12,208,326	46,678,746	61,852,072
Disposals, net	-	-	(110,574)	(503,102)	-	(613,676)
Write-offs, net	-	-	(10)	(28,418)	-	(28,428)
Transfer, net	-	107,118,998	-	17,030,000	(124,148,998)	-
Depreciation	-	(16,197,105)	(273,730)	(23,506,148)	-	(39,976,983)
Closing net book value	189,041,766	132,841,427	310,651,499	62,028,368	32,680,706	727,243,766
As at 31 December 2019						
Cost	189,041,766	1,020,676,732	4,873,672,154	246,936,899	32,680,706	6,363,008,257
Less: Accumulated depreciation	-	(803,475,332)	(3,229,036,800)	(184,908,531)	-	(4,217,420,663)
Less: Allowance for impairment	-	(84,359,973)	(1,333,983,855)	-	-	(1,418,343,828)
Net book value	189,041,766	132,841,427	310,651,499	62,028,368	32,680,706	727,243,766

During the year ended 31 December 2019 and 2018, the Group has no borrowing costs capitalised as part of the cost of assets in additions.

As at 31 December 2019, management is currently searching for purchaser in the offering of ceased power plant of the Company. In 2018, the Company recognised impairment loss for such power plant in consolidated and separate financial statements at recoverable amount assessed by independent valuer on fair value less cost to sell method.

As at 31 December 2019, property, plant and equipment with net book value of Baht 63,561 million (including property, plant and equipment reclassified as lease receivable under power purchase agreement amounting to Baht 15,797 million) were mortgaged and pledged as collateral for long-term loans, as described in Note 21.1 (2018: Baht 69,244 million).

16 Intangible assets, net

	Consolidated financial statements		
	Right in long-term power purchase agreements and right to use transmission facilities Baht	Licences for operating power plants Baht	Total Baht
As at 1 January 2018			
Cost	7,217,165,258	295,655,717	7,512,820,975
<u>Less</u> Accumulated amortisation	(2,619,068,638)	(52,361,308)	(2,671,429,946)
Net book value	4,598,096,620	243,294,409	4,841,391,029
For the year ended 31 December 2018			
Opening net book value	4,598,096,620	243,294,409	4,841,391,029
Additions	8,755,800	-	8,755,800
Transfer	7,584,000	-	7,584,000
Amortisation	(473,643,308)	(15,505,946)	(489,149,254)
Exchange difference on translation	(2,423,602)	(18,963,909)	(21,387,511)
Closing net book value	4,138,369,510	208,824,554	4,347,194,064
As at 31 December 2018			
Cost	7,109,220,325	270,838,711	7,380,059,036
<u>Less</u> Accumulated amortisation	(2,970,850,815)	(62,014,157)	(3,032,864,972)
Net book value	4,138,369,510	208,824,554	4,347,194,064
For the year ended 31 December 2019			
Opening net book value	4,138,369,510	208,824,554	4,347,194,064
Additions	2,907,000	-	2,907,000
Amortisation	(458,072,282)	(14,201,579)	(472,273,861)
Allowance for impairment of assets	(249,590,672)	-	(249,590,672)
Exchange difference on translation	(12,585,844)	(12,121,309)	(24,707,153)
Closing net book value	3,421,027,712	182,501,666	3,603,529,378
As at 31 December 2019			
Cost	7,100,966,543	254,035,954	7,355,002,497
<u>Less</u> Accumulated amortisation	(3,430,348,159)	(71,534,288)	(3,501,882,447)
<u>Less</u> Allowance for impairment	(249,590,672)	-	(249,590,672)
Net book value	3,421,027,712	182,501,666	3,603,529,378

The Group recognised impairment loss for right in long-term power purchase agreements of subsidiaries that operate solar electricity generation plant totalling Baht 250 million in consolidated financial statements for the year ended 31 December 2019 to decrease carrying amount of right in long-term power purchase agreements to its recoverable amount which is determined based on value-in-use calculation. The cash flow projection decreased from decreasing in unit price of electricity revenues. The Group's management calculated value-in-use from discounted cash flow projection that covered the remaining Power Purchase Agreement (PPA) period.

Suraporn Anon

17 Goodwill, net

	Consolidated financial statements	
	2019 Baht	2018 Baht
As at 1 January		
Cost	10,011,800,065	10,011,800,065
<u>Less</u> Provision for impairment	(1,851,816,296)	(504,816,296)
Net book value	8,159,983,769	9,506,983,769
For the years ended 31 December		
Opening net book value	8,159,983,769	9,506,983,769
Impairment loss	(61,049,954)	(1,347,000,000)
Closing net book value	8,098,933,815	8,159,983,769
As at 31 December		
Cost	10,011,800,065	10,011,800,065
<u>Less</u> Provision for impairment	(1,912,866,250)	(1,851,816,296)
Net book value	8,098,933,815	8,159,983,769

Goodwill arose from the acquisitions of electricity generation business in Thailand and foreign countries. The Group's management considers the business in each country as a cash generating unit (CGU). Goodwill of Baht 9,725 million arising from the acquisition of investment in electricity generation business in the Philippines and remaining of Baht 287 million arising from the acquisition of investment in electricity generation business in Thailand.

Goodwill arose from the acquisition of investment in electricity generation business in each country is tested annually for impairment by comparing the carrying amount to the recoverable amount for each CGU. The recoverable amount is calculated based on value-in-use model by using cash flow projection over periods of Power Purchase Agreements in each country and the electricity tariffs and assumed capacity of the power plant specified in the agreements.

Majority of goodwill amounting to Baht 9,725 million, net of allowance for impairment Baht 1,830 million related to the acquisition of the electricity generation businesses in Philippines (Quezon Power (Philippines), Limited Co.). The recoverable amount calculated based on value-in-use model which exceeded carrying value by Baht 3,138 million. These calculations use a cash flow projection covering the remaining Power Purchase Agreement period for 6 years. The cash flows beyond the 6 year-period are extrapolated based on the market price of electricity tariffs and the assumed capacity of the power plant which approved by the management. The discount rate used in the calculation is 6.10% per annum. A rise in discount rate of 0.86% will be resulted the recoverable amount to be equal to the carrying amount.

However, the Group recognised the impairment loss on goodwill, which arose from the acquisition of electricity generation business in Thailand, amounting to Baht 61.5 million as part of administrative expenses in the consolidated statement of income for the year ended 31 December 2019. The recoverable amount was calculated based on value-in-use model by using a cash flow projection covering the remaining Power Purchase Agreement period for 18 years. The cash flow projection is based on the assumed capacity of the power plants and electricity tariffs specified in the Power Purchase Agreements which approved by management. The discount rate used in the calculation was 5.25% per annum.

18 Other non-current assets**Consolidated financial statements**

During the year ended 31 December 2019, the Group completed the acquisition of investment in Paju. As a result, the Group reclassified an advance payment for investment of Korean Won 84,769 million (equivalent to Baht 2,428 million) to investment in a joint venture as the details described in Note 13.1.3.



19 Short-term loans from financial institutions

19.1 Remaining balance of short-term loans from financial institutions

As at 31 December	Consolidated financial statements	
	2019 Baht	2018 Baht
US Dollar	37,580,625	121,365,000
Total short-term loans from financial institutions	37,580,625	121,365,000

The movement of the short-term loans from financial institutions for the year ended 31 December 2019 can be analysed as follows:

	Consolidated financial statements	
	2019 Baht	2018 Baht
Opening book value	121,365,000	1,150,000,000
Cash flows		
Proceeds from short-term loans	3,235,241,533	3,393,645,067
Payments on short-term loans	(3,313,028,758)	(4,427,983,750)
Other non-cash movement		
Exchange difference on translation	(5,997,150)	5,703,683
Closing book value	37,580,625	121,365,000

Short-term loans of the subsidiaries are unsecured loan from the financial institutions.

19.2 Credit facilities

As at 31 December 2019, the Group had the available credit facilities from short-term loans from financial institutions amounting to Baht 6,582 million and US Dollar 19 million in which an available credit facilities for the Company amounting to Baht 4,000 million (As at 31 December 2018: the Group had the available credit facilities from short-term loans from financial institutions amounting to Baht 6,582 million and US Dollar 16 million in which an available credit facilities for the Company amounting to Baht 4,000 million).

20 Other current liabilities

	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Interest payables	546,326,722	460,395,623	174,276,070	222,912,153
Value added tax payables	633,966,465	598,163,572	-	-
Corporate income tax payables	211,139,714	215,949,310	-	-
Interest rate swap contract payables	96,329,568	81,291,838	48,592,981	40,016,915
Cross currency swap contract payables	12,012,544	529,270	-	-
Advance received	170,776,251	121,868,325	-	-
Others	868,078,546	1,015,370,290	350,290,618	281,332,969
Total other current liabilities	2,538,629,810	2,493,568,228	573,159,669	544,262,037

Siraporn Anon



21 Long-term loans from financial institutions, net

21.1 The long-term loans from financial institutions are as follows:

As at 31 December	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Current portion of long-term loans from financial institutions, net				
Thai Baht	2,509,193,104	8,919,512,853	400,000,000	200,000,000
US Dollar	3,045,257,918	18,187,189,105	536,630,693	8,730,731,077
Australian Dollar	275,217,637	373,697,654	-	-
<u>Less</u> Deferred financing fee	(75,338,431)	(254,771,173)	(550,381)	(532,987)
	<u>5,754,330,228</u>	<u>27,225,628,439</u>	<u>936,080,312</u>	<u>8,930,198,090</u>
Long-term loans from financial institutions, net				
Thai Baht	28,902,579,434	26,761,932,992	10,400,000,000	12,800,000,000
US Dollar	46,780,786,303	28,880,948,056	23,530,089,269	20,986,369,384
Australian Dollar	3,681,122,905	4,215,812,948	-	-
<u>Less</u> Deferred financing fee	(377,993,401)	(302,964,837)	(29,638,634)	(46,349,926)
	<u>78,986,495,241</u>	<u>59,555,729,159</u>	<u>33,900,450,635</u>	<u>33,740,019,458</u>
Total long-term loans from financial institutions, net	<u>84,740,825,469</u>	<u>86,781,357,598</u>	<u>34,836,530,947</u>	<u>42,670,217,548</u>

Long-term loans from financial institutions of the Company

The Company has entered into unsecured long-term loan facility agreements with financial institutions amounting to Baht 10,800 million and US Dollar 793 million which equivalents to Baht 24,067 million (2018: Baht 13,000 million and US Dollar 911 million which equivalents to Baht 29,717 million) as follows:

Thai Baht loans

Number	Outstanding balance as at 31 December 2019 (Million Baht)	Outstanding balance as at 31 December 2018 (Million Baht)	Interest rate	Principal repayment term	Interest payment period
1	4,000	4,000	THBFIX six-month plus a certain margin per annum	Repayment in December 2021	Payment every six months
2	2,800	3,000	THBFIX six-month plus a certain margin per annum	Repayment every six months from December 2019	Payment every six months
3	-	2,000	THBFIX six-month plus a certain margin per annum	Repayment in June 2023	Payment every six months
4	4,000	4,000	THBFIX six-month plus a certain margin per annum	Repayment in December 2023	Payment every six months
Total	<u>10,800</u>	<u>13,000</u>			



US Dollar loans

Number	Outstanding balance as at 31 December 2019 (Million US Dollar)	Outstanding balance as at 31 December 2018 (Million US Dollar)	Interest rate	Principal repayment term	Interest payment period
1	-	250	BBA LIBOR six-month plus a certain margin per annum	Repayment within December 2019	Payment every six months
2	-	100	US LIBOR six-month plus a certain margin per annum	Repayment within December 2020	Payment every six months
3	100	100	US LIBOR six-month plus a certain margin per annum	Repayment within October 2022	Payment every six months
4	40	40	US LIBOR six-month plus a certain margin per annum	Repayment within January 2021	Payment every six months
5	200	200	US LIBOR six-month plus a certain margin per annum	Repayment within March 2022	Payment every six months
6	203	221	US LIBOR six-month plus a certain margin per annum	Repayment every six months within March 2025	Payment every six months
7	200	-	US LIBOR six-month plus a certain margin per annum	Repayment within November 2024	Payment every six months
8	50	-	US LIBOR six-month plus a certain margin per annum	Repayment within December 2024	Payment every six months
Total	793	911			

Long-term loans from financial institutions of the subsidiaries

The subsidiaries have entered into long-term loan facility agreements with financial institutions amounting to Baht 20,612 million, US Dollar 854 million which is equivalent to Baht 25,759 million and Australian Dollar 189 million which is equivalent to Baht 3,956 million (2018: Baht 22,681 million, US Dollar 533 million which is equivalent to Baht 17,351 million and Australian Dollar 202 million which is equivalent to Baht 4,590 million) as follows:

Thai Baht loans

Number	Outstanding balance as at 31 December 2019 (Million Baht)	Outstanding balance as at 31 December 2018 (Million Baht)	Interest rate	Principal repayment term	Interest payment period
1	273	372	THBFIX three-month plus a certain margin per annum	Repayment every three months from September 2012	Payment every three months
2	229	339	THBFIX three-month plus a certain margin per annum	Repayment every three months from June 2012	Payment every three months
3	163	246	THBFIX three-month plus a certain margin per annum	Repayment every three months from June 2012	Payment every three months
4	269	369	MLR six-month less a certain margin per annum	Repayment every three months from June 2012	Payment every three months
5	927	1,066	Fixed rate per annum	Repayment every six months from June 2014	Payment every six months



Number	Outstanding balance as at 31 December 2019 (Million Baht)	Outstanding balance as at 31 December 2018 (Million Baht)	Interest rate	Principal repayment term	Interest payment period
6	885	1,070	THBFIX three-month plus a certain margin per annum	Repayment every three months from June 2014	Payment every three months
7	80	92	Fixed rate per annum	Repayment every six months from June 2014	Payment every six months
8	61	73	THBFIX six-month plus a certain margin per annum	Repayment every six months from March 2014	Payment every six months
9	6,650	7,327	THBFIX six-month plus a certain margin per annum	Repayment every six months from February 2017	Payment every three months
10	1,483	1,599	Fixed rate per annum	Repayment every six months from June 2017	Payment every six months
11	1,771	1,938	THBFIX six-month plus a certain margin per annum	Repayment every six months from June 2017	Payment every six months
12	3,795	3,960	THBFIX three-month plus a certain margin per annum	Repayment every six months from December 2017	Payment every three months
13	4,026	4,230	THBFIX three-month plus a certain margin per annum	Repayment every six months from June 2018	Payment every three months
Total	20,612	22,681			

US Dollar loans

Number	Outstanding balance as at 31 December 2019 (Million US Dollar)	Outstanding balance as at 31 December 2018 (Million US Dollar)	Interest rate	Principal repayment term	Interest payment period
1	107	155	Fixed rate per annum	Repayment every six months from July 2012	Payment every six months
2	22	25	Fixed rate per annum	Repayment every six month from June 2014	Payment every six months
3	211	232	LIBOR six month plus a certain margin per annum	Repayment every six months from February 2017	Payment every six months
4	25	27	Fixed rate per annum	Repayment every six months from June 2017	Payment every six months
5	89	94	LIBOR three month plus a certain margin per annum	Repayment every six months from June 2018	Payment every three months
6	200	-	LIBOR six month plus a certain margin per annum	Repayment within December 2023	Payment every six months
7	200	-	LIBOR six month plus a certain margin per annum	Repayment within January 2024	Payment every six months
Total	854	533			



Australian Dollar loans

Number	Outstanding balance as at 31 December 2019 (Million Australian Dollar)	Outstanding balance as at 31 December 2018 (Million Australian Dollar)	Interest rate	Principal repayment term	Interest payment period
1	189	202	Floating rate plus a certain margin per annum	Repayment every quarter	Payment every three months
Total	189	202			

Long-term loans from financial institutions of the subsidiaries are secured liabilities. The long-term loans are secured over land, buildings, power plants and equipment. The subsidiaries are required to maintain cash reserves which are provided from the proceeds of sales of electricity for the purpose of repayment of principals and payment of interest due within one year (refer to Note 9). In addition, the Power Purchase Agreements, the Asset Purchase Agreements, the Major Maintenance Agreements and insurance policies have been assigned as collateral in accordance with the conditions under the loan agreement. Furthermore, the subsidiaries are required to comply with certain procedure and conditions; for example, maintaining debt to equity ratio at the level as specified in the agreements.

21.2 Interest rate risk management

Details of interest rate swap contract for long-term loans from financial institutions of the Group are shown in Note 36.1.

The interest rate exposures on the long-term loans from financial institutions of the Group before taking account of interest rate swap contract are as follows:

	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Long-term loans from financial institutions, net				
- at fixed rates	7,062,643,585	9,390,431,536	-	-
- at floating rates	77,678,181,884	77,390,926,062	34,836,530,947	42,670,217,548
Total long-term loans from financial institutions, net	84,740,825,469	86,781,357,598	34,836,530,947	42,670,217,548

After taking account of interest rate swaps, the range of weighted average effective interest rates of the long-term loans from financial institutions of the Group were from 4.08% to 5.80% per annum for Thai Baht loans, from 1.05% to 4.81% per annum for US Dollar loans and 5.01% per annum for Australian Dollar loans. (2018: from 3.80% to 5.72% per annum for Thai Baht loans, from 1.04% to 4.79% per annum for US Dollar loans and 5.72% per annum for Australian Dollar loans).

After taking account of interest rate swaps, the weighted average effective interest rate of the long-term loans from financial institutions of the Company were 4.08% per annum for Thai Baht loans and 3.35% per annum for US Dollar loans. (2018: 3.80% per annum for Thai Baht loans and 3.48% per annum for US Dollar loans).

Siraporn Anon

21.3 The movement of the long-term loans from financial institutions of the Group

The movement of the long-term loans from financial institutions of the Group for the years ended 31 December can be analysed as follows:

	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Opening net book value	86,781,357,598	92,614,368,100	42,670,217,548	43,142,689,570
Cash flows				
Proceeds from long-term loans	20,219,362,773	12,280,888,007	7,609,105,000	7,243,639,000
Payments on long-term loans	(19,055,327,830)	(17,601,645,272)	(13,615,180,000)	(7,833,457,500)
Payments on deferred financing fee	(40,158,859)	(72,934,339)	(7,620,100)	-
Other non-cash movement				
Net of long term loan repayment with dividend received from a subsidiary ^(*)	-	-	(288,515,539)	-
Net of long term loan repayment with long term loan to a subsidiary	-	-	(288,515,539)	-
Unrealised exchange (gains) losses	(2,058,736,760)	(308,436)	(1,267,274,423)	87,494,961
Addition of deferred financing fee	-	-	-	(4,061,750)
Amortisation of deferred financing fee	136,617,698	164,469,131	24,314,000	33,913,267
Exchange difference on translation	(1,242,289,151)	(603,479,593)	-	-
Closing net book value	84,740,825,469	86,781,357,598	34,836,530,947	42,670,217,548

Separate financial statements

^(*) On 1 March 2019, the Company and two subsidiaries signed Tripartite Agreement of up to US Dollars 307 million that sets out a mechanism for netting dividends from the subsidiaries with the Company's long-term US Dollar loan and interest repayments to lenders. Under the agreement, the subsidiary transfers a set amount in US Dollar to the Company's lenders in accordance with the Company's instructions. At the same time, the subsidiaries declare dividends in Thai Baht at an equivalent amount to the US Dollar repayments to lenders. Through this, the Company nets off the transactions between dividends from subsidiaries and long-term US Dollar loan and interest repayments to the Lenders. The agreement is effective for one year from 1 March 2019.

21.4 Maturity of long-term loans from financial institutions is as follows:

	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Within 1 year	5,754,330,228	27,225,628,439	936,080,312	8,930,198,090
Later than 1 year and not later than 5 years	57,435,860,674	42,287,259,805	29,612,510,795	28,219,712,457
Later than 5 years	21,550,634,567	17,268,469,354	4,287,939,840	5,520,307,001
Total long-term loans, net	84,740,825,469	86,781,357,598	34,836,530,947	42,670,217,548

As at 31 December 2018, a subsidiary has reclassified the long-term loans of Baht 13,360 million to current liabilities and presented as current portion of long-term loans in accordance with accounting standards due to an Event of Default as a result of failure to comply with the financial ratio specified in its Credit Facilities Agreement. However, such subsidiary already received a consent letter from lender on 22 February 2019. Therefore, the Group shall classify these loans as non-current liabilities in the consolidated statement of financial position as at 31 December 2019.

21.5 Credit facilities

As at 31 December 2019, the Company had the available credit facilities from long-term loans from financial institutions amounting to US Dollar 50 million (As at 31 December 2018: a subsidiary had the available credit facilities from long-term loans amounting to US Dollar 400 million).



22 Debenture

Details of debenture are as follows:

	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Debenture	4,786,803,360	5,084,006,560	4,786,803,360	5,084,006,560
<u>Less</u> Current portion of debenture	-	-	-	-
Debenture, net	4,786,803,360	5,084,006,560	4,786,803,360	5,084,006,560

The movements of the debenture can be analysed as follows:

For the years ended 31 December	Consolidated and Separate financial statements	
	2019 Baht	2018 Baht
Opening book value	5,084,006,560	5,026,945,600
Unrealised exchange (gain) loss	(297,203,200)	57,060,960
Closing book value	4,786,803,360	5,084,006,560

Debenture is unsecured debenture amounting to Japanese Yen 17,120 million. The principal will be redeemed within seven years, dated on 10 March 2022. The debenture bears interest at a fixed rate per annum and the payment schedule is every six month. The Company is required to comply with certain procedure and conditions; for example, maintaining debt to equity ratio at the level as specified in the contract.

In addition, the Company entered into a cross currency swap contract with a financial institution to manage exposure arising from fluctuations in currency exchange rate and interest rate of such debenture, from Yen 17,120 million to US Dollar 143 million at a fixed interest rate.

23 Deferred income taxes

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

	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Deferred tax assets:				
Deferred tax assets to be recovered within 12 months	31,053,279	20,744,270	-	-
Deferred tax assets to be recovered after more than 12 months	598,785,290	665,263,408	-	-
	629,838,569	686,007,678	-	-
Deferred tax liabilities:				
Deferred tax liabilities to be settled within 12 months	(185,902,022)	(193,035,534)	-	-
Deferred tax liabilities to be settled after more than 12 months	(2,867,941,627)	(3,409,257,573)	-	-
	(3,053,843,649)	(3,602,293,107)	-	-
Deferred income taxes, net	(2,424,005,080)	(2,916,285,429)	-	-

Siraporn Anon

The movement in the deferred income tax account is as follows:

For the years ended 31 December	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
As at 1 January	(2,916,285,429)	(3,656,362,588)	-	(598,880,947)
Charged/(credited) to profit or loss	259,209,271	106,455,356	-	-
Charged/(credited) directly to other comprehensive income	13,536,910	595,402,358	-	598,880,947
Exchange difference on translation	219,534,168	38,219,445	-	-
As at 31 December	(2,424,005,080)	(2,916,285,429)	-	-

Sungrasorn Chiraporn

The movement in deferred tax assets and liabilities is as follows:

	Consolidated financial statements					
	Provision	Tax loss	Allowance for	Depreciation	Others	Total
	Baht	carry forward	obsolescence	Baht	Baht	Baht
		Baht	Baht	Baht	Baht	Baht
Deferred tax assets						
As at 1 January 2019	120,004,196	310,199,206	89,323,538	3,902,672,370	221,399,755	4,643,599,065
Charged/(credited) to profit or loss	2,450,562	5,554,126	7,126,357	(199,395,803)	8,676,039	(175,588,719)
Charged/(credited) directly to other comprehensive income	13,536,910	-	-	-	-	13,536,910
Exchange difference on translation	(955,571)	(23,845,817)	-	-	(15,188,260)	(39,989,648)
As at 31 December 2019	135,036,097	291,907,515	96,449,895	3,703,276,567	214,887,534	4,441,557,608
As at 1 January 2018	277,764,131	338,831,174	273,343,121	4,102,068,150	158,134,678	5,150,141,254
Charged/(credited) to profit or loss	(153,927,514)	(2,363,045)	(184,019,583)	(199,395,780)	(13,825,580)	(553,531,502)
Charged/(credited) directly to other comprehensive income	(3,478,589)	-	-	-	-	(3,478,589)
Exchange difference on translation	(353,832)	(26,268,923)	-	-	77,090,657	50,467,902
As at 31 December 2018	120,004,196	310,199,206	89,323,538	3,902,672,370	221,399,755	4,643,599,065

		Consolidated financial statements					
Lease receivable under power purchase agreement		Unrealised gains on investments in marketable securities - available-for-sale	The assigned fair values of assets acquired in business acquisitions	Tax effect of currency translation on tax base	Others	Total	
Baht	Baht	Baht	Baht	Baht	Baht	Baht	
3,588,900,364 (145,177,122)	572,191,629 37,267,257 (30,060,151)	- - -	2,623,953,755 (228,091,173) (176,936,287)	763,205,520 (96,042,688) (51,794,256)	11,633,226 (2,754,264) (733,122)	7,559,884,494 (434,797,990) (259,523,816)	
3,443,723,242	579,398,735	-	2,218,926,295	615,368,576	8,145,840	6,865,562,688	
3,701,269,419 (112,369,055)	931,705,782 (402,220,311)	598,880,947 -	2,843,184,785 (192,205,836)	717,188,598 49,193,496	14,274,311 (2,385,152)	8,806,503,842 (659,986,858)	
- -	- 42,706,158	(598,880,947) -	- (27,025,194)	- (3,176,574)	- (255,933)	(598,880,947) 12,248,457	
3,588,900,364	572,191,629	-	2,623,953,755	763,205,520	11,633,226	7,559,884,494	

Deferred tax liabilities

As at 1 January 2019

(Charged)/credited to profit or loss
Exchange difference on translation

As at 31 December 2019

As at 1 January 2018

(Charged)/credited to profit or loss
(Charged)/credited directly
to other comprehensive income
Exchange difference on translation

As at 31 December 2018

	Separate financial statements		
	Provision Baht	Allowance for obsolescence Baht	Total Baht
Deferred tax assets			
As at 1 January 2019	-	62,130,757	62,130,757
Charged/(credited) to profit or loss	-	-	-
As at 31 December 2019	-	62,130,757	62,130,757
As at 1 January 2018	78,771,526	166,063,412	244,834,938
Charged/(credited) to profit or loss	(78,771,526)	(103,932,655)	(182,704,181)
As at 31 December 2018	-	62,130,757	62,130,757
	Separate financial statements		
	Depreciation and amortisation Baht	Unrealised gains on investments in marketable securities - available-for- sale Baht	Total Baht
Deferred tax liabilities			
As at 1 January 2019	62,130,757	-	62,130,757
(Charged)/credited to profit or loss	-	-	-
As at 31 December 2019	62,130,757	-	62,130,757
As at 1 January 2018	244,834,938	598,880,947	843,715,885
(Charged)/credited to profit or loss	(182,704,181)	-	(182,704,181)
(Charged)/credited directly to other comprehensive income	-	(598,880,947)	(598,880,947)
As at 31 December 2018	62,130,757	-	62,130,757

Deferred tax assets are recognised for tax loss and carry 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 of Baht 504 million (2018: Baht 1,172 million) in respect of losses amounting to Baht 2,518 million (2018: Baht 5,858 million) that can be carried forward against future taxable income. Losses amounting to Baht 194 million will be expired for tax benefit in 2020 (2018: Baht 120 million already expired in 2019).

24 Provision for decommissioning costs

For the years ended 31 December	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Opening balance	1,375,071,901	1,808,066,021	115,490,000	437,176,000
Provision increased (decreased)	602,268,487	(100,568,279)	-	-
Additional provision - Finance costs	50,145,172	50,060,467	-	-
Reversal of provision	-	(371,086,000)	-	(321,686,000)
Exchange difference on translation	(44,863,759)	(11,400,308)	-	-
Closing balance	1,982,621,801	1,375,071,901	115,490,000	115,490,000

Siraporn Anon



25 Other non-current liabilities

As at 31 December	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Advances received	1,296,895,479	1,542,555,372	-	-
Deposits	4,033,781	3,138,374	2,003,567	838,160
Cross currency swap contract payables	172,419,084	18,632,574	-	-
Other non-current liabilities	51,647,296	52,600,236	18,646,359	18,998,182
Total other non-current liabilities	1,524,995,640	1,616,926,556	20,649,926	19,836,342

26 Legal reserve

For the years ended 31 December	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Opening balance	530,000,000	530,000,000	530,000,000	530,000,000
Appropriation during the year	-	-	-	-
Closing balance	530,000,000	530,000,000	530,000,000	530,000,000

Under the Public Companies Act B.E. 2535, the Company is required to set aside as a legal reserve at least 5% of its net profit after accumulated deficit brought forward (if any) until the reserve is not less than 10% of the registered capital. The legal reserve is non-distributable.

27 Sales and services income

For the years ended 31 December	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Sales of electricity	11,501,242,249	10,975,191,227	-	-
Service income under power purchase agreements	19,011,182,790	16,984,310,812	-	-
Services income	696,570,907	1,060,971,896	-	-
Total sales and services income	31,208,995,946	29,020,473,935	-	-

28 Cost of sales and services

For the years ended 31 December	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Cost of sales of electricity	9,683,982,325	9,192,242,476	-	-
Cost of services under power purchase agreements	17,513,441,571	15,900,702,548	-	-
Cost of services	690,324,232	983,453,094	-	-
Total cost of sales and services	27,887,748,128	26,076,398,118	-	-



29 Dividend and other income

For the years ended 31 December	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Dividend income from subsidiaries and joint ventures (Note 13.5)	-	-	8,226,594,068	5,255,131,565
Interest income	584,353,285	698,956,645	1,646,731,588	313,510,524
Rental and service income	55,065,096	53,234,413	248,037,370	215,760,548
Adder*	1,990,153,849	1,848,393,846	-	-
Others	265,394,403	51,405,907	21,429,723	40,887,611
Total other income	2,894,966,633	2,651,990,811	10,142,792,749	5,825,290,248

* The adder represented income received from Electricity Generating Authority of Thailand (EGAT) and Provincial Electricity Authority (PEA)

30 Expense by nature

The following expenditure items have been charged in arriving at net profit:

For the years ended 31 December	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Depreciation on plant and equipment	2,593,626,340	2,675,943,877	39,976,983	57,638,073
Amortisation of right in power purchase agreements	472,273,861	489,149,254	-	-
Impairment of investments in joint ventures	296,549,767	-	2,830,000,000	1,580,000,000
Impairment of investments in subsidiaries	-	-	-	663,056,302
Impairment of goodwill	61,049,954	1,347,000,000	-	-
Impairment of property, plant and equipment	3,576,015	1,616,776,496	-	913,520,903
Impairment of intangible assets	249,590,672	-	-	-
Major repair and maintenance expenses of power plants	698,685,835	1,007,559,293	-	-
Staff costs	2,257,494,077	2,115,617,704	631,068,971	539,470,433

31 Finance costs

For the years ended 31 December	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Interest expenses	3,981,212,498	4,023,693,045	1,558,505,847	1,716,280,462
Net gains on exchange rates from financing activities	(2,998,686,792)	(342,026,950)	(2,308,686,575)	(253,745,731)
Other finance costs	270,944,604	327,787,968	83,170,859	109,965,409
Total finance costs	1,253,470,310	4,009,454,063	(667,009,869)	1,572,500,140

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32 Income tax expense

For the years ended 31 December	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Current tax	1,118,107,941	1,044,802,445	-	-
Deferred tax	(259,209,271)	(106,455,356)	-	-
Total income tax expense	858,898,670	938,347,089	-	-

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 parent company as follows:

	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Profit before tax	13,985,513,827	22,054,804,228	7,290,114,094	4,765,623,996
Tax calculated at a tax rate of 20%	2,797,102,765	4,410,960,846	1,458,022,819	953,124,799
The result of the accounting profit multiplied by the income tax rate	2,797,102,765	4,410,960,846	1,458,022,819	953,124,799
Tax effect of :				
Income not subject to tax	(1,427,604,983)	(2,606,478,168)	(1,652,725,012)	(1,092,533,570)
Expenses not deductible for tax purpose	603,907,945	866,027,310	657,465,655	539,635,660
Revenues that are granted income tax exemption or expenses that are deductible at a greater amount	(366,759,188)	(544,007,896)	-	-
Net losses deductible	(464,015,324)	(401,340,792)	(462,763,462)	(400,226,889)
Tax losses for the year for which no deferred income tax assets was recognised	581,563,115	192,999,408	-	-
Share of profit of investments accounted for using the equity method	(1,280,995,411)	(1,097,681,678)	-	-
Difference on tax rate in which countries the Group operated	415,699,751	117,868,059	-	-
Income tax	858,898,670	938,347,089	-	-

The weighted average applicable tax rate for the Group and the Company were 6.14% and 0.00%, respectively (2018: 4.25% and 0.00%, respectively).

The tax charged/(credited) relating to component of other comprehensive income is as follows:

For the years ended 31 December	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Unrealised gains on investments in marketable securities available-for-sale				
As at 1 January	-	598,880,947	-	598,880,947
Charged/(credited) to other comprehensive income	-	(598,880,947)	-	(598,880,947)
As at 31 December	-	-	-	-



33 Earnings per share

Basic earnings per share is calculated by dividing the net profit for the year attributable to shareholders by the weighted average number of ordinary shares issued and paid-up during the year, net of treasury stock.

	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Net profit attributable to owners of the parent (Baht)	13,059,235,793	21,072,883,487	7,290,114,094	4,765,623,996
Weighted average number of ordinary share in issue (Shares)	526,465,000	526,465,000	526,465,000	526,465,000
Basic earnings per share (Baht)	24.81	40.03	13.85	9.05

The Group has no dilutive potential ordinary shares in issue during the periods presented, therefore, no diluted earnings per share are presented.

34 Dividends

At the Annual General Shareholders' meeting dated 18 April 2019, the shareholders approved the payment of dividends in respect of the operating results for six-month period ended 31 December 2018 for 526,465,000 shares at Baht 3.50 per share, totalling Baht 1,843 million. These dividends were paid to the shareholders on 26 April 2019.

At the Board of directors' meeting dated 23 August 2019, the directors approved the payment of dividends in respect of the operating results for the six-month period ended 30 June 2019 for 526,465,000 shares at Baht 3.25 per share, totalling Baht 1,711 million. These dividends were paid to shareholders on 16 September 2019.

At the Annual General Shareholders' meeting dated 19 April 2018, the shareholders approved the payment of dividends in respect of the operating results for the six-month period ended 31 December 2017 for 526,465,000 shares at Baht 3.50 per share, totalling Baht 1,843 million. These dividends were paid to shareholders on 27 April 2018.

At the Board of directors' meeting dated 17 August 2018, the directors approved the payment of dividends in respect of the operating results for the six-month period ended 30 June 2018 for 526,465,000 shares at Baht 6.00 per share, totalling Baht 3,159 million. These dividends were paid to shareholders on 14 September 2018.

35 Promotional privileges

The Group has been granted promotional privileges by the Office of the Board of Investment under promotion certificates in respect of electricity. These ten subsidiaries have been granted exemption from certain taxes and duties as detailed in the certificates including exemption from corporate income tax for a period of eight years from the date of first revenue. As promoted entities, these subsidiaries are required to comply with the terms and conditions specified in the promotion certificates.

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36 Financial risk management

The principal financial risks faced by the Group are interest rate and exchange rate risks. The Group borrows to finance its operations, which involve payments in foreign currencies, at both fixed and floating interest rates.

The objectives of using derivative financial instruments are to reduce the uncertainty over future cash flows arising from movements in interest rates and exchange rate and to manage the liquidity of cash resources. Interest rate exposure is managed through interest rate swap contracts. In respect of currency exchange risk of the domestic operation, the formula for the calculation of the Availability Payments and Energy Payments charged to EGAT allows for the minimisation of the impact of currency exchange. For the exchange rate risks of the overseas operations, the Group receives cash inflow from trade receivables in the same currency as the major liabilities of the Group.

Trading for speculative purposes is not allowed. All derivative transactions are subject to prior approval by the respective board of director of each company in the Group.

36.1 Interest rate and exchange rate risk

As at 31 December 2019 and 2018, the Group had outstanding foreign currency assets and liabilities as follows:

	Consolidated financial statements			
	2019		2018	
	Foreign currency Million	Million Baht	Foreign currency Million	Million Baht
Assets				
US Dollar	543.73	16,299	988.68	31,920
Australian Dollar	40.50	837	32.51	730
Philippine Peso	135.59	79	231.33	140
Japanese Yen	127.84	35	314.35	91
Korean Won	48,832.98	1,260	-	-
		18,510		32,881
Liabilities				
US Dollar	1,702.62	51,643	1,499.70	48,913
Australian Dollar	190.48	4,080	201.80	4,688
Philippine Peso	17.59	11	11.47	7
Japanese Yen	17,373.38	4,858	17,415.06	5,172
Swedish Krona	-	-	0.23	1
		60,592		58,781
	Separate financial statements			
	2019		2018	
	Foreign currency Million	Million Baht	Foreign currency Million	Million Baht
Assets				
US Dollar	24.77	743	5.42	175
Liabilities				
US Dollar	798.62	24,223	911.15	29,717
Japanese Yen	17,120.00	4,787	17,120.00	5,084
		29,010		34,801

Foreign currency assets represent cash and cash equivalents, trade receivables and deposits with financial institutions. Foreign currency liabilities represent trade payables, other payables, interest payables, loans and debenture.

In order to manage risks arising from fluctuations in interest rates and currency exchange rates, the Group uses the following derivative financial instruments (Note 21.2).

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Interest rate swap contract

Interest rate swap contracts manage exposure to fluctuations in interest rates. The Company entered into interest rate swap contracts by converting floating interest rates to fixed interest rates for the total amount of long-term loans of Baht 10,800 million and US Dollar 543 million (equivalent to Baht 16,484 million). The eleven subsidiaries entered into interest rate swap contracts by converting floating interest rates to fixed interest rates for the total amount of long-term loans of Baht 16,803 million and US Dollar 268 million (equivalent to Baht 8,128 million) and Australian Dollar 147 million (equivalent to Baht 3,156 million).

Foreign currency forward contract

Foreign currency forward contracts manage exposure to fluctuations in foreign exchange rates. Two subsidiaries entered into foreign currency forward contract for Construction Agreement and Long-Term Services Agreement for power plants of Japanese Yen 8,824 million (equivalent to Baht 409 million and US Dollar 86 million) and Swedish Krona 221 million (equivalent to Baht 921 million).

Cross currency swap contract

Cross currency swap contracts manage exposure to fluctuations in foreign exchange rates and interest rates by fixed the foreign exchange rates in advance and convert floating interest rates to fixed interest rates. The Company entered into cross currency swap contracts for total amount of debenture of Japanese Yen 17,120 million (equivalent to US Dollar 143 million) and four subsidiaries entered into such contracts for total amount of long-term loans of US Dollar 147 million (equivalent to Baht 1,461 million and Korean Won 117,200 million). In addition, a subsidiary entered into such contract for total amount of long-term loans of Baht 396 million (equivalent to US Dollar 11 million).

Cross currency interest rate swap contract

Cross currency interest rate swap contracts manage exposure to fluctuation in foreign exchange rates of interest and fluctuation in interest rate by fix the foreign exchange rates in advance and convert floating interest rates to fixed interest rates. A subsidiary entered into such contracts for totalling amount of US Dollar 300 million (equivalent Korean won 351,600 million).

The fixed interest rates under the interest rate swap contracts, cross currency swap contracts and cross currency interest rate swap contracts for long-term loans as at 31 December were as follows:

Currency	Contract amount (million)		Fixed rates per annum	
	2019	2018	2019	2018
US Dollar	822	1,214	2.53 - 5.09	2.53 - 5.09
Thai Baht	29,064	33,152	1.00 - 6.10	1.00 - 6.10
Australian Dollar	147	154	2.64 - 4.51	2.64 - 4.51
Korean Won	468,800	-	3.22 - 3.36	-

The remaining notional principal amounts of the outstanding interest rate swap contracts, cross currency swap contracts and cross currency interest rate swap contracts as at 31 December were as follows:

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
	Million Baht	Million Baht	Million Baht	Million Baht
Within 1 year	3,784	15,155	937	8,931
Later than 1 year	65,731	61,185	26,347	33,786
	69,515	76,340	27,284	42,717

36.2 Credit risk

The Group has no significant concentrations of credit risk relating to its cash, investments and trade receivables. Since the Group places its cash and investments with high quality financial institutions. The Group's policy is designed to limit exposure with any one institution and to invest its excess cash in low risk investment accounts. The Group has not experienced any losses on such accounts. For trade receivables, the Group's sales are made to state-owned enterprises and industrial users under the terms and conditions of the long-term Power Purchase Agreements and the long-term Electricity and Steam Sales and Purchase Agreements.

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36.3 Liquidity risk

Prudent liquidity risk management means maintaining sufficient cash and marketable securities, the availability of funding through an adequate amount of committed credit facilities, and the ability to close out market positions.

37 Related party transactions

Individuals and entities that directly or indirectly control or are controlled by or are under common control with the Company, including investment entities, associates, joint venture and individuals or entities having significant influence over the Company, key management personnel, including directors and officers of the Company and close members of the family of these individuals and entities 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 major shareholders of the Company are the Electricity Generating Authority of Thailand (EGAT) and TEPDIA Generating B.V., which is an associate between Tokyo Electric Power Company (TEPCO) and Diamond Generating Asia, Limited. holding 25.41% and 23.94% of the Company's shares, respectively. The remaining shares of the Company are widely held.

The information on the Company's subsidiaries, associates and joint ventures is provided in Note 13.

The following material transactions were carried out with related parties:

37.1 Sales of electricity

For the years ended 31 December	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
	Million Baht	Million Baht	Million Baht	Million Baht
Sales of electricity				
- Major shareholder	8,021	7,333	-	-
Lease income under power purchase agreements				
- Major shareholder	3,004	3,069	-	-
Service income under power purchase agreements				
- Major shareholder	12,118	10,748	-	-

37.2 Trade receivable from a related party and trade payables to related parties

As at 31 December	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
	Million Baht	Million Baht	Million Baht	Million Baht
Trade receivable				
- Major shareholder	1,530	1,491	-	-

Outstanding trade receivable from a related party as at 31 December can be analysed as follows:

As at 31 December	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
	Million Baht	Million Baht	Million Baht	Million Baht
Not overdue	1,530	1,491	-	-
Overdue below 3 months	-	-	-	-
Overdue 3 - 6 months	-	-	-	-
Overdue 6 - 12 months	-	-	-	-
Overdue over 12 months	-	-	-	-
	1,530	1,491	-	-

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As at 31 December	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
	Million Baht	Million Baht	Million Baht	Million Baht
Trade payable				
- Major shareholder	8	2	-	-
- Other related party	85	105	-	-
	93	107	-	-

37.3 Trade receivable from a related party for services under power purchase agreements

As at 31 December	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
	Million Baht	Million Baht	Million Baht	Million Baht
Trade receivable from a related party under power purchase agreements				
- Major shareholder	1,969	2,188	-	-

Outstanding trade receivable from a related party for services under power purchase agreements as at 31 December can be analysed as follows:

As at 31 December	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
	Million Baht	Million Baht	Million Baht	Million Baht
Not overdue	1,969	2,188	-	-
Overdue below 3 months	-	-	-	-
Overdue 3 - 6 months	-	-	-	-
Overdue 6 - 12 months	-	-	-	-
Overdue over 12 months	-	-	-	-
	1,969	2,188	-	-

37.4 Lease receivable under power purchase agreements from a related party, net

As at 31 December	Consolidated financial statements			
	Minimum payment		Present value of Minimum payment	
	2019	2018	2019	2018
	Million Baht	Million Baht	Million Baht	Million Baht
Lease receivable under power purchase agreements from a related party				
- Less than 1 year	4,238	4,361	1,356	1,353
- Over 1 - 5 years	15,862	16,693	3,338	3,596
- Over 5 years	35,890	38,772	13,479	14,050
	55,990	59,826	18,173	18,999
<u>Less</u> Deferred financial revenue	(37,817)	(40,827)		
Present value of minimum payment	18,173	18,999		
Lease receivable under power purchase agreement from a related party can be analysed as follows:				
- Current portion			1,356	1,353
- Non-current portion			16,817	17,646
			18,173	18,999

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37.5 Amounts due from and amounts due to related parties

As at 31 December	Consolidated financial statements		Separate financial statements	
	2019 Million Baht	2018 Million Baht	2019 Million Baht	2018 Million Baht
Amounts due from related parties				
- Subsidiaries	-	-	821	167
- Joint ventures	175	315	3	3
- Other related party	30	-	-	-
	205	315	824	170
Amounts due to related parties				
- Subsidiaries	-	-	4	17
- Joint ventures	46	23	-	-
	46	23	4	17

37.6 Long-term loans to related parties and related interests

As at 31 December	Consolidated financial statements		Separate financial statements	
	2019 Million Baht	2018 Million Baht	2019 Million Baht	2018 Million Baht
Long-term loans to related parties				
- Subsidiaries				
- Due within 1 year	-	-	1,862	172
- Due over 1 year	-	-	48,658	2,479
	-	-	50,520	2,651
- Associates				
- Due within 1 year	-	-	-	-
- Due over 1 year	1,231	1,231	1,231	1,231
	1,231	1,231	1,231	1,231
	1,231	1,231	51,751	3,882

The movements of long-term loans to related parties can be analysed as follows:

For the years ended 31 December 2019	Consolidated financial statements	Separate financial statements
	Million Baht	Million Baht
Beginning balance	1,231	3,882
Cash flows		
Repayment during the year	-	(239)
Other non-cash movement		
Increased during the year	-	49,094
Net offset principal repayment with ^(*)		
- Interest payment of the Company	-	(673)
- Principal repayment of Company	-	(273)
- Payment on additional share capital of a joint venture	-	(34)
- Withholding tax on interest income from a subsidiary	-	(6)
Ending balance	1,231	51,751

Addition during the year 2019

On 1 June 2019, the Company and EGCO Plus, a subsidiary of the Company, entered into a long-term loan agreement to convert a note receivable issued by EGCO Plus into a long-term loan to EGCO Plus amounting to Baht 49,094 million. The loan bears interest at a fixed rate per annum. The principal repayment will be made on the lender's instructions with maturity within 10 years commencing from 1 June 2019, and the interest payment period is every year within the last business day of May.



(*) During the year ended 31 December 2019, the Company instructed EGCO Plus to pay interest and repay principals of long-term loans of US Dollar 21 million and US Dollar 9 million, respectively on behalf of the Company to the Company's lenders and pay for additional share capital of a joint venture on behalf of the Company amounting to US Dollar 1 million. During the year ended 31 December 2019, EGCO Plus fully paid for such amounts. Therefore, the Company net off these transactions with long-term loans to a subsidiary in amount of Baht 673 million, Baht 273 million and Baht 34 million, respectively.

As at 31 December	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
	Million Baht	Million Baht	Million Baht	Million Baht
Interest receivable				
- Subsidiaries	-	-	788	130
- Associates	273	194	273	194
	273	194	1,061	324

For the years ended 31 December	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
	Million Baht	Million Baht	Million Baht	Million Baht
Interest income				
- Subsidiaries	-	-	1,504	182
- Associates	-	-	79	81
	-	-	1,583	263

37.7 Dividend income

For the years ended 31 December	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
	Million Baht	Million Baht	Million Baht	Million Baht
Dividend income				
- Subsidiaries	-	-	4,277	1,619
- Joint ventures	-	-	3,950	3,636
	-	-	8,227	5,255

37.8 Directors and managements remuneration

For the years ended 31 December	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
	Million Baht	Million Baht	Million Baht	Million Baht
Short-term employee benefits	91	87	72	68
Post-employment benefits	6	5	2	4
Total director and managements remuneration	97	92	74	72

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38 Fair value**38.1 Fair value estimation**

Financial assets and liabilities carried at fair value, by valuation method. The different levels have been defined as follows:

- Quoted prices (unadjusted) in active markets for identical assets or liabilities (Level 1).
- Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices) (Level 2).
- Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs) (Level 3).

There were no transfers between Levels 1, 2 and 3 of fair value level during the year.

38.2 Financial assets and liabilities that are not measured at fair value

The carrying amounts of the following financial assets and financial liabilities approximate their fair values: cash and cash equivalents, short-term investments, trade receivables and payables, amounts due from and due to related parties, other receivables and payables, and short-term loans due to the short maturities of these instruments.

(a) Long-term loans to related parties, long-term loans from financial institutions and debenture

The fair values of long-term loans to related parties, long-term loans from financial institutions and debenture with fixed interest rates have been calculated by level 2.

The contract amounts and fair values at the date of financial statements are as follows:

	Consolidated		Separate	
	financial statements		financial statements	
	Contract amount Million Baht	Fair value Million Baht	Contract amount Million Baht	Fair value Million Baht
Asset				
Long-term loans to related parties	-	-	50,168	50,776
Liabilities				
Long-term loans from financial institutions	7,149	7,512	-	-
Debenture	4,787	4,872	4,787	4,872
	Consolidated		Separate	
	financial statements		financial statements	
	Contract amount Million Baht	Fair value Million Baht	Contract amount Million Baht	Fair value Million Baht
Asset				
Long-term loans to related parties	-	-	2,292	2,367
Liabilities				
Long-term loans from financial institutions	9,429	9,469	-	-
Debenture	5,084	5,135	5,084	5,135

The fair values have been calculated from the net present value of future cash flows discounted by market interest rates using rates at the date of financial statements. The fair values of long-term loans from financial institutions and long-term loans to related parties with floating interest rates approximate their carrying amounts.

The fair values have been calculated using rate quoted by the Group's counterparties at the date of statement of financial position.



(b) Derivatives financial instruments

The fair values of the derivatives financial instruments have been calculated by level 2.

The fair values of the derivatives financial instruments at the date of financial statements are as follows:

	Consolidated financial statements		Separate financial statements	
	2019 Million Baht	2018 Million Baht	2019 Million Baht	2018 Million Baht
Assets				
Interest rate swap contracts	10	602	10	510
Foreign currency forward contracts	-	20	-	-
Cross currency swap contracts	398	477	342	433
Liabilities				
Interest rate swap contracts	(3,647)	(2,002)	(621)	(154)
Foreign currency forward contracts	(544)	(396)	-	-
Cross currency swap contracts	(183)	(88)	-	-
Cross currency interest rate swap contracts	(54)	-	-	-

The fair values of interest rate swap contracts, foreign currency forward contracts, cross currency swap contracts and cross currency interest rate swap contracts have been calculated using rates quoted by the Group's counterparties to terminate the contracts at the date of financial statements.

39 Commitments and significant agreements**39.1 Commitments**

- a) As at 31 December 2019, the Company had commitments under the Counter Guarantee and Standby Letters of Credit issued on behalf of the Company to subsidiaries and joint ventures of Baht 2,790 million (2018: Baht 6,866 million).
- b) According to the Power Purchase Agreements (PPAs) between the Company's subsidiaries and the Electricity Generating Authority of Thailand (EGAT) which period between 21 years and 25 years, the subsidiaries have to provide bank guarantees, totalling Baht 813 million. The collateral is to be returned to such subsidiaries upon the expiry of the agreements.
- c) The Company has provided a guarantee of up to US Dollar 23.96 million (equivalent to Baht 727 million) from 31 March 2017 to 31 December 2037 and up to US Dollar 23.78 million (equivalent to Baht 721 million) from 1 January 2038 to 31 December 2049 for an associate's obligations as the buyer under share sales and purchase agreements for geothermal operations in Indonesia. A subsidiary will pay US Dollar 5 million to Star Energy Group Holding Pte Ltd. During the year 2040 to the year 2047 in accordance with the relevant consortium agreement to be released from obligations.
- d) As at 31 December 2019, the Company has provided a guarantee for a subsidiary's obligations as a borrower under long-term loans facility agreements with financial institutions. The guarantee for the principal of loans is for up to US Dollar 300 million (equivalent to Baht 9,099 million) and for the cross currency interest rate swap contract up to US Dollar 100 million equivalent to Korean Won 122,909 million (equivalent to Baht 3,220 million). The subsidiary will pay the full principals and interest within the specified period to be released from the obligations. In addition, the Company has to comply with certain conditions set out in the agreement, i.e. to maintain financial ratio of debt to equity ratio, and interest coverage ratio specified in the agreement.



39.2 Significant agreements

39.2.1 Power Purchase Agreements (PPAs)

Six subsidiaries have entered into seven PPAs with EGAT. The agreements are effective for periods of 21 years to 25 years, commencing from the Commercial Operations Dates. The sales quantity and its price must be complied with conditions specified in agreements.

Six subsidiaries have entered into eleven PPAs with the Provincial Electricity Authority (PEA) under the Very Small Power Producer (VSPP) scheme. The sales quantity and its price must be complied with conditions specified in agreements. The PPAs are effective for periods of 5 years and are automatically renewable every 5 years.

A subsidiary in the Philippines has entered into a PPA and a Transmission Line Agreement (TLA) with a purchaser in the Philippines. The PPA is effective for a period of 25 years, commencing from the Commercial Operations Date.

A subsidiary in Australia has entered into a PPA with a purchaser in Australia. The PPA is effective for a period of 10 years commencing from November 2014 and can be extended for additional 5 years.

39.2.2 Fuel Purchase Agreements

Four subsidiaries have entered into Gas Purchase Agreements with PTT Public Company Limited (PTT). The agreements are effective for a period between 21 years and 25 years, commencing from the Commercial Operations Dates. The sales quantity and its price must be complied with conditions specified in agreements.

A subsidiary in the Philippines has entered into Coal Supply Agreements (CSAs) with two contractors. Under the CSAs, the subsidiary has to purchase coal as specified in the agreements. The CSAs are effective for periods of 15 years and 25 years, respectively, commencing from the Commercial Operations Date.

39.2.3 Operation and Maintenance Agreements

A subsidiary has entered into power plant operation and maintenance, and power plant equipment maintenance agreements with 7 subsidiaries and 2 joint ventures of the Group. The agreements are effective for a period between 5 years and 6 years.

Two subsidiaries have entered into maintenance service agreement with three constructors. The agreements are effective for a period of 11 years commencing from 26 June 2013 and 12 years commencing from 19 June 2016.

Two subsidiaries have entered into a long-term technical service agreement for power plant and equipment maintenance. The agreements are effective for a period between 6 years and 8 years, commencing from the Commercial Operations Dates which can be extended from the maturity date upon the conditions specified in the agreements.

40 Events occurring after the reporting date

- a) During January 2020, the Company has entered into interest rate swap contracts in order to manage exposure to fluctuations in interest rates by converting floating interest rate to a fixed interest rate for the total amount of long-term loans of US Dollar 200 million (equivalent to Baht 6,100 million).
- b) On 23 January 2020, the Company has provided a guarantee to the financial institutions for the loans of US Dollar 35 million (equivalent to Baht 1,062 million) on behalf of a joint venture for the period from 23 January 2020 to 23 May 2022. The joint venture is required to comply with the requirements as specified in the loan agreement to release those commitments of the Company.



Management Discussion and Analysis

For the Financial Result of Year 2019

Ended December 31, 2019

Note: This Management Discussion and Analysis (MD&A) was made to disclose information and the vision of the management in order to assist investors to better understand the company's financial status and operation. It also supports the "Good Corporate Governance Project" of the Securities and Exchange Commission (SEC).

An English version of the MD&A has been prepared from the Thai version. In the event of a conflict or a difference in interpretation between the two languages, the Thai version shall prevail.

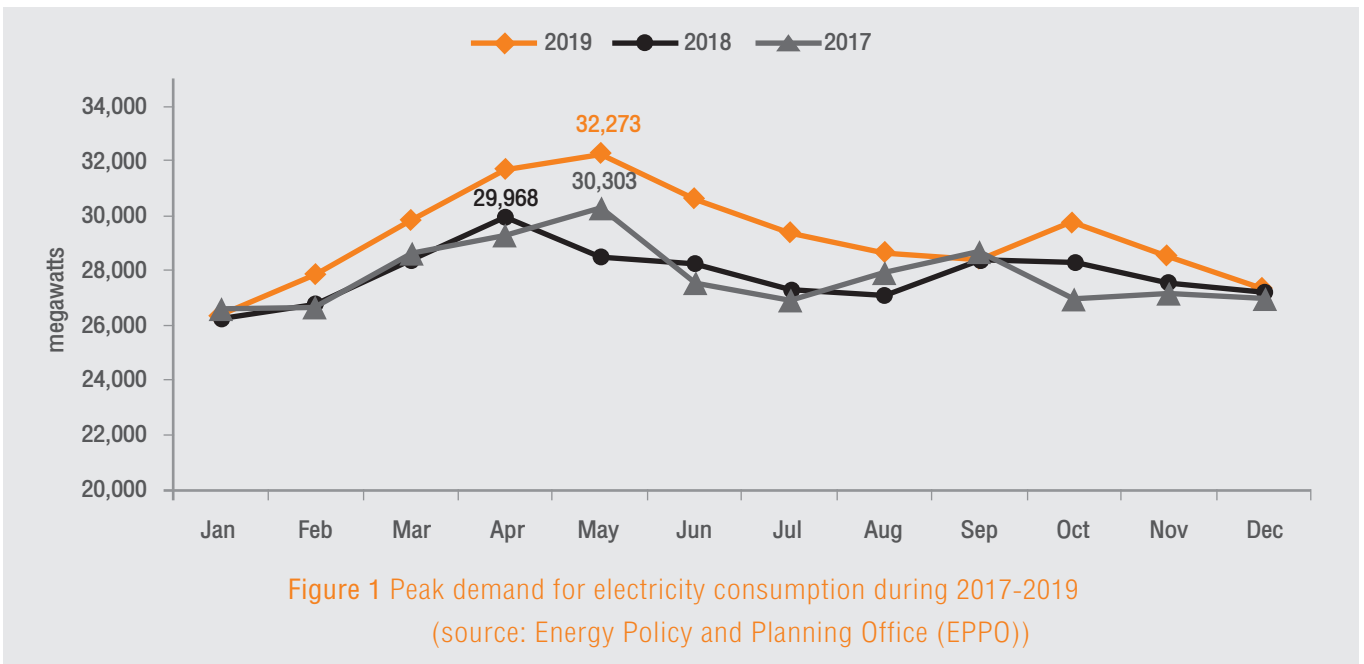
The objective of this MD&A is to present the information and the explanation of financial status and operating results as of the date hereof. However, the information provided in this MD&A may vary if any factors or situation are changed in the future; the investors are, therefore, required to have their own discretion regarding the usage of this information for any purpose. For further detail, please contact Investor Relations Division of the Electricity Generating Public Company Limited (EGCO) at Tel: 662-998-5150-3 or Email: ir@egco.com

1. Power Industry and Competition

1.1 Electricity industry and Economic situation in Thailand

Thailand's economy expanded by 2.4 percent in 2019, lower than 2018. The downside was mainly stemmed from the impact of export contraction affected by the global economic slowdown, prolonged US-China trade tension and the Baht appreciation. As for economic outlook in 2020, National Economic and Social Development Council (NESDC) forecasted Thailand's economy to expand by 1.5-2.5 percent, softening from 2019 due to impacts from the coronavirus (Covid-19) outbreak, the drought conditions and the delay in FY2020 budget. However, the economy will be supported by a gradual global economic recovery following easing trade tensions and reduced risks of a no-deal Brexit as well as a favorable expansion of private consumption and investment of both private and public.

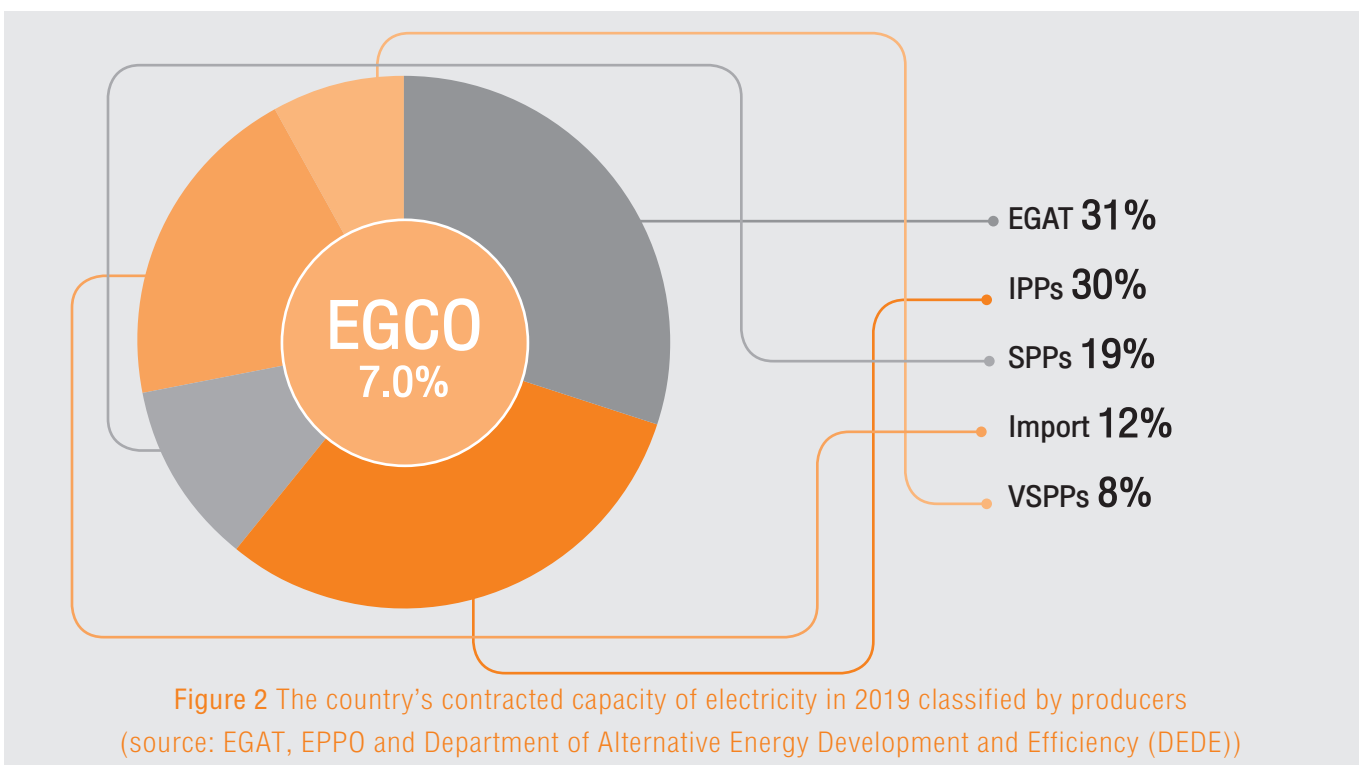
For electricity industry situation in 2019, Thailand's peak demand in Electricity Generating Authority of Thailand (EGAT)'s system was 30,853 megawatts, occurred on May 2, 2019 at 10.27 pm, higher than the peak demand of 28,338 megawatts in 2018 by 8.9 percent while the peak demand in 3 power authorities system (EGAT, Metropolitan Electricity Authority (MEA) and Provincial Electricity Authority (PEA)) was 32,273 megawatts, occurred on May 3, 2019 at 02.27 pm, increased from the peak demand of 29,968 megawatts in 2018 by 7.7 percent. This is a result of higher temperature from previous year and increasing electricity consumption from private sectors. Peak demand for electricity consumption is shown in Figure 1. At the same time, electricity consumption of the country in EGAT's system as of December 2019, including electricity consumption outside EGAT's system as of November 2019 stood at 210,752 gigawatt-hours which were 6,446 gigawatt-hours or 3.2 percent rising from 204,306 gigawatt-hours in 2018. A surge in electricity consumption was mainly consequence from high temperature.



As of December 31, 2019, the country’s contracted capacity in 3 power authorities system was 49,304 megawatts, 15,130 megawatts or 30.7 percent of which were generated by EGAT power plants, and the remaining from other producers as follows;

- Independent Power Producers (IPPs) 14,948 megawatts or 30.3 percent
- Small Power Producers (SPPs) 9,498 megawatts or 19.3 percent
- Import from neighboring countries 5,721 megawatts or 11.6 percent
- Very Small Power Producers (VSPPs) as of April 2019 4,007 megawatts or 8.1 percent

EGCO’s contracted capacity of electricity sold to EGAT and PEA was 3,440 megawatts, representing 7.0 percent of the country’s contracted capacity in three power authority’s system, as presented in Figure 2

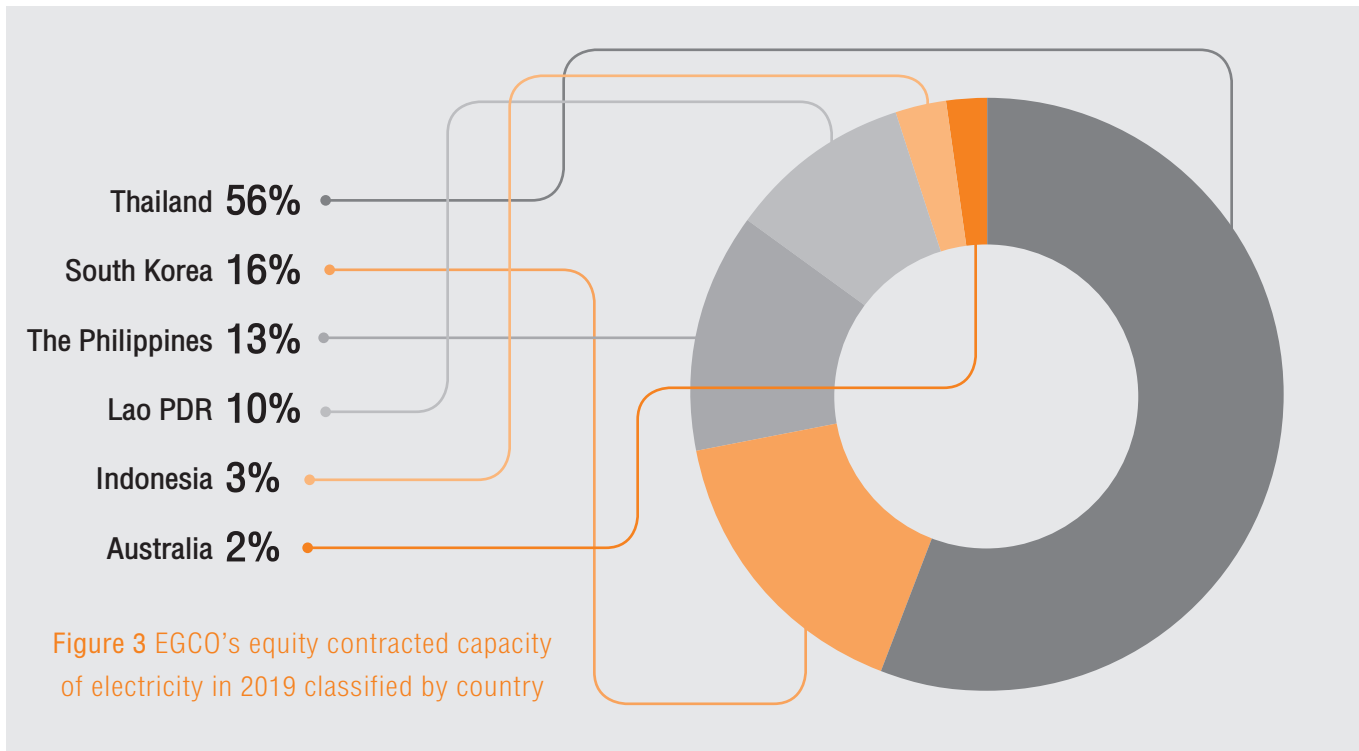


In the recent year, Thailand’s power development plan for 2018 to 2037 (PDP 2018) was approved by the National Energy Policy Council (NEPC) on January 24, 2019 and by the cabinet on April 30, 2019. The PDP 2018 focuses on the use of natural gas as primary fuel for power generation as well as the increase proportion in renewable energy, especially household solar rooftops. In addition, Ministry of Energy has launched the Energy for All scheme, which aims to enable private companies to form joint ventures with local communities to operate renewable power projects in remote areas.

Regarding the Alternative Energy Development Plan for 2018 (AEDP 2018), AEDP 2018 are under arrangement to be synchronized with PDP 2018. According to the latest amendment of the AEDP 2018, the electricity generation from renewable energy sources will contribute a total of 29,411 megawatts by 2037. According to the Department of Alternative Energy Development and Efficiency (DEDE), the current status of renewable energy power plants as of October 2019, which achieved COD was 11,844 megawatts, increased from which of 2018 by 475 megawatts or 4.2 percent.

1.2 Electricity industry in target countries

Due to limited growth prospect for domestic electricity industry, EGCO has expanded the investment in Asia-Pacific countries such as Philippines, Lao PDR, Indonesia, Australia and South Korea where the Company has established business bases. Investment of EGCO in each country is shown in Figure 3. In addition, EGCO has also been seeking for further investment opportunities in other target countries such as Vietnam, Myanmar, Cambodia and Taiwan. EGCO has consistently kept monitoring and analyzing electricity industry situation to explore investment opportunities in those targeted countries. The overall industry situations of which are as briefed below;



- The Philippines

The Philippines’s economy had expanded 6.2 percent from previous year. The Philippines currently has installed capacity of 24,000 megawatts, which are primarily from coal-fired power. Peak demand in the Philippines is expected to increase 5.4 percent annually. The Philippines plan to expand its capacity by 39,000 megawatts by 2026, which focus on power generation from coal-fired power plant. Additionally, the Philippines set target renewable energy generation of 26,000 megawatts by 2026, which supports the power generation from solar and wind power.

- **Lao People's Democratic Republic (Lao PDR)**

Lao PDR had a GDP growth of 6.5 percent from prior year, supported by investments in large infrastructure projects. Lao PDR's installed capacity is approximately 8,800 megawatts. Because of its abundant water resource and mountainous geography, the electricity generation is mainly from hydropower plants. With an aim to be the Battery of Asia, the electricity generation for export to neighboring countries such as Thailand and Vietnam are approximately 65 percent of total capacity. The demand growth of whole country is forecasted to grow 13.2 percent annually. Furthermore, Lao PDR's promotes the investment in power generation from hydropower and alternative renewable energies, such as solar and wind from private sectors, both domestic and overseas. Presently, Thailand has signed Memorandum of Understanding (MOU) to purchase electricity of 9,000 megawatts from Lao PDR.

- **Indonesia**

Indonesia's GDP has grown by 5.2 percent from previous year. Indonesia's installed capacity is approximately 63,000 megawatts. Coal-fired and natural gas power plants play a significant role as base load generation. Demand growth is forecasted to increase 6.5 percent annually. According to 2019-2028 Power Supply Business Plan (RUPTL), the government plans to expand its electricity generating capacity by 56,000 megawatts. The new RUPTL prioritizes the use of renewable energy sources, as well as domestic use of gas. In overall, the additional electricity generating capacity is mainly from coal, gas, geothermal and hydropower, which are the major resources.

- **Australia**

Australia had a GDP growth of 2.8 percent from prior year. Australia's installed capacity is approximately 57,000 megawatts, mainly supplied by aging coal-fired power plants and renewable energy. In recent years, solar, wind and gas generation increased drastically, while coal-fired generation declined because of the reduction in its average availability and displacement by solar during the day. Due to energy efficiency and a continuous increase in rooftop PV capacity, demand growth in Australia is estimated to be flat over the 20-year outlook period. Furthermore, the government of Australia puts an effort to increase renewable energy generation to 33,000 gigawatt-hours by 2020, which focus on power generation from wind power and rooftop PV. Power generation from wind power and rooftop PV are forecasted to be more than double from present by 2029.

- **Vietnam**

Vietnam's economy has expanded by 7.1 percent, supported by rapid growth of population and foreign investors. The installed capacity of Vietnam is approximately 48,000 megawatts, which are primarily from coal-fired power and hydropower. Demand growth is estimated to increase 8.4 percent annually. According to revision of power master plan VII, Vietnam's electricity generating capacity is forecasted to increase to 130,000 megawatts by 2030. Additionally, the government of Vietnam aims to develop power generation from renewable energy to achieve target of 48,000 megawatts by 2030, which promotes investment from solar power, hydropower and wind power. Currently, Vietnam is drafting on its power master plan VIII, which expected to replace their coal-focused power plants with schemes favoring cleaner sources, including renewables and LNG. Furthermore, Vietnam wholesale electricity market (VWEM) has officially come into operation since January 2019, as part of its commitment to the power sector's reforms aimed to attract foreign capital inflows.

- **Myanmar**

Myanmar's GDP growth expanded by 6.2 percent from previous year. Myanmar's installed capacity is approximately 5,700 megawatts, which are mainly generated by hydropower plants. However, the current supply is not sufficient to meet country's demand, which is forecasted to increase 9.6 percent annually. Additionally, as 60 percent of households are not connected to the national grid, relying on local solutions such as diesel generators and solar rooftop, the government puts an effort to achieve 100 percent

electrification by 2030 by increasing energy access in rural areas and securing reliable supply in urban areas and Special Economic Zones (SEZs) through joint investment with foreign investors. With this regard, Myanmar plans to expand its electricity generating capacity to 14,000 megawatts in 2030, which focuses on the development of hydropower plants and coal-fired plants. Thailand has signed Memorandum of Understanding (MoU) for the purchase of electricity from Myanmar, expiration in 2020 with no specific capacity.

- Cambodia

Cambodia's economy had a GDP growth of 7.5 percent from prior year. The installed capacity of Cambodia is approximately 2,700 megawatts. Hydro and coal are primary source of fuel supply in Cambodia. Demand growth in Cambodia is forecasted to increase 9.5 percent annually. The government has a policy to connect all villages to the national grid by 2020 and import more energy from neighboring countries to fulfil its growing demand. Cambodia plans to increase 2,600 megawatts of electricity generating capacity, which promote power generation from hydropower and coal-fired power. Thailand has signed Memorandum of Understanding (MoU) for the purchase of electricity from Cambodia, with no specific capacity.

- South Korea

The economy of South Korea expanded by 2.7 percent, compared with previous year. South Korea's installed capacity is approximately 120,000 megawatts, which are significantly from natural gas and coal-fired power. Demand growth is estimated to increase 1.3 percent annually. South Korea electricity market is cost based pool. The Korea Power Exchange (KPX) functions as the independent electricity market operator in Korea. In this role, KPX acts as the clearing house for power sales and purchases. It controls real time dispatch of all generators which is set daily on a merit cost basis. South Korea's electricity generating capacity is estimated to increase to 174,000 megawatts. The government plans to shift away from coal-fired and nuclear power towards LNG and renewables. Moreover, South Korea promotes the development of renewable energy to achieve 20 percent of total capacity by 2030, with target of 31,000 megawatts and 15,000 megawatts from solar power and wind power respectively.

- Taiwan

Taiwan's economy has grown by 2.6 percent from previous year. Taiwan's installed capacity is approximately 45,000 megawatts, which are mostly generated from natural gas and coal-fired power. Demand growth is forecasted to increase 1.5 percent annually. The government of Taiwan plans to expand 34,000 megawatts of electricity generating capacity with emphasis on development of natural gas power plant while reducing the dependence on coal-fired power plants. Presently, the government has set the goal of achieving a nuclear-free homeland and increasing the ratio of renewable energy generation to 20 percent by 2025. Power generation from renewable energy focusing on solar and wind in Taiwan is expected to be 27,000 megawatts by 2025.

1.3 Competition

In 2019, power industry shows intensified competition. Due to limited growth prospect for domestic electricity industry, peers are actively exploring opportunities and expanding investment in overseas, which led to high competition in this region. Additionally, peers extended the investment to energy related business as well as new business for business diversification and coping with disruptive technologies. Despite the high competition in power industry, EGCO has successfully expanded its investment as follows;

- EGCO expanded its portfolio with new investment in 19.8 MW Gangdong Fuel Cell Project in Gangdong-gu, Seoul, South Korea, which EGCO holds 49% ownership interest.
- EGCO extended to other energy-related business through investment in Thai Pipeline Network Co., Ltd., which involves the operation of oil pipeline extension to the northeast of Thailand, opening new opportunity in the oil pipeline business with good and long-term investment return.

- Two projects under construction, being San Buenaventura power plant, a coal-fired power project in the Philippines and Xayaburi power plant, a hydropower project in Lao PDR had commenced their operations in October 2019. These strengthen EGCO's existing footholds in the Philippines and Lao PDR.
- EGCO successfully signed Share Purchase Agreement to hold 25% stake in 640 MW Yunlin offshore wind farm in Taiwan. Commissioning of the Project will occur in phases, with phase 1 comprising 352 MW scheduled for completion in the 4th quarter of 2020, and phase 2 comprising 288 MW scheduled for completion in the 3rd quarter of 2021.

These investments would not only enhance business growth but also provide economic value added to EGCO. EGCO is satisfactorily competitive in power business which was resulted by several key success factors including, but not limited to :

- **Human resources**

Competence and expertise of EGCO's personnel, experiences of its Board members, and good relationship with business alliances are the keys. EGCO personnel have dependable capabilities and experiences in power industry. Board members are competent persons from diverse business areas, many of whom are knowledgeable and long-time experienced in energy and electricity areas. Moreover, EGCO is committed to improving competency of its employees at all levels to ensure they have the competence and expertise to support EGCO Group's continuous business expansion.

- **EGCO's trustworthy**

EGCO continuously expands its investments to ultimately support sustainable growth and maximizes shareholders' value. Project selection criteria have been set to ensure quality investment, that generates good returns at an acceptable risk level. This led to satisfactory financial status, liquidity, and profit growth, which helped the company earn creditability and trustworthy from banks and financial institutions in financially supporting its ongoing investments.

- **Good relationship with communities surrounding power plants**

As power generation may cause impact to nearby communities, EGCO always operates its business with regard to participation in the community and society development starting from the communities in the vicinity of power plants, covering openly disclosure of factual information and promotion of appropriate participation of the society before construction, under construction, and after completion of construction of power plants. EGCO's group power plants initiated and implemented community development projects under the "framework of improvement of quality of life of the communities surrounding the power plants", which ensures that the relationship between EGCO Group's power plants and communities are mutually beneficial.

- **Innovation**

Innovation for sustainability at EGCO Group is one of the most important elements that drives forward the company's business operations not only for distinctive competitive advantage but also towards a sustainable future. EGCO aims to promote internal innovation and encourage creativity and innovative mindsets for EGCO's employees, which can be applied to work process, increase work efficiency and obtain the competitive advantages over competitors.

2. Significant events in 2019

2.1 The progress in construction projects

2.1.1 Project completion

- **SBPL Project**, a project of San Buenaventura Power Ltd., Co., (EGCO holds a 49% ownership interest.), is a 500 MW supercritical coal-fired power plant, in Mauban, Quezon province of Republic of the Philippines. 455 MW of the plant's capacity and energy are contracted to the Manila Electric Company

(MERALCO) pursuant to a 20 years power supply agreement which is extendable for up to an additional 5 years. Construction works of the project was completed and its operation started on September 26, 2019.

- **Xayaburi Project**, a project of the **Xayaburi Power Company Limited**, (EGCO holds a 12.50% ownership interest.), is a hydro power plant project, Run-of-River, with the capacity of 1,285 MW. The project is located on the Mekong River in Xayaburi Province of the Laos People's Democratic Republic (Laos PDR). The project has entered into the Power Purchase agreement (PPA) with Electricity Generating Authority of Thailand (EGAT) with the contracted capacity of 1,220 MW and Electricite Du Laos (EDL) with the contracted capacity of 60 MW for 29 years. Construction works of the project was completed and its operation started on October 29, 2019.

2.1.2 Process of construction

- **NT1PC Project**, a project of **Nam Theun 1 Power Company Limited** (EGCO holds a 25% ownership interest.), is a hydro power plant project. The project is located on Nam Kading River in Bolikhamxay Province of Lao PDR. The project has entered into the PPA with EGAT with the contracted capacity of 514 MW and EDL with the contracted capacity of 130 MW for 27 years. The construction of the project has progressed 66% (The construction plan was 69.32%). The commercial operation date is scheduled in the second quarter of 2022.

2.2 Additional Investments in Joint Ventures

- On January 15, 2019, Gen Plus B.V., a wholly owned subsidiary of EGCO, entered into the sale and purchase agreement to invest in a 49% ownership interest in **Paju Energy Services Co.,Ltd. (Paju ES)** owned by **SK E&S Co.,Ltd. (SK E&S)**. Paju ES owns and operates Paju Power Plant which is a combined cycle gas-fired power plant, which is located in South Korea with the capacity of 2 x 911.50 MW. Paju ES will sell electricity to Korea Electric Power Corporation (KEPCO), the sole off-taker of wholesale power generation in South Korea, through the Korea Power Exchange (KPX).
- On June 21, 2019, The Board of Directors of EGCO approved the investment in **Gangdong Fuel Cell Project (Gangdong)**, located in Gangdong-gu, Seoul, South Korea with the capacity of 19.80 MW. Gangdong will sell electricity to KEPCO through the KPX, sell thermal energy, and receive renewable credits in the form of Renewable Energy Certificates (REC) with respect to its electricity generation output. Gangdong construct and operate by Paju ES, a company in which EGCO owns a 49% equity interest. The investment objectives for the Gangdong are to fulfil a portion of the Renewable Portfolio Standard (RPS) obligations of Paju ES on a long-term basis and to generate incremental economic earnings to Paju ES. A fuel cell is an electrochemical device that combines hydrogen from natural gas and oxygen to produce electricity and heat. Fuel cells operate without combustion and it is considered as an option for a reliable source of power. The construction of the project has progressed 82.45% (The construction plan was 82.12%). The commercial operation date is scheduled in the fourth quarter of 2020.
- On September 25, 2019, EGCO has entered into the Shareholder's Agreement of **Thai Pipeline Network Company Limited (TPN)** to acquired 44.60% ownership interest. TPN operates oil transportation service business with pipeline transportation system to the northeastern region of Thailand which is the extension of petroleum pipeline system to northeastern region project (The project). The project connects the Thai Petroleum Pipeline Co., Ltd (Thappline) Terminal in Saraburi to TPN's owned terminal with storage capacity of 142 million liters in Khon Kaen, through a newly constructed 342.80 kilometers undergrounded pipeline which has an annual transport capacity of approximately 5,443 million liters. The capacity of the project shall potentially increase to 7,330 million liters in Phase 2. The construction of the project has progressed 22.15% (The construction plan was 25.45%). The commercial operation date is scheduled in the fourth quarter of 2021.
- On December 19, 2019, Greenwing Energy B.V., a wholly owned subsidiary of EGCO, entered into the share purchase agreement to acquire a 25% ownership interest in **Yunlin Holding GmbH (Yunlin)** owned by Taiwan Offshore Holding GmbH. The share purchase is expected to be closed in the first quarter of 2020.

Yunlin is a holding company which owns 100% of Yunneng Wind Power Co., Ltd. of Taiwan (Yunneng). Yunneng is constructing a 640 MW offshore wind farm project which will be located in the Taiwan Strait approximately 8 km west of coast of Yunlin Country in Taiwan. Yunneng has entered into power purchase agreement with Taiwan Power Company (Taipower) pursuant to a fixed 20-year feed-in tariff PPA, for the sale of electricity by the project. Commissioning of Yunneng will occur in phase, with phase 1 comprising 352 MW scheduled for the completion in fourth quarter of 2020 and phase 2 comprising 288 MW scheduled for the completion in third quarter of 2021.

2.3 Other event

On September 3, 2019, the 21-year PPA between **Gulf Cogeneration Co., Ltd. (GCC)** and EGAT expired. GCC is a combined cycle power plant in Saraburi Province of Gulf Electric Public Company Limited (GEC) (EGCO holds a 50% ownership interest), which has entered into the PPA with EGAT with the contracted capacity of 109.60 MW. GCC stopped its operation and electricity sales to EGAT on the same day.

3. Business overview

EGCO Group have invested in the Power Producer (PP), Independent Power Producer (IPP), Small Power Producer (SPP), Very Small Power Producer (VSPP), Coal Mining, Oil Transportation Service with pipeline transportation system (Oil Transportation Service), Operating and Maintenance (O&M), Management and Administrative Services (Management Services). Details of each plant are as follows:

(1) Subsidiaries which can be categorized into 2 businesses:

1. Power Generation

1.1 Local power generation

Khanom Electricity Generating Co., Ltd. (KEGCO)	IPP
EGCO Cogeneration Co., Ltd. (EGCO Cogen)	SPP
Roi-Et Green Co., Ltd. (RG)	SPP
Banpong Utilities Co., Ltd. (BPU)	SPP
Klongluang Utilities Co., Ltd. (KLU)	SPP
Chaiyaphum Wind Farm Co., Ltd. (CWF)	SPP
SPP Two Co., Ltd. (SPP 2)	VSPP
SPP Three Co., Ltd. (SPP 3)	VSPP
SPP Four Co., Ltd. (SPP 4)	VSPP
SPP Five Co., Ltd. (SPP 5)	VSPP
Yanhee EGCO Holding Co., Ltd. (Yanhee EGCO)	Holding Co.
• Solarco Company Limited (Solarco)	VSPP
Theppana Wind Farm Co., Ltd. (TWF)	VSPP
EGCO Plus Co., Ltd. (EGCO Plus)	Holding Co.

1.2 Overseas Power Generation

Quezon Power (Philippines) Limited Co. (Quezon)	PP
Boco Rock Wind Farm Pty Ltd. (BRWF)	PP

2. Other businesses

2.1 Local Other Businesses

EGCO Engineering and Service Co., Ltd. (ESCO) O&M

2.2 Overseas Other Businesses

Pearl Energy Philippines Operating Inc. (PEPOI) O&M

Quezon Management Service Inc. (QMS) Management Services

(2) Associated in overseas power generation business

Star Energy Geothermal Pte. Ltd. (SEG) PP

Star Energy Geothermal (Salak - Darajat) B.V. (SEGSD) PP

Xayaburi Power Company Limited (XPCL) PP

(3) Joint Ventures which can be categorized into 2 businesses:

1. Power Generation

1.1 Local power generation

Gulf Electric Public Company Limited (GEC) Holding Co.

- Gulf Cogeneration Co., Ltd. (GCC) SPP

- Nong Khae Cogeneration Co., Ltd. (NKCC) SPP

- Samutprakarn Cogeneration Co., Ltd. (SCC) SPP

- Gulf Yala Green Co., Ltd. (GYG) SPP

- Gulf Power Generation Co., Ltd (GPG) IPP

BLCP Power Limited (BLCP) IPP

Natural Energy Development Co., Ltd. (NED) SPP & VSPP

G-Power Source Co., Ltd. (GPS) VSPP

1.2 Overseas power generation

Nam Theun 2 Power Co., Ltd. (NTPC) PP

San Buenaventura Power Ltd. Co. (SBPL) PP

Nam Theun 1 Power Co., Ltd. (NT1PC) PP

Paju Energy Services Co.,Ltd. (Paju ES) PP

2. Other businesses

2.1 Local Other Businesses

Thai Pipeline Network Company Limited (TPN) Oil Transportation Service

2.2 Overseas Other Businesses

PT Manambang Muara Enim Co., Ltd. (MME) Coal Mining

E&E Engineering and Service Company Limited (E&E) O&M

As of December 31, 2019, EGCO Group's portfolio consists of 28 operating power plants, with a total contracted capacity of 5,475 MW equity and 2 construction projects, with a total contracted capacity of 171 MW equity.

4. Report and Analysis of the Operating Results

EGCO would like to present analysis of the operation result as follows:

Summary of operating results for the year 2019, Ended of December 31, 2019

Unit : Million Baht

	Power Generation		Others		Total		Change Increase (Decrease)	
	2019	2018	2019	2018	2019	2018	Amount	%
Total Revenues	42,830	38,502	797	1,254	43,627	39,756	3,871	10%
Total Expenses	(39,403)	(35,525)	(753)	(1,092)	(40,156)	(36,617)	3,539	10%
Share of Profit (Loss)	6,899	5,972	(2)	84	6,897	6,056	841	14%
Normal operating profit (loss)*	10,326	8,949	42	246	10,368	9,195	1,173	13%
Gains on disposal of investments	-	14,177	-	-	-	14,177	(14,177)	(100%)
Operating profit (loss)**	10,326	23,126	42	246	10,368	23,372	(13,004)	(56%)
Loss from impairment	(611)	(2,619)	-	-	(611)	(2,619)	2,008	77%
Profit (Loss) before the effects of foreign exchange, deferred income tax and lease income	9,715	20,507	42	246	9,757	20,753	(10,996)	(53%)
Deferred income (expense) tax	228	(23)	7	2	235	(21)	256	1,219%
Profit (Loss) before the effects of foreign exchange and lease income	9,943	20,484	49	248	9,992	20,732	(10,740)	(52%)
Profit (Loss) from foreign exchange	2,806	92	(1)	1	2,805	93	2,712	2,916%
Net Profit (Loss) before the impact of lease income	12,749	20,576	48	249	12,797	20,825	(8,028)	(39%)
Impact of lease income	262	248	-	-	262	248	14	6%
Net Profit (Loss)	13,011	20,824	48	249	13,059	21,073	(8,014)	(38%)

* Normal operating profit (loss) : Operating profit (loss) before the effects of gains on disposal of investments.

** Operating profit (loss) : Profit (Loss) before the effects of foreign exchange, deferred income tax, impairment and lease income.

For focusing on the operating performance, the impact of lease income were excluded from the analysis of the operation result.

The operating profit of EGCO Group for the year 2019 were Baht 10,368 million, decreasing by Baht 13,004 million comparing to 2018. However, if excluding gains on disposal of investments Baht 14,177 million, the normal operating profit of EGCO for the year 2019 were increased by Baht 1,173 million comparing to 2018, which came from an increase in power generation business of Baht 1,377 million and a decrease in other business of Baht 204 million. See more details in 4.1 and 4.2 as follows;

4.1 The Analysis of the Operating Results in Power Generation business

The normal operating profit (loss) for the year 2019 of power generation business increased by Baht 1,377 million, comparing to 2018, mainly due to the recognition of the operating results of Paju ES and SBPL and an increase in the operating results of EGCO, Quezon, KEGCO and GPG. On the other hand, those of EGCO Plus, BLCP and NTPC decreased as follows:

Paju ES:

Unit : Million Baht

	2019	2018	Change Increase (Decrease)	
			Amount	%
Electricity revenue	15,919	-	15,919	100%
Other income	451	-	451	100%
Total revenues	16,370	-	16,370	100%
Cost of sale	(13,591)	-	13,591	100%
Other expenses	(1,098)	-	1,098	100%
Total expenses	(14,689)	-	14,689	100%
Normal operating profit (loss)	1,681	-	1,681	100%

- **Paju ES** : The operating result was Baht 1,681 million. This was resulted from the acquisition 49% of Paju ES on January 15, 2019.

SBPL :

Unit : Million Baht

	2019	2018	Change Increase (Decrease)	
			Amount	%
Electricity revenue	1,486	-	1,486	100%
Other income	-	-	-	-
Total revenues	1,486	-	1,486	100%
Cost of sale	(1,021)	-	1,021	100%
Other expenses	(248)	(60)	188	313%
Total expenses	(1,269)	(60)	1,209	2,015%
Normal operating profit (loss)	217	(60)	277	462%

- **SBPL** : The operating result was increased by Baht 277 million. This was resulted from the commencement of SBPL on September 26, 2019.

EGCO:

Unit : Million Baht

	2019	2018	Change Increase (Decrease)	
			Amount	%
Electricity revenue	-	-	-	-
Other income	2,565	570	1,995	350%
Total revenues	2,565	570	1,995	350%
Cost of sale	-	-	-	-
Other expenses	(4,156)	(3,682)	474	13%
Total expenses	(4,156)	(3,682)	474	13%
Normal operating profit (loss)	(1,591)	(3,112)	1,521	49%

- **EGCO** : The operating result was increased by Baht 1,521 million mainly due to interest income from loan to EGCO Plus and recognition of gain on disposal in North Pole. Additionally, interest expense was decreased. Meanwhile, administrative expenses were increased due to success fee and amortization of rights to power purchase agreement and rights to fuel purchase agreement of Paju ES.

Quezon (Include PEPOI and QMS):

Unit : Million Baht

	2019	2018	Change Increase (Decrease)	
			Amount	%
Electricity revenue	10,845	10,240	605	6%
Other income	22	5	17	340%
Total revenues	10,867	10,245	622	6%
Cost of sale	(6,106)	(5,715)	391	7%
Other expenses	(1,393)	(1,836)	(443)	(24%)
Total expenses	(7,499)	(7,551)	(52)	(1%)
Normal operating profit (loss)	3,368	2,694	674	25%

- **Quezon** : The operating result was increased by Baht 674 million mainly due to an increase of electricity profit, caused by shorter maintenance period, comparing to the same previous year. Additionally, in 2018, there were costs of replacement and dismantling of transmission line and switchyard as part of the construction of SBPL.

KEGCO:

Unit : Million Baht

	2019	2018	Change Increase (Decrease)	
			Amount	%
Electricity revenue				
- Availability Payment (AP)	3,915	3,871	44	1%
- Energy Payment (EP)	11,644	10,317	1,327	13%
Other income	79	33	46	139%
Total revenues	15,638	14,221	1,417	10%
Cost of sale	(13,275)	(12,008)	1,267	11%
Other expenses	(1,108)	(1,195)	(87)	(7%)
Total expenses	(14,383)	(13,203)	1,180	9%
Normal operating profit (loss)	1,255	1,018	237	23%

- **KEGCO** : The operating result was increased by Baht 237 million mainly due to an increase in Availability Payment (AP) and electricity profit, caused by a scheduled maintenance in 2018. Additionally, other income was increased according to compensation for non-compliance of the EPC Contractor's contract and interest expenses was decreased.

GPG:

Unit : Million Baht

	2019	2018	Change Increase (Decrease)	
			Amount	%
Electricity revenue				
- Availability Payment (AP)	2,055	2,068	(13)	(1%)
- Energy Payment (EP)	1,582	1,062	520	49%
Other income	24	19	5	26%
Total revenues	3,661	3,149	512	16%
Cost of sale	(2,245)	(1,857)	388	21%
Other expenses	(381)	(401)	(20)	(5%)
Total expenses	(2,626)	(2,258)	368	16%
Normal operating profit (loss)	1,035	891	144	16%

- **GPG** : The operating result was increased by Baht 144 million mainly due to an increase in electricity profit resulting from higher dispatch from EGAT, comparing to the same period of previous year.

EGCO Plus (Include North Pole):

Unit : Million Baht

	2019	2018	Change Increase (Decrease)	
			Amount	%
Electricity revenue	-	-	-	-
Other income	554	928	(374)	(40%)
Total revenues	554	928	(374)	(40%)
Cost of sale	-	-	-	-
Other expenses	(2,354)	(355)	1,999	563%
Total expenses	(2,354)	(355)	1,999	563%
Normal operating profit (loss)	(1,800)	573	(2,373)	(414%)

- **EGCO Plus** : The operating result was decreased by Baht 2,373 million mainly due to interest expenses on loan from EGCO and loans for investment in Paju ES. Other income was decreased, caused by recognition of gain on liquidation of 100% indirect shares in EGCO BVI. Additionally, other expenses were increased due to corporate income tax expenses and withholding tax expenses on dividend payment from Paju ES.

BLCP:

Unit : Million Baht

	2019	2018	Change Increase (Decrease)	
			Amount	%
Electricity revenue				
- Availability Payment (AP)	2,478	3,581	(1,103)	(31%)
- Energy Payment (EP)	5,426	5,288	138	3%
Other income	209	90	119	132%
Total revenues	8,113	8,959	(846)	(9%)
Cost of sale	(6,599)	(6,558)	41	1%
Other expenses	(667)	(526)	141	27%
Total expenses	(7,266)	(7,084)	182	3%
Normal operating profit (loss)	847	1,875	(1,028)	(55%)

- **BLCP** : The operating result was decreased by Baht 1,028 million mainly due to a decrease in Availability Payment (AP) according to the PPA. Additionally, interest and administrative expenses were increased. Meanwhile, electricity profit was increased according to shorter scheduled maintenance, comparing to the same period of previous year and other income was increased due to compensation for non-compliance of the EPC Contractor's contract.

NTPC:

Unit : Million Baht

	2019	2018	Change Increase (Decrease)	
			Amount	%
Electricity revenue	2,807	2,987	(180)	(6%)
Other income	15	9	6	67%
Total revenues	2,822	2,996	(174)	(6%)
Cost of sale	(983)	(881)	102	12%
Other expenses	(489)	(590)	(101)	(17%)
Total expenses	(1,472)	(1,471)	1	1%
Normal operating profit (loss)	1,350	1,525	(175)	(11%)

- **NTPC** : The operating result was decreased by Baht 175 million mainly due to a decrease in electricity revenue, caused by the lower amount of water, comparing to the same period of previous year. Additionally, cost of sale was increased due to liquidated damages from unplanned outage. Meanwhile, interest and administrative expenses were decreased.

Other Subsidiaries in Power Generation business:

Unit : Million Baht

	BPU		KLU*		EGCO COGEN		RG	
	2019	2018	2019	2018	2019	2018	2019	2018
Electricity revenue	4,895	4,690	2,527	2,231	1,731	1,711	197	172
Other income	9	5	7	7	5	5	1	1
Total revenues	4,904	4,695	2,534	2,238	1,736	1,716	198	173
Cost of sale	(4,173)	(3,911)	(2,118)	(1,889)	(1,564)	(1,571)	(179)	(165)
Other expenses	(410)	(438)	(251)	(262)	(72)	(62)	(17)	(15)
Total expenses	(4,583)	(4,349)	(2,369)	(2,151)	(1,636)	(1,633)	(196)	(180)
Normal operating profit (loss)	321	346	165	87	100	83	2	(7)

* KLU : The operating result was increased by Baht 78 million mainly due to an increase of electricity profit, resulting from higher generation.

Other Subsidiaries in Power Generation business (continue):

Unit : Million Baht

	SPP 2		SPP 3		SPP 4		SPP 5	
	2019	2018	2019	2018	2019	2018	2019	2018
Electricity revenue	176	170	178	174	128	123	181	178
Other income	-	2	-	2	-	2	1	5
Total revenues	176	172	178	176	128	125	182	183
Cost of sale	(53)	(53)	(50)	(50)	(39)	(39)	(51)	(50)
Other expenses	(35)	(41)	(31)	(38)	(26)	(31)	(33)	(40)
Total expenses	(88)	(94)	(81)	(88)	(65)	(70)	(84)	(90)
Normal operating profit (loss)	88	78	97	88	63	55	98	93

Other Subsidiaries in Power Generation business (continue):

Unit : Million Baht

	YEH EGCO*		BRWF		CWF**		TWF		Total		Change Increase (Decrease)	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	Amount	%
Electricity revenue	1,318	1,241	877	996	865	726	77	68	13,150	12,480	670	5%
Other income	12	9	13	11	7	8	1	1	56	58	(2)	(3%)
Total revenues	1,330	1,250	890	1,007	872	734	78	69	13,206	12,538	668	5%
Cost of sale	(313)	(330)	(418)	(434)	(325)	(327)	(28)	(28)	(9,311)	(8,847)	464	5%
Other expenses	(306)	(332)	(302)	(392)	(200)	(217)	(17)	(19)	(1,700)	(1,887)	(187)	(10%)
Total expenses	(619)	(662)	(720)	(826)	(525)	(544)	(45)	(47)	(11,011)	(10,734)	277	3%
Normal operating profit (loss)	711	588	170	181	347	190	33	22	2,195	1,804	391	22%

* YEH EGCO : The operating result was increased by Baht 123 million mainly due to higher irradiation, leading an increase in electricity profit.

** CWF : The operating result was increased by Baht 157 million mainly due to higher wind speed, leading an increase in electricity profit.

Other Joint Ventures and Associated in Power Generation business

Unit : Million Baht

	SEG (ASSO)		SEGSD (ASSO)		NED (JV)		GEC (JV)	
	2019	2018	2019	2018	2019	2018	2019	2018
Electricity revenue	1,964	2,049	1,219	1,297	952	915	3,566	3,915
Other income	-	-	-	-	7	10	38	46
Total revenues	1,964	2,049	1,219	1,297	959	925	3,604	3,961
Cost of sale	(413)	(432)	(250)	(262)	(233)	(238)	(3,191)	(3,438)
Other expenses	(1,043)	(1,203)	(638)	(691)	(94)	(116)	(195)	(223)
Total expenses	(1,456)	(1,635)	(888)	(953)	(327)	(354)	(3,386)	(3,661)
Normal operating profit (loss)	508	414	331	344	632	571	218	300

Other Joint Ventures and Associated in Power Generation business (continue):

Unit : Million Baht

	GPS (JV)		XPCL [*] (ASSO)		NT1PC (JV)		GIDEC ^{**} (JV)		Total		Change Increase (Decrease)	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	Amount	%
Electricity revenue	274	268	190	-	-	-	-	11	8,165	8,455	(290)	(3%)
Other income	-	1	-	-	-	-	-	-	45	57	(12)	(21%)
Total revenues	274	269	190	-	-	-	-	11	8,210	8,512	(302)	(3%)
Cost of sale	(93)	(93)	(109)	-	-	-	-	(12)	(4,289)	(4,475)	(186)	(4%)
Other expenses	(31)	(38)	(133)	-	(18)	(18)	-	(7)	(2,152)	(2,296)	(144)	(6%)
Total expenses	(124)	(131)	(242)	-	(18)	(18)	-	(19)	(6,441)	(6,771)	(330)	(5%)
Normal operating profit (loss)	150	138	(52)	-	(18)	(18)	-	(8)	1,769	1,741	28	2%

* The commercial operation date of XPCL was on October 29, 2019.

** Divested ordinary shares in GIDEC on March 15, 2018.

4.2 The Analysis of the Operating Results in Other Businesses

Normal operating profit (loss) for the year 2019 in other businesses decreasing by Baht 204 million comparing to 2018 as follows:

Subsidiaries and Joint Ventures in Other business:

Unit : Million Baht

	ESCO (Sub)		MME (JV)		Total		Change Increase (Decrease)	
	2019	2018	2019	2018	2019	2018	Amount	%
Revenue	-	-	418	698	418	698	(280)	(40%)
Service income	786	1,244	-	-	786	1,244	(458)	(37%)
Other income	11	10	11	43	22	53	(31)	(59%)
Total revenues	797	1,254	429	741	1,226	1,995	(769)	(39%)
Cost of sale	(673)	(977)	(386)	(581)	(1,059)	(1,558)	(499)	(32%)
Other expenses	(80)	(115)	(45)	(76)	(125)	(191)	(66)	(35%)
Total expenses	(753)	(1,092)	(431)	(657)	(1,184)	(1,749)	(565)	(32%)
Normal operating profit (loss)	44	162	(2)	84	42	246	(204)	(83%)

Summary of operating results for the year 2019

Unit : Million Baht

	2019				2018			
	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Total Revenues	10,434	11,175	10,719	11,299	9,216	9,071	10,343	11,126
Total Expenses	(9,678)	(10,224)	(9,804)	(10,450)	(9,042)	(8,402)	(9,262)	(9,911)
Share of Profit (Loss)	2,159	1,643	1,649	1,446	1,802	1,819	1,468	967
Normal operating profit (loss)	2,915	2,594	2,564	2,295	1,976	2,488	2,549	2,182
Gains on disposal of investments	-	-	-	-	14,162	-	-	15
Operating profit (loss)	2,915	2,594	2,564	2,295	16,138	2,488	2,549	2,197
Loss from impairment	-	-	-	(611)	-	-	-	(2,619)
Profit (Loss) before the effects of foreign exchange, deferred income tax and lease income	2,915	2,594	2,564	1,684	16,138	2,488	2,549	(422)
Deferred income (expense) tax	46	169	(86)	106	65	(197)	22	89
Profit (Loss) before the effects of foreign exchange and lease income	2,961	2,763	2,478	1,790	16,203	2,291	2,571	(333)
Profit (Loss) from foreign exchange	712	1,195	224	674	3,886	(5,316)	2,004	(481)
Net profit (Loss) before the impact of lease income	3,673	3,958	2,702	2,464	20,089	(3,025)	4,575	(814)
Impact of lease income	76	(10)	121	75	82	661	(628)	133
Net Profit (Loss)	3,749	3,948	2,823	2,539	20,171	(2,364)	3,947	(681)

5. Report and Analysis of Financial Position

Comparing the Statements of Financial Position as at December 31, 2019 to the Statements of Financial Position as at December 31, 2018 is shown below:

	Consolidated Financial Statement (Million Baht)			
	Year		Change Increase (Decrease)	
	2019	2018	Amount	%
Assets				
Current Assets	35,794	51,353	(15,559)	(30%)
Investments in joint ventures and associated, net and advance payments for investment	87,281	58,364	28,917	50%
Property, plant and equipment, net	52,782	56,361	(3,579)	(6%)
Other non-current assets	32,666	40,350	(7,684)	(19%)
Total Assets	208,523	206,428	2,095	1%
Liabilities				
Current Liabilities	6,724	6,720	4	1%
Long-term loans and debenture (including current portion of long-term loans)	89,528	91,865	(2,337)	(3%)
Other current liabilities	7,164	6,993	171	2%
Total Liabilities	103,416	105,578	(2,162)	(2%)
Shareholders' Equity				
Parent's shareholders' equity	104,491	100,239	4,252	4%
Non-controlling interests	616	611	5	1%
Total Shareholders' Equity	105,107	100,850	4,257	4%
Total Liabilities and Shareholders' Equity	208,523	206,428	2,095	1%

5.1 Asset Analysis

As of December 31, 2019 the total assets were Baht 208,523 million, increasing by Baht 2,095 million or 1% from the year 2018. The details are as follows:

- Current assets decreased by Baht 15,559 million or 30%. This was caused by Cash, cash equivalents and short-term investments decreased by Baht 14,167 million from an investment in Paju ES. Spare parts and supplies of Quezon and KEGCO decreased by Baht 470 million. Dividend receivable from BLCF decreased by Baht 306 million. KEGCO's financial lease receivable decreased by Baht 219 million. Additionally, trade receivable and trade receivable from a related party and other current assets decreased by Baht 103 million and Baht 294 million, respectively.

- Investments in joint ventures and associated (net) and an advance payment for investment increased by Baht 28,917 million or 50% mainly due to an investment in Paju ES, TPN, SBPL, NT1PC, XPCL and E&E. Additionally, recognition of share of profits after dividend deduction from joint ventures and associated. Meanwhile, an advance payment for investment in Paju ES was decreased.
- Property, plant and equipment (net) decreased by Baht 3,579 million or 6% mainly due to depreciation.
- Other non-current assets decreased in the amount of Baht 7,684 million or 19% mainly due to dividend receivable from BLCPL decreased by Baht 6,188 million. A decreased of deferred expenses and KEGCO's financial lease receivable by Baht 858 million and Baht 829 million, respectively. Meanwhile, other non-current assets increased by Baht 191 million.

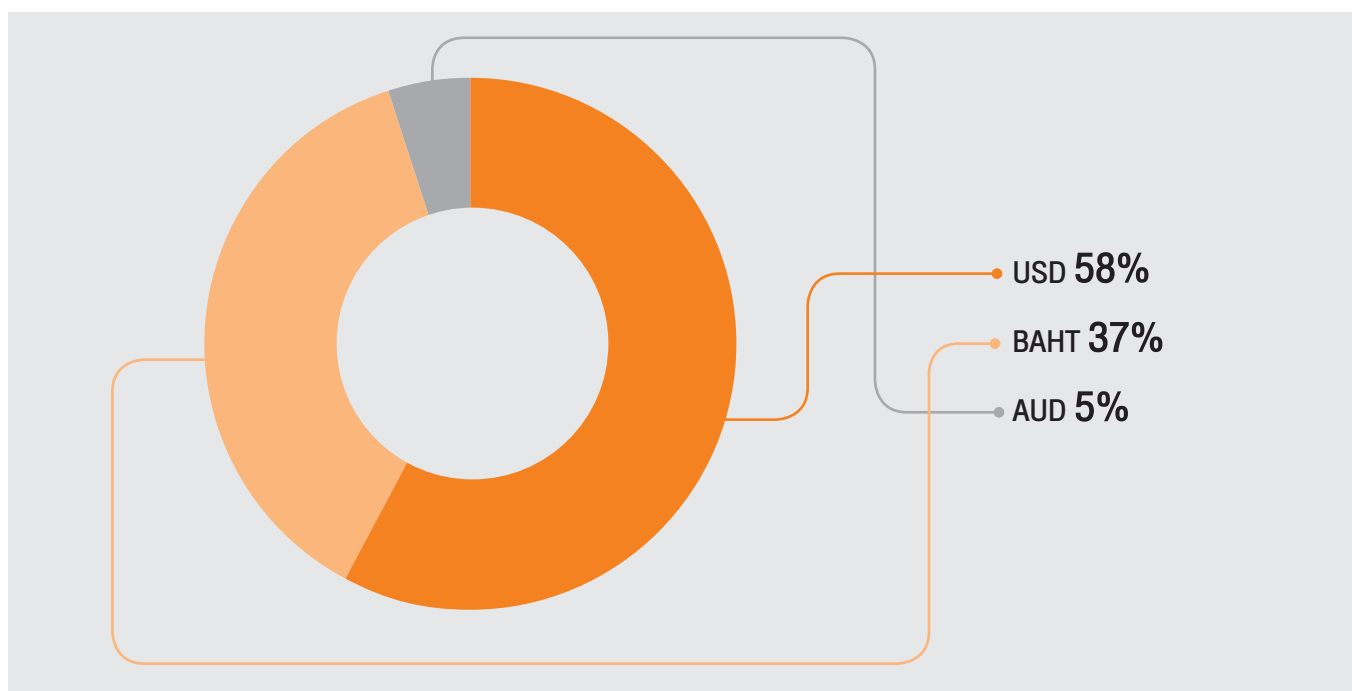
5.2 Liability Analysis

As of December 31, 2019 the total liabilities were Baht 103,416 million, decreasing by Baht 2,162 million or 2% from the year 2018. The details are as follows:

- Current liabilities increased in the amount of Baht 4 million or 1% mainly due to payable for acquisition of investment in TPN Baht 1,240 million and other current liabilities increased by Baht 45 million. Whereas, trade payable and trade payable to a related party of Quezon, BPU, KEGCO and EGCO Cogen decreased by Baht 1,197 million. The principle repayment of short-term loan of Quezon in the amount of Baht 84 million.
- Long-term loans and debenture decreased by Baht 2,337 million or 3% mainly due to the principle repayment of long-term loan of EGCO, KEGCO and Quezon. Whereas, the drawn down of long-term loan of EGCO Plus to invest in Paju ES.

➤ Outstanding long-term loans are as follows:

- USD loans : US dollar 1,647 million, equivalent to Baht 49,826 million
- Baht loans : Baht 31,412 million
- AUD loans : Australian dollar 189 million, equivalent to Baht 3,956 million



Loan maturities schedule as at December 31, 2019

Unit : Million Baht

Maturity	EGCO	KEGCO	BPU	Quezon	BRWF	CWF	KLU	Yanhee EGCO	SPP 2,3,4,5	TWF	EGCO Plus	Total
Within 1 year	936	1,309	322	1,543	264	359	175	430	382	34	-	5,754
2 - 5 years	29,613	4,630	1,484	1,658	3,657	1,689	719	1,372	507	106	12,001	57,436
Over 5 years	4,288	6,942	4,843	-	-	1,920	2,859	598	42	59	-	21,551
Total	34,837	12,881	6,649	3,201	3,921	3,968	3,753	2,400	931	199	12,001	84,741

➤ Debenture : Yen 17,120 million, redeems within 7 years from the issuance date, had a cross currency swap to US Dollar 143 million.

- Other non-current liabilities increased by Baht 171 million or 2% mainly due to provision for decommissioning costs of Quezon and other non-current liabilities increased by Baht 608 million and Baht 252 million, respectively. Meanwhile, deferred income tax liabilities and advance payment to contractor of Quezon decreased by Baht 548 million and Baht 140 million, respectively.

5.3 Shareholders' Equity Analysis

As of December 31, 2019, total Shareholders' Equity were Baht 105,107 million increasing by Baht 4,257 million or 4% from the year 2018. The main reasons are as follows: Firstly, EGCO's operating profit in Income Statement was Baht 13,059 million. Secondly, an increase by non-controlling interests in the amount of Baht 5 million. Thirdly, a decrease by dividend payment in the amount of Baht 3,553 million. Fourthly, share of other comprehensive income of associates and joint ventures was Baht 2,586 million. Fifthly, the effect from the translation adjustment of currencies to Thai Baht for offshore subsidiaries decreased by Baht 2,515 million and the loss on the effect of changes in accounting policy was Baht 94 million. Lastly, the loss on remeasurements of post-employee benefit obligations was Baht 59 million.

5.4 Cash Flow Analysis

As of December 31, 2019 cash and cash equivalents were Baht 20,488 million, decreasing by Baht 14,389 million comparing to December 31, 2018. The details are as follows:

	Unit: Million Baht
Net cash <u>received from</u> operating activities	11,430
Net cash <u>payment for</u> investing activities	(17,816)
Net cash <u>payment for</u> financing activities	(6,490)
Loss from the effect of foreign exchange rate	(1,513)
Net decrease in cash	<u>(14,389)</u>

- Net cash received from operating activities was Baht 11,430 million from operating of EGCO and its subsidiaries.
- Net cash payment for investing activities was Baht 17,816 million. Cash payments in investment in Paju ES and TPN were Baht 23,022 million and Bath 1,980 million, respectively. The investment in SBPL, NT1PC, XPCL and E&E were Baht 3,151 million, Baht 1,428 million, Baht 160 million and Baht 12 million, respectively. Cash payments in purchases of equipment and construction in progress were Baht 258 million. Cash payments in short-term and long-term investments used as collateral and cash payments for purchases of land around Rayong Power Plant were Baht 254 million and Baht 50 million, respectively. Meanwhile, the dividend received from joint ventures and other company were Baht 11,943 million, Cash receipts from interest income was Baht 496 million and cash receipts from redemption of SEG's shares was Baht 60 million.
- Net cash payment for financing activities was Baht 6,490 million, resulted from the principal repayment of short-term and long-term loans totalling Baht 22,368 million, interest payment of loans and financing fees totalling Baht 3,961 million and dividend payment to shareholders amounting to Baht 3,615 million. Meanwhile, the short-term and long-term loan draw down was Baht 23,454 million.

6. Financial Ratios

Profitability Ratios

	2019	2018	Change Increase (Decrease)
Gross Profit Ratio (%)	27.60	32.82	(5.22)
Operating Profit Ratio before FX (%)	26.23	51.23	(25.00)
Profit Ratio before FX (%)	11.79	26.49	(14.70)
Profit before FX per share (Baht)	18.98	39.38	(20.40)

Trade receivables aging summary

Aging periods of trade receivables as at December 31, 2019 are shown in the table below:

Unit : Million Baht

	2019	2018	Change Increase (Decrease)	
			Amount	%
Current	2,052	2,041	11	1%
Overdue less than 3 months	-	8	(8)	(100%)
Overdue between 3 - 6 months	-	68	(68)	(100%)
Overdue between 6 - 12 months	-	-	-	-
Overdue more than 12 months	32	-	32	100%
Trade receivables, net	2,084	2,117	(33)	(2%)

Leverage Ratio and Liquidity Ratio

	2019	2018	Change Increase (Decrease)
Debt to equity ratio (Time)			
- Consolidated	0.98	1.05	(0.07)
- Company	0.65	0.80	(0.15)
Book value per share (Baht)			
- Consolidated	198.48	190.40	8.08
- Company	122.86	115.80	7.06
Current ratio (Time)			
- Consolidated	2.87	1.51	1.36
- Company	2.51	0.38	2.13
Interest Coverage Ratio (Time)			
- Company	5.44	3.61	1.83

7. Future Plans

In year 2020, EGCO has set a new vision: “To be a major sustainable Thai energy company with full commitment to environment protection and social development support”. To achieve the vision and corporate goals, EGCO drives the business through corporate strategies based on Balanced Scorecard concept in four strategic perspectives: finance, customer, internal business process and learning and growth, that will be major drivers for EGCO’s future sustainable growth.

The strategic plan for the year 2020, EGCO sets investment directions to expand the investment from the existing core business in power generation to fuel supply business and smart energy solution business in order to increase investment opportunities, to generate long-term income and to secure continuous growth to EGCO. We aim to enhance financial competitiveness by securing competitive funding sources with financial exposure optimization, which is the one of our key success factors. Moreover, we place a great emphasis on effective asset management to ensure maximum efficiency of existing power plants in order to achieve its highest performance and manage projects under construction to be completed as scheduled and within the planned budget. In order to secure the future success and enhance corporate competencies, strengthening in human resource foundation has been placed as priority to ensure the effective organization structure and people management. Furthermore, EGCO has a strong intention to enhance corporate sustainability practice and elevate corporate governance to be in line with international standard. In overall, the corporate strategies would be implemented to ultimately deliver sustainable long-term value towards stakeholders.



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