

# **Management Discussion and Analysis**

## For the Annual Operating Results 2018

## Ended December 31, 2018

<u>Note</u>: 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 at Tel: 662-998-5150-3 or Email: ir@egco.com

## **Management Discussion and Analysis**

#### 1. Power Industry and Competition

#### 1.1 Electricity industry and Economic situation in Thailand

In 2018, Thailand's peak demand in Electricity Generating Authority of Thailand (EGAT)'s system was 28,338 megawatts, occurred on April 24, 2018 at 01.51 pm, lower than the peak demand of 28,578 megawatts in 2017 by 0.85% while the peak demand in 3 power authorities system (EGAT, Metropolitan Electricity Authority (MEA) and Provincial Electricity Authority (PEA) was 29,968 megawatts, lower than the peak demand of 30,303 megawatts in 2017 by 1.11%. A decrease in the peak demand was the consequence of cold weather in the beginning of the year and continuous raining as well as the increase of Independent Power Supply (IPS) and Small Power Producer (SPP) outside the EGAT system. In the meantime, electricity consumption of the country in EGAT system as of December 2018, including electricity consumption outside EGAT system as of November 2018 stood at 203,006 gigawatt-hours which were 1,840 gigawatt-hours or 0.91% increase from 201,166 gigawatt-hours in 2017. A growth of electricity consumption was mainly driven by the expansion of economy and thriving tourism.

As for economic outlook in 2019, National Economic and Social Development Board (NESDB) forecasted Thailand's economy to expand in the range of 3.50% to 4.50% (Mean 4.00%), lower than the expansion of 4.20% in 2018. A lower projection is mainly resulted from the uncertainty of trade protection and reciprocal retaliation between the United States of America and the People's Republic of China along with an increase in federal funds rate, which negatively affect trading-partner economies, world trade volume, global economy, and Thai exports to grow slower than expected

As of December 31, 2018, the country's contracted capacity in 3 power authorities system was 48,990 megawatts, 15,790 megawatts or 32.23% of which were generated by EGAT power plants, and the remaining from other producers, i.e.

- Independent Power Producers (IPPs) 14,948 megawatts or 30.51%
- Small Power Producers (SPPs) 8,757 megawatts or 17.88%
- Very Small Power Producers (VSPPs) as of October 2018 5,617 megawatts or 11.46%
- Neighboring Countries Power Producers 3,878 megawatts or 7.92%

EGCO's contracted capacity of electricity sold to EGAT was 3,332.08 megawatts, representing 6.80% of the country's contracted capacity in 3 power authorities system, as presented in Figure 1

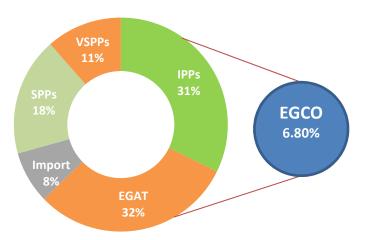


Figure 1 The country's contracted capacity of electricity in 2018 classified by producers

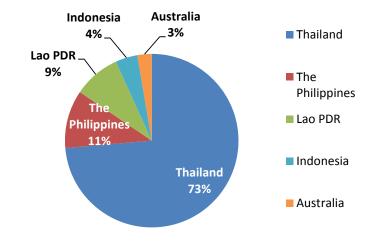
Source: EGAT and Department of Alternative Energy Development and Efficiency (DEDE)

In the recent year, the National Energy Policy Council (NEPC) had a plan to draft the new Power Development Plan (PDP) to portray a clear picture of power sector development since some planned power plants in PDP 2015 could not be constructed as planned along with electricity consumption behavior change, influenced by disruptive technology. The objectives of the new PDP aim to strengthen security of power supply for each region, maintain appropriate costs of power generation and focus on reducing environmental and social impacts by lessening carbon dioxide intensity in power generation. The new PDP has been approved by NEPC on January 24, 2019 after public hearing to obtain opinions and comments from private sector and others authorities has already been done.

Regarding the Alternative Energy Development Plan of 2015-2036 (AEDP 2015), power generation from renewable energy (including large hydropower) is targeted to be 19,684 megawatts in 2036. In 2018, the government has announced the plan to suspend the purchase of renewable power during the next five years because the country has sufficient reserve margin. According to the Department of Alternative Energy Development and Efficiency, the current status of renewable energy power plants as of October 31, 2018, which achieved the commercial operation date (COD) was 10,798 megawatts, increased from which of 2017 by 560 megawatts or 5.47%.

#### 1.2 Electricity industry in Asia-Pacific countries

EGCO has envisioned slight growth prospect for domestic electricity industry. Therefore, EGCO has thus worked out expansion plans in Asia-Pacific countries such as Republic of the Philippines, Laos People's Democratic Republic (Lao PDR), Republic of Indonesia and Commonwealth of Australia, where the company has established business bases. Investment of EGCO in each country is shown in Figure 2. To secure sustainable growth, EGCO has also been seeking for investment opportunities in other countries in the asia pacific region such as Socialist Republic of Vietnam, Union of Myanmar, State of Cambodia, Republic of Korea (South Korea) and Republic of China (Taiwan). To be well prepared for such endeavors, EGCO has consistently kept abreast of electricity industry situation in those targeted countries.



#### Figure 2 EGCO's equity contracted capacity of electricity in 2018 classified by country

#### 1.3 Competition

Overall picture in 2018 illustrated the active movements of power sector. On the government sector, the National Energy Policy Council or NEPC is drafting the new PDP. On the private sector, power companies are actively seeking for investment opportunities outside Thailand due to limited growth prospect for domestic electricity industry. This resulted in the intensified competition in overseas market. Despite the high competition in power industry, EGCO successfully enhanced its investment in a new project. On November 15, 2018, EGCO by Gen Plus B.V., has signed sale and purchase agreement to invest in a 49% ownership interest in Paju Energy Service Co.Ltd. (Paju ES), which owns and operates the Paju combined cycle power plant with an installed capacity of 1,823 megawatts (consists of 2 units of 911.50 megawatts each), which is located in Paju city, Gyeonggi Province, South Korea. The transaction is completed on 15 January 2019. Such acquisition not only enables EGCO to receive the immediate income, but also adds the economic value to the company in the long term. EGCO is satisfactorily competitive in power business which was resulted by favorable factors as follows;

#### - Human resources

Competence and expertise of EGCO 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.

## - EGCO's trustworthy

EGCO has planned to expand its investments to ensure a consistent and sustainable growth. The Company selected to invest in projects that generate good returns at an acceptable risk level, which has resulted in its satisfactory financial status, liquidity, and profit growth. This has helped the Company earn trust and confidence 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 power plants with full responsibility towards society and environment. EGCO discloses information without concealment, encourages public participation and maintains good relationship with nearby communities. Moreover, it supports local employment for income distribution and the well-being of local people. So far, EGCO has faced no complaints from communities surrounding its power plants

#### - Innovation

Since EGCO realizes the importance of organizational development to prepare for the disruptive changes in the future, EGCO aims to incubate EGCO personnel with creative and innovative ideas, which can be applied to work process, increase work efficiency and obtain the competitive advantages over competitors. For instance, EGCO arranged innovation workshopped to encourage the process of innovative thinking to practical innovation including innovation competition "EGCO Group Innovation Team Challenge".

## 2. Significant events in 2018

## 2.1 The progress in construction projects

- 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. The project is located in the Laos People's Democratic Republic (Laos PDR). The project has entered into the PPA with EGAT with the contracted capacity of 1,220 MW and Electricite De Laos (EDL) with the contracted capacity of 60 MW for 29 years. The construction of the project has progressed 97.45% (The construction plan was 97.09%). The commercial operation date is scheduled in the fourth quarter of 2019.

- 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. The construction of the project has progressed 97.38% (The construction plan was 96.83%). The commercial operation date is scheduled in the fourth quarter of 2019.
- 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, 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 46.79% (The construction plan was 59.68%). The commercial operation date is scheduled in the second quarter of 2022.

## 2.2 Additional Investments in Joint Ventures and Associated

- On March 14, 2018, EGCO divested all 18.72% shares in Eastern Water Resources Development and Management Public Company Limited to Manila Water Company Inc. EGCO Group recognised gain on disposal totalling Baht 4,358 million.
- On March 15, 2018, EGCO divested all 50% shares in GIDEC Company Limited to IEC Green Energy Company Limited. EGCO Group recognised gain on disposal totalling 9 million Baht.
- On March 20, 2018, Gen Plus B.V., a wholly owned subsidiary of EGCO, divested all 49% indirect shares in MASINLOC POWER PARTNERS CO. LTD. (MPPCL) to SMC Global Power Holdings Corp. EGCO Group recognised gain on disposal totalling 320 million US dollar, equivalent to 9,810 million Baht.

## 2.3 Other significant event

 On November 15, 2018, Gen Plus B.V., a wholly owned subsidiary of EGCO, singed 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 the Paju combined cycle power plant, which is located in South Korea. The acquisition was completed on January 15, 2019.

## 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, 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

## (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

## 2. Others businesses

#### • Overseas Other Business

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

#### (4) Other long-term investments

• Xayaburi Power Company Limited (XPCL)

As of December 31, 2018, EGCO Group's portfolio consists of 26 operating power plants, with a total contracted capacity of 4,260 MW equity and 3 construction projects, with a total contracted capacity of 544 MW equity.

## 4. Report and Analysis of the Operating Results

EGCO would like to present analysis of the operating results as follows:

## Summary of operating results for the year 2018

Unit : Million Baht

	Power Generation		Others		Total		Change Increase (Decrease)	
	2018	<u>2017</u>	<u>2018</u>	<u>2017</u>	<u>2018</u>	2018 2017		<u>%</u>
Total Revenues	38,502	32,331	1,254	1,072	39,756	33,403	6,353	19%
Total Expenses	(35,525)	(30,541)	(1,092)	(923)	(36,617)	(31,464)	5,153	16%
Share of Profit (Loss)	5,972	7,264	84	65	6,056	7,329	(1,273)	(17%)
Gain on disposal of investments	14,177	-	-	-	14,177	-	14,177	100%
Profit (Loss) before the effects of								
foreign exchange, deferred income tax,	23,126	9,054	246	214	23,372	9,268	14,104	100%
impairment and lease income								
Loss from impairment	(2,619)	(352)	-	-	(2,619)	(352)	(2,267)	(100%)
Profit (Loss) before the effects of								
foreign exchange, deferred income tax	20,507	8,702	246	214	20,753	8,916	11,837	100%
and lease income								
Deferred income (expense) tax	(23)	346	2	(1)	(21)	345	(366)	(100%)
Profit (Loss) before the effects of	20.404	0.040	240	040	00 700	0.004	44 474	400%
foreign exchange and lease income	20,484	9,048	248	213	20,732	9,261	11,471	100%
Profit (Loss) from foreign exchange	92	3,785	1	-	93	3,785	(3,692)	(98%)
Net profit (Loss) before the impact of	00.570	40.000	0.40	040	00.005	10.010	7 770	000/
lease income	20,576	12,833	249	213	20,825	13,046	7,779	60%
Impact of lease income	248	(1,228)	-	-	248	(1,228)	1,476	100%
Net Profit (Loss)	20,824	11,605	249	213	21,073	11,818	9,255	78%

To focusing on the operating performance, the impacts of lease income were excluded from the analysis of the operating result.

The operating profit of EGCO Group before the effects of foreign exchange, deferred income tax, impairment and lease income for the year 2018 were Baht 23,372 million, increasing by Baht 14,104 million comparing to 2017, which came from a increase in power generation business of Baht 14,072 million and a increase in other business of Baht 32 million. See more details in 4.1 and 4.2 as follows;

## 4.1 <u>The Analysis of the Operating Results in Power Generation business</u>

Profit (loss) before the effects of foreign exchange, deferred income tax, impairment and lease income for the year 2018 of power generation business increased by Baht 14,072 million, comparing 2017. This was mainly due to a increase in the operating results of EGCO Plus, EGCO, BPU, SEGSD, KLU, CWF, NTPC, SEG and GPG. On the other hand, those of Quezon, KEGCO and BLCP were decreased as follows:

#### EGCO Plus (Include Gen Plus B.V. and North Pole):

Unit : Million Baht

			Change		
	<u>2018</u>	<u>2017</u>	Increase (Dec	rease)	
			<u>Amount</u>	<u>%</u>	
Electricity revenue	-	-	-	-	
Other income	10,738	6	10,732	100%	
Total revenues	10,738	6	10,732	100%	
Cost of sale	-	-	-	-	
Other expenses	(355)	(223)	132	59%	
Total expenses	(355)	(223)	132	59%	
Profit (Loss) before the effects of					
foreign exchange, deferred income tax,	10,383	(217)	10,600	100%	
impairment and lease income					

 EGCO Plus : The operating result was increased by Baht 10,600 million mainly due to recognition of gain on disposal of 49% indirect shares in MPPCL amount Bath 9,810 million and recognition of gain on liquidation of 100% indirect shares in EGCO BVI. Additionally, other income and interest income were increased from cash received from the disposal of shares in MPPCL. Meanwhile, administrative expense was increased.

			Change		
	<u>2018</u>	<u>2017</u>	Increase (Decre	rease)	
			<u>Amount</u>	<u>%</u>	
Electricity revenue	-	-	-	-	
Other income	4,937	609	4,328	100%	
Total revenues	4,937	609	4,328	100%	
Cost of sale	-	-	-	-	
Other expenses	(3,682)	(4,176)	(494)	(12%)	
Total expenses	(3,682)	(4,176)	(494)	(12%)	
Profit (Loss) before the effects of					
foreign exchange, deferred income tax,	1,255	(3,567)	4,822	100%	
impairment and lease income					

EGCO:

 EGCO: The operating result was increased by Baht 4,822 million mainly due to recognition of gain on disposal in East Water and GIDEC in the amount of Baht 4,358 million and Baht 9 million, respectively. Interest income and other income were increased. Additionally, a decrease in expenses, caused by the stopped amortization of right to PPA for MPPCL. Meanwhile, dividend income from East Water was decreased since the disposal of investment. Interest expense was increased.

BPU: Unit : Millio				/lillion Baht
			Change	
	<u>2018</u>	<u>2017</u>	<u>Increase (Decr</u>	ease)
			<u>Amount</u>	<u>%</u>
Electricity revenue	4,690	1,149	3,541	100%
Other income	5	-	5	100%
Total revenues	4,695	1,149	3,546	100%
Cost of sale	(3,911)	(946)	2,965	100%
Other expenses	(438)	(178)	260	100%
Total expenses	(4,349)	(1,124)	3,225	100%
Profit (Loss) before the effects of				
foreign exchange, deferred income tax,	346	25	321	100%
impairment and lease income				

• **BPU**: The operating result was increased by Baht 321 million. This was resulted from the commencement of BPU on October 1, 2017.

SEGSD:

			Change	
	<u>2018</u>	<u>2017</u>	Increase (Dec	rease)
			<u>Amount</u>	<u>%</u>
Electricity revenue	1,297	963	334	35%
Other income	-	1	(1)	(100%)
Total revenues	1,297	964	333	35%
Cost of sale	(262)	(160)	102	64%
Other expenses	(691)	(586)	105	18%
Total expenses	(953)	(746)	207	28%
Profit (Loss) before the effects of				
foreign exchange, deferred income tax,	344	218	126	58%
impairment and lease income				

- **SEGSD**: The operating result was increased by Baht 126 million due to EGCO's indirect shares in SEGSD at 11.89%, since March 31, 2017, therefore recognized the share of profit according to the increasing investment.

KLU: Unit : Million B				illion Baht	
			Change	,	
	<u>2018</u>	<u>2017</u>	<u>Increase (Decr</u>	rease)	
		[	<u>Amount</u>	<u>%</u>	
Electricity revenue	2,231	913	1,318	100%	
Other income	7	1	6	100%	
Total revenues	2,238	914	1,324	100%	
Cost of sale	(1,889)	(781)	1,108	100%	
Other expenses	(262)	(135)	127	94%	
Total expenses	(2,151)	(916)	1,235	100%	
Profit (Loss) before the effects of					
foreign exchange, deferred income tax,	87	(2)	89	100%	
impairment and lease income					

- **KLU**: The operating result was increased by Baht 89 million. This was resulted from the commencement of KLU on July 20, 2017.

			Change		
	<u>2018</u>	<u>2017</u>	Increase (Dec	rease)	
			<u>Amount</u>	<u>%</u>	
Electricity revenue	726	673	53	8%	
Other income	8	4	4	100%	
Total revenues	734	677	57	8%	
Cost of sale	(327)	(332)	(5)	(2%)	
Other expenses	(217)	(230)	(13)	(6%)	
Total expenses	(544)	(562)	(18)	(3%)	
Profit (Loss) before the effects of					
foreign exchange, deferred income tax,	190	115	75	65%	
impairment and lease income					

- **CWF** : The operating result was increased by Baht 75 million due to higher wind speed, comparing to the same period of previous year, leading to higher electricity generation.

NTPC: Unit : Million Baht					
			Change		
	<u>2018</u>	<u>2017</u>	Increase (Dec.	rease)	
			<u>Amount</u>	<u>%</u>	
Electricity revenue	2,987	3,076	(89)	(3%)	
Other income	9	5	4	80%	
Total revenues	2,996	3,081	(85)	(3%)	
Cost of sale	(881)	(918)	(37)	(4%)	
Other expenses	(590)	(701)	(111)	(16%)	
Total expenses	(1,471)	(1,619)	(148)	(9%)	
Profit (Loss) before the effects of					
foreign exchange, deferred income tax,	1,525	1,462	63	4%	
impairment and lease income					

- **NTPC**: The operating result was increased by Baht 63 million mainly due to interest and corporate income tax expenses were decreased. Meanwhile, a decrease in electricity profit from lower electricity generation, comparing to the same period of previous year.

			Change			
	<u>2018</u>	<u>2017</u>	<u>Increase (Decrease)</u>			
			<u>Amount</u>	<u>%</u>		
Electricity revenue	2,049	1,897	152	8%		
Other income	-	85	(85)	(100%)		
Total revenues	2,049	1,982	67	3%		
Cost of sale	(432)	(391)	41	11%		
Other expenses	(1,203)	(1,217)	(14)	(1%)		
Total expenses	(1,635)	(1,608)	27	2%		
Profit (Loss) before the effects of						
foreign exchange, deferred income tax,	414	374	40	11%		
impairment and lease income						

 SEG : The operating result was increased by Baht 40 million mainly due to share of profits from 40.90% (8.18% indirect shares of EGCO) ownership in SEGSD which was invested since March 31, 2017. Meanwhile, Other income was decreased as there was an insurance claim from landslide received in 2017.

GPG: Unit : Million Baht Change 2018 2017 Increase (Decrease) Amount <u>%</u> Electricity revenue - Availability Payment (AP) 2,068 2,213 (145) (7%) - Energy Payment (EP) 1.062 2.046 (984) (48%) Other income 19 27 (8) (30%) Total revenues 3,149 4,286 (1,137) (27%) Cost of sale (1,857)(2,924)(1,067)(37%) (401) (93) Other expenses (494) (19%) Total expenses (2,258) (3,418) (1,160) (34%) Profit (Loss) before the effects of foreign exchange, deferred income tax, 891 868 23 3% impairment and lease income

- **GPG**: The operating result was increased by Baht 23 million mainly due to a decrease in interest and corporate income tax expenses. Meanwhile, Availability Payment (AP) was decreased according to the PPA and a decrease in electricity profit resulting from the lower dispatch from EGAT, comparing to the same period of previous year.

Unit : Million Baht

			Change			
	<u>2018</u>	<u>2017</u>	<u>Increase (Decrease)</u>			
			<u>Amount</u>	<u>%</u>		
Electricity revenue	10,240	10,331	(91)	(1%)		
Other income	5	-	5	100%		
Total revenues	10,245	10,331	(86)	(1%)		
Cost of sale	(5,715)	(5,579)	136	2%		
Other expenses	(1,836)	(1,732)	104	6%		
Total expenses	(7,551)	(7,311)	240	3%		
Profit (Loss) before the effects of						
foreign exchange, deferred income tax,	2,694	3,020	(326)	(11%)		
impairment and lease income						

 Quezon : The operating result was decreased by Baht 326 million mainly due to costs of replacement and dismantling of transmission line and switchyard as part of the construction of SBPL. Additionally, a decrease in electricity profit resulting from the lower electricity generation, comparing to the same period of previous year, caused by an unplanned outage.

KEGCO: Unit : Million Bal								
			Change <u>Increase (Decrease)</u>					
	<u>2018</u>	<u>2017</u>						
		[	<u>Amount</u>	<u>%</u>				
Electricity revenue								
- Availability Payment (AP)	3,871	4,144	(273)	(7%)				
- Energy Payment (EP)	10,317	9,603	714	7%				
Other income	33	35	(2)	(6%)				
Total revenues	14,221	13,782	439	3%				
Cost of sale	(12,008)	(11,255)	753	7%				
Other expenses	(1,195)	(1,219)	(24)	(2%)				
Total expenses	(13,203)	(12,474)	729	6%				
Profit (Loss) before the effects of								
foreign exchange, deferred income tax,	1,018	1,308	(290)	(22%)				
impairment and lease income								

- **KEGCO :** The operating result was decreased by Baht 290 million mainly due to a decrease in Availability Payment (AP) according to the PPA.

Unit : Million Baht

			Change			
	<u>2018</u>	<u>2017</u>	Increase (Decrease)			
			<u>Amount</u>	<u>%</u>		
Electricity revenue						
- Availability Payment (AP)	3,581	3,851	(270)	(7%)		
- Energy Payment (EP)	5,288	5,038	250	5%		
Other income	90	93	(3)	(3%)		
Total revenues	8,959	8,982	(23)	(1%)		
Cost of sale	(6,558)	(6,341)	217	3%		
Other expenses	(526)	(661)	(135)	(20%)		
Total expenses	(7,084)	(7,002)	82	1%		
Profit (Loss) before the effects of						
foreign exchange, deferred income tax,	1,875	1,980	(105)	(5%)		
impairment and lease income						

- **BLCP**: The operating result was decreased by Baht 105 million mainly due to a decrease in Availability Payment (AP) according to the PPA. Meanwhile, interest and administrative expenses were decreased.

## Other Subsidiaries in Power Generation business:

Unit : Million Baht

	-	yong r Plant	Yanhee EGCO		R	RG		SPP 2		SPP 3		SPP 4		SPP 5	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>	
Electricity revenue	-	-	1,241	1,282	172	164	170	172	174	177	123	129	178	184	
Other income	-	11	9	11	1	1	2	12	2	-	2	1	5	1	
Total revenues	-	11	1,250	1,293	173	165	172	184	176	177	125	130	183	185	
Cost of sale	-	-	(330)	(328)	(165)	(162)	(53)	(53)	(50)	(49)	(39)	(39)	(50)	(49)	
Other expenses	-	(51)	(332)	(360)	(15)	(13)	(41)	(51)	(38)	(45)	(31)	(36)	(40)	(46)	
Total expenses	-	(51)	(662)	(688)	(180)	(175)	(94)	(104)	(88)	(94)	(70)	(75)	(90)	(95)	
Profit (Loss) before															
the effects of foreign															
exchange, deferred	-	(40)	588	605	(7)	(10)	78	80	88	83	55	55	93	90	
income tax, impairment	:														
and lease income															

## Other Subsidiaries in Power Generation business (continue):

Unit : Million Baht

	TWF		EGCO COGEN		BRWF		Total		Change <u>Increase (Decrease)</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>	<u>Amount</u>	<u>%</u>
Electricity revenue	68	67	1,711	1,658	996	981	4,833	4,814	19	1
Other income	1	1	5	2	11	9	38	49	(11)	(22)
Total revenues	69	68	1,716	1,660	1,007	990	4,871	4,863	8	1
Cost of sale	(28)	(27)	(1,571)	(1,441)	(434)	(425)	(2,720)	(2,573)	147	6
Other expenses	(19)	(26)	(62)	(73)	(392)	(481)	(970)	(1,182)	(212)	(18)
Total expenses	(47)	(53)	(1,633)	(1,514)	(826)	(906)	(3,690)	(3,755)	(65)	(2)
Profit (Loss) before										
the effects of foreign										
exchange, deferred	22	15	83	146	181	84	1,181	1,108	73	7
income tax, impairment										
and lease income										

## Other Joint Ventures in Power Generation business:

Unit : Million Baht

	GF (J			EC V)	NE (J)			DEC* IV)		n-AES** JV)		er*** V)	To	otal	Chang <u>Increas</u> <u>(Decrea</u>	se
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>	<u>Amount</u>	<u>%</u>								
Electricity revenue	268	286	3,915	3,723	915	927	11	73	-	7,473	-	-	5,109	12,482	(7,373)	(59)
Other income	1	3	46	26	10	12	-	1	-	-	-	7	57	49	8	16
Total revenues	269	289	3,961	3,749	925	939	11	74	-	7,473	-	7	5,166	12,531	(7,365)	(59)
Cost of sale	(93)	(97)	(3,438)	(3,166)	(238)	(242)	(12)	(72)	-	(4,416)	-	-	(3,781)	(7,993)	(4,212)	(53)
Other expenses	(38)	(56)	(223)	(237)	(116)	(136)	(7)	(50)	-	(1,659)	(78)	(38)	(462)	(2,176)	(1,714)	(79)
Total expenses	(131)	(153)	(3,661)	(3,403)	(354)	(378)	(19)	(122)	-	(6,075)	(78)	(38)	(4,243)	(10,169)	(5,926)	(58)
Profit (Loss) before the effects of foreign exchange, deferred income tax, impairment and lease income		136	300	346	571	561	(8)	(48)	-	1,398	(78)	(31)	923	2,362	(1,439)	(61)

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

\*\* Divested ordinary shares in MPPCL on March 20, 2018.

\*\*\* SBPL and NT1PC are under construction.

## 4.2 The Analysis of the Operating Results in Other businesses

Profit (loss) before the effects of foreign exchange, deferred income tax, impairment and lease income for the year 2018 in other businesses increased by Baht 32 million comparing to 2017. The details are as follows:

Unit : Million Baht

	ESCO (Sub)		MME (JV)		Total		Change <u>Increase</u> <u>(Decrease)</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>	<u>Amount</u>	<u>%</u>
Revenue	-	-	698	565	698	565	133	24%
Service income	1,244	1,063	-	-	1,244	1,063	181	17%
Other income	10	9	43	4	53	13	40	100%
Total revenues	1,254	1,072	741	569	1,995	1,641	354	22%
Cost of sale	(977)	(809)	(581)	(448)	(1,558)	(1,257)	301	24%
Other expenses	(115)	(114)	(76)	(56)	(191)	(170)	21	12%
Total expenses	(1,092)	(923)	(657)	(504)	(1,749)	(1,427)	322	23%
Profit (Loss) before the effects of								
foreign exchange, deferred income tax,	162	149	84	65	246	214	32	15%
impairment and lease income								

## 5. <u>Report and Analysis of Financial Position</u>

Comparing the Statements of Financial Position as at December 31, 2018 to the Statements of Financial Position as at December 31, 2017 is shown below:

	Consolida	ated Financial S	tatement (Million	Baht)		
	Year		Change			
	i eai		Increase (Decrease)			
	<u>2018</u>	<u>2017</u>	<u>Amount</u>	<u>%</u>		
Assets						
Current Assets	51,353	39,543	11,810	30%		
Investments in joint ventures and associated, net	EE 167	40.225	5.940	12%		
and advance payments for investment	55,167	49,325	5,842	12%		
Property, plant and equipment, net	56,361	61,723	(5,362)	(9%)		
Other non-current assets	43,547	49,741	(6,194)	(12%)		
Total Assets	206,428	200,332	6,096	3%		
Liabilities						
Current Liabilities	6,720	7,689	(969)	(13%)		
Long-term loans and debenture	01.965	07.004	(5.700)	(00/)		
(including current portion of long-term loans)	91,865	97,664	(5,799)	(6%)		
Other current liablities	6,993	8,123	(1,130)	(14%)		
Total Liabilities	105,578	113,476	(7,898)	(7%)		
Shareholders' Equity						
Parent's shareholders' equity	100,239	86,238	14,001	16%		
Non-controlling interests	611	618	(7)	(1%)		
Total Shareholders' Equity	100,850	86,856	13,994	16%		
Total Liabilities and Shareholders' Equity	206,428	200,332	6,096	3%		

#### 5.1 Asset Analysis

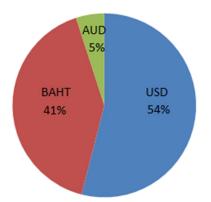
As of December 31, 2018 the total assets were Baht 206,428 million, increasing by Baht 6,096 million or 3% from the year 2017. The details are as follows:

- Current assets increased by Baht 11,810 million or 30%. This was caused by Cash, cash equivalents and short-term investments increased by Baht 27,556 million from gain on disposal in MPPCL, East Water and GIDEC. Trade receivable and trade receivable from a related party rose by Baht 554 million. In addition, Spare parts and supplies of Quezon and KEGCO increased by Baht 482 million. KEGCO's financial lease receivable increased by 484 million Baht. Meanwhile, assets held for sale decreased by Baht 16,590 million from disposal of share in MPPCL which was completed in Q1/2018. Dividend receivable from BLCP and other current assets decreased by Baht 408 million and Baht 268 million, respectively.
- Investments in joint ventures and associated (net) and advance payment for investment increased by Baht 5,842 million or 12% mainly due to an investment in NT1PC, SBPL and an advance payment for investment in Paju ES. Additionally, recognition of share of profits after dividend deduction from joint ventures and associated.
- Property, plant and equipment (net) decreased by Baht 5,362 million or 9% mainly due to asset's write-off of Quezon, BRWF, Rayong Power Plant and KEGCO.
- Other non-current assets decreased in the amount of Baht 6,194 million or 12%. This was caused by the disposal of share in East Water amount Baht 3,869 million. Impairment of goodwill of Quezon amount Baht 1,347 million. KEGCO's financial lease receivable decreased by Baht 716 million. A decrease of deferred expenses and dividend receivable from BLCP by Baht 582 million and Baht 306 million, respectively. Whereas, the investment in Xayaburi and other non-current assets increased by Baht 479 million and Baht 147 million, respectively.

#### 5.2 Liability Analysis

As of December 31, 2018 the total liabilities were Baht 105,578 million, decreasing by Baht 7,898 million or 7% from the year 2017. The details are as follows:

- Current liabilities decreased in the amount of Baht 969 million or 13% mainly due to short-term loan repayment of EGCO in the amount of Baht 1,029 million. Other current liabilities decreased by Baht 774 million mainly from retention of BPU, CWF and KLU. Whereas, trade payable and trade payable to a related party of KEGCO, KLU and BPU rose by Baht 833 million.
- Long-term loans and debenture decreased by Baht 5,799 million or 6% mainly due to the principle repayment of long-term loan of Quezon, KEGCO and BRWF.
  - \* Outstanding long-term loans are as follows:
    - USD loans : US dollars 1,444 million, equivalent to Baht 47,068 million
    - Baht loans : Baht 35,681 million
    - AUD loans : Australian dollars 202 million, equivalent to Baht 4,590 million



Loan maturities schedule as at December 31, 2018

14,706

7,196

4,980

4,533

42,670

Total

EGCO KEGCO BPU BRWF CWF KLU Yanhee SPP TWF Maturity Quezon Total EGCO 2,3,4,5 14.706 Within 1 year 8,930 343 1.544 363 340 162 416 390 32 27.226 2-5 years 28,220 \_ 1,471 3,436 4,170 1,622 672 1,710 854 132 42,287 77 Over 5 years 5,520 5,382 2,402 3,081 734 72 17,268

4,364

\* Debenture : Yen 17,120 million, redeems within 7 years from the issuance date, had a cross currency swap to US Dollar 143.05 million

3,915

2,860

1,321

Unit : Million Baht

86,781

236

 Other non-current liabilities decreased by Baht 1,130 million or 14% mainly due to deferred income tax liabilities decreased by Baht 828 million. Provision for decommissioning costs and advance payment to contractor of Quezon decreased by Baht 433 million and Baht 23 million, respectively. Meanwhile, other non-current liabilities increased by Baht 154 million

#### 5.3 Shareholders' Equity Analysis

As of December 31, 2018, total Shareholders' Equity were Baht 100,850 million increasing by Baht 13,994 million or 16% from the year 2017. The main reasons are as follows: Firstly, EGCO's operating profit in Income Statement increased by Baht 21,073 million. Secondly, the effect from the translation adjustment of currencies to Thai Baht for offshore subsidiaries, associated and joint ventures increased by Baht 302 million. Thirdly, share of other comprehensive income of associates and joint ventures was Baht 36 million. Fourthly, a decrease by dividend payment in the amount of Baht 5,001 million. Fifthly, the reversal of the gain from the valuation of available-for-sale investments and the loss on remeasurements of post-employee benefit obligations were Baht 2,395 million and Baht 14 million, respectively. Lastly, a decrease by non-controlling interests in the amount of Baht 7 million.

#### 5.4 Cash Flow Analysis

As of December 31, 2018 cash and cash equivalents were Baht 34,877 million, increasing by Baht 28,090 million comparing to December 31, 2017. The details are as follows:

	Unit: Million Baht
Net cash received from operating activities	11,253
Net cash received from investing activities	31,589
Net cash payment for financing activities	(15,714)
Gain from the effect of foreign exchange rate	962
Net increase in cash	28,090

- Net cash <u>received from</u> operating activities was Baht 11,253 million from operating of EGCO and its subsidiaries.

- Net cash <u>received from</u> investing activities was Baht 31,589 million. The amount of Baht 31,650 million was received from disposal of shares in MPPCL, East Water and GIDEC. The dividend received from joint ventures and other company were Baht 4,378 million. Cash receipts from Interest income was Baht 787 million. Cash receipts from short-term and long-term investments were Baht 360 million. Cash receipts from short-term and long-term investments used as collateral and cash receipts from land expropriation were Baht 177 million and Baht 12 million, respectively. Meanwhile, cash payment in advance investment in Paju ES was Baht 2,428 million. The construction costs and development costs of BPU, CWF and KLU were Baht 1,149 million. Equity injection in XPCL was Baht 470 million. The investment in NT1PC and SBPL were Baht 1,053 million and 675 million, respectively.

- Net cash <u>payment for</u> financing activities was Baht 15,714 million, resulted from the principal repayment of short-term and long-term loans totalling Baht 22,030 million, interest payment of loans and financing fees totalling Baht 4,308 million and the dividend payment to shareholders amounting to Baht 5,050 million. Meanwhile, the loan draw down was Baht 15,674 million.

## 6. Financial Ratios

## **Profitability Ratios**

	2018	2017	<u>Change</u>
	2018	<u>2017</u>	Increase/(Decrease)
Gross Profit Ratio (%)	32.82	36.07	(3.25)
Operating Profit Ratio before FX (%)	51.23	29.12	22.11
Profit Ratio before FX (%)	26.49	14.08	12.41
Profit before FX per share (Baht)	39.38	17.59	21.79

## Trade receivables aging summary

Aging periods of trade receivables as at December 31, 2018 are shown in the table below:

1 Init.	Million	Doht
Unit.	IVIIIION	banı

			Change		
	<u>2018</u>	<u>2017</u>	Increase/(Decrease)		
			<u>Amount</u>	<u>%</u>	
Current	2,041	1,966	75	4%	
Overdue less than 3 months	8	-	8	100%	
Overdue between 3 – 6 months	68	3	65	100%	
Overdue between 6 – 12 months	-	-	-	-	
Overdue more than 12 months	-	-	-	-	
Trade receivables, net	2,117	1,969	148	8%	

## 6. Financial Ratios (continue)

## Leverage Ratio and Liquidity Ratio

	2018	<u>2017</u>	<u>Change</u>	
			Increase/(Decrease)	
Debt to equity ratio (Time)				
- Consolidated	1.05	1.31	(0.26)	
- Company	0.80	0.80	-	
Book value per share (Baht)				
- Consolidated	190.40	163.81	26.59	
- Company	115.80	120.83	(5.03)	
Current ratio (Time)				
- Consolidated	1.51	2.26	(0.75)	
- Company	0.38	1.71	(1.33)	
Interest Coverage Ratio (Time)				
- Company	3.61	5.56	(1.95)	

## 7. Future Plans

EGCO continues to develop business in response to the company's sustainable growth. The company focuses on power projects due to its knowledge and expertise in power business. Having a strong intention to carry on its power generation business with accountability to the society, environment, and stakeholders, EGCO has set a new vision: "To be a major sustainable Thai power company doing business in Thailand and the Asia Pacific region, with full commitment to environment protection and social development support". To ensure its sustainable growth and accountability to the stakeholders, EGCO aims to maintain the return on equity (ROE) at 10% minimum and drive the business based on three main strategies: Business, Society and Environment, and Corporate Governance, which can be summarized as follows:

Business Strategy: EGCO will focus on asset management to ensure maximum efficiency of the existing power plant in order to guarantee its highest performance and to benefit all shareholders as planned; managing projects under construction to be completed as scheduled and within the planned budget; and seeking new investment opportunities through acquisition of commercially operating assets to immediately recognize incomes; as well as developing new projects within the existing plant sites and pursuing greenfield project investments for long-term income generation. Moreover, EGCO Group aims to increase renewable energy portfolio to achieve 30% by 2026 from both domestic and overseas.

- Society and Environment Strategy: EGCO has full commitment for environment protection and has strong intention to decrease negative impacts and increase positive impacts along with EGCO business processes. Our target is to enhance EGCO's environmental management and coexistence in harmony with local community.
- Corporate Governance Strategy: EGCO will conduct its business management with good corporate governance representing the key indicator of the efficiency, fairness, transparency and responsibility towards environment, society and every stakeholder.