



Sharing in Growth



Annual Report 2015
Electricity Generating Authority of Thailand



The **two-side** mission of EGAT is
to build the energy security

and to take care of
the society, community,
and environment.

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Vision

“Being a world-class organization in electricity business”

EGAT aims to achieve excellence in all areas and to be comparatively among the global top quartile in electricity. Being a leading organization, EGAT is committed to the following 5 aspects:

1. Good Corporate Governance

2. High-Performance Organization

3. Operational Excellence

4. National Pride

5. Financial Viability

Mission

- To generate, acquire, transmit, and sell electricity
- To conduct electricity-related businesses and other businesses related to EGAT's activities including production and sale of lignite according to the EGAT Act B.E. 2511 (1968) (Amended in B.E. 2535) (1992)



Core Culture

· Loyalty · Excellence · Integrity

Corporate Value

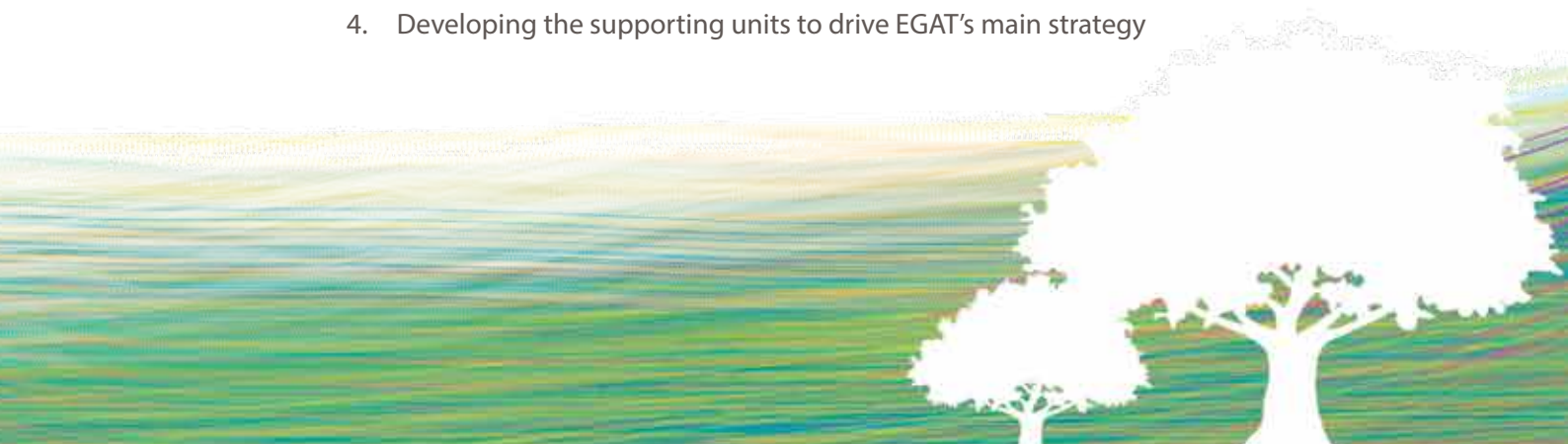
F : Fairness
I : Integrity
R : Responsibility & Accountability
M : Mutual Respect
C : Commitment to Continuous Improvement and Teamwork



Strategic Objectives

To achieve its vision, EGAT's strategic objectives are as follows:

1. Strengthening the competitiveness of the core businesses to become a Global Top Quartile Performer
2. Building growth in subsidiary companies and related businesses
3. Promoting the image of the organization to become "national pride"
4. Developing the supporting units to drive EGAT's main strategy





About EGAT

The Electricity Generating Authority of Thailand (EGAT) was established by virtue of the EGAT Act B.E. 2511 (1968) on May 1, 1969. The year 2015 marked the 46th anniversary of EGAT establishment. Being a state enterprise in the area of energy under the Ministry of Energy with the Ministry of Finance as major shareholder, EGAT is responsible for generating, acquiring, and supplying electricity to Metropolitan Electricity Authority (MEA), Provincial Electricity Authority (PEA), legal power users, and neighboring countries such as Malaysia. EGAT is also responsible for power related activities and service, producing and selling lignite and its by-products under the EGAT Act B.E. 2511 (1968) and its amendments B.E. 2535 (1992).

At present, the operation of EGAT is in accordance with the Electricity Supply Industry. Under the supervision of the Energy Regulatory Commission, EGAT is the producer and supplier of electricity and controls over the electricity production and distribution throughout the country to be efficient and adequate for the demand in parallel with environmental management for the community and society.

EGAT Headquarters' address is No. 53, Moo 2, Charansanitwong Road, Bang Kruai, Nonthaburi 11130. The Transmission System Operation has 5 offices, two of which are in Nonthaburi Province, and the rest are in Phitsanulok, Khon Kaen, and Krabi Provinces.



Financial Overview

	Unit : Million Baht		
	2015	2014	2013
Operating Performance			
Revenues from sales and services	546,480.33	557,080.18	536,294.27
Income from sales and services	72,175.49	60,848.68	63,221.15
Gains (Losses) on foreign exchange	(12,016.53)	774.21	(4,975.79)
Finance costs	31,697.89	25,679.05	25,675.02
Net income - EGAT and its subsidiaries	31,178.88	39,162.18	34,778.95
Net income - Non-controlling interests	1,579.00	3,321.54	3,570.15
Financial Status			
Total assets	876,625.40	734,965.04	708,599.67
Property, plant and equipment - net	273,251.44	259,020.27	236,190.88
Total liabilities	496,060.97	362,101.69	357,049.81
Long - term debts	75,816.28	81,874.41	83,701.58
Owners' equity and non-controlling interests	380,564.43	372,863.35	351,549.87
Financial Ratios			
Ratio of gross profit to net sales (percentage)	16.29	13.99	14.79
Ratio of net profit to net sales (percentage)	5.99	7.63	7.15
Rate of return on total assets (percentage)	4.07	5.89	5.55
Debt to equity ratio (time)	1.30	0.97	1.02
Time interest earned (time)	2.08	2.70	2.55

*Remark * Financial ratios for the years 2014 and 2013 are calculated from the financial statements prepared in accordance with Financial Reporting Interpretations No. 4 and Accounting Standard No. 17.*





EGAT believes that sharing
and supporting will render
a great benefit to the
strengthened Thai society

and the
sustainable growth
of EGAT.



Message from the Chairman

EGAT is a principal organization for energy security in Thailand. We are determined to develop and improve the country's power balance for sustainable growth. Under the nation's Power Development Plan 2015-2036 (PDP 2015), EGAT has the objective to diversify fuel sources by decreasing the use of natural gas as fuel for electricity generation from 70 percent to no more than 40 percent, while increasing the proportion of renewable energy from 8 percent at present to 15-20 percent by the end of the plan. Furthermore, we aim to reduce carbon dioxide emission in power generation from 0.506 kg/kWh in 2013 to 0.319 kg/kWh by the year 2036, or a 37 percent reduction. Last but not least, we also intend to maintain electricity tariff rate at a fair and appropriate level for stability, in order to enhance competitiveness of the country.

As part of Thailand's collective efforts to join hands with the world community to confront the climate change issue, by pledging the Intended Nationally Determined Contributions (INDC) from Thailand at the 21st Session of the UNFCCC Conference of the Parties (COP 21) in Paris in December 2015, EGAT expressed its intention to contribute a carbon dioxide emission reduction of 12.47 million tons of carbon dioxide equivalent by the year 2030. Previously, EGAT had expressed its commitment to participate in Thailand's pledge on Nationally Appropriation Mitigation Actions (NAMAs) to reduce, by the year 2020, the greenhouse gas emission between 7 to 20 percent of the level emitted in 2005, of which EGAT's contribution was a reduction target of carbon dioxide emission of 3 to 4 million tons. So far, current assessment of EGAT's measures in carbon dioxide emission reduction from various ways such as renewable power development projects, increased efficiency of new power plants, improvement of equipment of existing power plants, and demand-side management, has indicated that EGAT would be able to reduce carbon dioxide of up to 5.4 million tons by the year 2020. Moreover, the implementation of other relevant measures such as preparation of carbon footprints for the power plants would enable EGAT to achieve a goal of becoming a sustainable low carbon organization.

The lower crude oil price last year in global market, coupled with an efficiency of power generation sector for optimum benefit, have rendered positive results to the cost in power generation in 2015. The Energy Regulatory Commission (ERC) adjusted the electricity Ft tariff in 2015 for 3 times, resulting in a net 22.62 satang per unit decrease in Ft. Moreover, in the adjustment of the base tariff rate for 2015, the tariff could be reduced further by another 1.05 satang per unit.

Despite improvement of economic situation in Thailand due to an increasing investment of the state sector and the domestic consumption recovery, the investment of the private sector and the export still suffered from impact of the global economy slowdown and the agricultural sector's drought. As a result, the power demand was lower than the target. The net electricity demand in 2015 was 27,345.80 MW representing an increase of 1.50 percent. The net electricity demand of EGAT system was equivalent to 183,466.84 million kWh which was an increase of 3.31 percent.

At the end of 2015, the total system installed capacity for power generation of the country was 38,838.45 MW, an increase of 12.03 percent from the year before; comprising a capacity of 15,548.13 MW (or 40.03 percent) from EGAT power plants, and 23,290.32 MW or 59.97 percent from the domestic private power producers and power purchase from neighboring countries.

In terms of electricity generation in the last year, EGAT power plants generated electricity of 69,839.52 million kWh, or 38.07 percent of total energy consumption, whereas electricity generated from domestic private power producers and imported electricity from neighboring countries amounted to 113,627.32 million kWh, or 61.93 percent. The fuels used in power generation were natural gas of 69.22 percent, coal of 17.87 percent, hydropower of 2.05 percent, fuel oil, diesel oil and palm oil of 0.72 percent, electricity purchase from neighboring countries of 7.86 percent, and renewable energy sources of 2.31 percent. The total amount of power sales by EGAT was 179,537.39 million kWh representing an increase of 3.42 percent of the previous year.

In addition to its main mission for Thailand's energy security, EGAT has another role to continue its corporate social responsibilities. EGAT staff have been taught and instilled with a corporate culture of not only thriving for excellence but also caring and contributing to society and community around us. We initiated and continued to support many civic projects such as the Reforestation Project, the Wan Kaew (Eyeglasses) Project, and the Biological Way of Life for Sustainable Development Project. These projects take part in strengthening the Thai society and increasing love and care among Thai people. In disseminating information and knowledge in electricity to the community, EGAT's seven learning centers have been initiated and established. Two of them have already been in operation, while the remaining centers are expected to be completed by the year 2018. Besides, two more learning centers are planned to be built at the site of power plant development projects in the southern region. These learning centers will be the source of information and knowledge in electricity and innovations to be transferred to the youth and society in all parts of Thailand.

In 2015, in response to the government policy in assisting the farmers of palm oil in Krabi Province, EGAT made an improvement of the equipment to its thermal power plant in Krabi to enable it to buy and use additional palm oil. The total palm oil bought in 2015 amounted to 25,730 tons. The assistance reflected EGAT's corporate social responsibility and promoted renewable energy use so that the power plant and the community could live together in harmony.

In 2015, EGAT has been recognized for its performance and contributions and won many distinguished awards such as ASEAN Coal Awards 2015. Its Mae Moh Power Plant won the first prize in the categories of Best Practice of Clean Coal Use and Technology in Power Generation and Corporate Social Responsibility. Mae Moh Mine received Constructive Power Award for its innovation in the protection and control of flood in open pit mine by 3-stage differential elevation series-flow pumping system. Mae Moh Mine also received the second runner-up prize in the category of Best Practice of Surface Coal Mining for its mining, mine overburden, and coal transfer taking into account the sustainable and efficient environmental management.

EGAT is committed to developing its operation for continuous growth with quality by managing its investment with efficiency, while taking good care of society and environment, and promoting energy conservation and energy



efficiency. Meanwhile, EGAT would continue to seek new investment opportunity to expand its businesses in the country and abroad, through its affiliates, and proceed with the development in power transmission projects under the ASEAN Power Grid plan to realize energy connectivity and energy security of the ASEAN region.

On behalf of the EGAT Board of Directors, EGAT Executives and staff, I wish to thank stakeholders of all sectors for their continued support to the Electricity Generating Authority of Thailand. I hope to receive the same support for the growth and prosperity of the electricity business of our country.

Kurujit Nakornthap

(Mr. Kurujit Nakornthap)

Chairman, Board of Directors
Electricity Generating Authority
of Thailand (EGAT)



Report of the Audit Committee

The Audit Committee, appointed by the EGAT Board of Directors, consists of three members selected from independent directors of the EGAT Board of Directors. One member, at least, shall be knowledgeable and have experience in finance and accounting. EGAT Assistant Governor - Internal Audit Bureau serves as secretary of the Audit Committee.

The Audit Committee has independently performed its duties in accordance with the procedures set forth in Audit Committee Charter to enhance good corporate governance.

In 2015, 10 Audit Committee Meetings were held to discuss relevant agenda with EGAT Executives and the independent auditor (from the Office of the Auditor General of Thailand). The significant issues can be summarized as follows:

- Review with the Governor, Deputy Governor - Account and Finance, and the independent auditor from the Office of the Auditor General of Thailand, on the monthly, quarterly, and annual financial statements of EGAT and its subsidiaries to consider the appropriateness of the reports and to give useful recommendations to ensure the accuracy and reliability of the reports with adequately important information disclosure, in accordance with generally accepted accounting principles
- Review of EGAT's risk management and internal control system to consider the sufficiency, appropriateness, and coverage of all significant issues
- Review of the quarterly internal audit reports of EGAT and its subsidiaries and continuous follow-up on the correction and improvement in accordance with the audit comments
- Review of the evaluation reports of the Governor's performance
- Discussion with the Governor and the independent auditor on the development of the internal control systems
- Discussion with the top executives and the Management of each unit to consider risk management, internal control systems, and monitoring processes of key activities within their respective units to provide the best interests for EGAT's operations
- Discussion with the independent auditor on the scope and processes of the auditing practices and the performance of the auditor to enhance good coordination and reduce duplication of efforts

- Approval of the annual audit plan for 2016 and the 5-year strategic audit plan (2016-2020) as well as the sufficiency of the resources and the performance assessment of the Internal Audit Bureau
- Review of the appropriateness of EGAT Audit Committee Charter, EGAT Internal Audit Charter, and the Internal Audit Manual
- Preparation of the report of the Audit Committee and submission of the report to EGAT Board of Directors, Ministry of Energy, and Ministry of Finance
- Conduct of an annual self-assessment of the Audit Committee and an individual member of the Audit Committee based on the guidelines for practice of audit committee of the state enterprises set forth by Ministry of Finance and submission of the report to EGAT Board of Directors to enhance the effectiveness, transparency, and reliability of the Audit Committee

The Audit Committee believed that throughout the year 2015, EGAT had maintained the effective risk management, internal control systems, and corporate governance practices which enabled EGAT's operations to meet the set objectives. EGAT's financial statements were also prepared in accordance with generally accepted accounting principles and were presented with adequate information disclosure. EGAT also operated in complete compliance with laws, rules, and regulations with no significant deficiency. In performing their duties, each member of the Audit Committee expressed their opinions independently and provided straight recommendations to the Management and concerned parties to ensure the best interests of all related parties.



(Mr. Poramete Vimolsiri)

Chairman of the Audit Committee

January 25, 2016





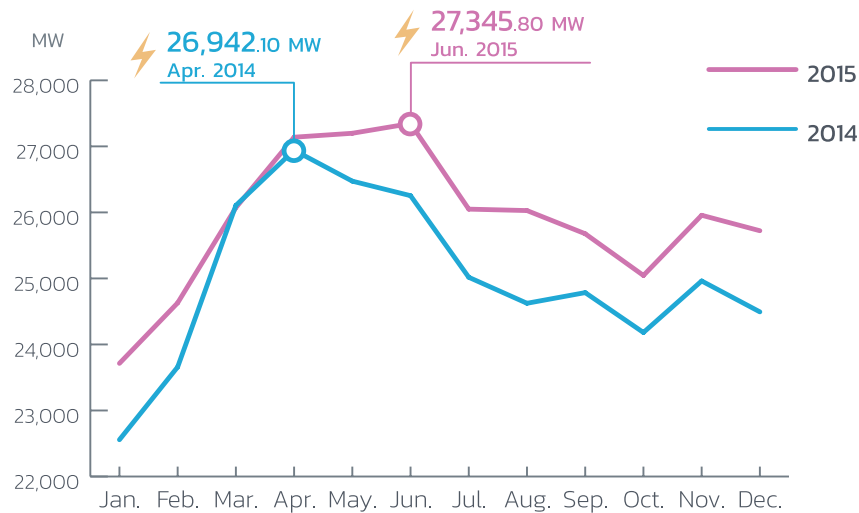
Economic and Electricity Overview

In 2015, the peak demand of EGAT power system topped 27,345.80 MW on Thursday, June 11, 2015 at 14.02 hours representing an increase of 403.70 MW or 1.50 percent of that in the previous year. The net energy demand of EGAT power system in 2015 was 183,466.84 million kWh, whereas the total energy requirements of 2014 had been 177,580.47 million kWh. This marked an increase of 5,886.37 million kWh or 3.31 percent.

The growth in electricity demand in 2015 resulted from the Thai economic recovery caused by an expansion in the service exports, high expansion in public investment, and the continuous expansion in domestic and public expenditure. However, investment of the private sector declined, while the export was affected from the global economy, and the agricultural sector suffered from the drought.

For 2016, it has been estimated that the peak demand of EGAT power system will be approximately 28,470 MW representing an increase of 4.11 percent from that of 2015. The net energy requirement has been predicted to be 187,750 million kWh or an increase of 2.38 percent from the prior year. (Reference: Prediction of electricity demand based on the 2016 electricity generation plan of the Power System Control and Operation Division, EGAT).

Monthly Peak Generation Requirement



Regarding the economic growth of Thailand in 2016, the National Economic and Social Development Board (NESDB) predicted that the economic growth of Thailand would be approximately 3.0 to 4.0 percent. The supporting factors are the acceleration of public expenditure and investment, demand push from the economic stimulation measures, slow recovery of global economy and export price, tendency of the Thai Bath devaluation, slow regaining of agricultural price together with the oil price which has been estimated as low, and the continuous expansion of tourism. It has been estimated that the value of goods export will increase by 3.0, residential consumption by 2.6, and overall investment by 9.5 percent. In addition, the inflation rate will be around 1.0 to 2.0 percent, and the current account surplus will be 5.7 percent of Gross Domestic Product (GDP).





Operations

Power Generation System

In 2015, EGAT's power plants had a total installed generating capacity of 15,548.13 MW accounting for 40.03 percent of the country's gross energy generation. The purchased power capacity included 14,766.70 MW from domestic independent power producers (IPPs) representing 38.02 percent of the country's total generating capacity, 5,137.02 MW or 13.23 percent from small power producers (SPPs), and 3,386.60 MW or 8.72 percent imported from neighboring countries.

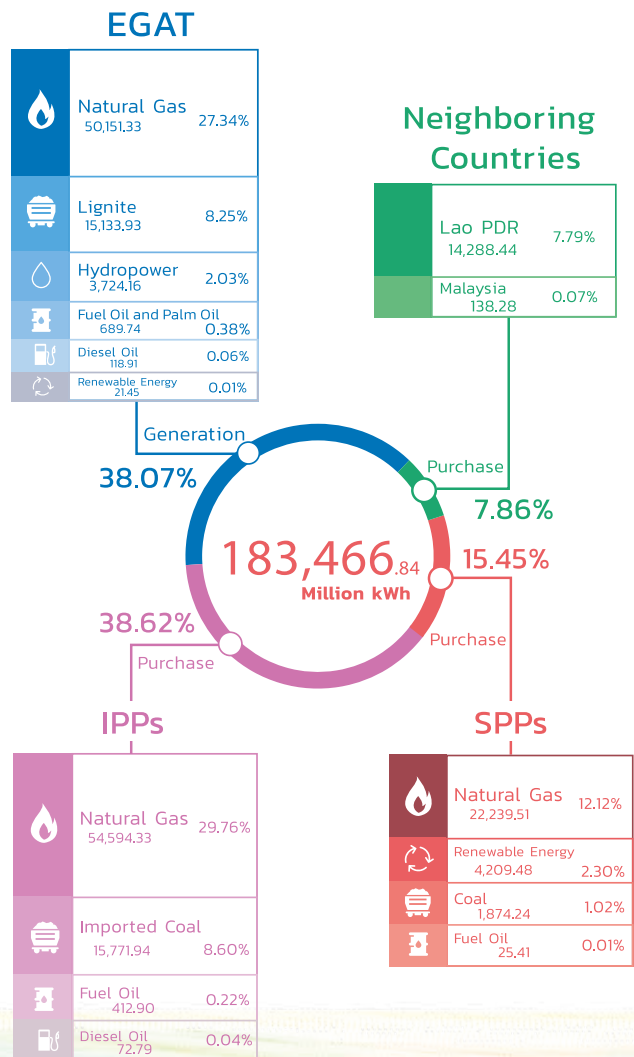
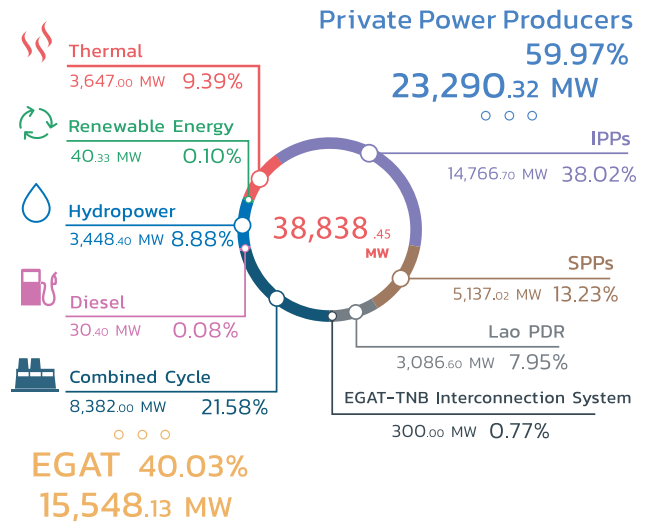
Power Generation and Power Purchase

In 2015, the peak demand topped 27,345.80 MW on Thursday, June 11, 2015 at 14.02 hours which was 403.70 MW or 1.50 percent higher than that of the preceding year. (In 2014, the peak demand of 26,942.10 MW occurred on Wednesday, April 23 at 14.26 hours.)

The highest net energy/day in 2015 accounted for 585.20 million kWh which was 10.82 million kWh or 1.88 percent greater than that of the previous year (574.38 million kWh).

In 2015, the net energy amounted to 183,466.84 million kWh which was 5,886.37 million kWh or 3.31 percent higher than that of the previous year (177,580.47 million kWh).

EGAT's electricity generation in 2015 still relied on natural gas as the main fuel which could generate the net energy of 126,985.17 million kWh or 69.22 percent of the total generated and purchased power. Next to natural gas was coal which could generate the net energy of 32,780.11 million kWh or 17.87 percent. The net electric power of 3,751.79 million kWh or 2.05 percent was generated from hydropower, whereas 14,426.72 million kWh or 7.86 percent was purchased from abroad. Electricity of 1,319.75 million kWh or 0.72



percent was generated from fuel oil, palm oil, and diesel oil, and 4,230.93 million kWh or 2.31 percent from renewable energy.

In 2015, the new power plants were added to the power system as follows:

Independent Power Producers (IPPs)

1. Gulf JP UT Co. Ltd., Block 1	800 MW	June 1, 2015
2. Gulf JP UT Co. Ltd., Block 2	800 MW	December 1, 2015

Overseas Power Producers

1. Hongsa Co. Ltd (Hongsa Power Plant), Unit 1	491 MW	June 2, 2015
2. Hongsa Co. Ltd (Hongsa Power Plant), Unit 2	491 MW	November 2, 2015

Large Hydropower Plants

1. Khwae Noi Bamrungdan Dam Units 1-2	30 MW	November 1, 2015
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Small Hydropower Plants

1. Khun Dan Prakan Chon Dam	10 MW	April 1, 2015
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Firm Small Power Producers (SPPs)

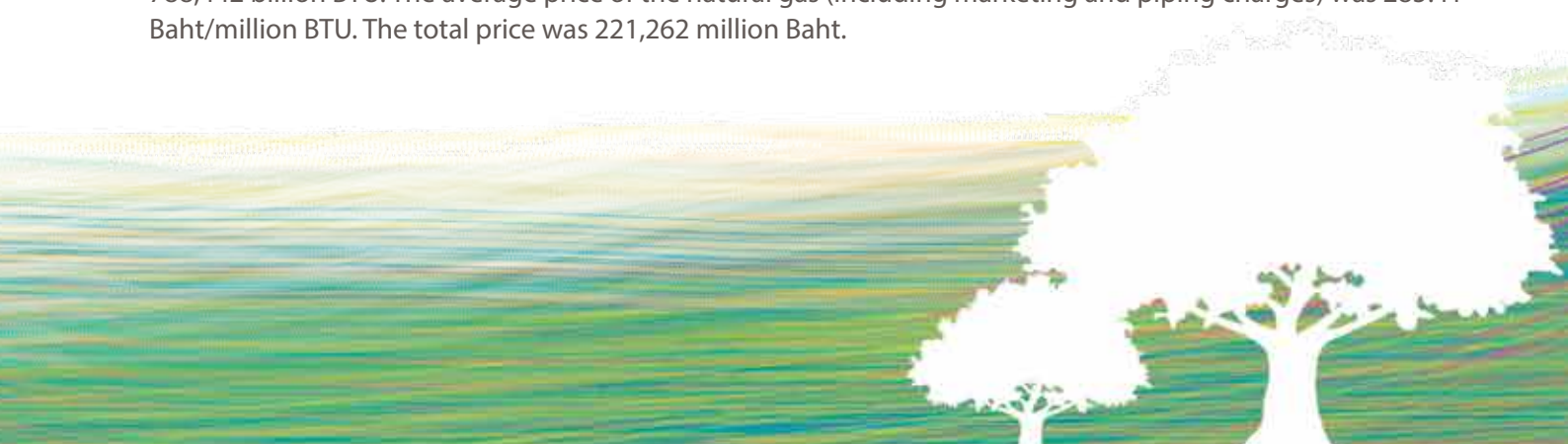
1. Khonburi Power Plant Co. Ltd.	22 MW	January 2, 2015
2. Ratchaburi World Cogeneration Co. Ltd. (Project 2)	90 MW	March 1, 2015
3. B. Grimm BIP Power 1 Ltd.	90 MW	April 29, 2015
4. Amata B. Grimm Power 4 Ltd.	90 MW	November 15, 2015

Non-Firm Small Power Producers (SPPs)

1. Thai Roong Ruang Energy Co. Ltd.	18 MW	August 5, 2015
2. TPI Polene Power Co. Ltd. (Project 1)	55 MW	August 6, 2015
3. SPP 6 Co. Ltd.	41 MW	December 30, 2015

Fuel Consumption

In 2015, natural gas supply for EGAT's electricity generation was derived from the various gas fields in the Gulf of Thailand and land-based fields (Nam Pong, Sin Phu Hom, and Sirikit fields) and imported from Myanmar (Myanmar fields and LNG). Natural gas utilization by EGAT's power plants amounted to 387,992 billion BTU costing 105,136 million Baht. The amount of natural gas used by the IPPs' power plants was 400,450 billion BTU costing 116,125 million Baht. Therefore, the total amount of natural gas used in electricity generation was 788,442 billion BTU. The average price of the natural gas (including marketing and piping charges) was 285.41 Baht/million BTU. The total price was 221,262 million Baht.

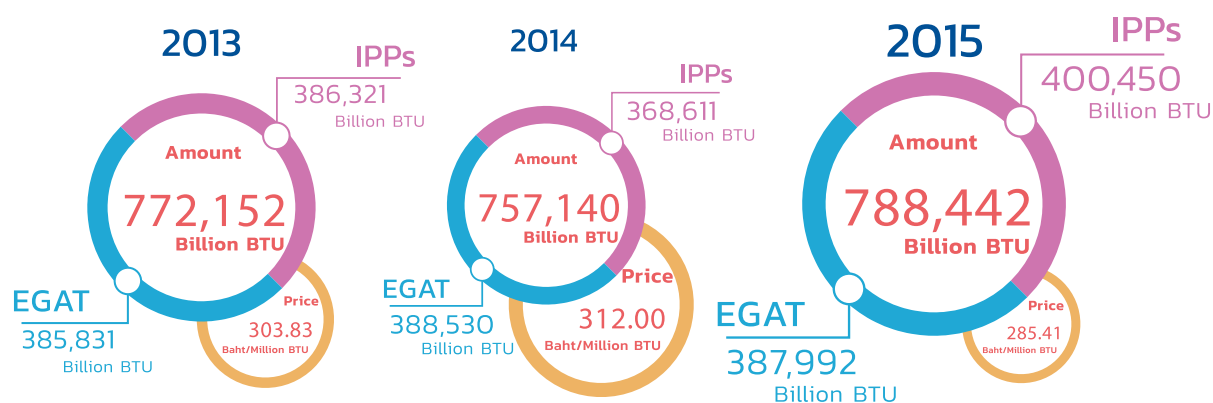


Natural Gas Utilization in Terms of Amount, Price, and Value (2013–2015)

Year	Power Plant	Gas utilization		Price ¹ (Baht/Million BTU)	Value ² (Million Baht)
		Billion BTU	(%)		
2013		772,152	100	303.83	234,606
	EGAT	385,831	50		
	IPPs	386,321	50		
2014		757,140	100	312.00	236,230
	EGAT	388,530	51		
	IPPs	368,611	49		
2015		788,442	100	285.41	221,262
	EGAT	387,992	49		
	IPPs	400,450	51		

- Remarks : 1. The price of natural gas is the average price of natural gas purchased by EGAT power plants including marketing and piping charges
 2. The value of natural gas includes marketing and piping charges but excludes the value-added tax (VAT).

Amount of Utilized Natural Gas and Price (2013–2015)



From the above table and chart, it is obvious that the use of natural gas as fuel in power generation in 2015 was greater than that in 2014 due to the commissioning of a new IPP, Uthai Power Plant (Gulf JP UT Co., Ltd.) in June 2015 resulting in an increase in the natural gas utilization for the IPPs. However, the proportion of natural gas consumption by EGAT and IPPs' power plants which was 50:50 remained considerably stable during the past 3 years.

Mae Moh Mine, moreover, has been recognized at the national and international levels as evidenced by the ASEAN Coal Awards 2015

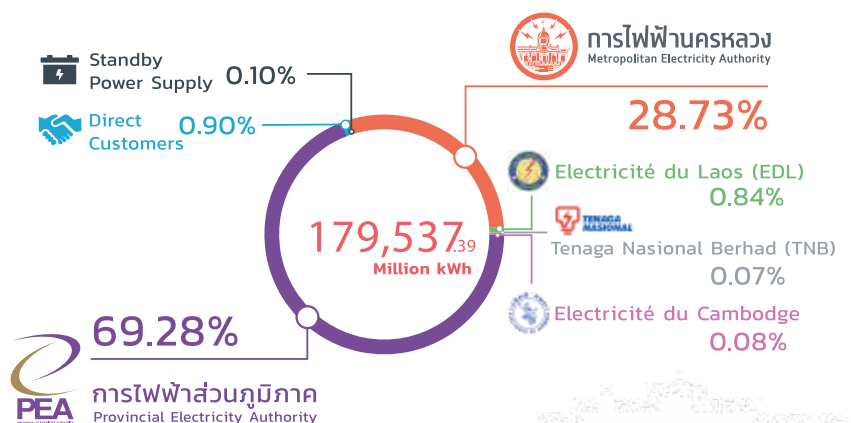
The average price of natural gas in 2015 decreased significantly as the global oil price became lower since the end of 2014 resulting in a continuously lower price of the natural gas since the beginning of the year. In 2015, the value of natural gas purchased for electricity generation decreased by 14,969 million Baht or 6.34 percent compared to 2014.

In 2015, Mae Moh Mine produced and supplied lignite of 14.48 million tons to Mae Moh power plant that generated electricity of 16.96 million kWh using lignite as fuel at the cost of 648.61 Baht/ton. As a result, the cost in electricity generation by lignite was 1.25 Baht/unit which was comparatively the lowest rate (Ft tariff in May-August 2015).

Mae Moh Mine, moreover, has been recognized at the national and international levels as evidenced by the ASEAN Coal Awards 2015 in which Mae Moh Mine received Constructive Energy Awards for the initiation of "Protection and control of floods in open-pit mine by 3-stage differential elevation series-flow pumping system" and Second Prize in Best Practice of Surface Coal Mining. Moreover, it was awarded Outstanding Enterprise in the category of outstanding innovation for the initiation of "Auto-alignment equipment for lignite conveyor belt of Mae Moh Mine"

Energy Sales

EGAT's energy sales totaled 179,537.39 million kWh. Its sales included 51,577.37 million kWh sold to the Metropolitan Electricity Authority (MEA), 124,376.08 million kWh to the Provincial Electricity Authority (PEA), 1,621.66 million kWh to direct customers, 1,768.89 million kWh to neighboring countries (Lao PDR, Malaysia, and Cambodia) and 193.39 million kWh to the customers purchasing electricity for temporary and standby use and other kinds of customers.





Energy Adjustment Charge (Ft Tariff)

In 2015, the cost of electricity generation was lower than that of the previous year resulting from the average price of Dubai crude oil that decreased 45.91 USD/BBL (the average price of crude oil in 2015 was 50.71 USD/BBL, lower from the average price of 96.62 USD/BBL in 2014). Though the exchange rate depreciated 1.82 Baht/USD (from 32.62 Baht/USD to 34.44 Baht/USD), the price of natural gas which was EGAT's main fuel in power generation was lowered 26 Baht/million BTU (decreasing from the average price of 320 Baht/million BTU to 294 Baht/million BTU) resulting in the lower cost of electricity generation. Furthermore, as EGAT had managed the electricity operation for the maximum effectiveness to control the cost in power generation, the Energy Regulatory Commission (ERC) approved the electricity tariff in 2015 with 4 revisions, namely January - April (the Ft Tariff of 58.96 Satang per unit), May - August (the Ft Tariff of 49.61 Satang per unit), September - October (the Ft Tariff of 46.38 Satang per unit), November - December (the Ft Tariff was reduced to -3.23 Satang per unit). The total reduced Ft Tariff in 2015 was 22.62 Satang per unit. Moreover, in the adjustment of energy charge for 2015, the Ft Tariff was further reduced 1.05 Satang per unit.

Ft Tariff in 2015

Revision	Month	Ft Tariff (Baht/Unit)	Average Retail Tariff including Ft (Baht/Unit)
1	January - April	0.5896	3.86
2	May - August	0.4961	3.78
3	September - October	0.4638	3.75
Energy adjustment charge in 2015			
4	November - December	-0.0323	3.72

EGAT Generation Fleet

EGAT's installed capacity in power generation according to types of power plants

Type of power plants	Installed capacity (MW)	Percentage of the system capacity
Hydropower	3,448.40	22.18
Thermal	3,647.00	23.45
Combined cycle	8,382.00	53.91
Diesel	30.40	0.20
Renewable energy	40.33	0.26
Total	15,548.13	100.00

The performance of EGAT's power plants

No.	Performance	2012	2013	2014	2015
1.	Heat rate (kJ/kWh)	8,662.00	8,620.00	8,503.00	8,286.00
2.	GWEAF (%)	90.54	92.10	92.80	92.93
3.	POF (%)	5.00	4.10	3.90	3.98
4.	UOF (%)	2.84	2.30	2.30	2.38
5.	UDF (%)	1.62	1.50	1.00	0.71

In 2015, the overall performance of EGAT generating power plants was improved continuously with lower heat rate than that in the previous year. The generating weighted equivalent availability factor (GWEAF) of EGAT power plants amounted to 0.13 percent, higher than that of the preceding year due to the control measure of the unplanned outage. The planned outage factor (POF) and the unplanned outage factor (UOF) in 2015 were both 0.08 percent higher than those in 2014. The unplanned disruption factor (UDF) in 2015 was 0.29 percent lower than that in 2014. EGAT has been able to control the rate of UOF to be less than 3 percent continuously since 2010.





Transmission System

EGAT's transmission system comprised transmission lines of 32,993.684 circuit-kilometers with 215 substations, 575 delivery points, and a total transformer capacity of 94,361.44 MVA.

In 2015, the planned outage occurred once and the forced outages occurred 59 times, out of which 14 times were caused by failure of the transmission lines, and 45 times were caused by failure of the substation equipment. The interruption was mainly caused by the malfunction of the substation equipment and the control and prevention equipment (19 times), by animals (19 times), by human errors, by either EGAT staff or outside people (6 times), by environment (6 times), by unidentifiable reasons (5 times), by weather (2 times), and by system failure (2 times).

The major event which had an impact on EGAT's power system was on August 18, 2015 at 12.50 hours when there was a partial blackout caused by the failure of latching relay (8046) arc at the contact of Bus Diff No.1 and a remote trip of the transmission delivery line to Had Yai 2 Substation resulting in the detachment of the power system for 5 provinces in the lower southern part of the country including Songkhla, Satun, Yala, Narathiwat, and Pattani from the main system. The system interruption of 773.8 MW of the longest duration of 38 minutes resulted in the failure of 36 delivery points and UER of 11,637 MW-Min.

EGAT's bulk power supply system performance in 2015

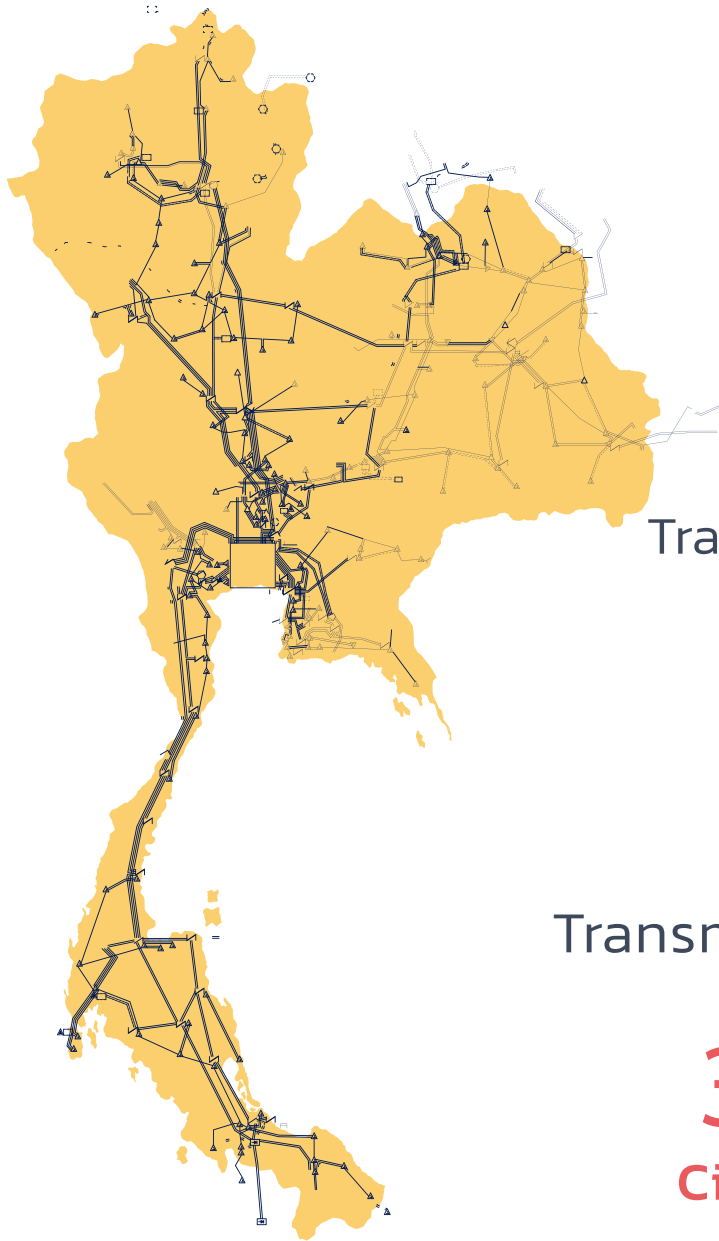
• System Average Interruption Frequency Index (SAIFI), (number of occurrence/delivery point)	0.19206
• System Average Interruption Duration Index (SAIDI), (minutes/delivery point)	3.20573
• Unsupplied Energy Ratio (UER) (%)	0.00033
• Voltage Deviation (VD) (PPM)	0.14063

The availability in 2015 was, as a result, as follows:

• Service Availability (SA) (%)	99.99939
• Transmission Circuit Availability (%)	99.98722
• Transformer Availability (%)	99.87530

The quality of the power supply service has been well maintained with the frequency being controlled within the band of 49.50 - 50.50 Hz and the system voltage being steadily controlled within the range of 95-105 percent of the nominal voltage.

To ensure the availability and continuity of the supply service, EGAT has given priority to the improvement and maintenance of existing transmission facilities. Works carried out during the year included insulators cleaning for the 500 kV transmission lines in the areas highly exposed to dirt, pollution, smoke, and waste from birds. Exercises of black start have been practiced, and the transmission network development plan has been prepared. Preventive measures to minimize interruption of power supply caused by human errors and equipment malfunctions caused by animals were also set up. Moreover, EGAT has implemented public communication programs to reduce power losses and damages to transmission facilities caused by the community activities and addressed the concern and complaints of all stakeholders regarding power transmission. With this, EGAT has successfully maintained its capability in supplying electricity of high quality in terms of voltage and frequency with continuity, stability, and reliability.



215
Substations

Transformer Capacity

94,361.44
MVA

Transmission Line Length

32,993.68
Circuit-Kilometers

Moreover, EGAT has participated in the benchmarking of the International Transmission Operation and Maintenance Study (ITOMS) to have available data for work improvement and to find more performance index appropriate to the transmission work.





The transmission lines carry,
not only the electric power
from one place to another,

but also
the happiness and
hope through all
passing areas.





Nature of Business of EGAT and Affiliates

EGAT's Business Operation

EGAT is a state-owned enterprise under the supervision of Ministry of Energy and Ministry of Finance having the principal mission in electricity generation, electricity acquisition, and electricity sales to the Metropolitan Electricity Authority (MEA), the Provincial Electricity Authority (PEA), a number of direct customers by law, and neighboring countries. EGAT is also responsible for other related businesses as stipulated by EGAT Act.

1. Main Business in Electricity Generation

1.1 Generation

EGAT owns and operates various types of power plants located in 45 sites countrywide with a total installed capacity of 15,548.13 MW. Its power generation facilities consist of 3 thermal power plants, 6 combined cycle power plants, 24 hydropower plants, 8 renewable energy plants, and 4 diesel power plants.

1.2 Purchase

In addition to operating its own power plants, EGAT also purchases bulk electricity from 12 Independent Power Producers (IPPs) totaling 14,766.70 MW, from Small Power Producers (SPPs) totaling 5,137.02 MW, and from neighboring countries, namely Lao PDR and Malaysia totaling 3,386.60 MW.

1.3 Transmission

EGAT transmits electricity generated by its own power plants and purchased from private power producers through its own grid network covering all parts of the country. EGAT's transmission lines are comprised of different voltages ranging from 500 kV, 230 kV, 132 kV, 115 kV, and 69 kV. EGAT sells electricity to two distributing authorities, namely Metropolitan Electricity Authority (MEA) and Provincial Electricity Authority (PEA) which deliver electricity to their retail customers countrywide. EGAT also sells electricity to the power utilities of neighboring countries, namely Lao PDR at 115 kV and at 22 kV lines and Malaysia at 300 kV HVDC lines.

2. Other Businesses

2.1 Energy-Related Businesses

In 2015, EGAT conducted its businesses in accordance with the strategic themes in building growth from its energy-related businesses. EGAT offered quality electricity service such as electrical engineering and power plant construction, power plant operation and maintenance as well as sale of by-products from power generation to external organizations. Moreover, EGAT expanded its energy-related businesses to ASEAN countries as a preparation for seeking benefits from the establishment of ASEAN Economic Community (AEC) in 2015.

The expansion of EGAT's energy-related businesses to ASEAN countries increases not only revenue to EGAT but also the security of electricity system in Thailand as those power plants have also supplied electric power back to the Thailand. Furthermore, EGAT's energy-related businesses have strengthened relationship among ASEAN members. In 2015, the outstanding EGAT's related businesses in overseas countries are as follows:

- Sign a Memorandum of Understanding (MOU) between the Ministry of Energy of Thailand and Ministry of Electricity of Myanmar on technical cooperation in electricity which is comprised of 4 areas, namely human resource development, electricity system development, transmission system development, and distribution system development. Joint Working Committee (JWC) and Joint Working Group (JWG) will be established to mobilize the technical cooperation framework. EGAT and its subsidiaries are vital for the success of the technical cooperation projects (projects on efficiency improvement for power plants and projects on large hydropower plant development), which will lead to more opportunities for expansion of EGAT's energy-related businesses in Myanmar in the future.
- Sign a Memorandum of Understanding (MOU) between the Bhutan Power Corporation Limited (BPC) and EGAT under the framework of technical cooperation and mutual search for business opportunity focusing on strengthened business development. Proposal for efficiency improvement for mini/micro hydropower plants of Bhutan has been made under the technical cooperation project.
- Provide an Operation and Maintenance Service to Hongsa Lignite-Fired Power Plant Project, the first thermal and the largest power plant of Lao PDR. The commercial operation date (COD) of Unit 1 to supply electricity to EGAT and Lao PDR was on June 2, 2015 and Unit 2 on November 2, 2015. The COD of Unit 3 will be in March 2016.
- Provide engineering and construction service to power plants in Lao PDR, namely Hongsa Lignite-Fired Power Plant Project which was completed on schedule and Nam Ngiep 1 Power Plant Project which started since 2014





In Thailand, EGAT has expanded the scope of its energy-related business to the following IPPs and SPPs.

- **IPPs**
 - Khanom Power Plant Project (Unit 4) : Engineering and Construction Service since 2014, Technical Consultant Service and Review and Inspection Service for Performance Test since 2015 (COD on June 16, 2016)
 - Gulf JP NS Co., Ltd : Maintenance Service
- **SPPs**
 - Nava Nakorn Power Generation Co., Ltd : Engineering and Construction Service and long-term Operation and Maintenance Service (scheduled COD on June 1, 2016)

Regarding exhibitions and seminars, in 2015, EGAT organized and participated in several exhibitions and seminars among which were “Power-Gen Asia 2015”, “the 11th Asia-Pacific V94.3A/ V84.3A Users Group Conference 2015”, and “EGAT Energy Forum 2015”.

On research and development, EGAT in cooperation with leading educational institutions in the country, has conducted research and development on the by-product from power generation of the Mae Moh Lignite-Fired Power Plant in Lampang Province, to produce fly ash and synthetic gypsum to be used in the quality improvement of cement and in organic fertilizer to enrich the soil quality.

Regarding transmission business, EGAT provides to domestic IPPs and SPPs as well as those of neighboring countries the Maintenance Services for transmission equipment of substations and high-voltage transmission lines, training, together with sale and service of substation equipment. The service provision is a way to enhance security and reliability of the electricity system of Thailand. Furthermore, EGAT has cooperated with its alliances in the private sector to provide a testing service for high-voltage equipment complying with the international standards. The testing service has upgraded electricity industry of Thailand and helped save the testing cost to be undertaken abroad.

2.2 EGAT's Affiliates

EGAT has invested in electricity generation and energy-related businesses in the following five companies:

Subsidiary Companies

• **Ratchaburi Electricity Generating Holding Public Company Limited (RATCH)**

Nature of Business

RATCH was established as a holding company on March 7, 2000. As a holding company, RATCH gets dividends from its invested companies as main revenue.

The company focuses mainly on investing and developing electricity generating business which concentrates on diversity of resources, ranging from natural gas, oil, coal, hydro, and alternative energy, such as wind, solar power, etc. The company is also interested in expanding into related businesses such as operation and maintenance service for power plant, coal mining, as well as joint ventures in various projects, both in Thailand and other countries.

EGAT has invested in electricity generation and energy-related businesses in the following five companies:

Ratchaburi Electricity Generating Holding PCL (RATCH)

EGAT International Company Limited (EGATi)

EGAT Diamond Service Co., Ltd. (EDS)

Electricity Generating Public Company Limited (EGCO)

District Cooling System and Power Plant Co., Ltd. (DCAP)

At present, RATCH has the total capacity of 6,578.12 MW comprising 4,951.99 MW from domestic power plants and 1,626.13 MW from overseas power plants.

Shareholding

As of December 31, 2015, RATCH had a total registered capital of 1,450 million shares (equivalent to 14,500 million Baht). Its ownership structure is composed of 45 percent stakes held by EGAT and 55 percent stakes held by general public.

• EGAT International Company Limited (EGATi)

Nature of Business

EGATi was established by EGAT on December 18, 2007. EGATi aims to directly invest or set up subsidiaries to invest in power development projects in foreign countries in order to supply electricity back to Thailand. The company is interested in expanding into electricity business and other related businesses relevant to EGAT in order to create value-added and to be beneficial to EGAT's business.

At present, EGATi has a project under construction, i.e. Nam Ngiep 1 Power Co., Ltd. (NNP1PC) in Lao PDR and 2 projects in the process

of development, i.e. Upper Salween hydropower development project (Mai Tong) in Myanmar and Quang Tri 1 thermal power development project in Vietnam.

Shareholding

As of December 31, 2015, EGATi had a total registered capital of 610.8 million shares (equivalent to 6,108 million Baht). EGAT presently holds 99.99 percent stakes in EGATi.

• EGAT Diamond Service Co., Ltd. (EDS)

Nature of Business

EGAT Diamond Service Co., Ltd (EDS) is a joint venture business founded on December 15, 2009 by EGAT, Mitsubishi Heavy Industries Ltd. (MHI), Mitsubishi Corporation (MC), and Ratchaburi Electricity Generating Holding Public Company Limited (RATCH). The objective of the company is to provide refurbishment work for the hot gas path parts of gas turbine in 18 countries including Thailand, Malaysia, Singapore, Lao PDR, Myanmar, Vietnam, Cambodia, Brunei, Australia, New Zealand, India, Pakistan, Bangladesh, Sri Lanka, Bhutan, Nepal, Afghanistan, and Maldives.





In May 2015, as a result of business restructure of Mitsubishi Heavy Industries, Ltd. (MHI), all of its shares were transferred to Mitsubishi Hitachi Power System Ltd. (MHPS).

The Gas Turbine Refurbishment Service Center which is located in Navanakorn Industrial Estate, Pathum Thani Province has started its operation in May 2011.

Shareholding

As of December 31, 2015, EDS had a total registered capital of 6.23 million shares (623 million Baht). Its ownership structure is composed of EGAT, MHPS, MC, and RATCH with the portion of 45 percent, 30 percent, 15 percent, and 10 percent stakes respectively.

Associated Company

· Electricity Generating Public Company Limited (EGCO)

Nature of Business

EGCO was established as a holding company by EGAT on May 12, 1992. Its revenues are mainly from dividends of subsidiaries and associated companies.

EGCO focuses mainly on generating and selling electricity to EGAT and other local customers as well as customers in ASEAN countries under the long-term Power Purchase Agreement (PPA). The company also provides a variety of energy-related services. Business of EGCO can be categorized into 5 groups as follows;

- 1) Independent Power Producer (IPP)
- 2) Small Power Producer (SPP)
- 3) Very Small Power Producer (VSPP)
- 4) Overseas Power Producer
- 5) Other business groups which are operation and maintenance companies (O&M), water supply companies, power plant management, and mines.

At present, EGCO has a total generating capacity of 5,715.93 MW consisting of 4,010.46 MW from domestic projects and 1,705.47 MW from overseas projects.

Shareholding

As of December 31, 2015, EGCO had the total registered capital amounting to 530 million shares (equivalent to 5,300 million Baht) of which 526.47 million shares (5,264.65 million Baht) were issued and paid-up. EGCO's shareholders are EGAT (25.41 percent), TEPDIA Generating B.V. (23.94 percent), and the general public (50.65 percent).



Joint Venture

· District Cooling System and Power Plant Co., Ltd. (DCAP)

Nature of Business

DCAP is a joint venture business founded on April 2, 2003 by EGAT, PTT Public Company Limited (PTT), and Metropolitan Electricity Authority (MEA). The objective of the company is to generate and sell electricity and cooling water to the Suvarnabhumi International Airport.

Presently, DCAP is conducting a feasibility study for its investment project of a new cogeneration plant to support the Suvarnabhumi International Airport (Phase 2).

Shareholding

As of December 31, 2015, DCAP had a total registered capital of 167 million shares (equivalent to 1,670 million Baht). Its ownership structure is composed of EGAT, PTT, and MEA with the portion of 35 percent, 35 percent, and 30 percent stakes respectively.

EGAT's investment in Its Affiliates

Company	Registered capital (million Baht)	Ownership (%)	Status
Ratchaburi Electricity Generating Holding Public Company Limited (RATCH) 8/8 Moo 2, Bang Khen Sub-district, Mueang District, Nonthaburi Province 11000 Tel : +66 (0) 2794 9999 Fax : +66 (0) 2794 9998 Website: www.ratch.co.th	14,500	45	Subsidiary Company
EGAT International Company Limited (EGATi) 53 Moo 2 Charansanitwong Road, Bang Kruai District, Nonthaburi Province 11130 Tel : +66 (0) 2436 6900 Fax : +66 (0) 2436 6957 Website: www.egati.co.th	6,108	99.99	Subsidiary Company
Electricity Generating Public Company Limited (EGCO) EGCO Tower 222 Moo 5, Vibhavadi-Rangsit Road, Thungsonghong Sub-district, Lak Si District, Bangkok Province 10210 Tel : +66 (0) 2998 5000 Fax : +66 (0) 2998 0956-9 Website: www.egco.com	5,300	25.41	Associated Company
District Cooling System and Power Plant Co., Ltd (DCAP) 222 Moo 1, Nong-Prue Sub-district, Bang Phli District, Samut Prakan Province 10540 Tel : +66 (0) 2327 4242 Fax : +66 (0) 2327 4244 Website: www.dcap.co.th	1,670	35	Joint Venture
EGAT Diamond Service Co., Ltd. (EDS) 56/25 Moo 20, Khlong Nueng Sub-district, Khlong Luang District, Pathum Thani Province 12120 Tel : +66 (0) 2529 0800 Fax : +66 (0) 2529 0900 Website : www.egatdiamond.co.th	623	45	Subsidiary Company



Analysis of Operating Results and Financial Status

1. Analysis of Operating Results of EGAT and its Subsidiaries

Operating results of EGAT and its subsidiaries including associates and joint ventures for the years ended December 31, 2015 and 2014 are summarized as follows:

Operating Results	(Adjusted)		Increase / (Decrease)		(Adjusted)
	2015 Million Baht	2014 Million Baht	2015-2014 Million Baht	Percentage	2013 Million Baht
Revenue from sales and services	546,480.32	557,080.18	(10,599.86)	(1.90)	536,294.26
Revenue from electric energy sales	531,713.22	535,911.51	(4,198.29)	(0.78)	512,432.63
Revenue from sales of other goods and services	14,767.10	21,168.67	(6,401.57)	(30.24)	23,861.63
Cost from sales and services	457,438.58	479,145.20	(21,706.62)	(4.53)	456,964.00
Cost of electric energy sales	444,390.69	459,664.47	(15,273.78)	(3.32)	434,752.34
Cost of sales of other goods and services	13,047.89	19,480.73	(6,432.84)	(33.02)	22,211.66
Gross profit	89,041.74	77,934.98	11,106.76	14.25	79,330.26
Other revenue	3,399.95	6,572.58	(3,172.63)	(48.27)	4,768.13
Income before expenses	92,441.69	84,507.56	7,934.13	9.39	84,098.39
Selling expenses	190.52	148.59	41.93	28.22	143.55
Administrative expenses	16,675.74	16,937.71	(261.97)	(1.55)	15,965.57
Other expenses	12,030.60	455.63	11,574.97	2,540.43	5,238.94
Operating income	63,544.83	66,965.63	(3,420.80)	(5.11)	62,750.33
Share of profit from associated company and joint ventures of subsidiaries under the equity method	2,318.65	2,466.51	(147.86)	(5.99)	2,707.02
Income before finance cost and income tax	65,863.48	69,432.14	(3,568.66)	(5.14)	65,457.35
Finance cost	31,697.88	25,679.05	6,018.83	23.44	25,675.02
Income tax (part of subsidiaries)	1,407.72	1,269.38	138.34	10.90	1,433.24
Net income for the year	32,757.88	42,483.71	(9,725.83)	(22.89)	38,349.09
Net income - Non-controlling interests	1,579.00	3,321.54	(1,742.54)	(52.46)	3,570.15
Net income - EGAT and its subsidiaries	31,178.88	39,162.17	(7,983.29)	(20.39)	34,778.94

Note: * The financial statements for 2015, 2014, and 2013 have been prepared according to Thai Financial Reporting Interpretation No. 4 and Thai Accounting Standard No. 17.

For operating results for the year ended December 31, 2015 EGAT and its subsidiaries recorded a net income of Baht 31,178.88 million, a decrease of Baht 7,983.29 million or 20.39% from the year 2014. The details are as follows:

1.1 Analysis of revenue from electric energy sales

For the year ended December 31, 2015, revenue from electric energy sales, which is the primary source of revenue of EGAT and its subsidiaries, amounted to Baht 531,713.22 million, decreasing by Baht 4,198.29 million or 0.78% from Baht 535,911.51 million in 2014. The lower sales revenue was mainly attributable to a decrease of Baht 0.125 per kWh from Baht 3.087 per kWh in 2014 to Baht 2.962 per kWh in 2015. However, the volume of electric energy sales of EGAT and its subsidiaries for the year ended December 31, 2015 increased by 5,932.95 million kWh or 3.42% to 179,533.57 million kWh, compared with 173,600.62 million kWh in 2014. The lower unit selling price affecting to sales revenues decreased in 2015.

1.2 Analysis of cost of electric energy sales

For the year ended December 31, 2015, the cost of electric energy sales of EGAT and its subsidiaries decreased from the year 2014 by Baht 15,273.78 million. Components of the cost of electric energy sales are detailed as follows:

Cost of Electric Energy Sales	2015	2014	Increase / (Decrease)	
	Million Baht	Million Baht	Million Baht	Percentage
Electricity purchased	116,628.28	112,963.64	3,664.64	3.24
Fuel	264,756.80	283,803.25	(19,046.45)	(6.71)
Generating expenses	52,182.30	52,127.51	54.79	0.11
Transmission expenses	10,823.31	10,770.07	53.24	0.49
Total	444,390.69	459,664.47	(15,273.78)	(3.32)

1.2.1 Electricity purchased

Electricity purchased as shown in the statement of income is a part of the purchase of electricity from power plants that do not qualify as a finance lease under Thai Accounting Standard No.17: Leases. For the year ended December 31, 2015, the cost of purchased electricity increased by Baht 3,664.64 million or 3.24%. The increase was attributable to an increase of foreign countries and small power producers (SPP).





1.2.2 Fuel cost

Fuel cost as shown in the statement of income for the year ended December 31, 2015 and 2014 included fuel cost of power plants under the power purchase agreements qualified as financial leases according to Thai Accounting Standard No. 17: Leases. The details are as follows:

Fuel	2015	2014	Increase / (Decrease)	
	Million Baht	Million Baht	Million Baht	Percentage
(1) Fuel cost of EGAT and its subsidiaries	163,112.45	181,464.10	(18,351.65)	(10.11)
(2) Fuel cost under finance leases	101,644.35	102,339.15	(694.80)	(0.68)
Total	264,756.80	283,803.25	(19,046.45)	(6.71)

(1) Fuel cost of EGAT and its subsidiaries

The volume of electricity produced by EGAT and its subsidiaries amounted to 89,109.66 million kWh, decreasing from the prior year by 562.15 million kWh from 89,671.81 million kWh in 2014. The details of fuel consumption in 2015 are as follows:

Fuel	2015	2014	Increase / (Decrease)	
	Million Unit	Million Unit	Million Unit	Percentage
Natural gas (MBTU)	520.88	505.57	15.31	3.03
Natural gas (liter)	269.29	457.91	(188.62)	(41.19)
Diesel oil (liter)	41.06	32.41	8.65	26.69
Palm oil (kg)	15.73	1.44	14.29	992.36
Lignite (ton)	14.48	17.02	(2.54)	(14.92)

The fuel cost for the year ended December 31, 2015 amounted to Baht 163,112.45 million, decreasing from the prior year by Baht 18,351.65 million or 10.11%. The details of fuel cost are as follows:

Fuel	2015	2014	Increase / (Decrease)	
	Million Baht	Million Baht	Million Baht	Percentage
Natural gas	148,188.09	158,529.49	(10,341.40)	(6.52)
Heavy oil	4,225.20	11,943.70	(7,718.50)	(64.62)
Diesel oil	928.43	832.61	95.82	10.32
Palm oil	376.56	35.88	340.68	949.50
Lignite	9,394.17	10,122.42	(728.25)	(7.19)
Total	163,112.45	181,464.10	(18,351.65)	(10.11)

The decreasing fuel cost was mainly attributable to the lower proportion of generating electricity of EGAT compared with the whole generating as 38.07% (41.30% for the year 2014), while EGAT purchased the higher proportion of electricity from the domestic and foreign power producers as 61.93% (58.70% for the year 2014). In addition, the fuel price was lower, especially natural gas which is the primary fuel for the electricity generated.

(2) Fuel cost under finance leases

Fuel cost under finance leases is adjusted according to the power purchase agreements qualified as leases complied with Thai Accounting Standard No. 17: Leases.

1.3 Revenue and cost of sales of other goods and services

Revenue and cost of sales of other goods and services were mainly derived from operation and maintenance services, engineering and construction consulting services and telecommunication services.

In 2015, EGAT and its subsidiaries recorded the revenue from sales of other goods and services in the amount of Baht 14,767.10 million, decreasing from the year 2014 by Baht 6,401.57 million or 30.24%, and the cost from sales of other goods and services in the amount of Baht 13,047.89 million, decreasing from the year 2014 by Baht 6,432.84 million or 33.02%.

1.4 Other revenue

Other revenue for the year ended December 31, 2015 totaled Baht 3,399.95 million, decreasing from the year 2014 by Baht 3,172.63 million or 48.27% due to the following reasons.

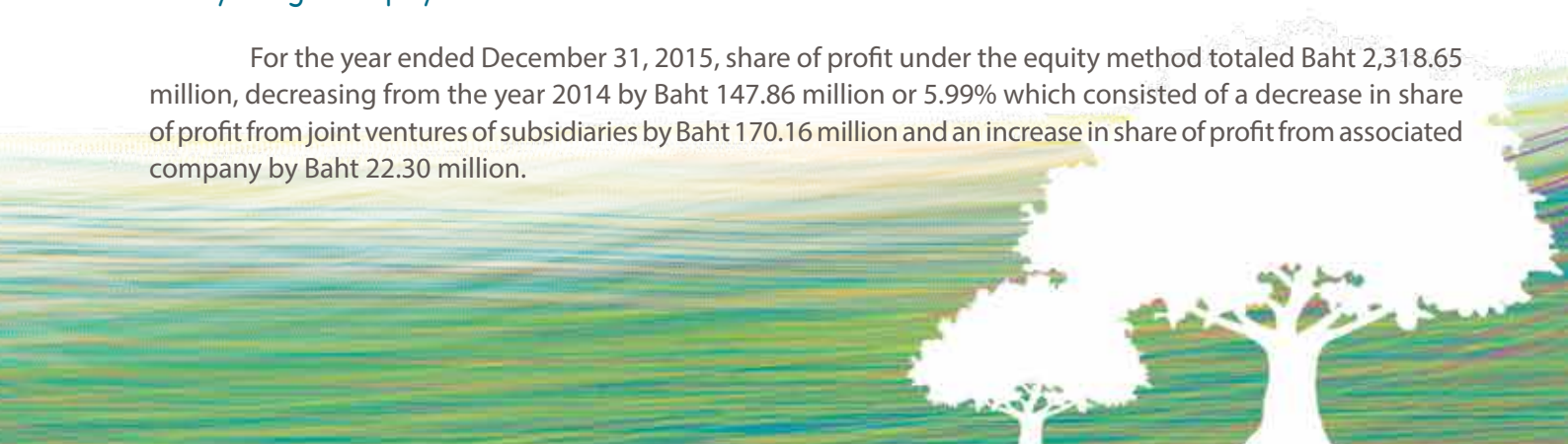
- A decrease in gain on foreign exchange in the amount of Baht 1,045.56 million.
- A decrease in other revenue in the amount of Baht 562.22 million, adjusted by discount on gas of Sirikit field at Lankrabue to deferred revenue for electricity compensation.
- For the year 2014, the subsidiaries had income from reverse provision liabilities and refund development project in the amount of Baht 440.24 million, and insurance compensation income was Baht 188.88 million. There was none in year 2015.
- For the year 2014, EGAT recognized fine income from dispute with Idrigo S.P.A Company Limited in the amount of Baht 235.92 million. There was none in year 2015.

1.5 Other Expenses

Other expenses for the year ended December 31, 2015 totaled Baht 12,030.60 million, increasing from the year 2014 by Baht 11,574.97 million or 2,540.43%. The increase was mainly attributable to an increase in loss on foreign exchange under finance leases in the amount of Baht 10,157.77 million and loss on foreign exchange in the amount of Baht 1,587.42 million.

1.6 Share of profit from associated company of EGAT and share of profit from joint ventures of subsidiaries by using the equity method

For the year ended December 31, 2015, share of profit under the equity method totaled Baht 2,318.65 million, decreasing from the year 2014 by Baht 147.86 million or 5.99% which consisted of a decrease in share of profit from joint ventures of subsidiaries by Baht 170.16 million and an increase in share of profit from associated company by Baht 22.30 million.





1.7 Income tax

For the year ended December 31, 2015, the income tax of Ratchaburi Electricity Generating Holding Plc. amounted to Baht 1,407.72 million, increasing from the year 2014 by Baht 138.34 million.

2) Analysis of Financial Status of EGAT and its Subsidiaries

Operating Results	Dec 31, 2015* Million Baht	(Adjusted) Dec 31, 2014* Million Baht	Increase / (Decrease)		(Adjusted) Dec 31, 2013* Million Baht
			Million Baht	Percentage	
Total assets	876,625.40	734,965.04	141,660.36	19.27	708,599.67
Total liabilities	496,060.97	362,101.69	133,959.28	36.99	357,049.81
Owners' equity of EGAT and its subsidiaries	346,993.49	338,778.82	8,214.67	2.42	318,423.31
Non-controlling interests	33,570.94	34,084.53	(513.59)	(1.51)	33,126.55

Note: * The financial statements for 2015, 2014, and 2013 have been prepared according to Thai Financial Reporting Interpretation No. 4 and Thai Accounting Standard No. 17.

As at December 31, 2015, the total assets of EGAT and its subsidiaries increased by Baht 141,660.36 million mainly due to the following reasons:

- An increase in cash and cash equivalents of Baht 10,001.48 million, mainly from an increase in fixed deposits not more than 3 months of EGAT and its subsidiaries in amount of Baht 22,121.83 million and a decrease in cash in banks - current and saving accounts of EGAT in amount of Baht 8,365.90 million.
- An increase in investment in associates and joint ventures of subsidiaries by using equity method of Baht 7,178.04 million. The details are as follows:

	Unit : Million Baht	
	Increase / (Decrease)	
Associates		
Electricity Generating Plc.	1,010.67	
Nam Ngieb 1 Power Co.,Ltd.	37.88	
First Korat Wind Co.,Ltd.	(12.38)	
K.R. Two Co.,Ltd.	(8.86)	
Perth Power Partnership (Kwinana)	(68.91)	958.40

Unit : Million Baht

Increase / (Decrease)

Joint ventures

District Cooling System and Power Plant Co.,Ltd.	63.18	
Chubu Ratchaburi Electric Services Co.,Ltd.	9.27	
SouthEast Asia Energy Ltd. and its subsidiary	63.57	
Nam Ngum 3 Power Co.,Ltd.	-	
Xe Pien – Xe Nam Noy Co.,Ltd.	453.85	
KK Power Co.,Ltd.	-	
Ratchaburi Power Co.,Ltd.	13.50	
Nava Nakorn Electricity Generation Co.,Ltd.	(14.74)	
Ratchaburi World Cogeneration Co.,Ltd.	635.64	
Solarta Co.,Ltd.	120.55	
Solar Power (Korat 3) Co.,Ltd.	(9.79)	
Solar Power (Korat 4) Co.,Ltd.	(8.48)	
Solar Power (Korat 7) Co.,Ltd.	(8.28)	
Songkhla Biomass Co.,Ltd.	4.41	
Songkhla Biofuel Co.,Ltd.	-	
Ayudhya Power Co.,Ltd.	(13.93)	
Oversea Green Energy Co.,Ltd.	7.78	
Berkprai Cogeneration Co.,Ltd.	0.04	
Hongsa Power Co.,Ltd.	4,561.57	
Phufai Mining Co.,Ltd.	26.17	
RICI International Investment Co.,Ltd.	315.33	6,219.64
Total		7,178.04

- Long-term investments increased by Baht 6,035.30 million, largely from an increase in investment of EGAT in available for sale security of Baht 5,370.16 million and investment of Ratchaburi Electricity Generating Holding Public Company Limited in available for sale security of Baht. 694.77 million.
- Finance lease assets increased by Baht 107,164.31 million, mainly due to the fact that Power Purchase Agreement in finance lease of EGAT, Gulf JP NS Company Limited, and Hongsa Power Company Limited is legally binding.
- Net property, plant and equipment increased by Baht 14,231.17 million as the assets of EGAT and its subsidiaries increased by Baht 35,557.89 million, while depreciation for the year increased by Baht 21,326.72 million.
- Work under construction decreased by Baht 9,926.74 million because the North Bangkok combined power plant – Block 2 had been completely constructed, then transferred to assets since December 2015.



As at December 31, 2015, the total liabilities of EGAT and its subsidiaries increased by Baht 133,959.28 million, mainly detailed as follows:

- Finance lease liabilities - Power plant and current portion increased by Baht 118,560.51 million, due to Power Purchase Agreement in finance lease of EGAT, Gulf JP NS Company Limited, and Hongsa Power Company Limited.
- Loan from Infrastructure Fund increased by Baht 20,855.00 million, since EGAT raised money by North Bangkok Power Plant Block 1 Infrastructure Fund of EGATIF which was traded on the Stock Exchange of Thailand in year 2015.
- Deferred revenue for electricity compensation increased by Baht 4,165.90 million, mainly because EGAT received fuel compensation and electricity compensation from fuel suppliers and electricity suppliers in order to compensate electricity users.
- Long-term loans and current portion decreased by Baht 6,034.26 million mainly due to a decrease in EGAT's bonds by Baht 7,800.00 million.

Owners' equity of EGAT and its subsidiaries totaled Baht 380,564.43 million, increasing by Baht 7,701.08 million, as shown in the following details.

- For the year ended December 31, 2015, the net income of EGAT and its subsidiaries totaled Baht 31,178.88 million.
- An increase in other comprehensive income in the amount of Baht 205.40 million.
- Estimated remittance to the Ministry of Finance totaled Baht 23,107.28 million.

3) Analysis of Cash flow

As at December 31, 2015, cash and cash equivalents of EGAT and its subsidiaries amounted to Baht 72,647.55 million, increasing from December 31, 2014 by Baht 10,001.48 million. The reasons are as follows:

	Unit : Million Baht
Cash and cash equivalents as at Dec 31, 2014 (Restated)	62,646.07
Net cash inflows from operating activities	115,258.46
Net cash outflows from investing activities	(44,924.40)
Net cash outflows from financing activities	(60,076.82)
Other Effects from cash and cash equivalents	(255.76)
Cash and cash equivalents as at December 31, 2015	72,647.55

In 2015, net cash inflows from operating activities totaled Baht 115,258.46 million which was derived from net income of Baht 31,178.88 million, adjusted by non-cash items in statements of income, such as depreciation and gain/(loss) on foreign exchange etc. totaling an increase of Baht 88,103.49 million. Besides, changes in working capital resulted in a decrease in cash of Baht 3,083.56 million, cash receipts on interest of Baht 807.60 million and cash payment on income tax totaled Baht 1,747.94 million.

Net cash outflows from investing activities amounted to Baht 44,924.40 million, consisting of investments for the construction of power plant projects, transmission system, and construction projects and durable goods including interests totaling Baht 34,794.40 million, an increase in temporary investments in the amount of Baht 1,470.43 million, an increase in available for sale security (EGATIF) of Baht 5,213.75 million, the payment for additional share capital in subsidiaries, associates and the joint ventures of subsidiaries totaling Baht 6,173.22 million. Meanwhile, EGAT and its subsidiaries received cash on dividends of Baht 2,177.85 million and interest of Baht 901.96 million.

Net cash outflows from financing activities totaled Baht 60,076.82 million, comprising of cash receipts from short and long-term loans of Baht 50,561.31 million, repayment of loans of Baht 39,942.85 million, a decrease in finance lease – power plant and cash payment on interest expense from finance lease of Baht 39,488.57 million, remittance to the Ministry of Finance of Baht 25,274.00 million and dividend payment of Baht 1,809.37 million.

4) Financial Ratio

Based on the operating results and financial status for the years ended December 31, 2015 and 2014, the financial ratios of EGAT and its subsidiaries are as follows:

Liquidity Ratio	2015*	2014*
Current ratio (time)	1.66	1.53
Quick ratio (time)	1.55	1.42
Cash ratio (time)	0.74	0.68
Profitability Ratio		
Ratio of gross profit to net sales (percentage)	16.29	14.00
Ratio of net profit to net sales (percentage)	5.99	7.56
EBITDA ** (million Baht)	117,039.50	104,322.68
Efficiency Ratio		
Rate of return on assets (percentage)	4.07	5.83
Rate of return on fixed assets (percentage)	26.22	31.83
Total assets turnover (time)	0.69	0.78
Financial Policy Ratio		
Debt to equity ratio (time)	1.30	0.97
Times interest earned (time)	2.08	2.69
Fixed charge coverage (cash basis) (time)	1.30	1.30

Remark: * Financial ratios for the years 2015 and 2014 are calculated from the financial statements prepared in accordance with Financial Reporting Interpretations No. 4 and Accounting Standard No. 17.

** EBITDA is calculated from gross profit after selling expenses, administrative expenses, excluding depreciation and other amortization expenses.

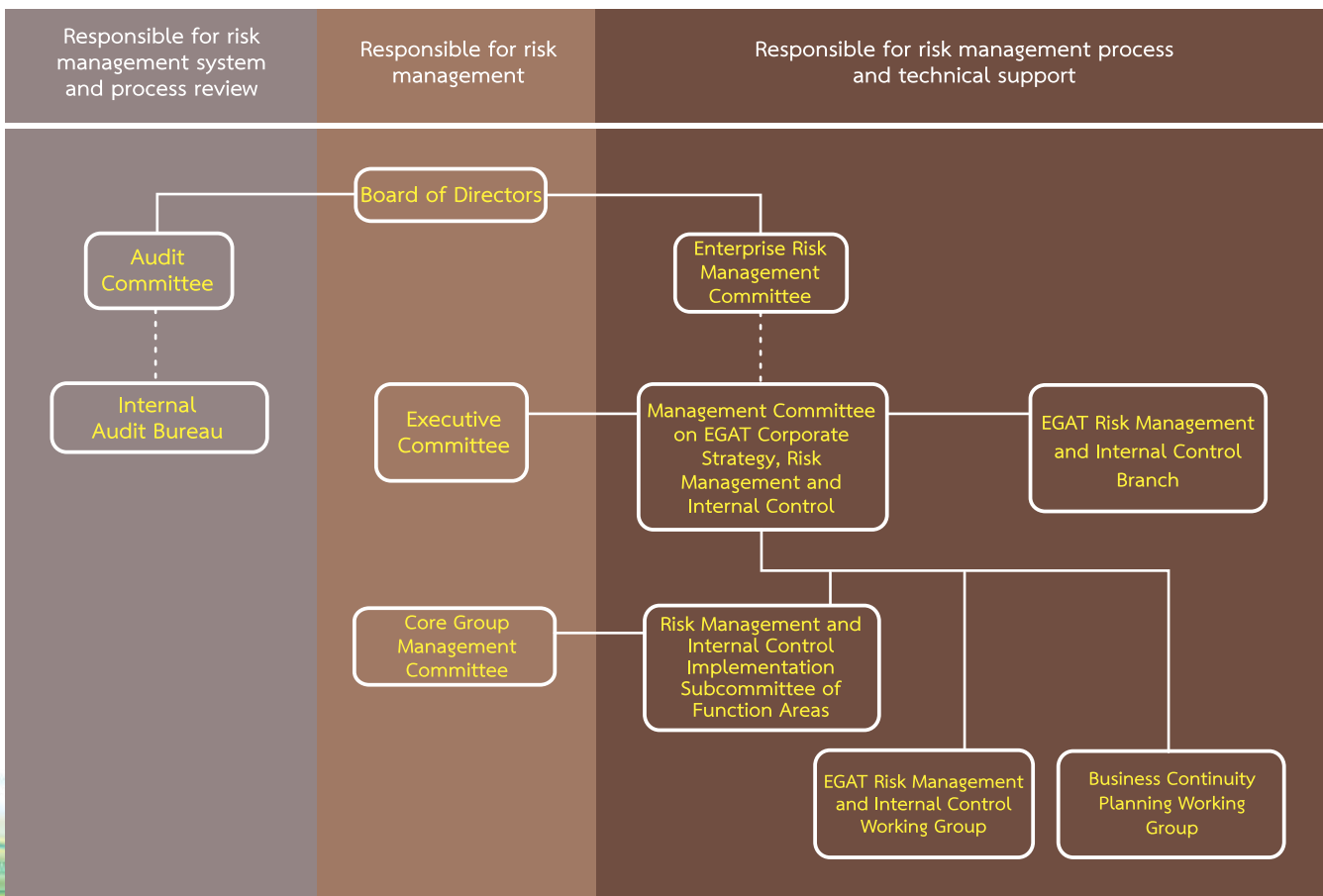




Enterprise Risk Management

Since 2005, EGAT has given importance to the enterprise risk management and has implemented enterprise risk management system based on the international standard of the Committee of Sponsoring Organizations of the Treadway Commission - Enterprise Risk Management System (COSO-ERM). Moreover, EGAT has continuously improved its enterprise risk management system to comply with the guideline set forth by the State Enterprise Policy Office, Ministry of Finance. The same standard is applicable to all units of EGAT. All employees must be aware of the importance of risk management and have responsibility to ensure that EGAT's operation achieves the corporate strategic objectives stated in its corporate plan with appropriate allocation of resources and risks being managed and controlled within its risk appetite.

EGAT carries out its risk management system under the supervision of risk management committees and working groups in every level of operation. At the top level, the Committee on Enterprise Risk Management (ERMC) is appointed by EGAT Board of Directors to oversee EGAT's overall risk management. At the organization level, the Committee on Corporate Strategy, Risk Management, and Internal Control is appointed by EGAT Governor to be responsible for the sufficiency and effectiveness of the risk management plans/measures and the effectiveness of the EGAT's risk management system. The Committee on Corporate Strategy, Risk Management, and Internal Control also establishes two working groups which are the Working Group on Risk Management and Internal Control to be responsible for introducing risk management method and/or approach and the Working Group on Business Continuity Planning which is responsible for introducing business continuity management to the committee.



To ensure that EGAT's mission will always be fulfilled, EGAT has monitored and revised the sufficiency of risk management action plans and measures on a quarterly basis, with additional reviews undertaken in case of emergency.

Risk Management in 2015

EGAT has deliberately considered risks regarding internal and external factors which could compromise its vision and mission. Risk appetites and tolerance have been defined to provide a framework for determining corporate strategies and integrating risk management process with its strategic objectives to ensure the success of EGAT's strategies. In 2015, EGAT carried out risk management in 4 aspects, namely Strategic & Corporate Risk, Financial Risk, Operational Risk, and Compliance Risk. The results of the operation can be summarized as follows:

1. Strategic & Corporate Risk

Having an aim to become a global top quartile utility, EGAT has been focusing on increasing its capability in power generation and transmission and promoting its growth through related business. In 2015, EGAT carried out risk management in association with the operation improvement resulting in higher efficiency in its power generation and transmission toward the international level.

2. Financial Risk

Financial risk management has been undertaken by EGAT in an effort to maintain its financial stability to ensure that EGAT will have adequate investment capital for the future power plants and transmission system projects.

3. Operational Risk

In order to manage operational risk, EGAT has prepared itself to take on risks inherent to all aspects of its operations, including electricity generation and transmission, construction of power plant and transmission system according to the Power Development Plan (PDP), matters concerning employees, community, and environment, and public communication regarding EGAT's operations.

In 2015, EGAT has prepared plans and measures on risk management taking into account operational risks concerning the attempt to increase the efficiency in power generation and transmission leading to a higher level of efficiency of EGAT as that of the Model Plant and a reduced timeframe for the transmission development projects.

4. Compliance Risk

EGAT has been giving attention to the compliance with all relevant law and regulations. Plans and measures have been prepared to prevent the impacts which may occur as a result of related law and regulation violation. Risk factors concerning the government's national anti-corruption policies for more concrete management have been added.





Internal Audit

Principle/Guidelines

EGAT's internal audit system is in accordance with the Standard Rule of State Audit, B.E. 2544 (2001) of the State Audit Commission (SAC). The same system is implemented throughout the organization to ensure that the internal audit is adequate and appropriate as well as achieving the following 3 objectives:

- Efficiency and effectiveness in the operation
- Reliability of the financial reports
- Compliance with law, rules, and regulations

The annual internal audit report is prepared and submitted to the Internal Audit Committee for scrutiny of the sufficiency and appropriateness of the report before submission to the EGAT Board of Directors and forwarding to the State Audit Commission within March every year.

Internal Audit Report in 2015

EGAT has evaluated the internal audit system in accordance with the Standard Rule of State Audit to ensure that the mission of EGAT is achieved with effectiveness and efficiency in terms of resource utilization, protection and maintenance of assets, prevention of error, damage or misconduct, reliability of financial and non-financial reports, and compliance with law, rules, and regulations. The results of the evaluation of the 5 components of internal audit are summarized as follows:

1. Audit environment

Internal audit process is organized by establishing the Audit Committee to check and review the sufficiency and efficiency of the control, to monthly review the financial and non-financial reports, and to check and review the assignment of authority and responsibility in written statement based on the corporate governance so that the operation can achieve the objectives of the organization with efficiency, transparency, fairness, and accountability.

2. Risk assessment

Risk assessment based on the COSO-ERM principles is applied throughout the organization under the supervision of the Enterprise Risk Management Committee (ERMC) which is responsible for setting policy, risk appetite, and risk tolerance as well as analyzing the internal and external factors in relation with the corporate plan. Assessment is carried out quarterly.

3. Audit activities

Policy and procedures together with major work manuals have been established and updated for every functional line. Assignment of responsibility, approval authority, and responsibility for protection and maintenance of property are clearly identified with scope of responsibility in written statement. The Internal Audit Bureau is responsible for reviewing the financial and non-financial reports before submission to the Internal Audit Committee and EGAT Board of Directors every month.

EGAT carries out its risk management system under the supervision of risk management committees and working groups in every level of operation

4. Information and communication

Financial and non-financial information system and complete database management system of which the data to be used are up-to-date and easily accessible. The Information Technology Committee of EGAT is established to be responsible for the information system management, preparation of the master plan, and implementation of the standard on information security. The management information system is available to support the decision-making of the executives. Various channels of information systems and communication systems are available and accessible in normal situation and in time of emergency.

5. Assessment

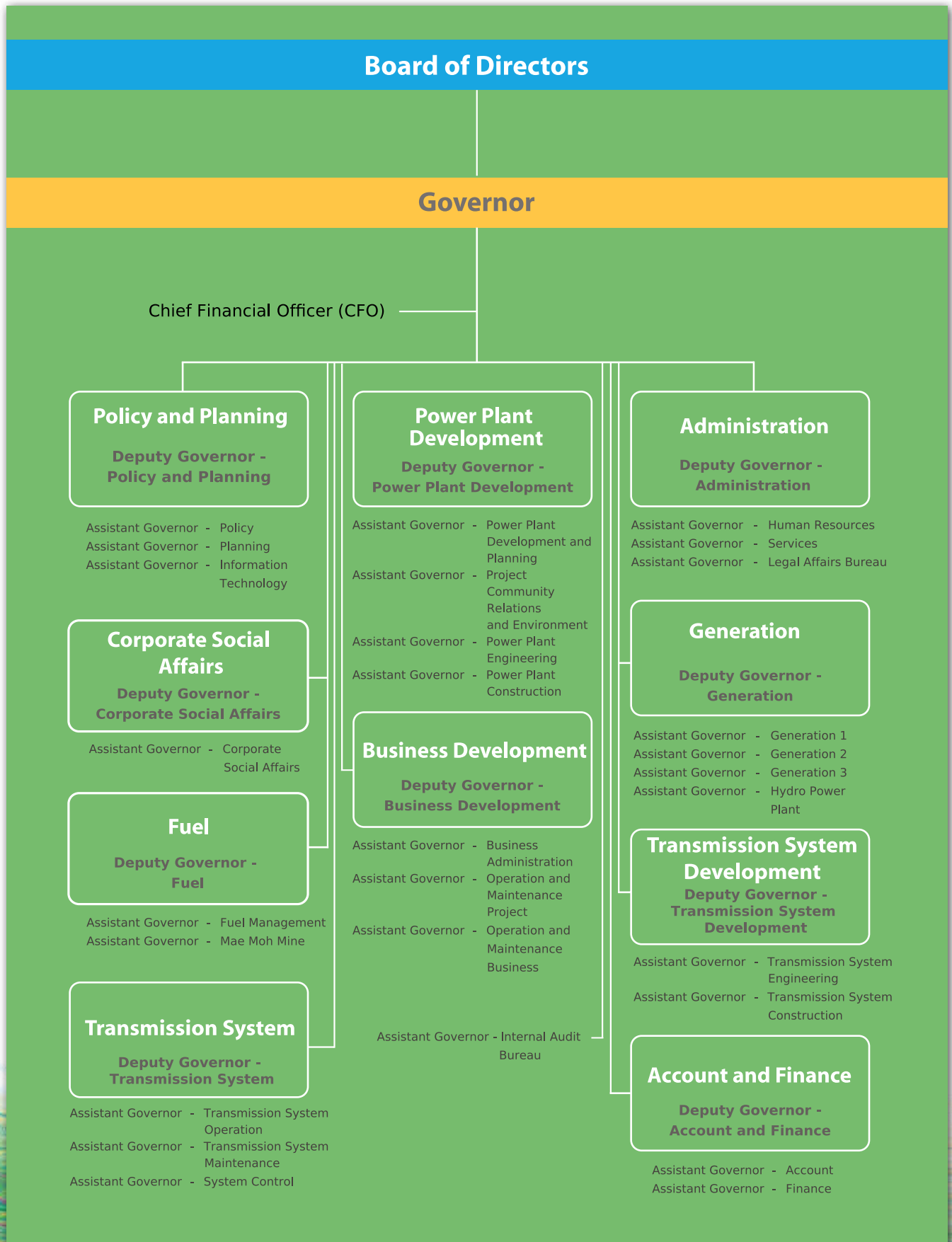
Assessment is conducted continuously and regularly in the course of major operation. Assessment for each activity and control self-assessment (CSA) is conducted for every line of command in integration with the risk assessment which is carried out quarterly. Independent assessment (IA) is also conducted by the Internal Audit Bureau and the Office of the General Auditor of Thailand.

In conclusion, EGAT has carried out the complete internal audit system covering 5 components in accordance with the regulation of the State Audit Commission throughout the organization with effectiveness, sufficiency, and appropriateness to fulfill the objectives of the internal audit.





Organization Chart



Structure of Organizational Management

EGAT Board of Directors has an important role in overseeing the overall operations, in decision making, and in setting policy and strategy of EGAT. The responsibility and the role of the Board of Directors and EGAT executives are clearly distinguished in accordance with the EGAT Act B.E. 2511 (1968) and the Act on Standards for Qualification of Board of Directors Members and Employees of State Enterprises, B.E. 2518 (1975) and its amendment. However, to provide a link between the supervision and the administration, EGAT Governor, the top management of EGAT, is appointed by the Board of Directors to be an ex - officio member and Secretary of the Board.

According to EGAT Act, B.E. 2511 (1968), composition, qualification, and criteria for the appointment of the Board of Directors are as follows:

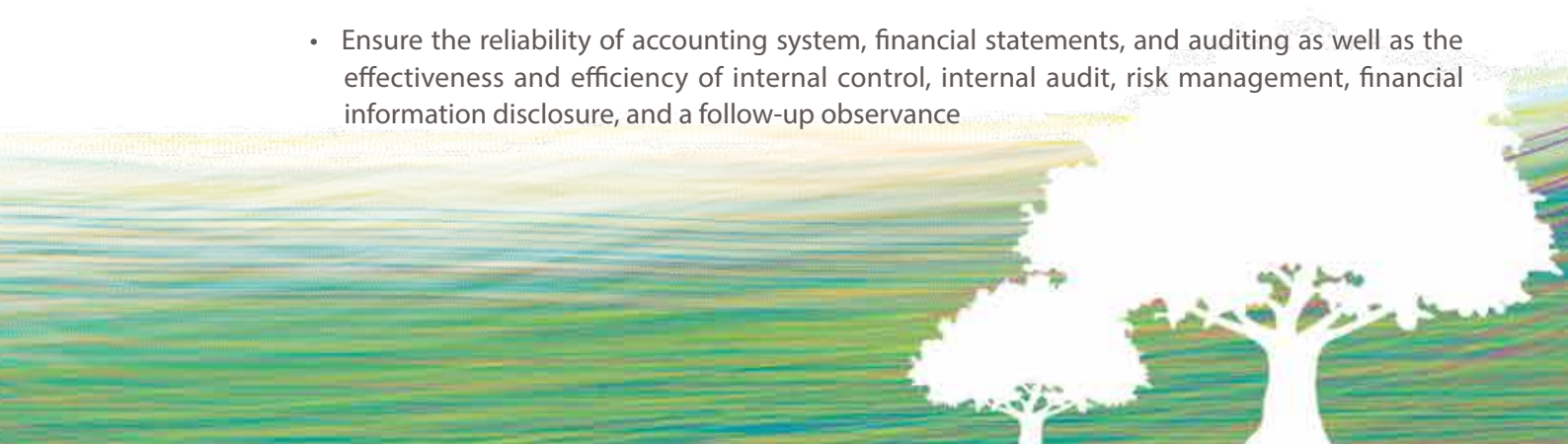
1. Board of Directors

1.1 Composition, Qualifications, and Criteria for Appointment

- The Board of Directors comprises Chairman and Directors of not exceeding 10 members including EGAT Governor who serves as an ex-officio Director.
- Chairman and Directors must be of Thai nationality and well qualified and experienced in business administration, science, engineering, economics, finance, or law. All members must not have any direct or indirect interest in the contracts made with EGAT or in the activities acted for EGAT, except that they are merely shareholders who invest in good faith in limited company or public limited company. All members must not hold any political post or possess prohibited attributes as stipulated in the Act on Standards for Qualification of Board of Directors Members and Employees of State Enterprises, B.E. 2518 (1975) and its amendment as well as resolutions of the Cabinet and other criteria relevant to Board of Directors appointment.
- The Chairman and Directors, except the ex-officio Director, are appointed by the Cabinet.

1.2 Authority and Responsibilities

- Lay down rules and regulations
- Establish EGAT's vision and policies and be accountable for the performance of EGAT Management
- Review and approve significant policies and strategies including financial objectives, corporate social responsibility, environmental conservation, and other EGAT's plans as well as monitoring the performance of EGAT Management regularly
- Ensure the reliability of accounting system, financial statements, and auditing as well as the effectiveness and efficiency of internal control, internal audit, risk management, financial information disclosure, and a follow-up observance





- Control and address conflicts of interest issues which may occur among the Management, members of Board of Directors, or employees as well as monitoring the misuse of EGAT's property and investigating misconduct or illegal and unethical behavior of the Management, members of Board of Directors, or employees
- Ensure that the structure and practices of EGAT Board of Directors comply with the principles of corporate governance and ethical standard
- Monitor the appropriateness of human resources management in terms of position classification and manpower
- Evaluate the performance of EGAT Governor and review EGAT's planning regularly

1.3 Independence of Board of Directors

To comply with the Principles and Guidelines for Corporate Governance for State Enterprise of 2009 issued by the State Enterprise Policy Office (SEPO), Ministry of Finance which specifies that at least one third of the members of the Board of Directors should be the independent outsiders so as to have real freedom in decision-making, and the number of independent members should be sufficient to ensure that their comments are heard by the meeting. At least one of the independent members is appointed from the list of members of State Enterprises' Boards of Directors prepared by the Ministry of Finance.

EGAT Board of Directors comprises the following 7 independent members from outside organizations which do not belong to the supervisory organizations of EGAT. These members have freedom in decision-making and in making comments.

1. Mr. Poramettee Vimolsiri
2. Mr. Chuan Sirinantporn
3. Gen. Kampanat Ruddit
4. Gen. Walit Rochanapakdee
5. Mr. Khemchai Chutiwongse
6. Mr. Sutat Patmasiriwat
7. Mr. Sarun Charoensuwan

1.4 Members of the Board of Directors

No.	Name	Position	Terms of office (2015)
1	Mr. Kurujit Nakornthap	Chairman	Jan. 13 - Dec. 19
2	Mr. Poramettee Vimolsiri	Director	Jan. 1 - Dec. 31
3	Mr. Chuan Sirinantporn	Director	Jan. 1 - Dec. 31
4	Gen. Kampanat Ruddit	Director	Jan. 1 - Dec. 31
5	Gen. Walit Rochanapakdee	Director	Jan. 1 - Dec. 31
6	Mr. Witoon Kulcharoenwirat	Director	Jan. 1 - Dec. 31
7	Mr. Khemchai Chutiwongse	Director	Jan. 1 - Dec. 31

No.	Name	Position	Terms of office (2015)
8	Mr. Krisada Chinavicharana	Director (Representative of Ministry of Finance)	Jan. 1 - Nov. 22
9	Mr. Sutat Patmasiriwat	Director	Jan. 13 - Dec. 31
10	Mr. Sarun Charoensuwan	Director	Jan. 13 - Dec. 31
11	Mr. Soonchai Kumnoonsate	Director (Ex-officio) & EGAT Governor Secretary	Jan. 1 - Dec. 31

Remark: No. 1 Appointed as Chairman by the resolution of the Cabinet on January 13, 2015 and resigned on December 20, 2015.
 No. 8 Resigned on November 23, 2015
 No. 9 and 10 Appointed as Director by the resolution of the Cabinet on January 13, 2015

1.5 Board Members Holding Office in EGAT's Affiliates

Name	Position in EGAT's Affiliates	Term of Office (2015)
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EGAT International Company Limited (EGATi)

1.	Mr. Soonchai Kumnoonsate	Chairman	Jan. 1 - Dec. 31
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Ratchaburi Electricity Generating Holding Public Company Limited (RATCH)

1.	Mr. Kurujit Nakornthap	Chairman	Jan. 1 - Dec. 20
2.	Mr. Sutat Patmasiriwat	Chairman	Dec. 21 - Dec. 31
		Director	Jan. 1 - Dec. 20
3.	Mr. Chuan Sirinantporn	Director	Jan. 1 - Dec. 31
4.	Mr. Witoon Kulcharoenwirat	Director	Jan. 1 - Dec. 31

2. Board Committees

The Board of Directors has appointed 11 Board Committees comprising principally 8 committees to scrutinize important issues and the other 3 committees to consider specific matters.

The 8 committees to scrutinize important issues are Executive Committee, Audit Committee, Enterprise Risk Management Committee, Corporate Governance Committee, Human Resources Committee, Committee for Deputy Governor Nomination, Committee for Assistant Governor and Division Director Nomination, and Relations Affairs Committee.

The other 3 committees to consider specific matters consist of Committee for EGAT Governor Nomination, Committee for Advisor and Expert Nomination, and Subcommittee for EGAT Governor's Remuneration.





2.1 Executive Committee

Duties and Responsibilities

- Consider and approve the Term of Reference (TOR) and procurement of supplies within the value limits not exceeding 700 million Baht which is beyond the approval authority of EGAT Governor and consider those over 700 million Baht for submission to the Board of Directors.
- Propose guidelines and recommendations concerning procurement for the purpose of transparency and for the best interest of EGAT.
- Consider and screen all issues concerning EGAT's financial and investment policies and plans as well as annual budget of EGAT and recommend the financial and investment strategies that will be beneficial to EGAT
- Consider and approve EGAT's master plan for information technology and communication
- Consider and screen EGAT Regulations and approve financial support to the people affected by the construction of power transmission lines within the value limits exceeding 4 million Baht but not exceeding 10 million Baht each
- Consider or screen the appeals concerning the seizure of the security in the procurement by an e-auction bidding in which the value of the security does not exceed 50 million Baht
- Consider other issues assigned by EGAT Board of Directors in accordance with EGAT Regulation No. 357 concerning the Executive Committee

Members of the Executive Committee

No.	Name	Position	Term of office (2015)
1	Mr. Kurujit Nakornthap	Chairman	Jan. 1 - Dec. 19*
2	Mr. Chuan Sirinantporn	Member	Jan. 1 - Dec. 31
3	Mr. Khemchai Chutiwongse	Member	Jan. 1 - Dec. 31
4	Mr. Witoon Kulcharoenwirat	Member	Jan. 1 - Dec. 31
5	Mr. Soonchai Kumnoonsate	Member (Ex-officio) & Secretary	Jan. 1 - Dec. 31

Remark: No. 1 Resigned from Chairman, EGAT Board of Directors, effective on December 20, 2015

2.2 Audit Committee

Duties and Responsibilities

- Review the efficiency and effectiveness of EGAT's internal control procedure, corporate governance procedure, and risk management procedure
- Review the reliability of financial statements and financial reports

- Monitor the observance of laws, rules and regulations, orders, related policies, and EGAT Code of Conduct and Ethics and supervise the procedure of complaint management of EGAT management team
- Consider the linkage of items or items which may have conflict of interests or possibility of dishonest treatment
- Monitor the effectiveness and efficient use of information technology system and resources that meet corporate objectives and create added values for EGAT
- Monitor EGAT Management's response to recommendations made by independent auditors and the Internal Audit Bureau concerning internal controls and risk management
- Review the operation of the Internal Audit Bureau and consider the appointment, transfer, and performance evaluation of the Assistant Governor - Internal Audit Bureau
- Coordinate with the independent auditors on the results of the annual audit
- Review at least once a year the appropriateness and effectiveness of the EGAT Regulations concerning the Audit Committee and the Internal Audit in accordance with EGAT Regulation No. 365 on the Audit Committee

Members of the Audit Committee

No.	Name	Position	Term of office (2015)
1	Mr. Poramete Vimolsiri	Chairman	Jan. 1 - Dec. 31
2	Gen. Kampanat Ruddit	Member	Jan. 1 - Dec. 31
3	Mr. Krisada Chinavicharana	Member	Jan. 1 - Nov. 22*
4	Assistant Governor - Internal Audit	Secretary (Ex-officio)	Jan. 1 - Dec. 31

Remark: No. 3 Resigned from EGAT Board of Directors, effective on November 23, 2015

2.3 Enterprise Risk Management Committee

Duties and Responsibilities

- Ensure the adequacy and effectiveness of risk management framework and policies which cover all EGAT's operations
- Review the policies and systems used in assessing and evaluating risk management and controls as well as auditing and reporting procedures
- Oversee and ensure the observance of risk management
- Review the disclosure of EGAT's risk information to the regulatory bodies and the public
- Perform any other tasks within the purview of the Enterprise Risk Management Committee as assigned by the Board of Directors in accordance with EGAT Regulation No.359 regarding the Enterprise Risk Management Committee



Members of the Enterprise Risk Management Committee

No.	Name	Position	Term of office (2015)
1	Mr. Sutat Patmasiriwat	Chairman	Jan. 28 - Dec. 31
2	Gen. Walit Rochanapakdee	Member	Jan. 28 - Dec. 31
3	EGAT Governor	Member	Jan. 28 - Dec. 31
4	Deputy Governor - Policy and Planning	Member and Secretary (Ex-officio)	Jan. 28 - Dec. 31

2.4 Corporate Governance Committee

Duties and Responsibilities

- Propose policy, strategies, and practical guidelines for corporate governance and social responsibility
- Consider and approve master plans for good governance and for social and environmental responsibility
- Promote participation of EGAT Board of Directors, Executives, and employees in corporate governance and CSR activities
- Supervise the implementation of activities in corporate governance practices and in CSR action plans
- Report to the Board of Directors every 6 months in accordance with EGAT Regulation No. 360 regarding the Corporate Governance Committee

Members of the Corporate Governance Committee

No.	Name	Position	Term of office (2015)
1	Mr. Chuan Sirinantporn	Chairman	Jan. 28 - Dec. 31
2	Mr. Khemchai Chutiwongse	Member	Jan. 28 - Dec. 31
3	Deputy Governor - Administration	Member	Jan. 28 - Dec. 31
4	Deputy Governor - Corporate Social Responsibility	Member	Jan. 28 - Dec. 31
5	Assistant Governor - Human Resources Development	Member	Jan. 28 - Dec. 31
6	Director of the Office of the Governor	Secretary (Ex-officio)	Jan. 28 - Dec. 31

2.5 Human Resources Committee

Duties and Responsibilities

- Propose policy guidelines on human resources
- Consider and approve EGAT's human resources master plan and submit to the Board of Directors
- Perform any other tasks related to HR oversight as assigned by the Board of Directors in accordance with EGAT Regulation No. 361 on the Human Resources Committee

Members of the Human Resources Committee

No.	Name	Position	Term of office (2015)
1	Mr. Chuan Sirinantporn	Chairman	Jan. 1 - Dec. 31
2	Mr. Sutat Patmasiriwat	Member	Aug. 27 - Dec. 31
3	EGAT Governor as a member of EGAT Board of Directors	Member	Jan. 1 - Dec. 31
4	Deputy Governor - Administration	Member	Jan. 1 - Dec. 31
5	Advisor Level 14	Member	Aug. 27 - Dec. 31
6	Assistant Governor - Human Resources	Secretary (Ex-officio)	Jan. 1 - Dec. 31

2.6 Committee for Deputy Governor Nomination

The Committee is responsible for considering and recommending candidates for nomination or rotation for the position of Deputy Governor in accordance with the criteria and procedure specified in EGAT Regulation No. 362 concerning Committee for Deputy Governor, Assistant Governor, and Division Director Nomination.

Members of the Committee for Deputy Governor Nomination

No.	Name	Position	Term of office (2015)
1	Mr. Kurujit Nakornthap	Chairman (Ex-officio)	May 22 - Dec. 19*
2	Mr. Poramettee Vimolsiri	Member	May 22 - Dec. 31
3	Mr. Chuan Sirinantporn	Member	May 22 - Dec. 31
4	Mr. Wirash Kanchanapibul	Member	May 22 - Dec. 31
5	Mr. Pithsanu Tongveerakul	Member	May 22 - Dec. 31
6	EGAT Governor	Member & Secretary (Ex-officio)	May 22 - Dec. 31

Remark: No.1 Resigned from Chairman, EGAT Board of Directors, effective on December 20, 2015





2.7 Committee for Assistant Governor and Division Director Nomination

The Committee is responsible for considering and recommending candidates for nomination or rotation for the position of Assistant Governor and Division Director in accordance with the criteria and procedure specified in EGAT Regulation No. 362 concerning Committee for Deputy Governor, Assistant Governor, and Division Director Nomination.

Members of the Committee for Assistant Governor and Division Director Nomination

No.	Name	Position	Term of office (2015)
1	EGAT Governor	Chairman (Ex-officio)	Jan. 1 - Dec. 31
2	Mr. Witoon Kulcharoenwirat	Member	Jan. 1 - Dec. 31
3	Deputy Governor	Member	Jan. 1 - Dec. 31
4	Deputy Governor - Administration	Member & Secretary (Ex-officio)	Jan. 1 - Dec. 31

2.8 Committee for EGAT Governor Nomination

The Committee for EGAT Governor Nomination is responsible for considering and recommending knowledgeable, competent, and experienced person as candidates for the position of EGAT Governor. The candidates must have appropriate qualification and without any prohibited attributes as stipulated by the law. The committee will submit the candidate list to EGAT Board of Directors for consideration.

2.9 Committee for Advisor and Expert Nomination

The Committee for EGAT Advisors and Experts Nomination is responsible for considering and recommending candidates for the position of advisors and experts.

2.10 Subcommittee for EGAT Governor's Remuneration

The Subcommittee for EGAT Governor's Remuneration is responsible for considering the payment and other remuneration for EGAT Governor as well as criteria and method in work performance evaluation; preparing hiring contract; and negotiating the rate of payment and other remuneration with the selected candidates for the position of EGAT Governor. The work of the Subcommittee will be submitted to the Board of Directors for consideration. The Subcommittee may assign any task to any appropriate EGAT units or personnel for assistance.

2.11 Relations Affairs Committee

Duties and Responsibilities

- Consider and give opinions on an improvement of the operational capacity of the State Enterprise as well as promoting and developing labour relations affairs

- Find out a compromise and prevent Labour Disputes in such State Enterprise
- Consider improving rules and regulations which will benefit Employers, Employees and such State Enterprise
- Consult to solve problems in any grievance made by an Employee or a Labour Union except a complaint concerning a disciplinary penalty
- Consult to consider improving Conditions of Employment

Members of the Relations Affairs Committee

No.	Name	Position	Term of office (2015)
1	Mr. Chuan Sirinantporn	Chairman	Jan. 1 - Dec. 31
2	Mr. Suthon Boonprasong	Member (representative of the employer)	Jan. 1 - Aug. 6
3	Mr. Seubphong Buranasirin	Member (representative of the employer)	Jan. 1 - Dec. 31
4	Mr. Saharath Boonpotipukde	Member (representative of the employer)	Aug. 7 - Dec. 31
5	Mr. Thaworn Ngamganokwan	Member (representative of the employer)	Jan. 1 - Dec. 31
6	Mr. Suchar Muankeo	Member (representative of the employer)	Jan. 1 - Aug. 6
7	Mr. Wiwat Chancherngpanich	Member (representative of the employer)	Jan. 1 - Dec. 31
8	Mr. Pol Kongsue	Member (representative of the employer)	Jan. 1 - Dec. 31
9	Ms. Pranee Tangseree	Member (representative of the employer)	Jan. 1 - Aug. 6
10	Mr. Wanchai Hongcherdchai	Member (representative of the employer)	Aug. 7 - Dec. 31
11	Mr. Veerachai Chairsrakeow	Member (representative of the employer)	Aug. 7 - Oct. 16
12	Mr. Surapong Rangsisombatsiri	Member (representative of the employer)	Jan. 1 - Aug. 6
13	Mr. Peerapol Sukviboon	Member (representative of the employer)	Jan. 1 - Aug. 6
14	Mr. Sombat Saphaveekul	Member (representative of the employer)	Aug. 7 - Dec. 31
15	Mr. Tewan Tantanatewin	Member (representative of the employer)	Aug. 7 - Dec. 31
16	Mr. Sirichai Maingam	Member	Jan. 1 - Dec. 31



(representative of employees)

No.	Name	Position	Term of office (2015)
17	Mr. Somyot Jiewkok	Member (representative of employees)	Jan. 1 - Dec. 31
18	Mr. Sirapong Boonplek	Member (representative of employees)	Jan. 1 - Dec. 31
19	Mr. Charnchai Sompornphun	Member (representative of employees)	Jan. 1 - Dec. 31
20	Mr. Somboon Srimaharpoo	Member (representative of employees)	Jan. 1 - Dec. 31
21	Mr. Teerachai Chatmaneepong	Member (representative of employees)	Jan. 1 - Dec. 31
22	Mr. Siriphong Poolsawat	Member (representative of employees)	Jan. 1 - Dec. 31
23	Mr. Adul Suk-Am	Member (representative of employees)	Jan. 1 - Dec. 31
24	Mr. Somkurn Yavichai	Member (representative of employees)	Jan. 1 - Dec. 31

3. Meetings of the Board of Directors and Its Committees

Meetings of EGAT Board of Directors are held in accordance with EGAT Regulation concerning meetings and work of EGAT Board of Directors. Members of the Board will be informed on the meeting schedule of the coming year in advance in December to enable the Board members to attend the meeting regularly.

In 2015, meetings were convened on the fourth Wednesday of each month. For each meeting, the agenda approved by the Chairman was circulated together with supporting documents and the letter of invitation 5 days in advance of the meeting date to give sufficient time for the Board members to study the issues and to request additional documents or information so that the Board members had enough information for thorough consideration.

In each meeting, when there was relevant agenda, Deputy Governors of the 10 operational lines also attended the meeting to give additional information, to receive policy as well as the views and recommendations of the Board of Directors and transfer to the operation for action correctly, appropriately, and rapidly.

Moreover, to provide transparency in the administration, two representatives from EGAT Labor Union, i.e. President and Vice-President or member delegated by the Chairman were invited to attend the meeting as observers.

In 2015, EGAT Board of Directors held 13 meetings. For the Committees of EGAT Board of Directors, some committees met every month, whereas the others met as necessary. Committee for EGAT Governor Nomination, the Committee for EGAT Advisor and Expert Nomination, and the Subcommittee for EGAT Governor's Remuneration did not have any meetings as there was no agenda that needed consideration.

Meeting Attendance of Board of Directors and Committee Members in 2015

No.	Name	Board of Directors	Executive Committee	Audit Committee	Enterprise Risk Management	Corporate Governance Committee	Human Resources Committee	Deputy Governor Nomination Committee	Assistant Governor & Division Director Nomination Committee	Relations Affairs Committee
1	Mr. Kurujit Nakornthap	12/12	11/11					1/1		
2	Mr. Porameteer Vimolsiri	10/13		7/10				1/1		
3	Mr. Chuan Sirinantporn	10/13	10/11			4/4	3/3	1/1		5/5
4	Gen. Walit Rochanapakdee	9/13			2/2					
5	Gen. Kampanat Ruddit	5/13		6/10						
6	Mr. Witoon Kulcharoenwirat	12/13	10/11						5/5	
7	Mr. Khemchai Chutiwongse	12/13	7/11			4/4				
8	Mr. Krisada Chinawicharana	8/12		8/9						
9	Mr. Sutat Patmasiriwat	13/13			2/2		1/1			
10	Mr. Sarun Charoensuwan	8/13								
11	Mr. Wirash Kanchanapibul							1/1		
12	Mr. Pithsanu Tongveerakul							1/1		
13	Mr. Soonchai Kumnoonsate	13/13	11/11		2/2		3/3	1/1	5/5	
Total		13	11	10	2	4	3	1	5	

Remark: Number of attendance/Number of meetings organized during their term of office

4. Self-Assessment of EGAT Board of Directors

The purpose of self-assessment on performance and effectiveness to be conducted by the Board of Directors is to help identify weak points that need improvement and provide an opportunity for all Board members to review their past performance and obstacles confronted. The Board of Directors can deliberate on their contribution to the success of EGAT in order to improve their performance in directing the strategy of EGAT and efficiently supervising the administration of the EGAT executives. The assessments were conducted based on the principles and guideline in the good corporate governance of state enterprise specified by the State Enterprise Policy Office (SEPO) stating that Board of Directors of state enterprise should conduct self-assessment regularly at least once a year so that improvement for more efficiency and effectiveness could be made based on the results of the assessment. In 2015, the annual self-assessment was comprised of collective Board self-assessment and individual self-assessment. The results of both assessments were "excellent".





5. Remuneration for EGAT Board of Directors

The remuneration for members of EGAT Board of Directors is within the rates approved by the Cabinet. Members of EGAT Board of Directors who are tasked with more responsibility such as being members of the Executive Committee, the Audit Committee, Corporate Governance Committee, or Enterprise Risk Management Committee will receive more remuneration at the rates also approved by the Cabinet. In 2015, the remuneration for EGAT Board of Directors totaled 8,832,130.81 Baht as follows:

No.	Name	Monthly remuneration (Baht)	Meeting allowance (Baht)	Bonus of 2014 Paid in 2015 (Baht)	Total (Baht)
1.	Mr. Kurujit Nakornthap	224,924.73	287,500.00	593,447.58	1,105,872.31
2.	Mr. Poramatee Vimolsiri	120,000.00	260,000.00	507,500.00	887,500.00
3.	Mr. Chuan Sirinantporn	120,000.00	322,500.00	507,500.00	950,000.00
4.	Gen. Walit Rochanapakdee	120,000.00	110,000.00	507,500.00	737,500.00
5.	Mr. Witoon Kulchroenwirat	120,000.00	260,000.00	507,500.00	887,500.00
6.	Mr. Khemchai Chutiwongse	120,000.00	230,000.00	507,500.00	857,500.00
7.	Mr. Krisada Chinawicharana	107,333.33	197,010.75	453,930.56	758,274.64
8.	Gen. Kampanat Ruddit	120,000.00	170,000.00	253,750.00	543,750.00
9.	Mr. Sutat Patamasiriwat	116,129.03	155,000.00	491,129.03	762,258.06
10.	Mr. Sarun Chareonsuwan	116,129.03	80,000.00	368,346.77	564,475.80
11.	Mr. Soonchai Kumnoonsate	120,000.00	150,000.00	507,500.00	777,500.00
	Total	1,404,516.12	2,222,010.75	5,205,603.94	8,832,130.81





The ultimate goal of
the technological
development is to improve
the quality of life

so that human
beings can live with
nature in perfect
harmony and
happiness.



Board of Directors



Mr. Kurujit Nakornthap
Chairman



Mr. Poramete Vimolsiri
Director



Mr. Chuan Sirinantporn
Director



Gen. Kampanat Ruddit
Director



GEN. Walit Rochanapakdee
Director



Mr. Witoon Kulcharoenwirat
Director



Mr. Khemchai Chutiwongse
Director



Mr. Krisada Chinavicharana
Director



Mr. Sutat Patmasiriwat
Director



Mr. Sarun Charoensuwan
Director



Mr. Soonchai Kumnoonsate
Director (Ex-officio)

Mr. Kurujit Nakornthap Age 60

Chairman (January 13 - December 19, 2015)

Education

- Ph.D. in Petroleum Engineering, University of Oklahoma, USA
- M.Sc. in Petroleum Engineering, University of Oklahoma, USA
- B.Sc. (with Special Distinction) in Petroleum Engineering, University of Oklahoma, USA

Training

- Training Program for Senior Executives (Class 46/2005), Office of the Civil Service Commission
- Senior Executive Program (2006), London Business School, UK
- Training programs organized by Thai Institute of Directors
 - Director Accreditation Program (Class 64/2007)
 - Audit Committee Program (Class 32/2010)
 - Role of Compensation Committee Program (Class 12/2011)
- National Defense Regular Course (Class 51/2008), Thailand National Defense College
- Top Executive Program in Commerce and Trade (TEPCoT) (Class 3/2010)
- Leadership for Change Program (Class 2/2011), Right Livelihood Foundation, Matichon Group
- Administrative Justice for Executives (Class 2/2011), Administrative Justice Development Institute
- Top Executive Program (Class 13/2011), Capital Market Academy
- Top Executive Program in Energy Literacy (Class 1/2012), Thailand Energy Academy
- Critical Thinking Skills in Systematic Problem Solving and Decision Making (SPSDM) (July 20-22, 2012), Office of the Civil Service Commission/ACI Consultants
- Top Executive Program "Bhumipalung Phandin" (Class 2) (June-November 2013), Chulalongkorn University

Work Experience

2015	Permanent Secretary, Ministry of Energy
2010 - 2015	Deputy Permanent Secretary, Ministry of Energy
2008 - 2010	Director - General, Department of Mineral Fuels, Ministry of Energy
2006 - 2008	Deputy Permanent Secretary, Ministry of Energy
2006	Deputy Director - General, Department of Mineral Fuels, Ministry of Energy

Directorship/Management Position in Other State Enterprise/Company

- Chairman of the Board of Directors, Ratchaburi Electricity Generating Holding Public Company Limited (RATCH)
- Chairman of the Board of Directors, Thai Oil Public Company Limited

Amount/Value of Shares in Other Companies *

None

Connected Transaction in 2015

None

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Mr. Porameteer Vimolsiri Age 55

Director (January 1 - December 31, 2015)

Education

- Ph.D. (Economics), Carleton University, Canada
- M.A. (International Affairs), Columbia University, USA
- B.A. (Economics), Chulalongkorn University

Training

- Executive Creative Economy Training (Class 2), Office of Knowledge Management and Development (Public Organization) in collaboration with University of the Thai Chamber of Commerce
- Top Executive Program in Commerce and Trade (TEPCoT) (Class 5), University of the Thai Chamber of Commerce
- Chief Information Officer (CIO) Training (Class 23), Office of Civil Service Commission and National Science and Technology Development Agency (NSTDA)
- National Defense Regular Course (2008-2009), Thailand National Defense College
- Training programs organized by Thai Institute of Directors
 - Director Certification Program (Class 86/2007)
 - Audit Committee Program (Class 42/2012)
 - Successful Formulation and Execution of the Strategy (Class 16/2013)
- ASEAN Senior Executives Program (Class 1/2013)
- Top Executive Program in Business, Industry, and Investment Development (Class 2/2015), Institute of Business and Industrial Development

Work Experience

- 2015 - Present Secretary - General, Office of the National Economic and Social Development Board, Office of Prime Minister
- 2011 - 2015 Deputy Secretary - General, Office of the National Economic and Social Development Board, Office of Prime Minister

2005 Senior Advisor in Policy and Plan (Level 10), Office of the National Economic and Social Development Board

2002 Director, Macroeconomic Strategy and Planning Bureau, Office of the National Economic and Social Development Board

Directorship/Management Position in Other State Enterprise/Company

- Member of the Thailand Institute of Scientific and Technological Research Board
- Member of the Bank of Thailand Board
- Member of the Monetary Policy Committee, Bank of Thailand
- Director, Board of Directors, the Government Pension Fund
- Member of the Executive Committee, Neighboring Countries Economic Development Cooperation Agency
- Member of the Executive Board, National Center for Genetic Engineering and Biotechnology
- Member of the Executive Board, the Halal Science Center, Chulalongkorn University
- Member of the Executive Board, Thailand Creative and Design Center (TCDC)
- Member of the Committee, Economic Association of Thailand
- Lecturer, Graduate School, Kasetsart University

Amount/Value of Shares in Other Companies*

None

Connected Transaction in 2015

None

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Mr. Chuan Sirinantporn Age 62

Director (January 1 - December 31, 2015)

Education

- Honorary Ph.D, Ubol Ratchathani Rajabhat University
- Honorary Ph.D, Ubol Ratchathani University
- M.A. (Development Administration) (Hons), National Institute of Development Administration
- B.A. (Political Science), Chulalongkorn University

Training

- Director Accreditation Program (Class 112/2014), Thai Institute of Directors
- Thai Senior Executive Development Program, National Graduate Policy Studies (GRIP), Japan
- Leadership for Changes, Prince Damrong Rajanuphab Institute of Research and Development, Ministry of Interior
- National Defense Regular Course, Thailand National Defense College
- Certificate Course in Public Law, Thammasat University
- Senior Governing Officers Training Program, Institute of Administration Development
- Top Executive Program in Energy Literacy, Thailand Energy Academy

Work Experience

2013 - Present	Retired
2012 - 2013	Director - General, Department of Provincial Administration
2011 - 2012	Governor, Nakhon Ratchasima Province
2010 - 2011	Governor, Prae Province
2007 - 2010	Governor, Ubol Ratchathani Province
2005 - 2007	Governor, Maha Sarakham Province

Directorship/Management Position in Other State Enterprise/Company

-

Amount/Value of Shares in Other Companies*

None

Connected Transaction in 2015

None

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Gen. Kampanat Ruddit Age 59

Director (January 1 - December 31, 2015)

Education

- M.A., Command and General Staff College
- B.Sc., Chulachomkhalo Royal Military Academy

Training

- National Defense Joint Public-Private Sector Course (Class 22), Thailand National Defense College
- Regular Course, Command and General Staff College

Work Experience

2015 - Present	Assistant Commander in Chief, Royal Thai Army
2014 - 2015	1 st Army Area Commander
2013 - 2014	Assistant Chief of Staff for Intelligence, Royal Thai Army
2011 - 2013	1 st Army Area Deputy Commander

2009 - 2011 Division Commanding General, the First Division, King's Guard

Directorship/Management Position in Other State Enterprise/Company

- Director, Board of Directors, Airports of Thailand Public Company Limited
- Chairman, Risk Management Committee, Airports of Thailand Public Company Limited
- Chairman, Information Technology Management and Communication Committee, Airports of Thailand Public Company Limited

Amount/Value of Shares in Other Companies*

None

Connected Transaction in 2015

None

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GEN. Walit Rochanapakdee Age 59

Director (January 1 - December 31, 2015)

Education

- M.A. (Public Administration) (Public Policy), Burapha University
- B.Sc., Chulchomklao Royal Military Academy

Training

- National Defense Joint Public-Private Sector Course (Class 22/2009), Thailand National Defense College

Work Experience

- 2015 - Present Deputy Commander in Chief, Royal Thai Army Headquarters
- 2014 - 2015 Deputy Chief of Staff, Royal Thai Armed Forces Headquarters
- 2014 4th Army Area Commander

2013 1st Corps Commander

2012 Assistant Chief of Staff for Logistics, Royal Thai Army

Directorship/Management Position in Other State Enterprise/Company

-

Amount/Value of Shares in Other Companies*

None

Connected Transaction in 2015

None

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Mr. Witoon Kulcharoenwirat Age 57

Director (January 1 - December 31, 2015)

Education

- M. Eng. (Safety Engineering), Kasetsart University
- M. Eng. (Transportation Engineering), Chulalongkorn University
- B. Eng. (Civil Engineering), Chiang Mai University

Training

- National Defense Regular Course (Class 52), Thailand National Defense College
- Senior Executive Program 1 (Class 43), Civil Service Training Institute

Work Experience

- 2014 - Present Director - General, Department of Energy Business, Ministry of Energy
- 2013 - 2014 Deputy Director - General, Department of Energy Business, Ministry of Energy
- 2008 - 2013 Director, Bureau of Safety of Natural Gas Business, Department of Energy Business, Ministry of Energy

2007 - 2008 Director, Bureau of Safety of Liquefied Petroleum Gas Business, Department of Energy Business, Ministry of Energy

Directorship/Management Position in Other State Enterprise/Company

- Director, Ratchaburi Electricity Generating Holding Public Company Limited.

Amount/Value of Shares in Other Companies*

None

Connected Transaction in 2015

None

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Mr. Khemchai Chutiwongse Age 61

Director (January 1 - December 31, 2015)

Education

- Master of Laws, Harvard University, USA
- Barrister at Law (Honors), Institute of Legal Education of Thai Bar Association
- Bachelor of Laws (1st Class Honors), Chulalongkorn University

Training

- Training programs organized by Thai Institute of Directors
 - Director Certification Program (Class 29/2003)
 - Director Accreditation Program (Class 18/2004)
- Top Executive Program, Capital Market Academy
- Politics and Governance in Democratic Systems for Executives, King Prajadhipok’s Institute
- National Defense Regular Course, Thailand National Defense College

Work Experience

- 2015 - Present Deputy Attorney General, Office of the Attorney General
- 2014 - 2015 Inspector General, Office of the Attorney General
- 2011 - 2013 Director - General, Department of Legal Counsel
- 2007 - 2011 Director - General, Department of Public Prosecutor Commission
- 1994 - 1995 Attorney, Pathum Thani Province, Office of the Attorney General

Directorship/Management Position in Other State Enterprise/Company

Board Director, Sukhumvit Asset Management Co. Ltd

Amount/Value of Shares in Other Companies*

None

Connected Transaction in 2015

None

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Mr. Krisada Chinavicharana Age 52

Director (January 1 - November 22, 2015)
(Representative of Ministry of Finance)

Education

- M.B.A. (Business Administration), University of New Haven, USA
- Bachelor of Laws, Chulalongkorn University

Training

- Top Executive Program (Class 18), Capital Market Academy
- National Defense Regular Course (Class 54), Thailand National Defense College
- Training programs organized by Thai Institute of Directors
 - Director Certification Program (Class 186/2014)
 - Director Certification Program (Class 179/2013)
- Development Program for Senior Officers: Government Officers (2010), Office of the Civil Service Commission
- Executive Course for Senior Officers (Course 1) (Class 56/2007), Office of the Civil Service Commission

- Financial Instrument and Market 2004, Harvard Business School, USA
- Integrated Justice Administration (Class 4/2006), Office of Justice Affairs

Work Experience

- 2014 Director, Fiscal Policy Office, Ministry of Finance
- 2012 - 2014 Financial Policy Advisor, Fiscal Policy Office, Ministry of Finance
- 2009 - 2012 Deputy Director, Fiscal Policy Office, Ministry of Finance

Directorship/Management Position in Other State Enterprise/Company

- Member of the Bank of Thailand Board
- Director, Board of Directors, Bangchak Petroleum Public Company Limited

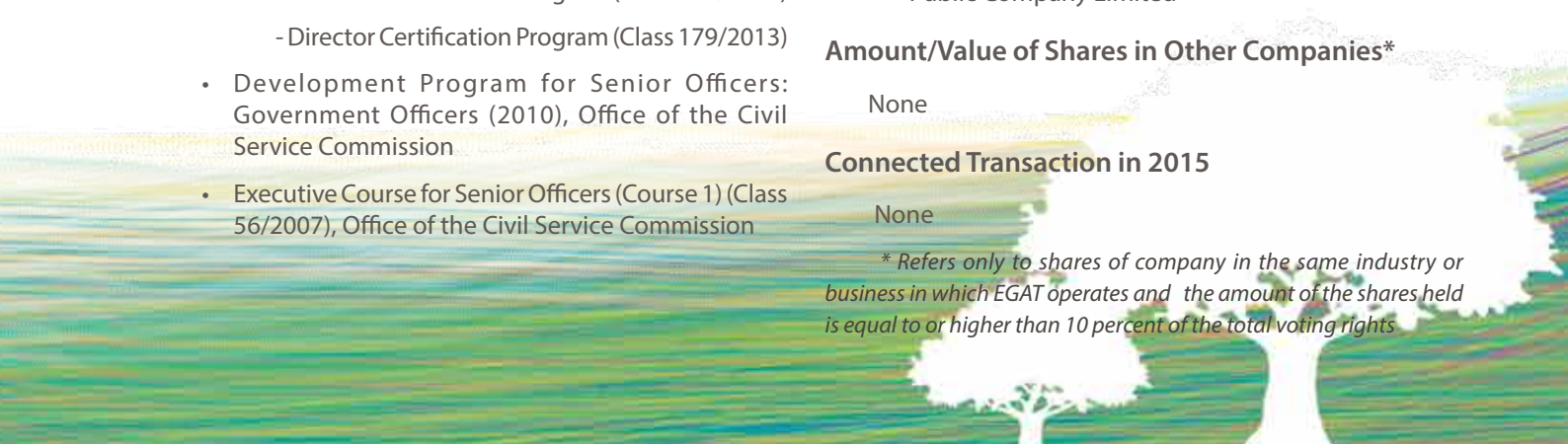
Amount/Value of Shares in Other Companies*

None

Connected Transaction in 2015

None

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Mr. Sutat Patmasiriwat

Age 62

Director (January 1 - November 22, 2015)

Education

- B. Eng. (Mechanical Engineering), Chulalongkorn University

Training

- Advanced Management Program, Harvard Business School, USA (2009)
- Senior Executive Development Program-2 (2006), Foundation for International Human Resource Development
- Masterful Coaching Workshop (2006), Hay Group
- Creating Value through Product Management and Customer Profitability Program (2004), Sasin Graduate Institute of Business Administration of Chulalongkorn University
- ASEAN Executives Development Program (2003), Thammasat Business School
- Training Programs organized by the Thai Institute of Directors
 - Director Certification Program (Class 83/2007)
 - Role of the Chairman Program (Class 24/2010)
 - Financial Statement for Directors (Class 14/2011)
 - Chartered Director Class (Class 9/2015)
- Public Administration and Law for Executives (Class 7), King Prajadhipok's Institute
- Executive Program: Executives with Vision and Ethics (Class 56), Office of the Civil Service Commission

Work Experience

2015	Chairman, Ratchaburi Electricity Generating Holding Public Company Limited
	Director, Board of Directors, Ratchaburi Electricity Generating Holding Public Company Limited
2010 - 2014	Chairman, Ratchaburi Electricity Generation Co. Ltd
2010 - 2014	Chairman, Ratchaburi Power Co. Ltd
2011 - 2013	Chairman, EGAT International Co. Ltd.
2010 - 2013	Director, Board of Directors, Ratchaburi Electricity Generating Holding Public Company Limited
2009 - 2013	EGAT Governor

Directorship/Management Position in Other State Enterprise/Company

- Director, Ratchaburi Electricity Generating Holding Public Company Limited

Amount/value of Share in Other Companies*

None

Connected Transactions in 2014

None

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Mr. Sarun Charoensuwan Age 50

Director (January 1 - December 31, 2015)

Education

- M.A. (Political Science) (Diplomatic), Georgetown University, USA
- B.A. (Political Science) (International Relations), Chulalongkorn University

Training

- Politics and Governance in Democratic System for Executives (Class 17/2012), King Prajadhipok's Institute
- Executive Program: Executives with Vision and Ethics (Class 56/2007), Civil Service Training Institute, Office of the Civil Service Commission

Work Experience

2015 - Present Ambassador of the Kingdom of Thailand to the Republic of Korea

2015 Director - General, Department of East Asian Affairs, Ministry of Foreign Affairs

2012 - 2015 Director - General, Department of European Affairs, Ministry of Foreign Affairs

2008 - 2012 Minister, Royal Thai Embassy, Brussels, Ministry of Foreign Affairs

Directorship/Management Position in Other State Enterprise/Company

-

Amount/value of Shares in Other Companies*

None

Connected Transaction in 2015

None

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Mr. Soonchai Kumnoonsate Age 59

EGAT Governor

Director (Ex-officio) (January 1 - December 31, 2015)

Education

- B. Eng. (Electrical Engineering), Chulalongkorn University

Training

- Top Executive Program, (Class 18), Capital Market Academy
- Executive Program in Energy Literacy (Class 2), Thailand Energy Academy
- Director Accreditation Program (Class 100/2013), Thai Institute of Directors
- Public Administration and Law for Executives (Class 11/2011), King Prajadhipok's Institute
- Advanced Management Program (2011), Harvard Business School, USA
- Psychological Operations for Management (Class 101/2007), Applied Psychology Institute
- Rule of Law and Democracy (Class 3) (January-September 2015), Office of the Constitutional Court

Work Experience

2013 - Present EGAT Governor

2011 - 2013 Deputy Governor - Power Plant Development, EGAT

2010 - 2011 Assistant Governor - Fuel Management, EGAT

Directorship/Management Position in Other State Enterprise/Company

- Chairman, EGAT International Co. Ltd. (EGATI)
- Director, Board of Directors, Ratchaburi Electricity Generating Holding Public Company Limited

Amount/value of Shares in Other Companies*

None

Connected Transaction in 2015

None

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Executives



Mr. Soonchai Kumnoonsate
Governor



Mr. Suthon Boonprasong
**Deputy Governor -
Transmission System**



Mr. Ratanachai Namwong
**Deputy Governor - Power
Plant Development**



Mr. Kornrasit Pakchotanon
**Deputy Governor -
Generation**



Mr. Boonmarg Smitthileela
**Deputy Governor -
Transmission System
Development**



Mrs. Juree Somprasong
**Advisor Level 14
to the Governor**



Mr. Seubphong Buranasirin
**Deputy Governor -
Administration**



Mr. Chartchai
Rojanaratanangkule
**Deputy Governor - Account
and Finance
Serving as Chief Financial
Officer (CFO)**



Mr. Saharath Boonpotipukde
**Deputy Governor -
Corporate Social Affairs
Serving as EGAT
Spokesman**



Mr. Ataporn Vathanavisuth
**Deputy Governor -
Business Development**



Mr. Kijja Sripatthangkura
**Deputy Governor - Policy
and Planning**



Mr. Thaworn Ngamganokwan
Deputy Governor - Fuel



Mr. Rum Herabat
**Engineer Level 14 to the
Governor
Appointed as Director
Chief Executive Officer,
Ratchaburi Electricity
Generating Holding Public
Company Limited**



Mr. Chanin Chaonirattisai
**Engineer Level 14 to the
Governor
Appointed as President,
Electricity Generating
Public Company Limited**

Mr. Soonchai Kumnoonsate Age 59

Governor

Education

- Bachelor of Engineering (Electrical Engineering), Chulalongkorn University

Training

- Rule of Law and Democracy, Constitutional Studies Institute, Office of the Constitutional Court
- Top Executive Program, Capital Market Academy
- Director Accreditation Program, Thai Institute of Directors
- Executive Program in Energy Literacy, Thailand Energy Academy
- Public Administration and Law for Executives, King Prajadhipok's Institute
- Advanced Management Program, Harvard Business School, USA
- Psychological Operations for Management, Applied Psychology Institute

Work Experience

- July 31, 2013 EGAT Governor
- October 1, 2011 Deputy Governor - Power Plant Development
- January 6, 2010 Assistant Governor - Fuel Management

Mr. Suthon Boonprasong Age 58

Deputy Governor - Transmission System

Education

- Master of Business Administration, Chiang Mai University
- Bachelor of Economics, Sukhothai Thammathirat Open University
- Bachelor of Laws, Ramkhamhaeng University
- Bachelor of Engineering (Electrical Engineering), Chulalongkorn University

Training

- Politics and Governance in Democratic System for Executives, King Prajadhipok's Institute
- Director Certification Program, Thai Institute of Directors
- Advanced Management Program, Harvard Business School, USA
- Public Economics Management for Executives, King Prajadhipok's Institute
- Advanced Police Command Course, Institute of Police Administration Development
- Senior Executive Development Program (Class 2), Foundation for International Human Resource Development
- Masterful Coaching Workshop, Hay Group
- Finance for Executive Decision, Continuing Education Center, Chulalongkorn University

Work Experience

- October 1, 2013 Deputy Governor - Transmission System
- October 1, 2010 Assistant Governor - Transmission System Operation
- January 6, 2010 Assistant Governor - Corporate Social Responsibility

Mr. Ratanachai Namwong Age 59

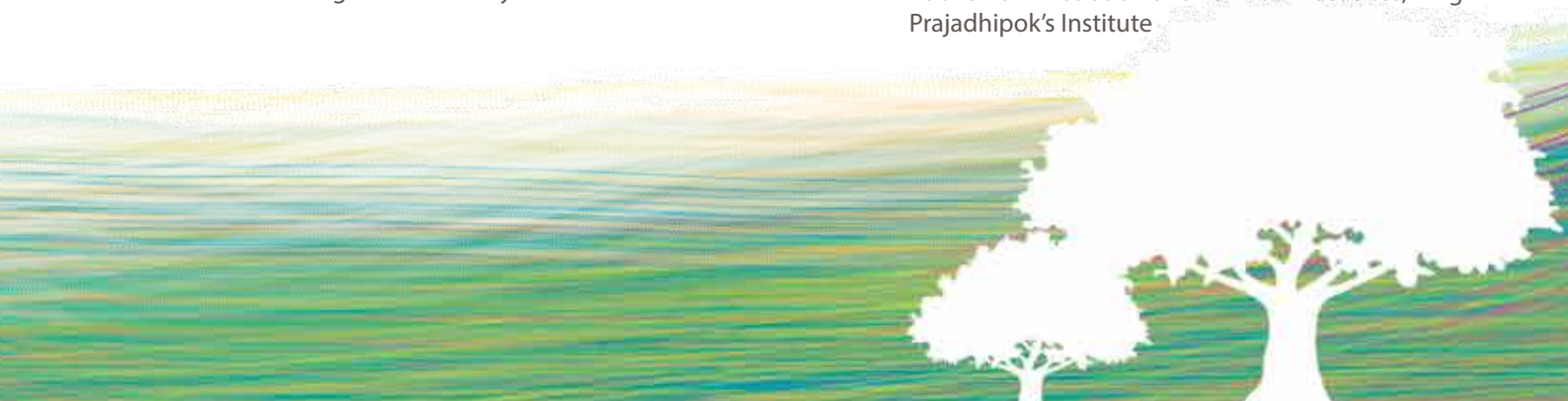
Deputy Governor - Power Plant Development

Education

- Master of Engineering (Nuclear Technology), Chulalongkorn University
- Bachelor of Engineering (Metallurgical Engineering), Chulalongkorn University

Training

- Executive Program in Energy Literacy, Thailand Energy Academy
- Director Certification Program, Thai Institute of Directors
- Public Administration and Law for Executives, King Prajadhipok's Institute





- Promotion of Peaceful Society, King Prajadhipok's Institute
- Senior Executive Development Program (Class 2), Foundation for International Human Resource Development
- Masterful Coaching Workshop, Hay Group

Work Experience

- October 1, 2013 Deputy Governor - Power Plant Development
- October 1, 2010 Assistant Governor - Power Plant Engineering

Mr. Kornrasit Pakchotanon Age 57

Deputy Governor - Generation

Education

- Bachelor of Engineering (Mechanical Engineering), Chulalongkorn University

Training

- Training Programs organized by Thai Institute of Directors
 - Financial Statements for Directors
 - Role of the Chairman Program
 - Chartered Director Class
 - Director Certification Program
- Executive Program in Energy Literacy, Thailand Energy Academy
- Advanced Management Program, Harvard Business School, USA
- Senior Executive Program, Sasin Graduate Institute of Business Administration of Chulalongkorn University
- Public Economics Management for Executives, King Prajadhipok's Institute
- Promotion of Peaceful Society, King Prajadhipok's Institute

Work Experience

- October 1, 2015 Deputy Governor - Generation
- October 1, 2013 Deputy Governor - Business Development
- October 1, 2011 Assistant Governor - Generation 3

Mr. Boonmarg Smithhileela Age 60

Deputy Governor - Transmission System Development

Education

- Bachelor of Engineering (Electrical Engineering), Chulalongkorn University

Training

- Director Certification Program, Thai Institute of Directors
- Administrative Justice for Executives, Office of the Administrative Court
- Promotion of Peaceful Society, King Prajadhipok's Institute

Work Experience

- October 1, 2013 Deputy Governor - Transmission System Development
- October 1, 2011 Assistant Governor - Transmission System Maintenance

Mrs. Juree Somprasong Age 58

Advisor Level 14 to the Governor

Education

- Master of Laws, University of California, USA
- Bachelor of Laws (2nd Class Honors), Chulalongkorn University

Training

- Director Certification Program, Thai Institute of Directors
- Executive Program in Legal Administration for the Public, Office of the Council of State
- Executive Development Program, Fiscal Policy Research Institute Foundation
- Justice Administration for Executives, Office of the Attorney General
- Masterful Coaching Workshop, Hay Group

Work Experience

- January 22, 2014 Advisor Level 14 to the Governor
- March 15, 2010 Assistant Governor - Legal Affairs Bureau



October 1, 2009 Assistant Governor - Legal Affairs Bureau
Serving as Assistant Secretary of EGAT
Board of Directors and Assistant Secretary
of EGAT Board of Directors' Executive
Committee

January 1, 2009 Assistant Governor - Legal Affairs Bureau

Mr. Seubphong Buranasirin Age 56

Deputy Governor - Administration

Education

- Master of Public Administration, National Institute of Development Administration
- Bachelor of Economics (Development Economics), Ramkhamhaeng University
- Bachelor of Laws, Thammasat University

Training

- Top Executive Program "Bhumipalung Phandin", Chulalongkorn University
- Anti-corruption: The Practical Guide, Thai Institute of Directors
- Justice Administration for Executives, Office of the Administrative Court
- National Defense Joint State-Private Sector Course, Thailand National Defense College
- Director Certification Program, Thai Institute of Directors
- Anti-Corruption Course for Executives, Office of the National Anti-Corruption Commission

Work Experience

October 1, 2014 Deputy Governor - Administration

May 1, 2014 Assistant Governor - Human Resources

October 1, 2012 Assistant Governor - Human Resources,
Serving as Assistant Secretary of EGAT
Board of Directors and Assistant Secretary
of EGAT Board of Directors' Executive
Committee

October 1, 2011 Assistant Governor to Office of the
Governor, Serving as Assistant Secretary
of EGAT Board of Directors and Assistant
Secretary of EGAT Board of Directors'
Executive Committee

Mr. Chartchai Rojanaratanangkule Age 59

Deputy Governor - Account and Finance
Serving as Chief Financial Officer (CFO)

Education

- Bachelor of Accountancy, Chulalongkorn University

Training

- Advanced Insurance Program, Office of Insurance Commission
- Financial Management Program, Fiscal Policy Research Institute Foundation

Work Experience

October 1, 2014 Deputy Governor - Account and Finance,
Serving as Chief Financial Officer (CFO)

October 1, 2013 Assistant Governor - Internal Audit Bureau

Mr. Saharath Boonpotipukde Age 57

Deputy Governor - Corporate Social Affairs
Serving as EGAT Spokesman

Education

- Bachelor of Engineering (Electrical Engineering), Chulalongkorn University

Training

- Advanced Management Program, Harvard Business School, USA
- Senior Executive Program, Sasin Graduate Institute of Business Administration of Chulalongkorn University
- Director Certification Program, Thai Institute of Directors
- The Basic Concept of Conflict Management in Public Policies by Peaceful Means, King Prajadhipok's Institute

Work Experience

October 1, 2014 Deputy Governor - Corporate Social Affairs,
Serving as EGAT Spokesman

October 1, 2013 Engineer Level 13, Deputy Governor -
Business Development Appointed as
Executive Vice President - Administration,
EGAT International Co. Ltd.



Mr. Ataporn Vathanavisuth Age 59

Deputy Governor - Business Development

Education

- Bachelor of Engineering (Industrial Engineering) (2nd Class Honors), King Mongkut's University of Technology Thonburi

Training

- Director Certification Program, Thai Institute of Directors
- Thailand and the ASEAN Economic Community, King Prajadhipok's Institute

Work Experience

- October 1, 2015 Deputy Governor - Business Development
- October 1, 2012 Assistant Governor - Business Administration
- March 23, 2012 Assistant Governor - Operation and Maintenance Project

Mr. Kijja Sripatthangkura Age 55

Deputy Governor - Policy and Planning

Education

- Bachelor of Engineering (Electrical Engineering), Prince of Songkhla University

Training

- Public Economics Management for Executives, King Prajadhipok's Institute
- Advanced Management Program, Harvard Business School, USA
- Senior Executive Program, Sasin Graduate Institute of Business Administration of Chulalongkorn University
- Thailand and the ASEAN Economic Community, King Prajadhipok's Institute

Work Experience

- October 1, 2015 Deputy Governor - Policy and Planning
- October 1, 2013 Assistant Governor - Planning

Mr. Thaworn Ngamganokwan Age 57

Deputy Governor - Fuel

Education

- Master of Public Administration, National Institute of Development Administration
- Bachelor of Engineering (Mining Engineering), Chulalongkorn University

Training

- Promotion of Peaceful Society, King Prajadhipok's Institute
- Director Certification Program, Thai Institute of Directors
- Royal Thai Army War College Course, Institute of Advanced Military Studies

Work Experience

- October 1, 2015 Deputy Governor - Fuel
- October 1, 2014 Assistant Governor - Mae Moh Mine
- October 1, 2013 Assistant Governor - Fuel Management

Mr. Rum Herabat Age 59

Engineer Level 14 to the Governor

Appointed as Director Chief Executive Officer, Ratchaburi Electricity Generating Holding Public Company Limited

Education

- Bachelor of Engineering (Mechanical Engineering), Chulalongkorn University

Training

- Top Executive Program in Energy Literacy, Thailand Energy Academy
- Director Certification Program, Thai Institute of Directors
- Advanced Management Program, Harvard Business School, USA
- Royal Thai Army War College Course, Institute of Advanced Military Studies
- Leading into the Future Under Strategic Inflection of Change
- EGAT Senior Executive Program (ESEP)

- EGAT Director Development Program (EDDP)
- EGAT Newly-Promoted Executive Orientation Program (ENOP)
- EGAT Assistant Director Development Program (EADP)
- EGAT's Executive Development Program (EEDP)

Work Experience

- October 1, 2015 Engineer Level 14 to the Governor
Appointed as Director Chief Executive Officer, Ratchaburi Electricity Generating Holding Public Company Limited
- October 1, 2014 Deputy Governor - Generation
- October 1, 2013 Deputy Governor - Fuel
- October 1, 2011 Assistant Governor - Operation and Maintenance Business

Mr. Chanin Chaonirattisai Age 59

Engineer Level 14 to the Governor

Appointed as President, Electricity Generating Public Company Limited

Education

- Master of Engineering (Electrical Engineering), University of Missouri-Rolla, USA
- Bachelor of Engineering (Electrical Engineering), University of Missouri-Rolla, USA

Training

- Financial Statements for Directors, Thai Institute of Directors
- Director Certification Program, Thai Institute of Directors
- Politics and Governance in Democratic System for Executives, King Prajadhipok's Institute
- The Basic Concept of Conflict Management in Public Policies by Peaceful Means, King Prajadhipok's Institute

Work Experience

- October 1, 2015 Engineer Level 14 to the Governor
Appointed as President, Electricity Generating Public Company Limited
- October 1, 2013 Deputy Governor - Policy and Planning
- October 1, 2011 Assistant Governor - System Control

Executives Retired on October 1, 2015

Mr. Sahust Pratuknukul

Engineer Level 14 to the Governor

Appointed as President, Electricity Generating Public Company Limited

(October 1, 2011 - September 30, 2015)

Mr. Thana Putarungsi

Senior Deputy Governor to the Governor

Appointed as Senior Executive Vice President and Acting President, EGAT International Company Limited

(October 1, 2013 - September 30, 2015)

Mr. Pongdith Potchana

Engineer Level 14 to the Governor

Appointed as Chief Executive Officer, Ratchaburi Electricity Generating Holding Public Company Limited

(July 1, 2013 - September 30, 2015)

Mr. Prapas Vichakul

Deputy Governor - Fuel

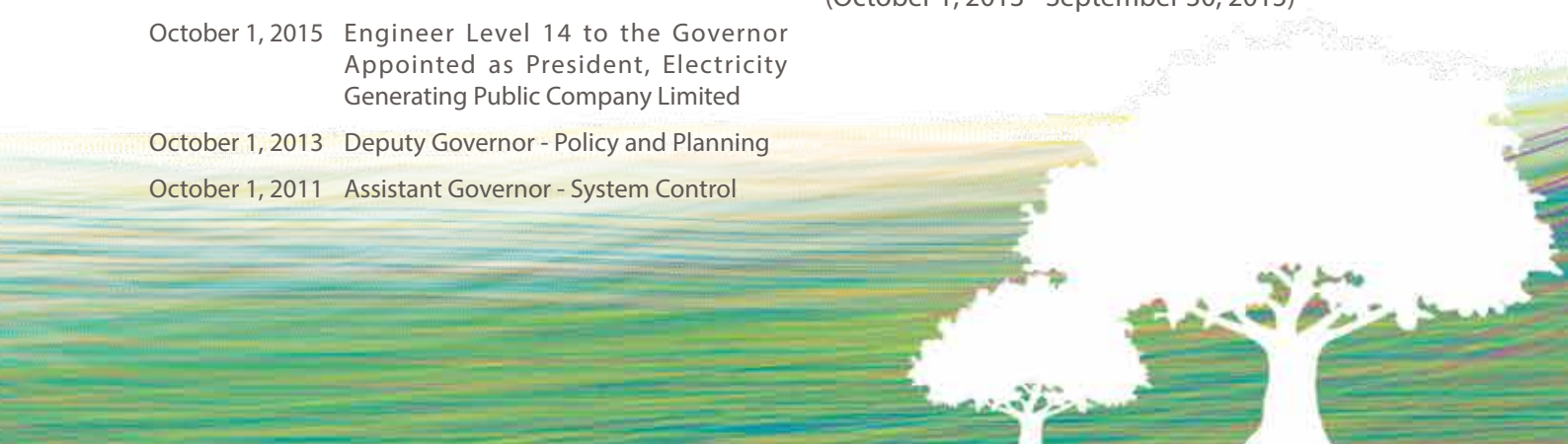
(October 1, 2014 - September 30, 2015)

Mr. Paisan Katchasuwanmanee

Engineer Level 14 to the Governor

Appointed as Executive Vice President - Development, EGAT International Company Limited

(October 1, 2013 - September 30, 2015)





Corporate Governance

EGAT corporate governance is in accordance with the Principles and Guidelines for Corporate Governance for State Enterprise of 2009 issued by the State Enterprise Policy Office (SEPO). EGAT's policy on corporate governance was established by EGAT Board of Directors as the Notification No. 11/2010 signed by the Chairman of Board of Directors on April 28, 2010. The policy was revised in 2015 and found to be appropriate for further implementation.

• Corporate Governance Policy

1. Implementing 6 principles of good corporate governance, consisting of rule of law, morality, transparency, participation, accountability, and effectiveness and efficiency
2. EGAT Code of Conduct should be established and to be observed by the Board of Directors, executives, and employees in conjunction with EGAT Rules and Regulations.
3. In establishing the vision, strategy, policy, and major plans of EGAT, risk factors should be considered, and appropriate management should be established. Internal audit should be followed to ensure the reliability of the accounting system, fiscal report, and audit report.
4. Promoting the dedication and responsibility of EGAT executives and employees in accordance with their role and responsibility
5. Promoting EGAT's good management taking into account the following 4 elements:
 - State, society, community, and environment
 - Customers and stakeholders
 - Organization
 - Employees
6. Promoting the establishment of appropriate ad-hoc committees to scrutinize important issues
7. Promoting the disclosure of financial and non-financial information with correctness, reliability, sufficiency, regularity, and timeliness to ensure that the involved persons and stakeholders have received information with equity
8. EGAT Board of Directors and EGAT executives shall constitute the model of good conduct and morality
9. EGAT Board of Directors and EGAT executives shall carry out their duty with dedication and responsibility. There must be a clear dividing line between the role of the Chairman of the Board of Directors and EGAT Governor.
10. Recruitment system and procedure and/or selection of persons for the important executive posts of all levels shall be appropriate, transparent, and fair.
11. Self-assessment shall be available to be used as a frame in the assessment of the performance of EGAT Board of Directors.

Based on the above-mentioned policy, EGAT has established its vision and strategy in operation with continuous implementation and appropriate for the situation. As a result of its regular attention to corporate governance, EGAT won several awards in 2015 reflecting its good corporate governance. Major awards are:

- Outstanding State-Owned Enterprise (SOE) Awards 2015 (in the category of Outstanding Innovation) from the State Enterprise Policy Office, received on September 22, 2015 for the invention of the “Auto-alignment equipment for lignite conveyor belt of Mae Moh Mine”.
- Scientific and Technological Invention Awards from the Office of Permanent Secretary, Ministry of Science and Technology, received on March 12, 2015 for the invention of the “Tool for supplying data of water management and telemetering system”.
- Outstanding Safety Workplace Awards 2015 from Ministry of Labour, presented to 29 units of EGAT on June 23, 2015.
- “Beneficial Organization to Children and Youth Award” in the category of Natural Resource and Environment, presented by Her Royal Highness Princess Sirivannavari Nariratana on September 20, 2015 for EGAT’s Project “Move World Together”.
- For CSR-DIW Awards 2015, the CSR-DIW Continuous Awards were presented to 23 units of EGAT and CSR-DIW Continuous Project Award to Lam Ta Khong Jolabha Vadhana Hydro Power Plant on September 15, 2015.
- The 3Rs Award “Aiming Towards Quality Factory in Waste Management of Mae Moh Power Plant”, received from the Director General of Industrial Works on August 4, 2015.
- Plaques and Green Industry Certificates Level 4, presented to 5 hydropower plants of EGAT by the Permanent Secretary, Ministry of Industry on August 13, 2015.

• State’s Role as an Owner

The Statement of Directions had been issued by the State to be used as a guideline by EGAT in the preparation of its strategy. Consequently, EGAT’s Statement of Directions had been considered by the State Enterprise Policy Office, the Office of the National Social and Economic Development Board, and the Ministry of Energy and was improved to be appropriate for the current situation and suitable to be used as a guideline in setting direction for development and for EGAT’s operation as follows:

“Building confidence in the sufficiency, security, and quality of the electricity system of the country, developing power generation from renewable energy with accountability of social and environmental impact including managing cost and resource of the organization with efficiency”.





• Role of EGAT in Relation to the Stakeholders

EGAT has a clear policy in taking good care of the environment and society. Public hearings are organized in the event that there are new projects or new activities of EGAT which may have an impact on quality of the environment, health and sanitation, quality of life or on any other stakeholders relevant to the community or the area. Stakeholders are divided into 3 groups, i.e. customer group, stakeholder group, and group of suppliers and counterparts. Needs and expectation as well as communication channels for each group are as follows:

Table 1 Needs and expectation/Communication channels of customers

Customers	Needs and expectation	Communication channels
High voltage market, i.e. PEA, MEA, and direct customers	<ul style="list-style-type: none"> • Quality of the delivered electricity • Stability and reliability of the power system 	<ul style="list-style-type: none"> • Meetings, seminars • Customer relations and recreation • Visit
Operation and maintenance market (O&M), i.e. domestic IPPs and overseas IPPs	<ul style="list-style-type: none"> • Readiness of the power plants for the operation • Quality of service as stated in the contract (MMA/OMA) 	<ul style="list-style-type: none"> • Complaint system • Survey of level of satisfaction, dissatisfaction, and loyalty • Direct contact, from daily coordination • Email and memo • Market survey and market research • Sales agents and service team

Table 2 Needs and expectation/Communication channels of stakeholders

Stakeholders	Needs and expectation	Communication channels
a. Society as a whole (People in general)	<ul style="list-style-type: none"> • Communication (through various channels and on a continuous basis) • Activities in compliance with ISO 26000 • CSR in process 	<ul style="list-style-type: none"> • EGAT website www.egat.co.th • EGAT Call Center 1416 • EGAT Information Center (prinfo.egat.co.th) • Public Relations of each operation unit and each power plant • EGAT newsletter, newspaper, radio, television • Surveys, seminars, meetings, letters, website, email, visits

Stakeholders	Needs and expectation	Communication channels
b. Community - around the power plants - along the transmission lines	<ul style="list-style-type: none"> • Local employment • Communication (through various channels and on a continuous basis) • Safety of life and property 	<ul style="list-style-type: none"> • Billboard showing air quality of the power plants • Annual emergency rehearsal • Meetings of coordinating committee on social, community, and environmental matters • EGAT relations unit • Events organized by EGAT Executives together with the community around the power plants • Invitation to representatives of the community to visit EGAT power plants and EGAT projects • EGAT website, posters • Activities of social and environmental projects such as Biological Way of Life, Wan Kaew Project, mobile medical units, etc
c. EGAT employees	<ul style="list-style-type: none"> • Nature of work and involvement • Work achievement management and compensation • Roles of EGAT executives and superior levels 	<ul style="list-style-type: none"> • Intranet • News and information, EGAT Public Relations • Surveys, seminars, meetings, letters, website, email, visits
d. Opinion leaders, i.e. NGO, academics, mass media, community leaders	<ul style="list-style-type: none"> • Communication (through various channels and on a continuous basis) • Being a good organization of the society • CSR in process 	<ul style="list-style-type: none"> • EGAT website www.egat.co.th • Meetings, seminars • Press conference • Annual report • Reports on feasibility study
e. Regulatory bodies in the area of energy - Ministry of Energy - Energy Regulatory Commission - Ministry of Finance	<ul style="list-style-type: none"> • Giving support to the national policy on energy • Responsibility to the society and environment • Stability of electricity system and sufficiency of power supply 	<ul style="list-style-type: none"> • Meetings, seminars • Policy of the government and government agencies • Formal and informal meetings • Annual report • Website



Table 3 Role of suppliers and counterparts

Group	Role	EGAT's expectation	Communication mechanism
Suppliers			
<ul style="list-style-type: none"> Equipment producers 	<ul style="list-style-type: none"> Supplying main equipment and service 	<ul style="list-style-type: none"> Supplying equipment of the required quality within the deadline 	<ul style="list-style-type: none"> Purchase contract Letters, telephone, telefax, email
<ul style="list-style-type: none"> PTT Public Company Limited 	<ul style="list-style-type: none"> Supplying fuel, natural gas, fuel oil, and diesel oil in sufficient amount for the annual plan of power generation 	<ul style="list-style-type: none"> Supplying fuel of the required quality within the deadline Notifying EGAT with appropriate time in advance in case that fuel provision cannot be done in accordance with the annual power generation plan Giving corporation in supplying fuel in the time of emergency 	<ul style="list-style-type: none"> Meetings Letters, telephone, telefax, email
<ul style="list-style-type: none"> Private Power Plants (IPP, SPP) 	<ul style="list-style-type: none"> Generating electricity and supplying to EGAT transmission system as mentioned in the PPA Agreement and in line with the annual power generation plan 	<ul style="list-style-type: none"> Readiness of the power plants in power generation in accordance with the annual power generation plan Increasing or decreasing the power generation as requested by EGAT System Control Center 	<ul style="list-style-type: none"> Contact through the System Control Center Meetings, letters, telephone, telefax, email
Counterparts			
<ul style="list-style-type: none"> Tenaga Nasional Berhad Corporation (TNB) 	<ul style="list-style-type: none"> Technical cooperation in electricity activities (planning, operation, maintenance) Sale and purchase of electricity between Thailand and Malaysia 	<ul style="list-style-type: none"> Exchange of technical information in electricity operation Complying with the sales/purchase contracts 	<ul style="list-style-type: none"> Meetings Letters, telephone, telefax, email Contact with the System Control Center
<ul style="list-style-type: none"> Heads of ASEAN Power Utilities/Authorities (HAPUA) 	<ul style="list-style-type: none"> Conducting study and development for the purpose of strengthening the ASEAN power system 	<ul style="list-style-type: none"> Exchange of experiences to prepare for the future connection of power systems in ASEAN The lower cost of power generation The greater stability of the power system and lower reserved production 	<ul style="list-style-type: none"> Annual general meeting

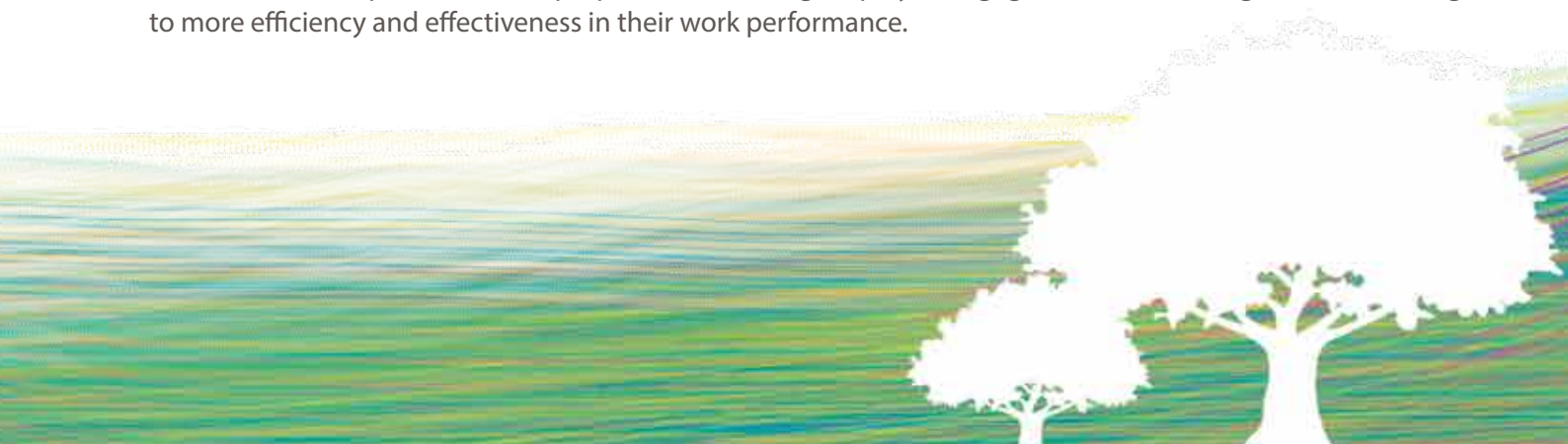


In 2015, EGAT contracted the following advisors to make a survey on the views of the stakeholders on EGAT's operation to determine the factors which have an impact on the stakeholders for improvement of the future activities, plans, and projects.

1. **Thammasat University Research and Consultancy Institute (TU-RAC)** : A survey was conducted on the acceptance and satisfaction of stakeholders with EGAT's operation in 2015. Samples of the stakeholders were classified as follows:

- Satisfaction of stakeholders with the operation of EGAT
- Satisfaction of the society as a whole with the operation of EGAT
- Satisfaction of the communities around the power plants with the operation of EGAT
- Satisfaction of the opinion leaders with the operation of EGAT
- Satisfaction of the regulatory bodies with the operation of EGAT
- Satisfaction of EGAT employees with the operation of EGAT

2. **Aon Hewitt Co., Ltd (Thailand)** : A survey was conducted on the core value of EGAT in 2015 to determine the level of value quotient for the purpose of increasing employee engagement with the organization leading to more efficiency and effectiveness in their work performance.





• Information Disclosure and Transparency

Information disclosure is an indicator of transparency in the operation and a factor to build confidence among all stakeholders. Realizing the importance of the disclosure of correct and precise information, EGAT has provided several channels through which the stakeholders can have an easy access to information. Campaigns have been made to raise awareness of information disclosure and transparency in the operation. Appropriate mechanism for receiving complaints has been provided to ensure fairness to all parties concerned. Financial and non-financial information has been provided in EGAT annual report. News and information have been communicated to all stakeholders with equity in accordance with the Official Information Act, B.E. 2540 (1997) and other relevant laws. Importance has been given to financial and management reports as an oversight tool. The reports have been ensured that they are accurate, reliable, up-to-date, and accountable to reduce the risk that might affect the operation. EGAT emphasizes the transparency of its operation on the principle that all levels of employees should perform their duties to maximize EGAT's benefits without personal interest.

Moreover, EGAT supports the supervision of the organization to work for the best interest of all stakeholders using several measures including :

- Establishing EGAT Committee for Information Management to be responsible for the provision of information service
- Provision of communication channels to receive complaints from stakeholders, from EGAT Voice of Customers (EGAT VOC) of the Transmission Unit, from EGAT website www.egat.co.th, from the complaint system of the Office of the Prime Minister (1111), and from EGAT Call Center 1416 whose efficiency has been improved in 2015 with the Application 1416 by which all EGAT information can be retrieved through smart phones.

The inquiry and complaints received from the mentioned channels will be forwarded to EGAT Opinions Management Center (Voice of Stakeholders: VOS) for responding to the stakeholders in due time.

• Ethics, Code of Conduct, and Core Value

EGAT Board of Directors issued EGAT Regulation No. 346 on Corporate Governance which contains the ethics and code of conduct to provide the operation of EGAT with transparency, morality, and accountability to the society and environment. EGAT Board of Directors, executives, and employees are required to observe EGAT Regulation No. 347 concerning the Code of Conduct for EGAT Board of Directors, Executives, and Employees which was issued by EGAT Board of Directors. Being in compliance with the provision of the Constitution of Thailand B.E. 2550 (2007), the above mentioned Code of Conduct includes "Core value of the standard for ethics", "EGAT standard for ethics", "What should be practiced by EGAT employees" and "Practice, mechanism, and enforcement of Code of Conduct". EGAT has also issued Notification No.1/2552 (2009) on the implementation of the Code of Conduct for EGAT's operation and recommendations on problems solving which has been effective until today.

Regarding the core value which is a basis for a strong corporate culture, EGAT Board of Directors and the executives have given importance to the implementation of the regulations to implant the core value and corporate culture in the employees. Revision of the core value was undertaken, and it was found that the present core value "Firm-C" (representing Fairness, Integrity, Responsibility and Accountability, Mutual Respect, and Commitment to Continuous Improvement and Teamwork) was still valid. All these values will support EGAT executives and the employees in working together, with the same direction for individual uniqueness, with mutual trust, and with the sense of belonging as a team. Being essential elements for an organization with strong corporate culture, "Firm-C" is an indispensable factor in enhancing an efficient and good person.

EGAT realizes the importance of transparency in the operation. Financial and non-financial information has been provided in EGAT annual report. News and information have been communicated to all stakeholders with equity in accordance with the Official Information Act, B.E. 2540 (1997)

The Committee for Good Governance has approved the 2015 FIRM-C Plan for implementation and assigned the Human Resources Division to give further explanation to the units which had, in 2014, comparatively lower understanding in FIRM-C. Handbook to promote EGAT core value for the executives has been prepared with the objective of establishing the executive as a role model to help support the acceptance of FIRM-C in each unit. Evaluation by means of questionnaire survey has been conducted in September-October each year. The average result was benchmarked with the ones of 200 leading companies in Thailand. The final result was used in the 2015 target setting. The questionnaires on the understanding of the core value and the implementation of EGAT core value had been improved to be appropriate for the benchmarking.

• **Avoidance and Management of Conflict of Interest and Anti-Corruption Policy**

Conflict of interest

To implement the policy of preventing the conflict of interest, EGAT Board of Directors has issued EGAT Regulation No. 346 on Corporate Governance containing a provision that EGAT Board of Directors is responsible for supervising and solving the problem regarding conflict of interest which may occur among the executives, Board of Directors, and

employees and investigating the misuse of EGAT's property. Moreover, EGAT Board of Directors will find a preventive measure against the abusive self-dealing of the members of the Board. Every member has to report on other positions they are holding including committee member, management position in other state enterprises or companies as well as connected transactions, amount/value of shares in other companies in the same industry or business in which EGAT operates and the amount of the shares held is equal to or higher than 10 percent of the total voting rights. Additionally, the qualification of the Board members shall be verified to be in compliance with the Constitution of Thailand, the Act on Qualification Standards for Directors and Employees of State Enterprises, B.E. 2518 (1975) and its amendment and other related laws. The qualification of the Board Committees shall comply with EGAT Regulations on Board Committees.

In addition to the report of the Board members mentioned above, the Corporate Governance Handbook also contains a form for disclosing the conflict of interest between one's personal interest and the organization's interest to be observed by EGAT executives from the level of Deputy Governor or the equivalent and above. The matter of conflict of interest will be disclosed upon the beginning of the post. The concerned people who are members of the procurement committee will report on this matter as soon as a conflict of interest is found. The Corporate Governance Handbook also contains a guideline in handling the conflict of interest. For example, in such a situation where decision is to be made in approving the items which involves or are suspected to involve a conflict of interest, a report should be made to the superior or the one who has the approval authority before withdrawing from such work. Self-assessment on conflict of interest must also be performed.





Anti-corruption policy

To prevent corruption and to promote corporate governance in the operation as well as to encourage participation in investigation and monitoring, and to raise awareness of EGAT's employees about the correct understanding of the anti-corruption matters leading to the attempt to prevent and suppress corruption of the entire organization, the Chairman of EGAT Board of Directors has set the following anti-corruption policy.

1. Raising awareness of EGAT employees about the importance and necessity in preventing and suppressing corruption
2. Supporting the establishment of the system, measures, and guidelines in monitoring, investigating, and notifying the clue of misuse to prevent corruption in all working processes
3. Supporting the conformity of work in internal control, internal audit, and risk management to prevent corruption with the international standard
4. Supporting the regular and continuous dissemination of information and knowledge concerning anti-corruption activities among employees
5. Promoting the strengthened morality and ethical conducts and mobilizing activities in anti-corruption

EGAT executives will implement the policy focusing on the preventive measures. In case that the corruption has been found, immediate investigation and severe punishment will be undertaken to prevent any corruption.

EGAT's implementation of the anti-corruption policy

EGAT has prepared the 2015 Anti-Corruption Plan for implementation in line with the State Enterprise Plan to raise awareness for all levels of employees in carrying out their duty with righteousness, transparency, and honesty focusing on the public benefits. EGAT's anti-corruption plan 2015 which is based on the National Strategic Plan in Anti-Corruption, Phase 2 (2013-2017), consists of 7 activities, i.e.

- Activity : "EGAT, a Transparent Organization"
- Dissemination of information on morality, ethics, and awareness of anti-corruption
- Activity of EGAT network
- Training /lecture on morality and ethics
- Public relations on activities to promote morality and ethics
- Revision of rules and regulations concerning anti-corruption
- Evaluation and preparation of report





EGAT has achieved its target according to the plan. Moreover, EGAT has signed a Memorandum of Understanding with the Office of the National Anti-Corruption Commission and the State Enterprise Policy Office in participating in the Integrity and Transparency Assessment 2015 organized by the Office of the National Anti-Corruption Commission to promote administration with transparency and fairness.

• Promotion and Dissemination of Activities Concerning Corporate Governance

EGAT has organized activities to support the participation of employees in corporate governance as a part of corporate culture. EGAT has been implementing Corporate Governance Plan 2012-2016 since the year 2012 with the purpose of developing EGAT to become an organization with the good corporate governance which supports the objectives of its vision embracing 6 strategies, 15 strategic objectives, 17 plans, and 34 activities. To link the corporate governance with EGAT's strategic plans and to cover all corporate lines in EGAT, each line is assigned to be responsible for the action plan supporting the master plan with key performance indicators. The Committee for Corporate Governance chaired by Assistant Governor-Human Resources was set up. The Committee which comprises representative of each line as corporate Governance Agent (CG Agent) is responsible for communication, coordination, monitoring, and quarterly reporting the work progress to EGAT Board of Directors and Committee for Corporate Governance to ensure that the image of EGAT in corporate governance is acceptable to all stakeholders.

In 2015, the annual action plans to support the master plan for corporate governance were prepared based on the results from the survey on the implementation of EGAT corporate governance. As a result, the 2015 corporate governance plan of EGAT has become more focused and proactive. According to the plan, the Corporate Communications Division incorporates the content of corporate governance with the emphasis on transparency or awards of corporate governance received by EGAT and the availability of EGAT's channels for complaints to be broadcasted through television and radio and published in the newspaper to all target groups. Activities concerning opinion panel should be initiated. The divisions relating to Transmission System Operation are assigned to be responsible for dissemination of information on complaint channels to customers by appropriate means and mass media. The Human Resource Development Division organizes training courses on corporate governance, morality, ethics, core value, and corporate culture to not less than 90 percent of the personnel appointed to the superior level, and the trainees must obtain, in the examination, not less than 75 percent of the full scores. Activities in which the stakeholders can have an opportunity to exchange ideas with EGAT executives (of the Director level and upper) should be organized in all areas of EGAT power plants, regional offices, dams, transmission lines, substations, offices, and EGAT power project sites to ensure, for example, that the use of natural resources of EGAT has been worthwhile, and EGAT's operation is within the limit of the law or even better than the limit, etc.





Official Information Act Compliance Report

In compliance with the Official Information Act, B.E. 2540 (1997), EGAT has appointed the Committee on EGAT Information Management to be responsible for determining policies, measures, or criteria regarding information management, permission to use information, and information services, with the approval of EGAT Deputy Governor - Corporate Social Affairs. EGAT Information Center is responsible for information service in accordance with EGAT information management policy with a commitment to provide news and information service in a fair, equitable, and transparent manner and in compliance with the Official Information Act B.E. 2540 (1997) and other relevant laws. EGAT has put in place its information disclosure system which defines clear rules, procedures, systems, and practices for the disclosure of EGAT information complying with the Official Information Act B.E. 2540 (1997). EGAT's information service is available in various forms, such as documents, internet-accessible information, audiotext, fax on demand, and assistance by EGAT staff. Moreover, interested persons can visit the EGAT Information Center at EGAT Headquarters, Bang Kruai District, Nonthaburi Province.

Detailed information or documents on important topics are available at the concerned divisions with the assistance of appointed EGAT staff in each division. Interested persons can visit the required division or by telephone.

Internet-Accessible Information

Information on various activities of EGAT is available at EGAT website: www.egat.co.th which is accessible on 24-hour basis. This information includes corporate profile, power plants, transmission systems, power generation, energy sale, power development plan, and new power projects, etc.

In 2015, social media (Facebook: EGAT 1416 and Twitter: EGAT 1416) as well as Mobile Application EGAT 1416 in IOS and Android system have been provided as another communication channel to give information, inquiries, complaints, and announcement of emergency to the public.

EGAT Call Center

EGAT Call Center is available to provide enquiry service regarding technical and other related information and suggestion useful to the public including emergency situations related to the high-voltage transmission system. EGAT Call Center has provided a one-stop service for the people countrywide to contact EGAT around the clock. EGAT Call Center 1416 has been in full operation since 2012.

Activities of EGAT Information Center in 2015

EGAT Information Center provides information through telephone, EGAT website, and the assistance to visitors at the Information Center during office hours. A report on the activities of EGAT Information Center is sent to the Office of Permanent Secretary, Ministry of Energy which is a supervisory body.

In 2015 (January- December), EGAT Information Center provided 10,676 times of information services through its Call Center Phone 1416. Types of information of public interest included the following:

- Information on EGAT's operations
- EGAT's CSR activities
- Job recruitment, internship training opportunities, and request for the visit of EGAT's offices and power plants
- Location and phone numbers of EGAT's offices, sites, and individual staff
- Information on the areas of the transmission lines
- Emergency situations and complaints

EGAT Information Management Committee

The Committee on EGAT Information Management is responsible for setting policies, measures on information management system, information service as well as consideration of complaints or objection according to the Official Information Act, B.E. 2540 (1997). The resolutions of the Committee will be responsible by relevant units of EGAT.

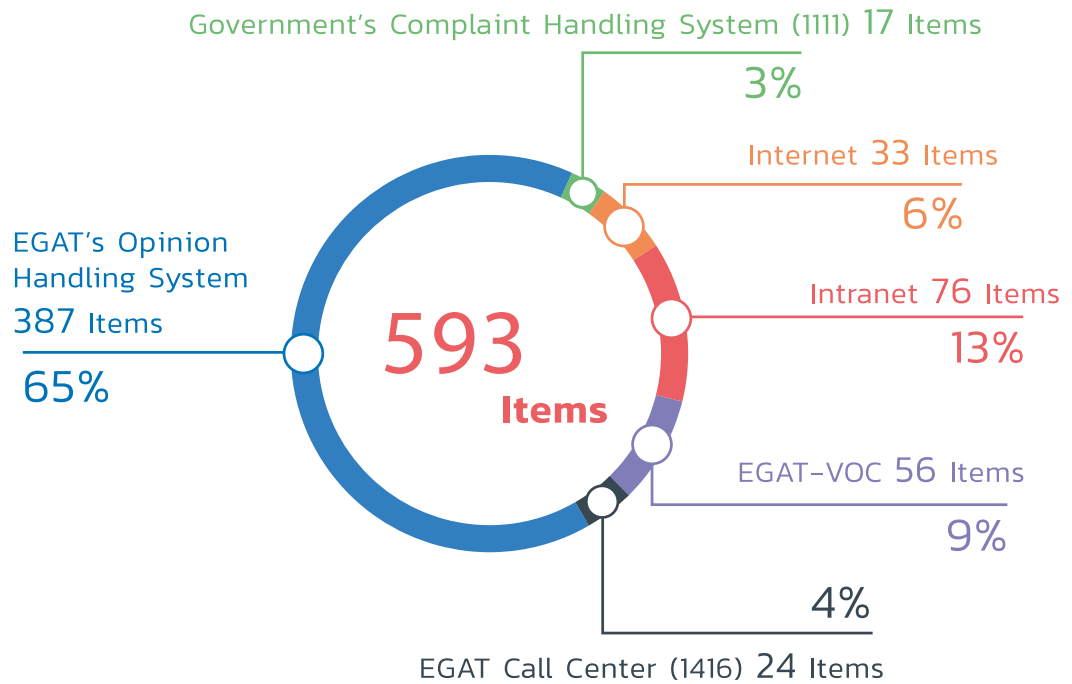




Public Complaint Process

In 2015, EGAT's Voice of Stakeholders (VOC) handled comments and complaints totaling 593 items received through various channels which were comprised of EGAT website (Internet and Intranet), EGAT-VOC, EGAT Call Center 1416, Government telephone hotline 1111, and complaint letters detailed as follows:

EGAT addressed comments and complaints received through various channels as follows:



1. Government's Complaint Handling System (1111) totaled 17 items

EGAT investigated the complaints and reported to the Office of Permanent Secretary under the Office of the Prime Minister in due time.

2. EGAT's Voice of Stakeholders (EGAT-VOC) totaled 56 items

Comments and complaints received from direct customers through EGAT-VOC enabled EGAT to be aware quickly of the problems occurring to EGAT's power system which affected customers' operation, and the problems at the delivery points so that they could be addressed promptly.

3. EGAT's Opinion Handling System (through complaint letters, intranet, and internet) totaled 520 items

Most of these complaints were the appeals for the land use outside the power grid network and for impacts of the construction of EGAT's dams and power plants.

In 2015,
EGAT developed
another channel of
communication which
was in the forms
of social media
for the better
information access
of the public

In 2015, EGAT-VOC forwarded 593 items of comments, opinions, complaints, and appeals received through the above-mentioned communication channels to responsible units for immediate actions. A total of 445 items had been addressed successfully. Furthermore, reviews of these cases had been undertaken, and guidelines were set up to prevent problems from the same occurrence in the future.

However, another 148 items were under consideration and investigation which took much time before informing the results to the complainants' owners.





Power Development and Future Plan

Thailand Power Development Plan 2015-2036 (PDP 2015) is a plan among the following 5 master plans which constitute Thailand Integrated Energy Blueprint (TIEB):

1. Thailand Power Development Plan : PDP
2. Energy Efficiency Plan : EEP
3. Alternative Energy Development Plan : AEDP
4. Natural Gas Supply Plan
5. Petroleum Management Plan

In the preparation of TIEB as well as PDP 2015, energy security, economy, and ecology have been taken into account. PDP 2015 had been considered and commented by the Energy Regulatory Commission (ERC) on May 6, 2015 and was endorsed by the National Energy Policy Council (NEPC) on May 14, 2015 and acknowledged by the Cabinet on June 30, 2015.

EGAT'S Power Plant Projects

1. New Power Plant Construction

1.1 North Bangkok Combined Cycle Power Plant, Block 2

North Bangkok Combined Cycle Power Plant, Block 2 is located in the area of the existing North Bangkok Power Plant, Bang Kruai District, Nonthaburi Province. The power plant has a net installed capacity of 848.3 MW using natural gas as fuel. The construction started in February 2013 with the scheduled commercial operation date in January 2016.



1.2 Replacement of Mae Moh Power Plant, Units 4-7

The replacement project of Mae Moh Power Plant, Units 4-7 is located in the area of the existing Mae Moh Power Plant, Mae Moh District, Lampang Province. The replacement of Mae Moh Power Plant, Units 4-7 has an installed capacity of 600 MW using lignite of Mae Moh Mine as main fuel. The construction started in January 2015 with the scheduled commercial operation date in November 2018.



2. Renewable Energy Development Projects

EGAT has continuously developed renewable energy power plants in response to the government's policy in promoting electricity generation from renewable energy and reducing fossil fuel consumption. The renewable energy development projects which have been approved by the Cabinet and have the scheduled commercial operation dates during 2016-2020 are as follows:

Project	Location (Province)	Type	Scheduled Commercial Operation Date (SCOD)	Capacity (MW)
Pasak Jolasid Hydropower Project	Lop Buri	Hydro	Sep. 2015	6.7
Khvae Noi Bamrungdan Hydropower Project	Phitsanulok	Hydro	Nov. 2015	30
Thap Sakae Solar Power Plant	Prachuap Khiri Khan	Solar	Mar. 2016	5
Lam Ta Khong Wind Power Project, Phase 2	Nakhon Ratchasima	Wind	Dec. 2017	24
Lam Ta Khong Jolabha Vadhana Hydropower Plant Project (Units 3-4)	Nakhon Ratchasima	Hydro	Feb. 2018	500
Kiew Kor Mah Hydropower Project	Lampang	Hydro	Sep. 2018	5.5
Klong Tron Hydropower Project	Uttaradit	Hydro	Sep. 2018	2.5
Chulabhorn Downstream Hydropower Project	Chaiyaphum	Hydro	Nov. 2019	1.25
Srinagarind Hydropower Improvement Project	Kanchanaburi	Hydro	Jan. 2020	360
Ban Chan De Hydropower Project	Kanchanaburi	Hydro	Sep. 2020	18
Total				952.95



Lam Ta Khong Jolabha Vadhana Hydropower Plant Project (Unit 3-4)



Khwae Noi Bamrungdan Hydropower Plant



Pasak Jolasid Hydropower Plant





3. Power Projects in Approval Process and in the Initial Stage of Development

3.1 Replacement of Bang Pakong Power Plant, Units 1-2

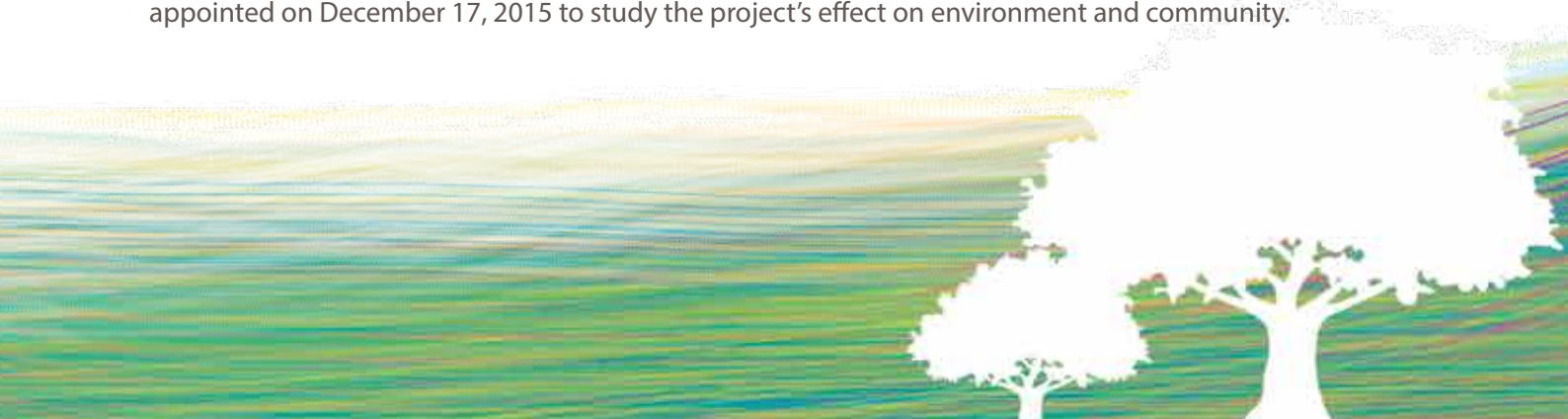
The Replacement of Bang Pakong Power Plant, Units 1-2 is a combined cycle power plant of a net installed capacity of 1,300 MW using natural gas as primary fuel and diesel oil as secondary fuel. The power plant will strengthen the security of power system in the eastern zone of the metropolitan area. It is scheduled to start commercial operation in April 2019.

3.2 Replacement of South Bangkok Power Plant, Phases 1-2

The Replacement of South Bangkok Power Plant, Phases 1-2 is a combined cycle power plant having a net installed capacity of 2x1,300 MW using natural gas as primary fuel and diesel oil as secondary fuel. The power plant will help strengthen the security of power system in the eastern and western zones of the metropolitan area. It is scheduled for commercial operation in April 2019 and in January 2022 respectively.

3.3 Krabi Coal-Fired Power Plant Project

Krabi Coal-Fired Power Plant Project aims to strengthen the power system security of the southern region and to increase the proportion of coal used in electricity generation in accordance with the government's policy in energy security by the diversification of fuel used in power generation, reducing dependence on natural gas and maintaining energy balance. Krabi Coal-Fired Power Plant is a thermal plant having a net installed capacity of 800 MW using imported sub-bituminous and bituminous as fuel. The project is scheduled for commercial operation in December 2019. However, the project is under the consideration of the Committee appointed on December 17, 2015 to study the project's effect on environment and community.





3.4 Thepha Coal-Fired Power Plant Project

Thepha Coal-Fired Power Plant Project will strengthen the security of power system in the Southern region and increase energy security on a long-term basis which will contribute to the cost reduction in electricity generation as a whole. Thepha Coal-Fired Power Plant is a thermal plant with a total capacity of 2x1,000 MW using imported sub-bituminous and bituminous as main fuel. It is scheduled for commercial operation in January 2021 and January 2024 respectively.

3.5 Nuclear Power Plant Project

According to the guidelines on power allocation and proportion of fuel in the Power Development Plan 2015-2036 (PDP 2015), the share of nuclear power in electricity generation will not be exceeding 5 percent of total capacity in 2036. The Project on Nuclear Power Plant which uses clean fuel, a low cost of investment, and also contributes to the reduction of global warming is planned to start at the end of 2036. Nuclear Power Plant Project is a thermal plant having a net capacity of 2x1,000 MW. The project is scheduled for commercial operation in January 2035 and January 2036 respectively. At present, the project is under the study on technical matters, safety, and plant location. Moreover, the learning process is organized regularly to promote understanding of the public regarding nuclear power plant.

Power Purchase Project

Power Purchase from Independent Power Producers (IPPs)

During 2016 - 2024, a total of 6 projects of power purchase from independent power producers (IPPs) and projects under construction with the total capacity of 5,540 MW are as follows:

Project	Location (Province)	Fuel	Capacity (MW)	Scheduled Commercial Operation Date (SCOD)
1. National Power Supply Co., Ltd., Units 1-2	Chachoengsao	Coal	270	Nov. 2016
2. National Power Supply Co., Ltd., Units 3-4	Chachoengsao	Coal	270	Mar. 2017
3. Gulf SRC Co., Ltd.	Chon Buri	Natural Gas	1,250 (2x625)	Mar./Oct. 2021
4. Gulf SRC Co., Ltd.	Chon Buri	Natural Gas	1,250 (2x625)	Mar./Oct. 2022
5. Gulf PD Co., Ltd.	Rayong	Natural Gas	1,250 (2x625)	Mar./Oct. 2023
6. Gulf PD Co., Ltd.	Rayong	Natural Gas	1,250 (2x625)	Mar./Oct. 2024
Total			5,540	

Power Purchase from Small Power Producers (SPPs)

The projects of power purchase from small power producers (SPPs) which are scheduled for commercial operation during 2016-2025 have a total capacity of 4,934 MW consisting of 3,664 MW from firm cogeneration projects and 1,270 MW from renewable energy projects.

Power Purchase from Neighboring Countries

At present, EGAT has purchased power from 7 projects of neighboring countries with a total generating capacity of 3,386.6 MW. During 2016-2019, it is expected that EGAT will purchase more power from 4 projects in Lao PDR totaling 2,334 MW.

Project	Fuel	Capacity (MW)	Scheduled Commercial Operation Date (SCOD)
1. Hongsa Lignite Power Plant, Unit 3	Lignite	491	Mar. 2016
2. Xe-Pian Xe-Namnoy	Hydro	354	Feb. 2019
3. Nam Ngiep 1	Hydro	269	Jul. 2019
4. Xayaburi	Hydro	1,220	Oct. 2019
Total		2,334	

Transmission System Development and Expansion Projects

• Approved Transmission System Projects

1.1 Transmission System Projects under Construction

1. Transmission System Expansion for Greater Bangkok Area Project, Phase 2 (GBAS2)

The project GBAS2 has an investment cost of 9,170 million Baht. The project is comprised of the construction of new transmission lines of 89.025 circuit-kilometers and a new substation, expansion of 6 substations, installation of transformers of 10,600 MVA, capacitor bank installation of 384 MVar, and 23 miscellaneous works relating to the transmission system expansion. As of December 2015, the progress of the project was 86.88 percent. The project is scheduled to be completed in 2018.

2. Transmission System Expansion Project No. 11 (TS11)

The project TS11 has an investment cost of 23,000 million Baht consisting of the construction of transmission lines totaling 1,902.273 circuit-kilometers and 6 new substations, expansion of 23 substations, installation of transformers of 11,975 MVA, capacitor bank installation of 1,705.20 MVar, and 115 miscellaneous works relating to the transmission system expansion. This project was completed in December 2015.





3. Transmission System Development Project for Power Purchase from Nam Ngum 3 and Nam Theun 1 Hydropower Plants (NNG3-NTN1)

The purpose of this transmission system development project is to accommodate the power purchase from Nam Ngum 3 and Nam Theun 1 Hydropower Plants and/or other potential projects in Lao PDR. The investment cost of this project is 16,337.6 million Baht. The project consists of the construction of the transmission lines of 1,492.340 circuit-kilometers and a new substation, expansion of 3 substations, the installation of the transformers of 4,000 MVA and capacitor bank of 770 MVar, and 2 miscellaneous works relating to the transmission system expansion. As of December 2015, the progress of the project was 32.37 percent. The project is scheduled to be completed in 2017.

4. Transmission System Development Project for Power Purchase from IPPs

The purpose of this transmission system development project is to accommodate the power purchase from IPPs power plants under 4 sub-projects of the total installed capacity of approximately 4,400 MW. The investment cost of the project is 7,985 million Baht. The project consists of the construction of transmission lines of 169.400 circuit-kilometers and 2 new substations, expansion of 6 substations, installation of transformers of 1,000 MVA, and 4 miscellaneous works relating to the transmission system expansion. As of December 2015, the progress of the construction was 76.84 percent. The project is scheduled to be completed in 2020.

The progress of each transmission system sub-project is as follows:

1. The construction of the transmission system for power purchase from a thermal plant of Gheco - One Co., Ltd. was completed in February 2013.
2. The construction of the transmission system for power purchase from a thermal plant of National Power Supply Co., Ltd will start in 2018 and will be completed in 2020.
3. The construction of the transmission system for power purchase from a thermal plant of Gulf JP UT Co., Ltd. was completed in August 2014.
4. The progress of the construction of the transmission system for power purchase from a thermal plant of Gulf JP NS Co., Ltd. was completed in May 2015.

5. Transmission System Development Project for Power Purchase from Hongsa Lignite-Fired Power Plant (HSA)

This project is to accommodate the power purchase from the Hongsa Lignite-Fired Power Plant in Lao PDR which has a generating capacity of 3×626 MW and will supply electric power of 1,473 MW power to Thailand through the 500 kV transmission lines across the Thai-Lao PDR border (in Nan Province) to the 500/230/115 kV Nan substation, linked with 500 kV transmission lines into the main system to 500 kV Mae Moh substation 3 with improvement of relevant transmission lines. The investment cost of this project is 21,160 million Baht. The project consists of the construction of the transmission lines of 1,192.065 circuit-kilometers, expansion of 3 substations, and the installation of transformers of 1,150 MVA and capacitor bank of 880 MVar. The project was completed in December 2015.

6. Transmission System Expansion and Renovation Project, Phase 1: Substation (RSP1)

Having the investment cost of 3,815 million Baht, the project consists of the renovation of 15 substations and the installation of transformers of 1,150 MVA and capacitor bank of 145.95 MVar. As of December 2015, the progress of the construction was 37.09 percent. The project is scheduled to be completed in 2017.

7. Transmission System Development Project for Chana Power Plant Project, Block 2 (CNC2)

The project has an investment cost of 1,290.5 million Baht and is comprised of the construction of 230 kV transmission lines of 90 circuit-kilometers from Chana Power Plant - Chana Junction - Khlong Ngae and the expansion of 2 substations. The project was completed in January 2015.

8. Main Transmission System Expansion Project for Power Purchase from SPP Cogeneration Power Plant, based on the Request for Proposal 2010 (SPPC)

This project has an investment cost of 10,610 million Baht. The project consists of the construction and expansion of relevant transmission system of 507.850 circuit-kilometers, a new substation, expansion of 3 substations, installation of transformers of 2,900 MVA, and 73 miscellaneous works relating to the transmission system expansion. As of December 2015, the progress of the project was 41.27 percent. The project is scheduled to be completed in 2019.

9. Transmission System Renovation and Expansion Project, Phase 1: Transmission Line (RLP1)

The investment cost of the project is 9,850 million Baht. The project is comprised of the construction of transmission lines of 1,648.722 circuit-kilometers, expansion of 13 substations, and 8 miscellaneous works relating to the transmission system expansion. As of December 2015, the progress of this project was 25.13 percent. It is scheduled to be completed in 2023.

10. Transmission System Development Project for North Bangkok Power Plant Project, Block 2 (NBC2)

Being an urgent project to meet the demand for electricity and to strengthen the security of power system with the net capacity of 800 MW, this transmission system development project has an investment cost of 179.1 million Baht. The project is comprised of the construction of an underground 230 kV transmission line of 500 meters from North Bangkok Power Plant, Block 2 to North Bangkok and the expansion of North Bangkok substation. This project was completed in February 2015.

11. Transmission System Renovation and Expansion Project, Phase 2 (RTS2)

The objective of this project is to reduce losses resulting from power outage occurring from the damaged or the aged substation equipment or the transmission lines and to increase capacity of the substations and the transmission lines in supplying electricity consistently and efficiently as well as increasing reliability and security of the power system. The investment cost of the project is 21,900 million Baht. This project involves the works in renovation and expansion of the transmission lines of 1,333.650 circuit-kilometers, renovation and expansion of 31 substations consisting of the installation of transformers of 1,746.50 MVA, capacitor bank of 550.80 MVar, static var compensator (SVC) inductive of 100 MVar, and capacitive of 300 MVar, as well as 34 miscellaneous works relating to the transmission system expansion. As of December 2015, the progress of this project was 3.01 percent. The project is scheduled to be completed in 2020.





12. Transmission System Development Project in the Areas of Ubon Ratchathani, Yasothon, and Amnat Charoen Provinces for Power Purchase from Lao PDR (UYAP)

The project aims to accommodate the power purchase from Xe-pian Xe-namnoy Hydropower Plant which has a generating capacity of 3×130 MW and to receive more power from other potential projects from the southern part of Lao PDR. The investment cost of the project is 7,300 million Baht. The project consists of the construction of 500 kV transmission lines from the border of Thailand-Lao PDR (at Ubon Ratchathani Province) to Ubon Ratchathani Substation 3 (new substation) with a distance of 90 km and the relevant works of transmission system. The works on the part of Thailand consist of the construction of transmission lines of 505.100 circuit-kilometers, a new substation, expansion of 4 substations, and installation of transformers of 400 MVA. As of December 2015, the progress of the project was 1.06 percent. The project is scheduled to be completed in 2018.

13. Transmission System Improvement Project in Eastern Region for System Security Enhancement (TIPE)

The purpose of this transmission system improvement project is to enhance the security of power system in the Eastern part of Thailand to continuously and sufficiently cope with the rising demand for electricity, to receive electric power from the new power plants, and to promote the expansion of industry and tourism in the eastern part of Thailand which has a significant role in the economy of the country. The investment cost of the project is 12,000 million Baht. The project consists of the construction of transmission lines of 469.664 circuit-kilometers and 3 new substations, expansion of 2 substations, installation of transformers of 5,000 MVA, and 8 miscellaneous works relating to the transmission system expansion. As of December 2015, the progress of this project was 0.45 percent. The project is scheduled to be completed in 2019.

14. Transmission System Expansion for Greater Bangkok Area Project, Phase 3 (GBA3)

The objectives of the project GBA3 are to respond to the increasing demand for electricity in the area of Greater Bangkok which is the area of high demand and the most important economic center of the country and also to strengthen the security of power system. The investment cost of this project is 12,100 million Baht. The project is comprised of the construction and improvement of the transmission lines of 172.400 circuit-kilometers and 2 new substations, expansion of 13 substations, installation of transformers of 10,200 MVA and capacitor bank of 96 MVAR, and 10 miscellaneous works relating to the expansion of the transmission system. As of December 2015, the progress of this project was 8.05 percent. The project is scheduled to be completed in 2018.

15. Transmission System Expansion Project No. 12 (TS12)

The Project TS12 has an investment cost of 60,000 million Baht. The project is comprised of the construction of transmission lines of 3,208.924 circuit-kilometers and 7 new substations, expansion of 72 substations, installation of transformers of 24,000 MVA, capacitor bank of 1,671.60 MVAR, static var compensator (SVC) inductive of 50 MVAR, and capacitive of 100 MVAR, as well as 133 miscellaneous works relating to the transmission system expansion. As of December 2015, the progress of this project was 0.65 percent. The project is scheduled to be completed in 2020.

1.2 Transmission System Projects Which Have Not Yet Been Implemented

1. Transmission System Development for Lam Ta Khong Wind Turbine Project (Phase 2) (LKW2)

The project has an investment cost of 265 million Baht consisting of the construction of a new substation and relevant works to transmission system. This project is scheduled to be completed in 2017 (Ministry of Industry is in the process of revising the law concerning establishing factory type 3 in the area 1B.)

2. Transmission System Development Project for Power Purchase from My-Kok Thermal Power Plant (MKTP)

The purpose of this transmission system development project is to accommodate power purchase from Myanmar's My-Kok Thermal Power Plant of which the capacity is 405 MW. The investment cost of the project is 2,740 million Baht. The 369 MW power purchased at Thailand-Myanmar border will be transmitted through the 230 kV transmission lines from My-Kok Thermal Power Plant to the border of Thailand (in Chiang Rai Province) to Mae Chan Substation. The 230 kV of transmission lines of 220 circuit-kilometers will be constructed from the Mae Chan Substation to Chiang Rai Substation together with the expansion of 2 substations and installation of transformers of 400 MVA. Presently, the power purchase agreement is still under consideration. Meanwhile, the development has been suspended because Tariff MOU expired on October 22, 2011 and has not been agreed by now.

3. Transmission System Development Project in the Area of Loei, Nong Bua Lam Phu, and Khon Kaen Provinces for Power Purchase from Lao PDR (LNKP)

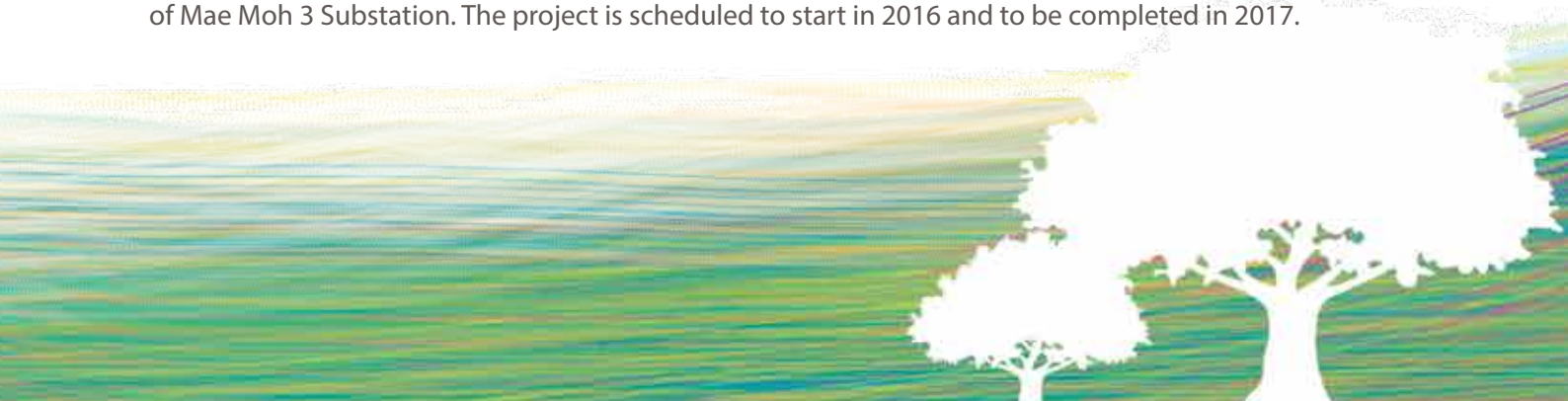
The purpose of this transmission system development project is to accommodate power purchase of 1,220 MW from the Xayaburi Hydroelectric Plant in Lao PDR. The investment cost of this project is 12,060 million Baht. The project is comprised of the construction of two circuits of 500 kV transmission lines from the border of Thai-Lao PDR (in Loei Province) to Loei 2 Substation (a new substation) with a distance of 52 kilometers and the construction of double-circuit of 500 kV transmission lines from Loei 2 Substation to Khon Kaen 4 Substation (a new substation) with a distance of 173 kilometers. The construction of transmission lines (in Thai part) totals 459 circuit-kilometers. Moreover, the project covers the construction of 2 new substations, expansion of 5 substations, and installation of transformers of 1,000 MVA and capacitor bank of 660 MVar. The project is scheduled to start in 2016 and to be completed in 2018.

4. Transmission System Improvement Project in the Western and Southern Regions for System Security Enhancement (TIWS)

The project involves the construction of 500 kV transmission lines and additional improvement of the 230 kV transmission system to cope with the increasing power demand in the southern part of Thailand in the long run, to increase the capability of the transmission system from the West and the Central to the South, and to enhance the business, industry, and tourism growth in the southern region. The investment cost of the project is 63,200 million Baht. The project consists of the construction of transmission lines of 2,196 circuit-kilometers and a new substation, expansion of 8 substations, and installation of transformers of 5,999 MVA and capacitor bank of 974 MVar. The project is scheduled to start in 2016 and to be completed in 2022.

5. Transmission System Development Project for the Replacement of Mae Moh Power Plant, Units 4-7 (MMR1)

The project involves the construction of a new Mae Moh thermal power plant with an installed capacity of 600 MW to replace the former plant which has been in operation for more than 25 years. The project will cope with the rising demand for electricity, maintain the security of the power system, and also respond to the government's policy of using indigenous fuel source for the maximum benefit. The investment cost of the project is 360 million Baht. The project consists of the construction of 230 kV underground transmission lines from the switchyard of Mae Moh Power Plant to 230 kV Mae Moh 3 Substation with a distance of 800 meters and expansion of Mae Moh 3 Substation. The project is scheduled to start in 2016 and to be completed in 2017.





6. Transmission System Development Project for the Northeast, Lower North, Central Part and Bangkok Metropolitan for System Security Enhancement (TIEC)

The project will improve the transmission system, enhance security of the power system, and support the renewable and alternative power projects under the Government's Renewable Power Development Plan and the ASEAN Power Grid (APG) Project. The investment cost of the project is 94,040 million Baht. The project is comprised of the construction of transmission lines of 2,622 circuit-kilometers, expansion of 10 substations, and installation of transformers of 12,000 MVA, line shunt reactor 605 MVAR, and static var compensator (SVC) 1200 MVAR. The project is scheduled to start in 2017 and to be completed in 2023.

7. Transmission System Development Project for the Upper Northern Region for System Security Enhancement (TIPN)

The project will improve the transmission system and enhance security of the power system in the upper northern region. The project consists of the construction of transmission lines of 420 circuit-kilometers, expansion of 3 substations, and installation of transformers of 2,600 MVA and capacitor bank of 55 MVAR. The investment cost of the project is 12,240 million Baht. The project is scheduled to start in 2017 and to be completed in 2021.

8. New Transmission System Interconnection Project between Su-Ngai Kolok Substation, EGAT and Rantau Panjang Substation, TNB (SUKP)

The purpose of this project is to enhance security of the power system in Narathiwat Province by receiving more electricity from Malaysia and promote the cooperation between Thailand and Malaysia. The investment cost of the project is 535 million Baht. The construction of the project will be able to start after the Interconnection Agreement between EGAT and Tenaga Nasional Berhad (TNB) is achieved.

• Transmission System Project under Approval Process

Transmission System Development Project for the Lower Southern Region for Power System Security Enhancement (TILS)

The objective of this project is to enhance security of the power system from Surat Thani Province downward to Songkhla Province and the lower part of the South to prevent the risk of blackout on the long-term basis and to cope with the rising demand for electricity of household, business, industry, and tourism sectors in the South while supporting the ASEAN Power Grid Project (APG) and the power purchase from neighboring countries. The investment cost of the project is 35,400 million Baht. The project is scheduled to be completed in 2023.

EGAT Headquarters Development Project

To increase the efficiency of the supporting units stationed in EGAT headquarters, it is necessary for EGAT to allocate sufficient space complying with the standard for the employees.

Therefore, all units will be confined in the office zone to facilitate efficient coordination and to maximize the use of available space. Parking lot will be available for the traffic safety. The budget for area development is 2,080 million Baht, and the construction will be completed in 2018. To upgrade the standard for quality of life of EGAT employees and to support the environmental impact management of the North Bangkok Combined Cycled Power Plant, Block 2, the area will be under the concept of ecological forest as designed in the master plan regarding EGAT Headquarters development.



EGAT Headquarters



Parking Building

Research and Development

In 2015, EGAT funded various educational institutions, research institutes, and internal units of EGAT in their research works under 20 projects. Since 2006, a total of 231 projects amounting to 2,476,659,656 Baht have been funded. The following projects are among the 18 completed EGAT-funded projects in 2015

A Study on the Approach of Green Area Development around Chana Power Plant by Thailand Environment Institute Foundation

The project on “Increasing green area around Chana Power Plant” in Chana District, Songkhla Province was initiated by EGAT during 2009-2012 in order to develop the area, to upgrade the quality of life of the community around the power plant, and to build good relationship between EGAT and the people in the community. However, as the soil around Chana Power Plant was brackish, not suitable for tree planting, and had been deserted, EGAT considered selection of proper trees which could grow in this type of soil and methods to encourage participation of the community in tree planting and taking care of economic trees in deserted areas. As a follow-up of the mentioned project, in 2014, EGAT granted fund to Thailand Environment Institute Foundation to conduct the Project “A Study on the Approach of Green Area Development around Chana Power Plant” to evaluate the achievement regarding the result and impact of the “Project on increasing green area around Chana Power Plant”.

From the study, it is found that this project has evidently increased the green area and built up confidence of the agriculturalists in planting trees around Chana Power Plant. As a result, agriculturalists in the community have given support to the project implementation on a continuous basis for sustainable development leading to implementation of the same activity in other areas.





A Study of Social Attitudes from Proceeding “Green Learning Room” Project, EGAT by Thammasat University

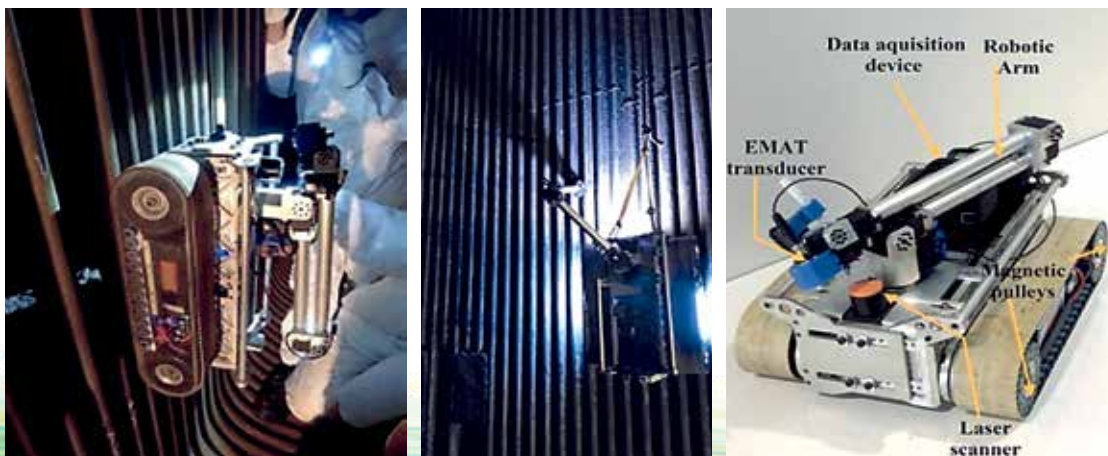
EGAT has been implementing the “Green Learning Room” Project since 1998 by establishing Green Learning Room to all model schools in every province to raise an awareness of the efficient use of electricity and other energy in realizing its value, preserving the environment, and practicing as a habit. Evaluation has also been made on the results of participating schools. However, evaluation of the achievements in the attitude and awareness raising as well as habit building among the youth regarding energy and environmental conservation has not been conducted formally. Therefore, EGAT needs to conduct a survey on this matter from the opinions of the participants of the project and the comparatively relevant persons particularly students, teachers, and executives of the schools participating in the project and schools which are non-participants.

From the study, the “Green Learning Room” Project is widely well known, and there are still a lot of schools that want to join the project. The implementation of the project will contribute to the achievements in attitude-building and respond to the strategy in demand side management and social responsibility of EGAT, and can be put into an action plan in the future.

Development of a Prototype of Inspection Robot for Tubes in Boiler by Institute of Field Robotics (FIBO), King Mongkut’s University of Technology Thonburi

For the thermal power plant, the regular maintenance of boilers is necessary to prevent the shutdown of electricity from the damage of boilers. Currently, inspection of the tubes and internal wall of boilers are undertaken by EGAT personnel. Scaffolds are used in inspecting the boilers located in a high level. Moreover, the location of the boilers which may be dusty and has high temperature atmosphere may pose a negative effect to the inspection in terms of efficiency, safety, and hygiene of the inspectors. Therefore, EGAT has allocated a fund to FIBO, King Mongkut’s University of Technology Thonburi for the project of “Development of a Prototype of Inspection Robot for Tubes in Boiler”. The objective of the project is to develop a prototype of inspection robot for tubes in boilers to replace the inspection by EGAT personnel.

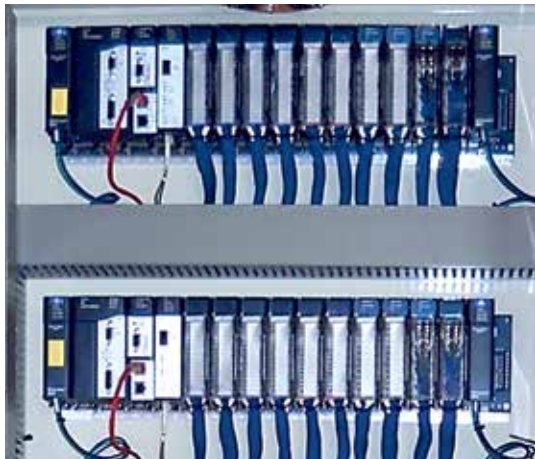
From the study, a prototype of inspection robot has been developed for inspection of tubes and wall in boilers. The robot can perform inspection with the acceptable level of accuracy in comparison with the traditional inspection method. With the use of ultrasonic transducer, the robot can access efficiently different positions and can perform inspection with speed, economization, and risk reduction.



Development of Static Excitation Control System with Redundant for Tha Thung Na Hydropower Plant by Electrical Maintenance Division, EGAT

To generate electricity, the large-sized generator uses excitation control system to supply electrical current to the field coil to generate magnetic field inductive to electricity. Presently, in several EGAT power plants, these tools are found to be deteriorating as some are aged and have no spare part supply, or the model is no longer in use, which results in an interruption of electricity generation. The research aims to develop a prototype of static excitation control system with redundant as a secondary system. In case that there is an interruption of the main system, it will be replaced immediately by the secondary system. The system is highly reliable, easy to use, and applicable to EGAT generators of various sizes. Moreover, it is cost-saving instead of the costly imported system.

From the pilot test of the prototype system of static excitation control with redundant at Tha Thung Na Hydro Power Plant, it has been found that the system works well with better function than the former system with remarkable quality in the ease of use and maintenance and has a lower cost than the imported system. The system has been registered in intellectual property. The research has benefitted EGAT in the knowledge of the system and the ability to reduce the dependency on foreign technology and experts. Moreover, the system can be applicable to EGAT power plants of various sizes as well as private power plants.





Organization and Human Resource Development

Human Resource Management

EGAT gives high importance to its employees as a valuable resource which is vital for the growth of the organization. Its human resource management has focused on promoting good, professionally competent, and happy employees with loyalty to the organization. In 2015, EGAT continued to promote and encourage the employees to uphold EGAT's corporate culture: "Loyalty, Striving for Excellence, and Embracing Good Ethics" which will lead the organization towards its goal in becoming national pride. In addition, for the purpose of supporting the recruitment of EGAT employees as well as supporting educational development, EGAT has been providing undergraduate scholarships to the general public and offering those who have become EGAT employees more scholarships for further studies.

Human Resource Development

As employees have been considered valuable resources for the sustainable growth of the organization, EGAT has a policy to develop employees to become good, honest, and generous persons, as well as having ethical conducts and consideration for society, community, country, and the public. EGAT employees should be competent, skillful, visionary, and professional comparatively at the international level. They should, moreover, be happy people with good quality of life and full of inspiration, and have loyalty to the organization so that they can help EGAT achieve its target of becoming a global top quartile utility.

In 2015, EGAT set up human resource development programs to increase the capability of employees to cope with the business growth. The plan consists of three levels: organization, operational lines, and individual. Human resource development programs are designed to serve requirements such as corporate strategies, organizational competencies, rules and regulations, customer requirements, and emerging business challenges of EGAT. Human resource development has been carried out in several areas including main professional skill, quality of life, behavior in connection with ethical conducts, morality, corporate governance, corporate value, corporate culture, safety, and health. Various approaches have been applied including on-the-job training, coaching, monitoring, and job assignment. Training as well as scholarships has been provided, locally and abroad. Individual Development Plan (IDP) technique has been used to promote self development with supervision and coaching by the unit to which they belong. Moreover, executive development programs have been available for preparing future leaders. Developing high-potential young generation to become new leaders has been undertaken to mobilize the operation of EGAT to achieve its target in accordance with the strategy and vision. Furthermore, EGAT has a knowledge management system to collect, transfer, and develop the knowledge to create innovation in the organization.



Information Technology Management

EGAT's Information Technology Committee is responsible for the following:

1. Lay down policies, rules, and regulations concerning EGAT's information technology management and computer provision
2. Prepare a master plan on EGAT's Information and Communication Technology
3. Scrutinize the budget allocation regarding information technology, give approval to the projects or work plans, and consider consultant - hiring in information technology
4. Set the criteria and evaluation of the operation regarding information technology management of different operational lines
5. Collect the work results and prepare the evaluation report of the work of EGAT's information technology management

EGAT has followed the national strategies in striving to become a global top quartile in electricity as indicated in the EGAT Corporate Plan 2015-2025. Strategies in information technology management as contained in the EGAT master plan of information technology management (2013 - 2017) have been revised to be up-to-date and applicable to support the successful operation of EGAT. The revised strategies are as follows:

- Strategy 1:** Develop the capability of EGAT's ICT professionals and employees to be able to create, produce, and use ICT in an efficient, effective, ethical, and discreet manner
- Strategy 2:** Strengthen EGAT's ICT governance
- Strategy 3:** Develop EGAT's ICT infrastructure
- Strategy 4:** Use ICT to promote EGAT's governance in administration and service
- Strategy 5:** Use ICT to build EGAT's sustainable competitiveness

Based on the principles of Corporate Governance of Information Technology, EGAT has controlled and directed its information technology in compliance with the International Standards. EGAT has been, therefore, certified as complying with the International Standard ISO/IEC 29110 : Systems and Software Life Cycle Profiles and Guidelines for Very Small Entities (VSEs) as well as the International Standard ISO/IEC 27001 : 2013 Information Security Management for the information technology services of EGAT's Head Office and its backup sites. In 2015, EGAT was certified to be complying with the SAP Enterprise Support Standard of the Customer Center of Expertise (CCoE).





Corporate Social Responsibility

EGAT has given importance to the social and environmental development as well as the development of the sites for power generation and transmission. CSR is considered to be an integral part of EGAT business which supports its sustainable growth. The activities of CSR in-process and CSR after-process have been carried out in compliance with the international standards to get acceptance of all sectors under the participatory process coupled with the sustainable development of quality of life and environment.

Community Relations in the Power Development Areas

EGAT has implemented the participatory process in various activities as follows:

1. Raising awareness and building understanding of power development

The objective of this activity is to build understanding among the people to be aware of the increasing demand for electricity due to the social growth and expansion which results in the need of more power plants. Various activities under participatory process have been carried out in the following projects:

- North Bangkok Power Plant, Block 2
- Chana Power Plant, Block 2
- Replacement of Mae Moh Power Plant, Units 4-7
- Energy Efficiency Improvement of the Southern Power Plant (Krabi)
- Replacement of Bang Pakong Power Plant, Units 1-2
- Replacement of South Bangkok Power Plant, Units 1-5
- Coal Power Plant Construction at Thepha District of Songkhla, Trang, and Chumphon Provinces, etc.
- Renewable Power Plants in Sikhio District, Nakhon Ratchasima Province and in Thap Sakae District, Prachuap Khiri Khan Province
- Public communication areas concerning nuclear power plant in Ubon Ratchathani Province

2. Development of the quality of life of the community

The activity has been carried out with participation of all sectors with the objective of promoting various community activities to upgrade the quality of life of communities around the existing power plants and in the areas of new development projects as a continuous participatory process to sustainability. Such activities cover various aspects, i.e. education, sports, arts and culture, local tradition, health and sanitation, occupational promotion including primary job and secondary job, public utilities including provision of water system for the community around the new power plants, and assistance to people suffered from disaster and also to underprivileged people.

3. Environmental conservation and protection

EGAT has promoted and participated in activities of all sectors in raising awareness and recognition of environmental conservation and promotion of natural resources and environmental conservation. Major projects include the following:

- EGAT has implemented the reforestation project “Six Million Saplings to Reduce Global Warming in Commemoration of the 60th Birthday Anniversary of Her Royal Highness Princess Maha Chakri Sirindhorn” in the area of 500 rai of Pha Taem National Park in Na Pho Klang Sub-District of Khong Chiam District in Ubon Ratchathani Province. Forest fire control has also been provided.
- Through the reforestation project “Conservation of the Mangrove Forest by the Thepha People in Honor of Her Majesty the Queen”, more than 5,000 saplings of Mangrove (*Rhizophora mucronata* Pole and *Rhizophora apiculata* Blume), Suicide tree (*Cerbera odollam* Gaertn), Velvet tamarind (*Dialium Cochinchinense* Pierre) and Atap palm (*Nypa fruticans* Wurmb) have been planted in Koh Lae Nang, Thepha District of Songkhla Province.
- EGAT has cooperated with the community in Nuea Khlong District, Krabi Province in the restoration of the mangrove forest and the increase of the number of shellfish larvae. The objective of this activity is to encourage participation and to raise awareness of the community about the importance of coastal resource restoration and conservation. The activities include the promotion of artificial reef construction, crab bank establishment, and wing shells release, etc.
- To commemorate the 60th Birthday Anniversary of Her Royal Highness Princess Maha Chakri Sirindhorn, EGAT has improved the landscape, planted trees, and released fishes in the area of Tanode Temple, Chalor Sub-district, Bang Kruai District, Nonthaburi Province. Moreover, in celebrating His Majesty the King’s Birthday Anniversary on December 5, 2015, a total of 3,989 black-ear catfish (*Pangasius larnaudii*) and Chao Phraya giant catfish (*Pangasius sanitwongsei* Smith) were released in the river in the area of North Bangkok Power Plant.
- EGAT has participated with the community in using the effective microorganism (EM) to protect the environment. The activity includes training in using EM in conserving the environment and promoting the understanding of the concept of Sufficiency Economy among the people living in the power development areas such as in Krabi, Chumphon, Nakhon Sawan, Ubon Ratchathani, Nakhon Ratchasima, and Prachuap Khiri Khan Provinces. Moreover, EGAT has cooperated with the community around the North Bangkok Power Plant in implementing the project “Beautiful Canal, Clear Water” by providing training and establishing a learning center.



Noise level monitoring in the powerplant



Water quality monitoring around the powerplant



Environmental Protection

In 2015, EGAT has given importance to the environmental management for sustainable development and has determined to become an organization with social and environmental responsibility. Under the policy framework in social and environmental responsibility, the achievements of EGAT in environmental protection in 2015 are as follows:

• Environmental impact assessment

For the environmental impact assessment (EIA) of EGAT new power projects in 2015, eight projects have been approved by the Office of Natural Resources and Environmental Policy and Planning namely:

- Replacement of Bang Pakong Power Plant, Units 1-2
- Replacement of South Bangkok Power Plant, Phase 1
- Chulabhorn Downstream Hydropower, Chaiyaphum Province
- Limestone Mine for Chemical Industry (for Mae Moh Power Plant)
- 500 kV Electrical Network of Loei 2 (Tha Li) – Khon Kaen 4 (the part passing through the forest reserve)
- 230 kV Electrical Network of Ayutthaya 4 – Sikhio 2 (the part passing through the forest reserve)
- Improvement of 115 kV Electrical Network of Krabi-Lampura (the part passing through the forest reserve)
- Report on the change of the detail of Krabi Thermal Power Plant Project regarding the use of raw palm oil with fuel oil in electricity generation.

Moreover, ten additional projects are in the EIA process.

• Environmental quality monitoring

EGAT has continuously monitored the quality of the environment resulting from the operation in electricity generation in terms of water quality, water ecology, ambient air quality, air quality emitted from the stack, noise level, electromagnetic field, and garbage and waste disposal. This process has been done to prevent various impacts which may occur from the operation and to control them to comply with the limit specified in the standards which are enforced by the law and to improve the environmental quality as a whole.

• Environmental network activities

Environmental networks have been established among the community around the power plants and power development sites such as Wang Noi Power Plant in Ayutthaya Province, Chana Power Plant in Songkhla Province, North Bangkok Power Plant in Nonthaburi Province, and Thap Sakae Solar Plant in Prachuap Khiri Khan Province. Through the study and real practice together with idea exchange between EGAT and the communities around the power plants, the local people will be aware of the importance of environment, have sufficient knowledge to participate in the environmental quality monitoring, and have a significant role in environmental protection of their community.

• Participation and public hearing

In 2015, EGAT organized the community hearings around the sites of the 12 new power development projects namely:

- 115 kV Electrical Network of Phuket 1 - Phuket 3 - Phuket 2 (the part passing through the forest reserve)
- 115 kV Electrical Network of Phangnga 2 - Phuket 3 (the part passing through the forest reserve and mangrove forest)
- 230 kV Electrical Network of Phangnga 2 - Phuket 3 (the part passing through the forest reserve)
- 230 kV Electrical Network of Klong Ngae - Satun (the part passing through the forest reserve)
- 500 kV Electrical Network of Loei 2 (Tha Li) - Khon Kaen 4 (the part passing through the forest reserve)
- 500 KV Electrical Network of the border in Nan - Tha Wang Pha (the part passing through the river basin of level B1)
- 500 kV Electrical Network of Surat Thani 2- Phuket 3 (the part passing through the forest reserve, mangrove forest, and river basin of level B1)
- Srinagarind Hydropower Plant, Kanchanaburi Province (Post-EIA)
- Limestone Mine for Chemical Industry Project (Request No. 11/2013 Lampang Province)
- Replacement of South Bangkok Power Plant, Phase 1, Samut Prakan Province
- Replacement of South Bangkok Power Plant, Units 1-5, Samut Prakan Province
- Thepha Coal-Fired Power Plant and Pier for Coal Transfer to Thepha Power Plant, Songkhla Province

• Greenhouse gas management

EGAT has prepared the first phase of EGAT 5-year Master Plan on Greenhouse Gas Management (2016-2020) and prepared for the long-term operation in greenhouse gas reduction (2021-2030) to achieve its target in being among the global top quartile utilities. This activity will contribute to the recognition of EGAT and its power plants by the community and social sector as well as its role as a global top quartile utility.





In 2015, the 7 power plants namely Chana Power Plant, Block 1, Krabi Power Plant, Wang Noi Power Plant, Nam Phong Power Plant, Bang Pakong Power Plant Units 1-2, Mae Moh Power Plant Units 4-7, and South Bangkok Power Plant prepared the carbon footprint for organization (CFO) according to ISO International Standard 14064-1 which can be used in the quantification of the greenhouse gas emission and classification of the greenhouse gas sources with signification. EGAT also signed a Memorandum of Understanding on technical cooperation with Thailand Greenhouse Gas Management Organization (Public Organization) on the greenhouse gas reduction of the power generation sector according to the Nationally Appropriate Mitigation Actions (NAMAs). According to NAMAs, the greenhouse gas reduction of the energy and transportation sectors will be reduced 7-20 percent by the year 2020.

In 2015, EGAT verified the result of the greenhouse gas reduction according to NAMAs and reported to the Ministry of Energy. The report was based on the assessment of EGAT's greenhouse gas reduction which was

a result of EGAT's measure in efficiency improvement of its power plants and measure in power generation from renewable energy (hydro, wind, and solar). In 2013 and 2014, the amount of greenhouse gas reduced was 422,551 tCO₂e and 3,229,064 tCO₂e respectively.



- Environmental management system in accordance with ISO 14001

To build community and public confidence in EGAT's environmental management system, ISO 14001: Environmental management systems - Requirement with guidance for use has been implemented in all units of EGAT involving power generation. In 2015, a total of 27 power plants, dams, and lignite mine were successfully certified to be in compliance with ISO 14001 by Certification Body (CB). Furthermore, ISO 14001 has been applied in EGAT substations to ensure the complete implementation of international standard on environmental management from power generation to power transmission.

- Environmental and social management of the power plant

In 2015, EGAT strictly complied with the relevant law and legal provision concerning environment. Focus was put on the Environmental Impact Assessment (EIA), Social Impact Assessment (SIA), and Health Impact Assessment (HIA). ISO 14001 and the Thai Industrial Standard on Occupational Health and Safety (TIS 18001) were implemented throughout all stages of the power plant operation; prior to the construction, the construction phase, and the generation phase coupled with the arrangement of participatory activities and hearings of stakeholders.

Social Activities

- Headwaters Reforestation Project in commemoration of the 60th Birthday Anniversary of Her Royal Highness Princess Maha Chakri Sirindhorn

To celebrate the 60th Birthday Anniversary of Her Royal Highness Princess Maha Chakri Sirindhorn on April 2, 2015, the headwaters reforestation project was implemented. From 2014 to 2015, reforestation was carried out in an area of 26,500 rai of the degraded headwaters forests of national park, national reserve, and

community forest of Nan Province, as well as degraded mangrove forests in Chanthaburi, Chumphon, Nakhorn Si Thammarat, and Songkhla Provinces. Under the project “Reforestation in the Planted Forest”, EGAT collaborated with the Plant Genetic Conservation Project Under the Royal Initiative of Her Royal Highness Princess Maha Chakri Sirindhorn in planting trees in an area of 3,500 rai around Sirindhorn Dam in Ubon Ratchathani Province. Furthermore, EGAT implemented the Project “Reforestation for Elephants and Environment” in collaboration with the Zoological Park Organization under the Royal Patronage of His Majesty the King, in planting trees in an area of 300 rai of the Elephant Land Project (Kacha Anachak) in Tha Tum District, Surin Province.

- **Wan Kaew Project in commemoration of the 60th Birthday Anniversary of Her Royal Highness Princess Maha Chakri Sirindhorn**

On the auspicious occasion of the 60th Birthday Anniversary of Her Royal Highness Princess Maha Chakri Sirindhorn, EGAT implemented the on-going Wan Kaew Project with an aim of “Bringing back eye-sight, Bringing light to life”. From 2014 to 2015, the mobile units provided medical service of 116 times to 68,442 people. The project has been supported by EGAT allies and agencies from public and private sectors.

- **Biological Way of Life for Sustainable Development Project**

Being the project implemented since 1999, the Biological Way of Life for Sustainable Development Project has focused on the promotion of the use of effective microorganism (EM) in replacement of chemical use in daily life in 4 areas, namely agriculture, fishery, livestock development, and environmental protection. Expansion of the network has been made in the communities near EGAT offices and the transmission lines by means of lectures, demonstration, and exhibition leading to the establishment of 28 EGAT’s community model of economy sufficiency all over the country. The community model has been served as a learning center. Through the memorandum of Understanding between EGAT and the Office of Vocational Education Commission, the Biological Way of Life for Sustainable Development Project will be implemented in 92 agricultural and technological colleges, vocational colleges, fishery colleges, and technological and management colleges throughout the country for further extension to the communities. In 2015, a total of 126 communities implemented the project.





• EGAT CSR volunteer camp

EGAT CSR Volunteer Camp has an aim to encourage and support the youth to become helpful for the social and community development. The youth are trained in positive thinking skill, systematic working, teamwork, and urgent problem solving to reach the same target. Starting from 2009, more than 2,500 volunteers have participated in the Project of EGAT CSR Camp during the 7 consecutive years of its implementation. From the competition in 2015, 20 camps out of 36 camps were selected by EGAT. A total of 283 students from 23 educational institutions participated in EGAT's activity.

• Support for Thai weightlifting athletes

In 2015, EGAT gave support to the 3 events of the weightlifting competition for the royal trophy. Regarding EGAT's support to the Amateur Weightlifting Association of Thailand, the Thai athletes were able to develop their skill to the world class level and were awarded gold, silver, and copper medals in the 9 events of the international and world competitions. Eight Thai athletes were selected to participate in the 31st Olympic Games in Rio de Janeiro, Brazil.

• Other Activities

Several additional activities for the youth have been carried out by EGAT including:

- Volunteer activity under "Art for All" project
- Voluntary parentage project for children in the border areas
The project has been implemented for 12 years. In 2015, 15 additional children under the project completed the university degree and returned to work in their hometown and nearby areas making a total number of 47 graduates.
- "EGAT ENVI Camp"
- Activity of raising environmental awareness of the youth
- Project on finding home and sea grass for fish
- Environmental quality monitoring network of Chana Power Plant by the community

Green Learning Room Project

The Green Learning Room Project is an on-going project which has started since 1998. The objective of the project is to implant the attitude and habit in using electricity and other energy with efficiency as well as in recognition of its value and aiming at environmental conservation. The project has been implemented in 414 schools across the country. Continuous development has been made by various related projects including the following:

The Project "Upgrading Green Learning Room to Green Learning School to Build Energy Network"

The project aims for school management for the whole system. The green learning room will be upgraded to green learning school to serve as the model school for energy and environmental conservation. At present, a total of 122 schools achieved EGAT's Green Learning School standards.

The Project “Low Carbon Schools for Electricity Consumption Reduction”

In 2015, there were 58 schools which could reduce the use of electricity. As a result, the emission of greenhouse gas could be reduced over 237 tons of carbon dioxide equivalent, and the use of electric power was reduced by 408,448.69 kWh.

The Project “Low Emission Support Scheme (LESS)”

The project was organized by Thailand Greenhouse Gas Management Organization (Public Organization). EGAT submitted the results of activities in energy reduction of schools participating in the 2 projects namely “Low Carbon Schools for Electricity Consumption Reduction” and “Campaign on Using Energy Efficient Fluorescent Tubes Label No.5” for certification of greenhouse gas reduction. In 2015, a total of 92 certificates were awarded to successful schools.

Demand Side Management

In 2015, the implementation of EGAT Demand Side Management successfully achieved higher energy conservation than the set target. With the reduction of 1,208.5 thousand tons of carbon dioxide and 352.3 MW of electric power use (Jan. - Dec. 2015), EGAT has contributed to the energy balance of the country in complying with the Energy Conservation Plan and the Energy Conservation Promotion Act, B.E. 2535 (1992).

Whereas the principal mission has reflected the achievement in energy and environmental conservation, EGAT has still continued its activity in promoting the use of electricity with economization and efficiency under 3 strategies as follows:

• Energy-saving electrical appliances

- Launch a campaign to promote the use of electrical appliances with energy efficient label No. 5 through various public relations channels
- Grant energy efficient label No.5 to 28 electrical appliances which have passed the test; the total accumulating number of energy efficient label No.5 used in 2015 was 23,027,451 labels
- Cooperate with the private sector in testing 34 electrical appliances of 517 lots from 99 companies
- Organize a signing ceremony of Memorandum of Understanding with 9 companies producing electrical pans and 6 companies producing automatic electrical water pumps and grant energy efficient label No.5 to 7 companies producing electrical kettles and 19 companies producing television sets at Centara Grand at Central Plaza Ladprao Bangkok on September 16, 2015
- Promote the marketing of the energy efficient label No.5 air conditioner with inverter compressor according to the standard of Seasonal Energy Efficiency Ratio (SEER)
- Organize an international exposition for lighting equipment in the LED Expo Thailand 2015 at IMPACT Exhibition and Convention Center, Muang Thong Thani during May 21-24, 2015 with the aim of expanding the market of LED products to 6.9 million and the reduction of electric power use to 450 million units per year.





• Energy-saving building

EGAT has launched a campaign of energy-saving in the buildings of business and industrial sectors which use a large amount of electricity. The campaign has raised the energy-saving awareness of business and industrial entrepreneurs to have more knowledge and better understanding of the efficient use of electricity in the old and new buildings of public, business, and industry. Activities to promote the efficient use of energy in the buildings are as follows:

- EGAT signed a Memorandum of Understanding with the German International Cooperation (GIZ) on October 1, 2015 to conduct a study on the supervision of energy management company (ESCO Facilitation) and the promotion of energy efficient label No.5 use for the buildings of energy conservation of business and industrial sectors. An exchange of information on energy management to be used as a guideline in energy saving and the efficient use of energy for sustainability was also made.
- During 2015-2016, in commemoration of the 60th Birthday Anniversary of Her Royal Highness Princess Maha Chakri Sirindhorn, EGAT, in cooperation with the Office of the Royal Development Project Board (ORDPB), implemented the project on replacing the old lighting equipments with LED lamps in 10 Royal Development Study Centers (RDSC) and their branches as a model for visitors to Royal Development Study Centers throughout the country. The activity could save electric energy of approximately 816,000 KWh per year and reduce carbon dioxide emission of 417 tons.
- EGAT launched a project to decrease the power demand in critical time with the Demand Response Measure which was carried out twice. With cooperation of business and industrial entrepreneurs which are direct customers of EGAT in reducing power use during the peak demand, crisis, or natural gas shortage with compensation payment from participation in the project, the peak demand could be reduced by 50.46 MW. The token of appreciation was given by EGAT in cooperation with the Energy Regulatory Commission (ERC) to the participants of the project on August 5, 2015.

• Energy-saving habit

To change the attitude and to increase awareness of consumers of energy saving, EGAT has produced public relations media for distribution through various channels according to the target groups as well as organizing activities to promote correct understanding among consumers

To build trustworthiness in the energy efficient label No. 5, the label has been developed in such a way that QR code has been added on the label to be used with 3 bulky products which are air conditioners, refrigerators, and freezers. The label gives correct information to customers who can check the products at the selling place before making decision.

According to the results from the 2015 survey on stakeholders' satisfaction with EGAT's operation made by Thammasat University Research and Consultancy Institute, EGAT projects on energy saving and energy efficient label No. 5 were the most satisfactory. Therefore, it is a confirmation of EGAT's commitment to energy saving to keep the balance use of energy for sustainable environmental conservation.



EGAT Learning Center

EGAT has an intention to establish power learning centers all over the country. The learning center will serve not only as the place to disseminate knowledge and understanding of electricity, the need for electricity generation, and EGAT's mission but also a channel to stimulate the imagination and creativity of the youth.

The construction of EGAT learning centers which will be beneficial to the youth and the general public is as follows:

EGAT Learning Center	Schedule	Budget (Million Baht)	Project Cost (Million Baht)	Status in 2015
1. Lignite Museum Education Center (Mae Moh Mine) in Honor of King Prajadhipok	2014- 2015	125.000	96.626	Under construction
2. EGAT Learning Center: Srinagarind Dam	2012 - 2013	40.000	39.698	Completed
3. EGAT Learning Center: Chana	2008-2013 (extended to 2016)	700.000	124.502	Completed
4. EGAT Learning Center : Head Office	2008 - 2013 (extended to 2016)		447.048	Under construction
5. EGAT Learning Center: Thap Sakae	2014 - 2015	137.000	86.877	Under construction
6. EGAT Learning Center: Lam Ta Khong	2016 - 2017	245.000	-	Design
7. EGAT Learning Center: San Kamphaeng	2016 - 2017		-	Design

*Remark: No. 3 and 4 under the same budget of 700 million baht
No. 6 and 7 under the same budget of 245 million baht*

In the future, in the development of the new power projects such as Krabi Power Plant or Thepha Power Plant, learning centers will be developed concurrently with those new projects.





Events



During her royal mission on elephant reintroduction at the Sap Langka Wildlife Sanctuary in Lop Buri Province on the occasion of her 60th Birthday Anniversary, Her Royal Highness Princess Maha Chakri Sirindhorn graciously presented a souvenir to Mr. Soonchai Kumnoonsate, EGAT Governor, on October 15, 2015.



Her Royal Highness Princess Maha Chakri Sirindhorn presided over the opening ceremony of Chana Power Plant in Chana District, Songkhla Province on November 9, 2015.





EGAT received the certificate of the successful implementation of the greenhouse gas reduction according to the Thai Voluntary Standard from the Thailand Greenhouse Gas Management Organization (Public Organization). The certificate presentation presided by Mr. Sunan Arunnopparat, Vice Minister of Natural Resources and Environment, was held at Centara Grand at Central Plaza Ladprao Bangkok on January 30, 2015.



The opening ceremony of EGAT Reforestation Project in commemoration of the 60th Birthday Anniversary of Her Royal Highness Princess Maha Chakri Sirindhorn was performed by Mr. Prateep Kiratirekha, Governor of Ubon Ratchathani Province, and Mr. Soonchai Kumnoonsate, EGAT Governor, at Sirindhorn Dam on April 2, 2015. Government officials, representatives of private sector, students, and the general public also participated in the event.



EGAT joined the energy reduction campaign that was presided by General Prayut Chan-o-cha, the Prime Minister, and held in front of the Headquarters Building 1 in the Government House on April 7, 2015. The aim of the campaign was to request for participation from all sectors in energy saving during the summertime.



Mr. Areepong Bhoocha-oom, Permanent Secretary for Energy, presided over the groundbreaking ceremony of Mae Moh Units 4-7 Replacement Project in Lampang Province on April 25, 2015.





In commemoration of the 60th Birthday Anniversary of Her Royal Highness Princess Maha Chakri Sirindhorn, EGAT in collaboration with the Royal Thai Marine Corps, implemented the project on a dropping of artificial reef made from insulators of high voltage transmission lines at the Marine Corps Bay at Krom Luang Chumphon Naval Base in Sattahip District of Chon Buri Province on April 29, 2015.



EGAT and its Affiliates donated 4.5 million Baht for the relief of the victims of earthquake in Nepal through the Thai government's project "From Thailand to Nepal". The donation was received by M.L. Panadda Diskul, Minister of the Prime Minister's Office and Permanent Secretary of the Prime Minister's Office, on May 6, 2015 at the Naree Samosorn Building in the Government House.



EGAT organized an international exposition on electrical technology and LED products "LED Expo Thailand 2015" which was considered to be the largest of such events in ASEAN. The exposition was held during May 21-24, 2015 at IMPACT Muang Thong Thani Exhibitions and Convention Center.



EGAT signed the Memorandum of Understanding on the seismic operation with the Meteorological Department, the Department of Mineral Resources and the Royal Irrigation Department. The signing ceremony was presided over by Mr. Pornchai Rujiprapa, Minister of Information and Communication Technology, on May 25, 2015 at the meeting room of the Meteorological Department in Bangkok.



EGAT was awarded the best organization with excellence in coal activities in “Thailand Coal Awards 2015”. The award was presented by Mr. Narongchai Akrasanee, Minister of Energy, on June 25, 2015 at Rama Gardens Hotel in Bangkok.



The Initial Public Offering of EGAT’s North Bangkok Power Plant Block 1 Infrastructure Fund (EGATIF) in the Stock Exchange of Thailand was held on July 13, 2015 at the Office of the Stock Exchange of Thailand.



Mr. Soonchai Kumnoonsate, EGAT Governor, received the “2015 Outstanding State Enterprise Award” from Mr. Somkid Jatusripitak, Deputy Prime Minister, on September 22, 2015 at the Government House. The award was given for the EGAT’s innovation of auto- alignment equipment for lignite conveyor belt of the Mae Moh Mine.





EGAT's Mae Moh Mine and Mae Moh Power Plant received 4 awards in the "ASEAN Coal Awards 2015" in the category of Mine and Power Plant held during the ASEAN Ministers of Energy Meeting (ASEAN Energy Business Forum - AEBF 2015) on October 7, 2015 in Kuala Lumpur, Malaysia.



EGAT received the outstanding award in the "Sustainability Report Award 2015" held on December 16, 2015 at the Office of the Stock Exchange of Thailand in Bangkok.





Key Statistical Data

System Installed Generating Capacity

Type of Power Plant	2015		2014		Increase/ (Decrease) Percentage
	MW	Percentage	MW	Percentage	
EGAT's Power Plants					
Thermal	3,647.00	9.39	3,647.00	10.52	-
Combined cycle	8,382.00	21.58	8,382.00	24.18	-
Hydropower	3,448.40	8.88	3,444.18	9.94	0.12
Diesel	30.40	0.08	4.40	0.01	590.91
Renewable energy	40.33	0.10	4.55	0.01	786.37
Subtotal	15,548.13	40.03	15,482.13	44.66	0.43
Purchase from					
Domestic Private Power Plants					
IPPs	14,766.70	38.02	13,166.70	37.98	12.15
SPPs	5,137.02	13.23	3,614.60	10.43	42.12
Neighboring Countries					
Laos	3,086.60	7.95	2,104.60	6.06	46.66
EGAT-TNB Interconnection System	300.00	0.77	300.00	0.87	-
Subtotal	23,290.32	59.97	19,185.90	55.34	21.39
Grand Total	38,838.45	100.00	34,668.03	100.00	12.03

Monthly Peak Generation Requirement

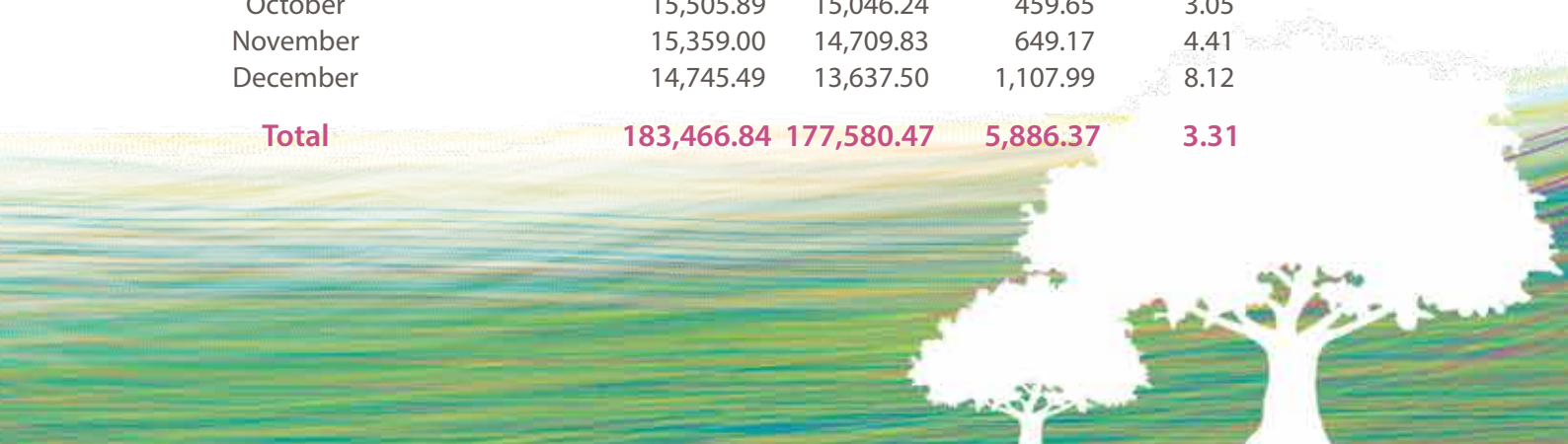
Month	Monthly Peak Generation Requirement (MW)		Increase/(Decrease)	
	2015	2014	MW	Percentage
January	23,713.40	22,556.93	1,156.47	5.13
February	24,629.50	23,658.59	970.91	4.10
March	26,072.10	26,105.94	(33.84)	(0.13)
April	27,139.00	26,942.10	196.90	0.73
May	27,198.40	26,473.30	725.10	2.74
June*	27,345.80	26,253.29	1,092.51	4.16
July	26,049.50	25,017.19	1,032.31	4.13
August	26,027.80	24,623.74	1,404.06	5.70
September	25,676.60	24,785.24	891.36	3.60
October	25,044.80	24,181.13	863.67	3.57
November	25,956.70	24,961.80	994.90	3.99
December	25,722.30	24,493.26	1,229.04	5.02
Yearly Peak Generation Requirement	27,345.80	26,942.10	403.70	1.50

*2015 peak generation requirement occurred on June 11, 2015 at 14.02 hours

*2014 peak generation requirement occurred on April 23, 2014 at 14.26 hours

Monthly Energy Generation Requirement

Month	Monthly Energy Generation Requirement (Million kWh)		Increase/(Decrease)	
	2015	2014	Million kWh	Percentage
January	13,309.26	12,709.93	599.33	4.72
February	13,329.24	13,010.96	318.28	2.45
March	16,102.09	15,819.48	282.61	1.79
April	15,138.58	15,085.20	53.38	0.35
May	16,890.77	16,424.23	466.54	2.84
June	16,084.28	15,462.91	621.37	4.02
July	15,999.13	15,457.62	541.51	3.50
August	15,662.98	15,210.71	452.27	2.97
September	15,340.13	15,005.86	334.27	2.23
October	15,505.89	15,046.24	459.65	3.05
November	15,359.00	14,709.83	649.17	4.41
December	14,745.49	13,637.50	1,107.99	8.12
Total	183,466.84	177,580.47	5,886.37	3.31





Gross Energy Generation and Purchase (by type of fuel)

Source	2015		2014		Increase/ (Decrease) Percentage
	Million kWh	Percentage	Million kWh	Percentage	
EGAT's Power Plants					
Natural gas	50,151.33	27.34	49,356.37	27.80	1.61
Coal (lignite)	15,133.93	8.25	17,347.47	9.77	(12.76)
Hydropower	3,724.16	2.03	5,141.09	2.90	(27.56)
Fuel oil and palm oil	689.74	0.38	1,428.03	0.80	(51.70)
Diesel oil	118.91	0.06	56.70	0.03	109.72
Renewable energy	21.45	0.01	6.13	0.00	250.16
EGAT's Total Generation	69,839.52	38.07	73,335.79	41.30	(4.77)
Purchase from					
Domestic Private Power Plants					
- IPPs					
Natural gas	54,594.33	29.76	49,057.52	27.62	11.29
Coal (bituminous)	15,771.94	8.60	16,334.20	9.20	(3.44)
Fuel oil	412.90	0.22	320.48	0.18	28.84
Diesel oil	72.79	0.04	64.78	0.04	12.37
Subtotal	70,851.96	38.62	65,776.98	37.04	7.72
- SPPs					
Natural gas	22,239.51	12.12	20,145.50	11.34	10.39
Coal	1,874.24	1.02	2,030.24	1.14	(7.68)
Fuel oil	25.41	0.01	25.91	0.02	(1.94)
Renewable energy	4,209.48	2.30	3,998.11	2.25	5.29
Subtotal	28,348.64	15.45	26,199.76	14.75	8.20
Neighboring Countries					
- Laos	14,288.44	7.79	12,122.90	6.83	17.86
- Malaysia	138.28	0.07	145.04	0.08	(4.66)
Subtotal	14,426.72	7.86	12,267.94	6.91	17.60
Total Energy Purchase	113,627.32	61.93	104,244.68	58.70	9.00
Grand Total	183,466.84	100.00	177,580.47	100.00	3.31

Energy Sale

Customer	2015		2014		Increase/ (Decrease) Percentage
	Million kWh	Percentage	Million kWh	Percentage	
Metropolitan Electricity Authority (MEA)	51,577.37	28.73	50,043.56	28.83	3.06
Provincial Electricity Authority (PEA)	124,376.08	69.28	120,200.48	69.24	3.47
Direct customers	1,621.66	0.90	1,593.17	0.92	1.79
Standby power supply	184.67	0.10	169.44	0.10	8.99
Electricité du Laos (EDL)	1,507.66	0.84	1,221.35	0.70	23.44
Tenaga Nasional Berhad (TNB) - Malaysia	122.59	0.07	22.36	0.01	448.26
Electricité du Cambodge (EDC)	138.64	0.08	350.07	0.20	(60.40)
Other minor customers	8.72	0.00	3.38	0.00	157.99
Total	179,537.39	100.00	173,603.81	100.00	3.42

Average Energy Sales Price

Customer	2015	2014	Increase/ (Decrease) Percentage
	Baht/kWh	Baht/kWh	
Metropolitan Electricity Authority (MEA)	3.00	3.17	(5.41)
Provincial Electricity Authority (PEA)	2.94	3.10	(4.92)
Direct customers	3.15	3.30	(4.57)
Standby power supply	5.19	5.46	(4.91)
Electricité du Laos (EDL)	1.59	1.60	(0.75)
Tenaga Nasional Berhad (TNB) - Malaysia	4.58	8.40	(45.45)
Electricité du Cambodge (EDC)	3.69	3.78	(2.36)
Overseas independent power producers	4.15	3.63	14.15
Other minor customers	4.65	3.97	16.92
Overall Average Sales Price	2.96	3.11	(5.11)





Transmission System

Voltage Level (kV)	2015			2014		
	Line Length (Circuit-Kilometers)	Number of Substations	Transformer Capacity (MVA)	Line Length (Circuit-Kilometers)	Number of Substations	Transformer Capacity (MVA)
500	4,987.72	13	23,199.99	4,167.17	11	20,849.99
230	14,142.75	76	56,060.04	14,605.12	71	52,460.04
132	8.70	-	133.40	8.70	-	133.40
115	13,812.64	126	14,579.99	13,703.93	131	14,629.99
69	18.80	-	-	19.00	-	-
300 (HVDC)	23.07	-	388.02	23.07	-	388.02
Total	32,993.68	215	94,361.44	32,526.99	213	88,461.44

Fuel Consumption

Type of Fuel	Consumption		Increase/(Decrease) Percentage
	2015	2014	
Natural gas (million cubic feet)			
- EGAT	409,151.60	416,297.35	(1.72)
- IPPs	458,084.22	414,386.84	10.55
Total	867,235.82	830,684.19	4.40
Fuel oil (million liters)			
- EGAT	177.61	377.38	(52.93)
- IPPs	91.41	80.53	13.50
Total	269.02	457.91	(41.25)
Coal (million tons)			
- EGAT	14.36	17.02	(15.64)
- IPPs	6.20	6.31	(1.79)
Total	20.56	23.33	(11.89)
Diesel oil (million liters)			
- EGAT	12.80	20.83	(38.54)
- IPPs	12.66	16.82	(24.72)
Total	25.46	37.65	(32.37)

Reservoir Operation

Operation	2015	2014	Increase/ (Decrease) Percentage
Total reservoir capacity (million cubic meters) *	62,427	62,427	-
Total storage at year end (million cubic meters) *	36,174	39,980	(9.52)
Total water inflow (million cubic meters) *	22,679	27,241	(16.75)
Total water release (million cubic meters) *			
- Passed through generators	19,681	29,865	(34.10)
- Extra release through spillways	40	485	(91.84)
- Extra release for irrigation	518	775	(33.22)
- Evaporation	2,903	3,121	(6.99)
Total water release	23,141	34,246	(32.43)
Water pumped up into the upper reservoir (million cubic meters) **	487	466	4.48
Generated energy (million kWh) ***	3,740	5,139	(27.22)
Water used for energy generation (cubic meters/kWh)	5.28	5.87	(9.97)

* Excluding Pak Mun Dam, Lam Ta Khong Dam, and other mini hydropower plants

** Water pumped up into Bhumibol Dam, Srinagarind Dam, and Lam Ta Khong Dam

*** All of EGAT's hydropower plants





Greenhouse Gas Management

Greenhouse Gas Emission Reduction from the Efficiency Improvement in Electricity Generation of Mae Moh Power Plant, Units 8-12 (2013-2014)

Mae Moh Power plant Unit	Base Year	Thermal Energy per Electrical Unit (MJ/MWh)			Net Electricity Generation (MWh)		Coefficient of Greenhouse Gas Emission ¹ (kgCO ₂ e/MJ)	Greenhouse Gas Emission Reduction (tCO ₂ e)	
		The year prior to the efficiency improvement (Base year)	The year in which the assessment was conducted (2014)	The year in which the assessment was conducted (2013)	2014	2013		2014	2013
8	2007	9,816.75	9,791.42	9,414.78	2,809,849	2,256,779	0.1010	7,188	91,622
9	2006	9,952.45	9,608.10	9,263.69	2,071,003	2,275,286	0.1010	72,026	158,279
10	2008	10,031.48	9,847.26	9,624.82	2,316,291	2,152,992	0.1010	43,096	88,429
11	2008	10,023.25	9,705.43	9,620.63	2,144,041	2,071,155	0.1010	68,823	84,221
12	2012	10,077.30	9,664.68	-	2,329,682	-	0.1010	97,090	-
GHG Emission Reduction of Units 8-12 (tCO₂e)								288,223	422,551

¹2006 IPCC Guidelines for National Greenhouse Gas Inventories, Volume 2: Energy, Table 1.4

Assessment of Greenhouse Gas Emission Reduction from Renewable Energy in 2014

Type	Electricity Generation ¹ (MWh)	Coefficient of Greenhouse Gas Emission ² (tCO ₂ /MWh)	Greenhouse Gas Emission Reduction (tCO ₂ e)
Hydropower	5,141,087.18	0.5715	2,938,131
Wind power	2,702.86	0.5715	1,545
Solar energy	2,037.87	0.5715	1,165
Total	5,145,827.92		2,940,841

¹ Report on the electricity generation and electricity purchase in 2014 of the Electricity Generating Authority of Thailand (EGAT)

² Report on the calculation of the coefficient of greenhouse gas emission of the transmission system for NAMAS in energy sector in 2014

Greenhouse Gas Emission Reduction By EGAT's Measures

Measure	Greenhouse Gas Emission Reduction (tCO ₂ e)	
	2014	2013
Efficiency improvement in electricity generation of the power plant	288,223	422,551
Electricity generation from renewable energy	2,940,841	-
Total	3,229,064	422,551

Workforce

Educational Level	at December 2015		at December 2014		Increase/ (Decrease) Percentage
	Number of Persons	Percentage	Number of Persons	Percentage	
Bachelor's Degree and Higher	8,380	36.79	8,084	35.27	3.66
Diploma/Higher Vocational Certificate	8,615	37.82	8,453	36.88	1.92
Vocational Certificate	2,678	11.76	2,882	12.57	(7.08)
Others	3,103	13.62	3,501	15.27	(11.37)
Total	22,776	100.00	22,920	100.00	(0.63)





“Energy balance”

embraces two aspects that are the development of secure and reliable power in response to the economic and social growth

and the environmentally-friendly energy development on a long-term basis.





Auditor's Report

(TRANSLATION)

To : The Board of Directors of Electricity Generating Authority of Thailand

The Office of the Auditor General of Thailand has audited the accompanying consolidated financial statements of Electricity Generating Authority of Thailand and its subsidiaries, and separate financial statements of Electricity Generating Authority of Thailand, which comprise the consolidated and separate statements of financial position as at December 31, 2015, and the consolidated and separate statements of income, the consolidated and separate statements of comprehensive income, the consolidated and separate statements of changes in owners' equity and the consolidated and separate statements of cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated and Separate Financial Statements

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

Auditor's Responsibility

The Office of the Auditor General of Thailand's responsibility is to express an opinion on these consolidated and separate financial statements based on the audit. The Office of the Auditor General of Thailand conducted the audit in accordance with Thai Standards on Auditing. Those standards require that the Office of the Auditor General of Thailand comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated and separate financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated and separate financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated and separate financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated and separate financial statements 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 entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated and separate financial statements.

Office of the Auditor General

March 21, 2016



The Office of the Auditor General of Thailand believes that the audit evidence the Office of the Auditor General of Thailand has obtained is sufficient and appropriate to provide a basis for the Office of the Auditor General of Thailand's audit opinion.

Opinion

In The Office of the Auditor General of Thailand's opinion, the above mentioned consolidated and separate financial statements present fairly, in all material respects, the consolidated financial position of Electricity Generating Authority of Thailand and its subsidiaries, and separate financial position of Electricity Generating Authority of Thailand, respectively, as at December 31, 2015, and their consolidated and separate financial performance and cash flows for the year then ended in accordance with Thai Financial Reporting Standards.

(Signed) Sirin Phankasem

Deputy Auditor General

(Sirin Phankasem)

Director of Financial Audit Office No. 8.

Office of the Auditor General

March 21, 2016





Financial Statements

ELECTRICITY GENERATING AUTHORITY OF THAILAND AND ITS SUBSIDIARIES

STATEMENTS OF FINANCIAL POSITION

AS AT DECEMBER 31, 2015

Unit : Baht

	Notes	Consolidated financial statement		Separate financial statement	
		Dec 31, 15	Dec 31, 14 (Restated)	Dec 31, 15	Dec 31, 14
ASSETS					
CURRENT ASSETS					
Cash and cash equivalents	6.1	72,647,548,544	62,646,069,258	64,932,129,035	51,832,088,359
Temporary investments	6.2	30,403,119,804	28,913,145,753	23,869,298,227	24,014,555,179
Trade accounts receivable - others	6.3	63,056,150,509	63,158,336,273	62,517,522,610	62,731,676,854
Trade accounts receivable - related parties	6.4.1	1,807,499,712	2,541,045,879	2,303,805,798	2,898,377,884
Other accounts receivable	6.6	10,190,145,618	7,456,742,881	9,419,911,207	7,054,532,164
Materials and supplies	6.7	12,092,490,602	13,382,524,484	10,141,786,762	10,725,339,295
Other current assets					
Others		1,789,129,656	1,807,343,030	-	-
Total current assets		191,986,084,445	179,905,207,558	173,184,453,639	159,256,569,735
NON - CURRENT ASSETS					
Investments in subsidiaries	6.8.4	-	-	12,913,350,000	11,167,350,000
Investments in associates	6.8.3, 6.8.4	20,862,950,612	19,904,547,926	1,587,550,233	1,587,550,233
Investments in joint ventures	6.8.3, 6.8.4	16,755,326,356	10,535,687,888	584,500,000	584,500,000
Other long - term investments		10,099,986,459	4,064,689,625	5,370,162,500	-
Long - term loans to related parties	6.4.2	47,294,940	43,195,812	-	-
Finance lease assets		285,272,614,493	178,108,306,597	285,272,614,493	178,108,306,597
Property, plant and equipment	6.9	273,251,440,038	259,020,269,678	259,366,264,470	244,109,227,418
Work under construction	6.10	35,674,128,851	45,600,873,587	35,671,208,851	45,590,905,814
Goodwill	6.11	299,469,555	273,532,776	-	-
Other intangible assets	6.12	28,858,624,653	28,636,411,334	24,770,216,511	24,251,627,818
Land awaiting development	6.13	2,125,289,755	2,134,160,622	1,816,082,185	1,816,082,185
Project development cost for collection		473,754,681	344,983,683	-	-
Deferred tax assets	6.14.2	107,382,133	51,617,195	-	-
Deposit for deferred revenue for electricity compensation		7,383,135,509	3,288,003,586	7,383,135,509	3,288,003,586
Other non - current assets	6.15	3,427,918,257	3,053,554,414	2,418,864,547	1,523,686,059
Total non - current assets		684,639,316,292	555,059,834,723	637,153,949,299	512,027,239,710
TOTAL ASSETS		876,625,400,737	734,965,042,281	810,338,402,938	671,283,809,445

Notes to the financial statements are an integral part of these financial statements.

ELECTRICITY GENERATING AUTHORITY OF THAILAND AND ITS SUBSIDIARIES
STATEMENTS OF FINANCIAL POSITION
AS AT DECEMBER 31, 2015

Unit : Baht

	Notes	Consolidated financial statement		Separate financial statement	
		Dec 31, 15	Dec 31, 14 (Restated)	Dec 31, 15	Dec 31, 14
LIABILITIES AND EQUITY					
CURRENT LIABILITIES					
Trade accounts payable - others	6.16	52,698,139,594	54,503,087,480	45,716,636,792	45,693,812,700
Trade accounts payable - related parties	6.4.3	8,285,578,968	7,610,728,910	16,559,695,125	17,968,105,954
Surplus revenue from electric energy sales					
according to automatic tariff adjustment (Ft)	6.5	7,022,818,454	4,872,377,719	7,022,818,454	4,872,377,719
Other accounts payable		10,717,727,170	10,840,089,778	9,666,654,151	9,236,264,176
Short - term loans		1,900,000,000	4,800,000,000	-	-
Accrued interest expenses		1,514,231,946	1,189,752,792	1,128,913,791	878,695,528
Accrued remittance to the Ministry of Finance	6.17	6,213,985,440	8,380,707,819	6,213,985,440	8,380,707,819
Accrued expenses		5,725,683,555	5,203,300,540	5,710,022,905	5,187,061,774
Current portion of long - term loans	6.18	6,814,543,369	8,827,995,292	5,584,598,046	8,076,716,135
Current portion of loan from infrastructure fund	12	414,476,205	-	414,476,205	-
Current portion of finance lease liabilities - Power plants	6.19	14,576,950,225	10,221,931,977	17,772,499,641	13,649,524,047
Current portion of finance lease liabilities - others		10,608,887	3,667,464	9,831,130	2,051,705
Other current liabilities					
Others		42,419,509	68,050,678	-	-
Total current liabilities		115,937,163,322	116,521,690,449	115,800,131,680	113,945,317,557
NON - CURRENT LIABILITIES					
Long - term loans from related parties	6.4.4	1,071,599,090	1,095,464,557	-	-
Long - term loans	6.18	67,930,136,853	71,950,949,302	50,607,867,530	56,203,902,463
Loan from infrastructure fund	12	20,440,523,795	-	20,440,523,795	-
Advance receive from related party		-	7,903,089	-	-
Deferred tax liabilities	6.14.2	1,958,311,454	1,765,326,301	-	-
Finance lease liabilities - Power plants	6.19	250,600,764,035	136,395,267,311	275,596,009,579	164,586,062,271
Finance lease liabilities - others		42,765,175	2,451,454	41,430,378	422,900
Employee benefit obligations	6.20	15,396,261,912	14,579,788,228	15,269,984,842	14,469,212,516
Provision liabilities for mine reclamation	6.21	2,169,269,052	2,141,000,116	2,169,269,052	2,141,000,116
Deferred revenue for electricity compensation	6.5	7,552,733,132	3,386,830,541	7,552,733,132	3,386,830,541
Other non - current liabilities	6.22	12,961,444,366	14,255,018,674	12,918,151,932	13,923,916,258
Total non - current liabilities		380,123,808,864	245,579,999,573	384,595,970,240	254,711,347,065
TOTAL LIABILITIES		496,060,972,186	362,101,690,022	500,396,101,920	368,656,664,622

Notes to the financial statements are an integral part of these financial statements.



ELECTRICITY GENERATING AUTHORITY OF THAILAND AND ITS SUBSIDIARIES
STATEMENTS OF FINANCIAL POSITION
AS AT DECEMBER 31, 2015

Unit : Baht

	Notes	Consolidated financial statement		Separate financial statement	
		Dec 31, 15	Dec 31, 14 (Restated)	Dec 31, 15	Dec 31, 14
LIABILITIES AND EQUITY					
OWNERS' EQUITY					
Contribution from the government	6.23	8,877,312,290	8,939,645,054	8,877,312,290	8,939,645,054
Surplus from royalty on state property service		207,548,321	213,885,677	207,548,321	213,885,677
Retained earnings					
Appropriated					
Capital expenditure appropriation		80,186,366,913	80,186,366,913	80,186,366,913	80,186,366,913
Unappropriated		256,438,981,712	248,361,039,089	222,404,360,917	214,725,053,427
Other components of owners' equity		1,283,282,466	1,077,881,054	(1,733,287,423)	(1,437,806,248)
TOTAL EQUITY ATTRIBUTABLE TO EGAT		346,993,491,702	338,778,817,787	309,942,301,018	302,627,144,823
NON - CONTROLLING INTERESTS		33,570,936,849	34,084,534,472	-	-
TOTAL OWNERS' EQUITY		380,564,428,551	372,863,352,259	309,942,301,018	302,627,144,823
TOTAL LIABILITIES AND OWNERS' EQUITY		876,625,400,737	734,965,042,281	810,338,402,938	671,283,809,445

Notes to the financial statements are an integral part of these financial statements.

(signed) Soonchai Kumnoonsate
(Mr. Soonchai Kumnoonsate)
Director and Governor

(signed) Chartchai Rojanaratanangkule
(Mr. Chartchai Rojanaratanangkule)
Deputy Governor - Account and Finance

ELECTRICITY GENERATING AUTHORITY OF THAILAND AND ITS SUBSIDIARIES
STATEMENTS OF INCOME
FOR THE YEAR ENDED DECEMBER 31, 2015

		Unit : Baht			
<u>Notes</u>	<u>Consolidated financial statement</u>		<u>Separate financial statement</u>		
	2015	2014 (Restated)	2015	2014	
REVENUES					
Revenue from electric energy sales	531,713,218,510	535,911,514,659	529,615,089,755	533,786,404,632	
Revenue from sales of other goods and services	6.24 14,767,114,889	21,168,666,895	16,684,299,779	23,385,655,408	
Total revenue from sales and services	546,480,333,399	557,080,181,554	546,299,389,534	557,172,060,040	
COST OF SALES					
Cost of electric energy sales	6.25 444,390,686,106	459,664,473,180	443,972,498,169	459,204,806,181	
Cost of sales of other goods and services	6.26 13,047,887,756	19,480,726,843	14,968,419,751	21,870,922,876	
Total cost of sales and services	457,438,573,862	479,145,200,023	458,940,917,920	481,075,729,057	
GROSS PROFIT	89,041,759,537	77,934,981,531	87,358,471,614	76,096,330,983	
OTHER REVENUES	6.27 3,399,952,590	6,572,582,114	4,875,792,910	6,323,389,785	
PROFIT BEFORE EXPENSES	92,441,712,127	84,507,563,645	92,234,264,524	82,419,720,768	
SELLING EXPENSES	190,528,879	148,585,269	186,704,345	146,353,489	
ADMINISTRATIVE EXPENSES	16,675,736,758	16,937,713,690	14,915,556,003	14,664,043,570	
OTHER EXPENSES	6.28 12,030,597,918	455,628,286	11,016,177,150	332,096,719	
TOTAL EXPENSES	28,896,863,555	17,541,927,245	26,118,437,498	15,142,493,778	
FINANCE COSTS	6.29 31,697,894,960	25,679,054,425	35,335,579,946	29,700,173,346	
PROFIT BEFORE SHARE OF PROFIT FROM INVESTMENTS	31,846,953,612	41,286,581,975	30,780,247,080	37,577,053,644	
SHARE OF PROFIT FROM INVESTMENTS IN ASSOCIATES	6.30 1,409,724,057	1,387,428,327	-	-	
SHARE OF PROFIT FROM INVESTMENTS IN JOINT VENTURES	908,930,197	1,079,086,396	-	-	
PROFIT BEFORE INCOME TAXES	34,165,607,866	43,753,096,698	30,780,247,080	37,577,053,644	
INCOME TAXES	6.14.1 1,407,724,577	1,269,377,123	-	-	
PROFIT FOR THE YEAR	32,757,883,289	42,483,719,575	30,780,247,080	37,577,053,644	
PROFIT (LOSS) ATTRIBUTABLE TO:					
OWNERS OF EGAT	31,178,882,213	39,162,180,875	30,780,247,080	37,577,053,644	
NON - CONTROLLING INTERESTS	1,579,001,076	3,321,538,700	-	-	
	32,757,883,289	42,483,719,575	30,780,247,080	37,577,053,644	

Notes to the financial statements are an integral part of these financial statements.

(signed) Soonchai Kumnoonsate

(Mr. Soonchai Kumnoonsate)
 Director and Governor

(signed) Chartchai Rojanaratanangkule

(Mr. Chartchai Rojanaratanangkule)
 Deputy Governor - Account and Finance



ELECTRICITY GENERATING AUTHORITY OF THAILAND AND ITS SUBSIDIARIES
STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEAR ENDED DECEMBER 31, 2015

Unit : Baht

	Consolidated financial statement		Separate financial statement	
	2015	2014 (Restated)	2015	2014
PROFIT FOR THE YEAR	32,757,883,289	42,483,719,575	30,780,247,080	37,577,053,644
OTHER COMPREHENSIVE INCOME (LOSS)				
ITEMS THAT MAY BE RECLASSIFIED TO PROFIT OR LOSS IN SUBSEQUENT PERIODS				
Exchange rate differences from currency translation	101,667,509	(1,194,128,786)	-	-
Loss on cash flow hedge	(117,768,649)	(105,465,824)	-	-
Gain (loss) on available - for - sale investments valuation	(372,198,253)	567,381,248	156,412,500	-
Share of other comprehensive income (loss) of associates	780,630,511	(104,925,206)	-	-
Share of other comprehensive income (loss) of joint ventures	(94,970)	78,056	-	-
ITEMS THAT WILL NOT BE RECLASSIFIED TO PROFIT OR LOSS IN SUBSEQUENT PERIODS				
Actuarial loss	(450,316,233)	(359,822)	(451,893,675)	-
Share of other comprehensive loss of associates	(19,727,168)	-	-	-
Share of other comprehensive income of joint ventures	934,966	-	-	-
OTHER COMPREHENSIVE INCOME (LOSS)				
FOR THE YEAR-NET OF TAXES	(76,872,287)	(837,420,334)	(295,481,175)	-
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	32,681,011,002	41,646,299,241	30,484,765,905	37,577,053,644
PROFIT (LOSS) ATTRIBUTABLE TO:				
OWNERS OF EGAT	31,384,283,625	38,781,663,563	30,484,765,905	37,577,053,644
NON - CONTROLLING INTERESTS	1,296,727,377	2,864,635,678	-	-
	32,681,011,002	41,646,299,241	30,484,765,905	37,577,053,644

Notes to the financial statements are an integral part of these financial statements.

(signed) Soonchai Kumnoonsate

(Mr. Soonchai Kumnoonsate)

Director and Governor

(signed) Chartchai Rojanaratanangkule

(Mr. Chartchai Rojanaratanangkule)

Deputy Governor - Account and Finance

ELECTRICITY GENERATING AUTHORITY OF THAILAND AND ITS SUBSIDIARIES
STATEMENTS OF CHANGES IN EQUITY
FOR THE YEAR ENDED DECEMBER 31, 2015

Consolidated financial statement

	Equity attributable to EGAT													Total owners' equity		
	Notes	Retained earnings		Other components of owners' equity							Total EGAT's equity	Non - controlling interests	Total owners' equity			
		Surplus from royalty on state property service	Appropriated	Unappropriated	Exchange rate differences from currency translation	Loss on cash flow hedges	Gain (loss) on available - for - sale investments	Actuarial loss	Surplus on subsidiaries and associates using equity method	Share of other comprehensive income (loss) of associates					Share of other comprehensive income (loss) of joint ventures	Total other components of owners' equity
		Contribution from the government	8,011,977,817	227,449,968,641												
Balance as at January 1, 2014 (Before adjustment)		9,001,977,817	80,186,366,913	227,449,968,641	(703,709,471)	-	354,603,105	(1,435,190,226)	2,886,909,938	485,380,717	-	1,557,994,063	318,416,330,467	33,126,549,466	351,543,079,933	
Cumulative effect of the adjustment	5	-	-	106,383,130	-	-	-	-	-	(99,595,697)	-	(99,595,697)	6,787,433	-	6,787,433	
Cumulative effect of the reclassification	5	-	-	-	-	-	21,913	-	-	-	(2,913)	-	-	-	-	
Balance as at January 1, 2014 (Adjusted)		9,001,977,817	80,186,366,913	227,556,351,771	(703,709,471)	-	354,625,018	(1,435,190,226)	2,886,909,938	355,785,020	-	1,458,398,366	318,423,317,900	33,126,549,466	351,549,867,366	
Depreciation of assets for irrigation	6.23	(62,332,764)	-	-	-	-	-	-	-	-	-	-	(62,332,763)	-	(62,332,763)	
Remittance to the Ministry of Finance		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Increase of the year 2013		-	-	(28,828,065)	-	-	-	-	-	-	-	-	(28,828,065)	-	(28,828,065)	
The year 2014 (Jan 1 - Jun 30, 2014)		-	-	(10,559,095,029)	-	-	-	-	-	-	-	-	(10,559,095,029)	-	(10,559,095,029)	
Provision for remittance to the Ministry of Finance		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
The year 2014 (Jul 1 - Dec 31, 2014)		-	-	(8,380,707,819)	-	-	-	-	-	-	-	-	(8,380,707,819)	-	(8,380,707,819)	
Changes in owners' equity for the year		-	-	(18,968,630,913)	-	-	-	-	-	-	-	-	(18,968,630,913)	-	(18,968,630,913)	
Decrease in non - controlling interests of subsidiaries		-	-	-	-	-	-	-	-	-	-	-	-	(96,328,672)	(96,328,672)	
Dividends paid		-	-	-	-	-	-	-	-	-	-	-	-	(18,103,255,000)	(18,103,255,000)	
Amortization of surplus from royalty on state property service		-	-	6,337,356	-	-	-	-	-	-	-	-	-	-	-	
Final judgment of contentious litigation adjustment		-	-	604,800,000	-	-	-	-	-	-	-	-	604,800,000	-	604,800,000	
Total comprehensive income (loss) for the year		-	-	39,062,180,875	(425,363,980)	(105,465,824)	255,321,562	(161,920)	2,886,909,938	(104,925,206)	78,056	(380,517,312)	38,781,665,563	2,864,635,678	41,646,299,241	
Balance as at December 31, 2014		8,939,645,054	80,186,366,913	228,361,039,089	(1,129,073,451)	(105,465,824)	609,946,580	(1,435,352,140)	2,886,909,938	250,859,814	56,143	1,077,881,054	338,778,817,787	34,084,534,472	372,863,352,259	
Balance as at January 1, 2015 (Before adjustment)		8,939,645,054	80,186,366,913	247,911,016,135	(1,129,073,451)	(105,465,824)	610,002,723	(1,435,352,140)	2,886,909,938	339,700,107	-	1,166,721,347	338,417,635,126	34,084,534,472	372,502,169,598	
Cumulative effect of the adjustment	5	-	-	450,022,954	-	-	-	-	-	(88,840,293)	-	(88,840,293)	361,182,661	-	361,182,661	
Cumulative effect of the reclassification	5	-	-	-	-	-	(56,143)	-	-	-	56,143	-	-	-	-	
Balance as at January 1, 2015 (Adjusted)		8,939,645,054	80,186,366,913	248,361,039,089	(1,129,073,451)	(105,465,824)	609,946,580	(1,435,352,140)	2,886,909,938	250,859,814	56,143	1,077,881,054	338,778,817,787	34,084,534,472	372,863,352,259	
Depreciation of assets for irrigation	6.23	(62,332,764)	-	-	-	-	-	-	-	-	-	-	(62,332,764)	-	(62,332,764)	
Remittance to the Ministry of Finance		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Increase of the year 2014		-	-	(7,060,197,151)	-	-	-	-	-	-	-	-	(7,060,197,151)	-	(7,060,197,151)	
The year 2015 (Jan 1 - Jun 30, 2015)		-	-	(9,833,094,355)	-	-	-	-	-	-	-	-	(9,833,094,355)	-	(9,833,094,355)	
Provision for remittance to the Ministry of Finance		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
The year 2015 (Jul 1 - Dec 31, 2015)		-	-	(23,107,276,946)	-	-	-	-	-	-	-	-	(23,107,276,946)	-	(23,107,276,946)	
Changes in owners' equity for the year		-	-	(30,000,568,452)	-	-	-	-	-	-	-	-	(30,000,568,452)	-	(30,000,568,452)	
Dividends paid		-	-	6,337,356	-	-	-	-	-	-	-	-	6,337,356	-	6,337,356	
Amortization of surplus from royalty on state property service		-	-	31,788,822,213	94,225,286	(117,768,649)	(81,462,339)	(451,183,826)	-	760,903,343	687,597	205,401,412	31,384,235,625	1,296,727,377	32,681,011,002	
Total comprehensive income (loss) for the year		-	-	256,438,981,712	(1,034,848,165)	(223,234,473)	528,884,241	(1,886,535,972)	2,886,909,938	1,011,703,157	743,740	1,283,292,466	346,693,491,702	33,570,936,849	380,864,428,551	
Balance as at December 31, 2015		8,877,312,290	80,186,366,913	256,438,981,712	(1,034,848,165)	(223,234,473)	528,884,241	(1,886,535,972)	2,886,909,938	1,011,703,157	743,740	1,283,292,466	346,693,491,702	33,570,936,849	380,864,428,551	

Notes to the financial statements are an integral part of these financial statements.

ELECTRICITY GENERATING AUTHORITY OF THAILAND AND ITS SUBSIDIARIES

STATEMENTS OF CHANGES IN EQUITY

FOR THE YEAR ENDED DECEMBER 31, 2015

Separate financial statement

Notes	Separate financial statement							Unit : Baht Total owners' equity
	Contribution from the government	Surplus from royalty on state property service	Retained earnings		Other components of owners' equity		Total other components of owners' equity	
			Appropriated	Unappropriated	Gain on available - for - sale investments valuation	Other comprehensive income (loss)		
6.23	9,001,977,817 (62,332,763)	220,223,033	80,186,366,913	195,505,493,340	-	(1,437,806,248)	(1,437,806,248)	283,476,254,855 (62,332,763)
	-	-	-	(28,828,065)	-	-	-	(28,828,065)
	-	-	-	(10,559,095,029)	-	-	-	(10,559,095,029)
	-	-	-	(8,380,707,819)	-	-	-	(8,380,707,819)
	-	-	-	(18,968,630,913)	-	-	-	(18,968,630,913)
	-	(6,337,356)	-	6,337,356	-	-	-	-
	-	-	-	604,800,000	-	-	-	604,800,000
	-	-	-	37,577,053,644	-	-	-	37,577,053,644
	8,939,645,054	213,885,677	80,186,366,913	214,725,053,427	-	(1,437,806,248)	(1,437,806,248)	302,627,144,823
	8,939,645,054	213,885,677	80,186,366,913	214,725,053,427	-	(1,437,806,248)	(1,437,806,248)	302,627,144,823
6.23	(62,332,764)	-	-	-	-	-	-	(62,332,764)
	-	-	-	(7,060,197,151)	-	-	-	(7,060,197,151)
	-	-	-	(9,833,094,355)	-	-	-	(9,833,094,355)
	-	-	-	(6,213,985,440)	-	-	-	(6,213,985,440)
	-	-	-	(23,107,276,946)	-	-	-	(23,107,276,946)
	-	(6,337,356)	-	6,337,356	-	-	-	-
	-	-	-	30,780,247,080	156,412,500	(451,893,675)	(295,481,175)	30,484,765,905
	8,877,312,290	207,548,321	80,186,366,913	222,404,360,917	156,412,500	(1,889,699,923)	(1,733,287,423)	309,942,301,018

Notes to the financial statements are an integral part of these financial statements.

ELECTRICITY GENERATING AUTHORITY OF THAILAND AND ITS SUBSIDIARIES
STATEMENTS OF CASH FLOWS
FOR THE YEAR ENDED DECEMBER 31, 2015

Unit : Baht

	Notes	Consolidated financial statement		Separate financial statement	
		2015	2014 (Restated)	2015	2014
CASH FLOWS FROM OPERATING ACTIVITIES					
Net income of EGAT		31,178,882,213	39,162,180,875	30,780,247,080	37,577,053,644
Adjustments to reconcile net income to net cash inflow (outflow)					
from operating activities					
Depreciation		25,261,125,822	25,572,382,972	24,212,338,221	24,459,091,934
Depreciation of finance lease assets - Power plants	6.32	13,164,672,950	11,336,178,674	13,164,672,950	11,336,178,674
Donation assets		(14,590)	-	(14,590)	-
Loss on donated assets		851,923	9,228,715	851,923	9,228,715
Amortization of land rights and project development rights		265,979,681	296,121,074	896,061	853,727
Amortization of computer software rights		236,429,935	235,643,669	219,763,750	218,758,129
Amortization of royalty on state property service		6,337,356	6,337,356	6,337,356	6,337,356
Amortization of transmission system connection rights		3,014,155	3,712,103	-	-
Allowance for diminution in value of inventories, materials and supplies		356,380,953	348,710,244	148,428,385	145,712,215
Loss on impairment of property, plant and equipment		-	134,176,015	-	-
Loss on impairment of goodwill		-	375,367,356	-	-
Amortization of deferred charges of the lignite mine		5,926,443,274	6,108,101,571	5,926,443,274	6,108,101,571
Doubtful debts		(591,836)	(7,802,704)	(591,836)	(7,802,704)
Bad debts		605,512	6,983,411	605,512	6,983,411
(Gain) loss on revaluation of investments in trading securities		723,799	(2,113,492)	-	-
Gain on disposal of investments in joint ventures		-	(10,942,000)	-	-
(Profit) loss on disposal of assets	6.27,6.28	(119,917,379)	(277,412,441)	2,530,120	(277,609,858)
Revenue from deferred income	6.22	(347,191,727)	(311,013,901)	(347,191,727)	(311,013,901)
Employee benefit expense realized from estimates		1,137,037,387	1,009,046,154	1,117,306,186	989,773,618
Actuarial gain	6.20	(1,892,276)	(94,395)	(1,892,276)	-
(Gain) loss on foreign exchange	6.27,6.28	1,587,414,414	(1,045,563,838)	419,755,696	(675,369,678)
Loss on foreign exchange under finance leases - Power plants	6.28	10,429,118,648	271,350,916	10,579,826,478	276,781,686
Gain on changes in the fair value of derivatives	6.27	(140,626,844)	(107,615,802)	(140,626,844)	(107,615,802)
Loss on bargain purchase of a subsidiary.		-	825,375,928	-	-
Loss on disposal of investments in subsidiary		-	142,113,794	-	-
Dividends received from associates	6.8.4	-	-	(836,085,388)	(836,085,388)
Dividends received from subsidiary	6.8.4	-	-	(1,481,175,000)	(1,481,175,000)
Dividends received from joint venture	6.8.4	-	-	(15,360,660)	-
Dividends received from other investments		(269,418,991)	(235,951,209)	(57,351,250)	-
Share of profit from investments in associates		(1,409,724,057)	(1,387,428,327)	-	-
Share of profit from investments in joint ventures		(908,930,197)	(1,079,086,396)	-	-
Net income attributable to non - controlling interests		1,579,001,076	3,321,538,700	-	-
Interest income		(1,791,064,573)	(1,954,574,066)	(1,372,795,126)	(1,647,741,080)
Finance costs		4,406,911,230	4,408,861,404	3,016,661,249	2,924,282,826
Interest expenses under finance leases - Power plants		27,290,983,730	21,229,109,420	32,318,918,696	26,774,341,382
Income taxes		1,407,724,577	1,269,377,123	-	-
Reversal of provision liabilities and others		32,103,584	-	-	-
Net income from operating activities before changes in operating assets and liabilities		119,282,369,749	109,652,298,903	117,662,498,240	105,489,065,477

Notes to the financial statements are an integral part of these financial statements.



ELECTRICITY GENERATING AUTHORITY OF THAILAND AND ITS SUBSIDIARIES
STATEMENTS OF CASH FLOWS
FOR THE YEAR ENDED DECEMBER 31, 2015

	Notes	Unit : Baht			
		Consolidated financial statement		Separate financial statement	
		2015	2014 (Restated)	2015	2014
CASH FLOWS FROM OPERATING ACTIVITIES (CONTINUE)					
Changes in operating assets (Increase) Decrease					
Trade accounts receivable		836,841,874	(5,778,564,214)	809,836,272	(6,162,156,263)
Other accounts receivable		677,877,862	(257,612,684)	1,165,007,804	(476,205,357)
Materials and supplies		1,028,514,949	(304,728,602)	500,574,241	(286,500,722)
Other current assets		179,967,438	(1,655,188,380)	-	-
Deposit for deferred revenue for electricity compensation		(4,095,131,924)	(1,155,137,591)	(4,095,131,924)	(1,155,137,591)
Other non - current assets		(440,994,270)	(153,220,924)	(963,738,147)	(19,289,061)
Deferred charges of the lignite mine		(5,857,883,614)	(6,031,066,636)	(5,857,883,614)	(6,031,066,636)
Changes in operating liabilities Increase (Decrease)					
Trade accounts payable		1,032,079,267	(6,818,757,430)	771,167,576	(6,494,948,832)
Other accounts payable		(745,209,296)	1,934,528,038	300,673,106	1,397,046,224
Long - term advance receive from related party		(7,903,089)	7,903,089	-	-
Other current liabilities		(25,631,168)	(1,078,856,211)	-	-
Accrued expenses		517,188,500	17,854,237	522,961,131	(13,070,421)
Other non - current liabilities		426,915,534	129,566,668	(833,670,500)	789,985,016
Actual payment on employee benefit		(813,143,105)	(526,996,110)	(810,762,545)	(516,663,638)
Deferred revenue for electricity compensation		4,165,902,592	1,155,486,630	4,165,902,592	1,155,486,630
Provision liabilities for mine reclamation		37,044,373	67,749,836	37,044,373	67,749,836
		<u>(3,083,564,077)</u>	<u>(20,447,040,284)</u>	<u>(4,288,019,635)</u>	<u>(17,744,770,815)</u>
Cash receipts from operating		116,198,805,672	89,205,258,619	113,374,478,605	87,744,294,662
Cash receipts on interest		807,600,816	1,250,671,777	795,543,140	1,215,734,012
Cash payment on income taxes		<u>(1,747,939,563)</u>	<u>(1,330,557,462)</u>	<u>-</u>	<u>-</u>
Net cash from operating activities		<u>115,258,466,925</u>	<u>89,125,372,934</u>	<u>114,170,021,745</u>	<u>88,960,028,674</u>
CASH FLOWS FROM INVESTING ACTIVITIES					
Net cash receipts (payment) on temporary investments		(1,470,433,918)	8,108,982,273	157,004,294	9,041,325,385
Net cash receipts (payment) on long - term investments		(6,336,898,491)	(291,299,037)	(5,213,750,000)	-
Cash receipts on disposal of assets		465,235,726	447,752,979	436,506,247	442,618,142
Cash payment on property, plant, equipment, work under construction and intangible assets	a	(34,365,304,265)	(34,767,591,001)	(34,194,421,946)	(34,914,317,077)
Cash payment on finance costs for work under construction		(429,095,119)	(325,873,449)	(429,095,119)	(325,873,449)
Cash payment on project development cost for collection		(121,565,136)	(344,983,683)	-	-
Cash payment on short - term loans to related party		(7,600,000)	-	-	-
Cash payment of refund to contribution	6.22	(3,900,000)	(54,738,519)	(3,900,000)	(54,738,519)
Cash receipts on deferred income		424,596,864	385,935,059	424,596,864	385,935,059
Cash payment on investments in subsidiaries		-	(703,435,335)	(1,746,000,000)	(1,254,000,000)
Cash payment on investments in associated company		(40,604,840)	(623,844,703)	-	-
Cash payment on investments in joint ventures		(6,132,612,794)	(417,275,485)	-	-
Cash receipts from disposal of investments in joint ventures		13,972,105	10,942,000	-	-
Cash receipts from disposal of investments in subsidiaries		-	118,428,750	-	-
Cash receipts on interest		901,955,536	806,326,085	490,282,658	513,780,822
Dividends received from associates	6.8.3,6.8.4	1,180,184,864	1,144,640,436	836,085,388	836,085,388
Dividends received from subsidiary	6.8.4	-	-	1,481,175,000	1,481,175,000

Notes to the financial statements are an integral part of these financial statements.

ELECTRICITY GENERATING AUTHORITY OF THAILAND AND ITS SUBSIDIARIES
STATEMENTS OF CASH FLOWS
FOR THE YEAR ENDED DECEMBER 31, 2015

Unit : Baht

	Notes	Consolidated financial statement		Separate financial statement	
		2015	2014 (Restated)	2015	2014
CASH FLOWS FROM INVESTING ACTIVITIES (CONTINUE)					
Dividends received from joint ventures	6.8.3,6.8.4	728,250,136	634,473,550	15,360,660	-
Dividends received from other entities		269,418,991	235,951,209	57,351,250	-
Net cash used in investing activities		(44,924,400,341)	(25,635,608,871)	(37,688,804,704)	(23,848,009,249)
CASH FLOWS FROM FINANCING ACTIVITIES					
Remittance to the Ministry of Finance		(25,273,999,326)	(20,054,216,778)	(25,273,999,326)	(20,054,216,778)
Cash receipts from short - term loans from financial institutions		24,880,000,000	17,535,000,000	-	-
Cash payment of short - term loans from financial institutions		(25,280,000,000)	(23,433,996,684)	-	-
Cash receipts from bill of exchange payables		2,700,000,000	4,700,000,000	-	-
Cash payment of bill of exchange payables		(5,200,000,000)	(3,750,000,000)	-	-
Cash receipts from long - term loans		2,126,309,581	10,274,205,641	-	-
Cash receipts from long - term loan of infrastructure fund		20,855,000,000	-	20,855,000,000	-
Decrease in finance lease liabilities - others		(5,729,032)	(3,449,902)	(4,201,198)	(1,955,220)
Decrease in finance lease liabilities - Power plants		(12,197,584,521)	(11,837,849,773)	(15,775,884,421)	(13,919,771,521)
Cash payment of long - term loans		(9,462,854,794)	(11,439,292,767)	(8,065,858,653)	(6,457,892,766)
Cash payment on finance costs		(4,117,606,983)	(4,421,961,911)	(2,820,351,600)	(3,035,339,589)
Cash payment on interest under finance leases - Power plants	6.29	(27,290,983,730)	(21,229,109,420)	(32,318,918,696)	(26,774,341,382)
Dividends paid to non - controlling interests of subsidiary		(1,809,375,459)	(1,810,325,000)	-	-
Net cash used in financing activities		(60,076,824,264)	(65,470,996,594)	(63,404,213,894)	(70,243,517,256)
EFFECT FROM FOREIGN EXCHANGE RATE IN CASH AND CASH EQUIVALENTS					
		(255,763,034)	(175,670,808)	23,037,529	(74,682,048)
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS		10,001,479,286	(2,156,903,339)	13,100,040,676	(5,206,179,879)
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR		62,646,069,258	64,802,972,597	51,832,088,359	57,038,268,238
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR	6.1	72,647,548,544	62,646,069,258	64,932,129,035	51,832,088,359

Notes to the financial statements are an integral part of these financial statements.





ELECTRICITY GENERATING AUTHORITY OF THAILAND AND ITS SUBSIDIARIES
STATEMENTS OF CASH FLOWS
FOR THE YEAR ENDED DECEMBER 31, 2015

Notes to the Statements of Cash Flows

a. Property, Plant and Equipment, Work under Construction and Intangible Assets

Consolidated

During the year 2015, EGAT and its subsidiaries purchased property, plant and equipment, work under construction and intangible assets which total costs were Baht 34,678.82 million. The purchase was paid in cash amounted to Baht 34,365.30 million, which includes amount of net accounts payable during the year amounted to Baht 10.90 million (Beginning and Ending balance of accounts payable amounted to Baht 2,915.24 million and Baht 2,926.14 million respectively). The remaining amounted to Baht 302.62 million were net revenues from first synchronization of power plants which would deduct the cost of property, plant and equipment, work under construction and intangible assets.

During the year 2014, EGAT and its subsidiaries purchased property, plant and equipment, work under construction and intangible assets which total costs were Baht 34,564.05 million. The purchase was paid in cash amounted to Baht 34,767.59 million, which includes the deduction of net accounts payable during the year amounted to Baht 826.37 million (Beginning and Ending balance of accounts payable amounted to Baht 3,741.61 million and Baht 2,915.24 million respectively). The remaining amounted to Baht 622.83 million were net revenues from first synchronization of power plants, which would deduct the cost of property, plant and equipment, work under construction and intangible assets.

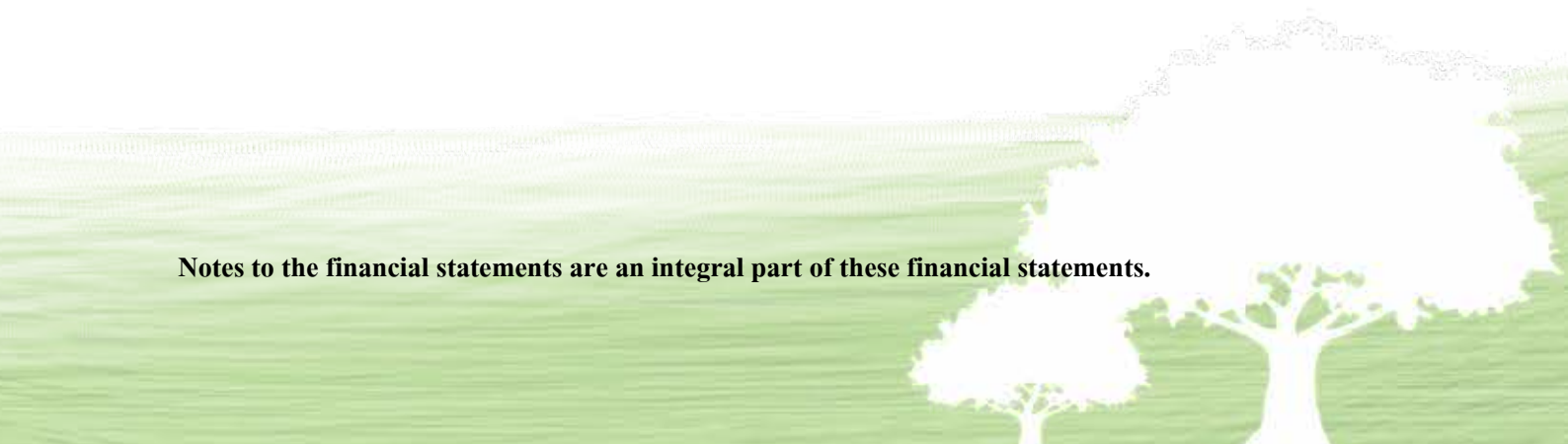
Separate

During the year 2015, EGAT purchased property, plant and equipment, work under construction and intangible assets which total costs were Baht 34,507.94 million. The purchase was paid in cash amounted to Baht 34,194.42 million, which includes amount of net accounts payable during the year amounted to Baht 10.90 million (Beginning and Ending balance of accounts payable amounted to Baht 2,915.24 million and Baht 2,926.14 million respectively). The remaining amounted to Baht 302.62 million were net revenues from first synchronization of power plants, which would deduct the cost of property, plant and equipment, work under construction and intangible assets.



During the year 2014, EGAT purchased property, plant and equipment, work under construction and intangible assets which total costs were Baht 34,710.78 million. The purchase was paid in cash amounted to Baht 34,914.32 million, which includes the deduction of net accounts payable during the year amounted to Baht 826.37 million (Beginning and Ending balance of accounts payable amounted to Baht 3,741.61 million and Baht 2,915.24 million respectively). The remaining amounted to Baht 622.83 million were net revenues from first synchronization of power plants, which would deduct the cost of property, plant and equipment, work under construction and intangible assets.

Notes to the financial statements are an integral part of these financial statements.





ELECTRICITY GENERATING AUTHORITY OF THAILAND AND ITS SUBSIDIARIES
NOTES TO THE FINANCIAL STATEMENTS
FOR THE YEAR ENDED DECEMBER 31, 2015

1. General Information

Electricity Generating Authority of Thailand (EGAT), which is a juristic person, was established by Electricity Generating Authority of Thailand Act, B.E. 2511 (1968) and subsequent amendments. EGAT's main business objectives are generating, acquiring, transmission or distribution electric energy, the operation of electric energy business and energy sources deriving from natural resources, and undertaking business concerning electric energy and other businesses concerning or related to the activities of EGAT, or collaborate with other persons for the said activities. Besides, its businesses include production and selling lignite or any chemicals derived from lignite. The head office of EGAT is located at 53 Moo 2, Charansanitwong Road, Bang Kruai, Nonthaburi.

2. Basis of Financial Statements Presentation

2.1 Principles of Financial Statements Preparation

The consolidated and the separate financial statements have been prepared in accordance with Thai Financial Reporting Standards under the Accounting Profession Act, B.E. 2547, including interpretations and guidelines promulgated by the Federation of Accounting Professions (FAP). EGAT has presented the financial statements in compliance with the notification of the Department of Business Development "Definition of the abbreviated components required in the financial statements, B.E.2554", dated September 28, B.E.2554, under the third paragraph of section 11 of the Accounting Act, B.E.2543.

These accompanying consolidated and the separate financial statements are prepared based on the assumption that users of these financial statements have an understanding of generally accepted accounting principles and practices used in Thailand. In any case, these accounting principles may differ, in certain aspects, from generally accepted accounting principles used in other countries.

The mentioned financial statements have been prepared under the historical cost convention, except explained otherwise as disclosed in Note 3.

In the consolidated financial statements, the significant transactions arising between EGAT and subsidiaries are eliminated. Investments in subsidiaries, associate and the joint venture have been presented in the separate financial statements under the cost method. Non - controlling interests are separately disclosed in equity. When materiality, accounting policies of its subsidiaries, an associate, and joint venture have been changed to ensure consistency with the accounting policies adopted by EGAT.

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

2.2 Use of Estimates

The consolidated and the separate financial statements are prepared in conformity with Thai generally accepted accounting principles in Thailand, which require management to make estimates and assumptions that affect the book value of assets and liabilities in the consolidated and the separate financial statements. Actual results may differ from those estimates and assumptions.

3. Significant Accounting Policies

3.1 Cash and Cash Equivalents

Cash and cash equivalents include cash, cash in current accounts, saving accounts and short term fixed deposits not more than 3 months including promissory notes or bills of exchange with maturity of 3 months or less which EGAT has fully accessed without commitment.

3.2 Temporary investments

Temporary investments of EGAT has followed to the regulations of the Ministry of Finance regarding accounting and finance of state owned enterprise B.E. 2548 section 2 of finance which defined state owned enterprise to deposit its money with commercial banks that also are state owned following to the budgeting law. If there is remaining liquidity or desire to manage remaining liquidity to gain higher reward than deposit with state owned banks following to the budgeting law of state owned enterprise, it is possible to invest in short term financial instruments issued by the Ministry of Finance or financial institutions of government.

3.3 Trade Accounts Receivable and Other Accounts Receivable

Accounts receivable are stated at net realizable value. The allowance for doubtful accounts is estimated by percentage of the overdue, which have been based on historical results of collection and the present events pertaining to accounts receivable at the statements of financial position date. According to the regulations of the Ministry of Finance regarding accounting and finance of state owned enterprise B.E. 2548, which amended the regulations of the Ministry of Finance regarding accounting and finance of state owned enterprise B.E. 2520, the allowance for doubtful accounts are stated as follows:



3.3.1 Trade accounts receivable exclusive of government agencies and state enterprises

Overdue Period	Percentage of allowance for doubtful accounts
Over 6 months - 1 year	50
Over 1 year	100

3.3.2 Other accounts receivable (exclude accrued revenues and prepaid expenses), which the overdue period is over 1 year, the percentage of allowance for doubtful accounts is 100.

3.4 Materials and Supplies

3.4.1 Fuel oil for power plant is stated at the lower of moving average cost or net realizable value.

3.4.2 Lignite is stated at the lower of moving average cost or net realizable value.

3.4.3 Spare parts for power plant and mine equipment are stated at moving average cost less allowance for obsolescence of stocks designed to write off the parts on a straight - line method over the useful lives of the main equipment.

Spare parts for power plant under materials and supplies - net item are namely the spare parts and equipment which are used in maintenance power plants. The portion of main spare parts and equipment for power plants, which has useful life over 1 year, is stated in equipment for power plants under property, plant and equipment item.

Spare parts for mine equipment are namely component, spare parts and supplies for mine equipment maintenance such as spare parts for 85 ton truck, spare parts for excavator and spare parts for engine belt system. However, useful life over 1 year and reserved spare parts for mine equipment is stated under property, plant and equipment item.

3.4.4 General materials and supplies are stated at moving average cost less allowance for obsolescence of stocks designed, which have not moved for 6 months and above. The allowance is calculated at the following rates:

No movement within	Percentage of allowance for obsolescence of stocks
6 -18 months	10
Over 18 - 30 months	30
Over 30 - 48 months	50
Over 48 - 60 months	75
Over 60 months	100

General materials and supplies consist of fuel oil for vehicle and machine, general spare parts and office suppliers for operation.

3.5 Derivative Assets and Derivative Liabilities

Derivatives have initial realized based on the fair value at the statements of financial position date. Gain or loss from the change of fair value are realized in statements of income of that period.

At the statements of financial position date, the fair value of forward foreign exchange contracts, cross currency and interest rate swap contracts, currency swap contracts and interest rate swap contracts are calculated by financial institutions, which are the contractor of EGAT.

3.6 Investments in Subsidiaries, Associates, and Joint Ventures

3.6.1 Investments in subsidiaries

Investments in subsidiaries of EGAT have been presented in the separate financial statements under the cost method. Investments in subsidiaries of EGAT and its subsidiaries have been eliminated together with the equity interests in the consolidated financial statements preparation.

A list of subsidiaries of EGAT and its subsidiaries is set out in Note 6.8.1 and 6.8.2 respectively.

Although EGAT owned Ratchaburi Electricity Generating Holding Public Company Limited (RATCH) and EGAT Diamond Service Co., Ltd., only 45% of the total fully paid - up common share, EGAT has effective control over so that they are subsidiaries of EGAT according to financial reporting standards, which must prepared the consolidated financial statements.

3.6.2 Investments in associates

Investment in associate of EGAT has been presented in the separate financial statements under the cost method. Investments in associates of EGAT and its subsidiaries have been presented in the consolidated financial statements under the equity method.

A list of associates of EGAT and its subsidiaries is set out in Note 6.8.1 and 6.8.2 respectively.

3.6.3 Investments in joint ventures

Investment in joint venture of EGAT has been presented in the separate financial statements under the cost method. Investments in joint ventures of EGAT and its subsidiaries have been presented in the consolidated financial statements under the equity method.

A list of joint ventures of EGAT and its subsidiaries is set out in Note 6.8.1 and 6.8.2 respectively.



3.7 Investments in financial securities

Investments in financial securities of EGAT comprise of held - to - maturity investments and available - for - sale securities investments.

3.7.1 Held - to - maturity investments are investments with maturity period. The bearers intends and be able to held to maturity date. It has been included in the current assets and disclosed in cash and cash equivalents and temporary investments in the case of the maturity date of investments is more than 3 months but not more than 1 year.

Held - to - maturity investments are stated in the statements of financial position at amortized cost less impairment loss of investments. The difference between purchased prices and maturity value will be amortized using the effective rate of interest method over the remaining useful life of the investments.

3.7.2 Available - for - sale securities investments are investments held with no identifiable time and may sell for enhancing liquidity or when interests rate change.

Available - for - sale securities investments are stated at fair value. Unrealized gain (loss) from value changes is recognized separately in the equity. When there are sales of available - for - sale securities investments, accumulated changes in fair value is recognized in the statements of income and discloses in gain (loss) from sales of investments.

Investments in financial securities of EGAT is in compliance with the regulations of the Ministry of Finance about Accounting and Finance of state owned enterprise, B.E.2548 section 2 which require the state owned enterprises who want to manage liquidity may elect to invest in short - term financial instruments issued by the Ministry of Finance or government financial institutions.

3.8 Property, Plant and Equipment

Property, Plant and equipment are stated at cost on the date of acquisition or completion of construction less accumulated depreciation and allowance for impairment.

Depreciation is calculated on the straight - line method in order to reduce the book value of each type of assets over the estimated useful lives with residual value of one Baht except the land which has infinite useful lives.

The estimates of useful lives of EGAT's assets are as follows:

	Years	
Structures	3 years	- 40 years
Reservoirs and dams	6 years 8 months	- 75 years



	Years	
Power plants	5 years	- 30 years
Equipment for power plants	3 years	- 25 years
Control system	3 years	- 25 years
Transmission system	3 years	- 40 years
Communication system	5 years	- 25 years
Coal handling system	10 years	- 25 years
Machinery	5 years	- 10 years
Large - sized spare parts for mine equipment	8 years	
Vehicles	5 years	- 12 years
Other materials and supplies	3 years	- 10 years

The estimate of useful lives for power plants of subsidiaries is stated according to the power purchase agreement.

Depreciation of the Srinagarind, Bang Lang, Vajiralongkorn, Rajjaprabha and Pak Mun dams are included in the statements of income only to the extent that they relate to power generation. The remaining portion relating to irrigation is deducted from capital contribution for supporting construction of those dams.

When the asset was disposed, EGAT recorded to write off the asset with accumulated depreciation and recognized gain (loss) on disposal of asset in the statements of income.

The cost of major inspection was recognized as the part of property, plant and equipment and was amortized according to the estimated useful lives. The useful lives of major inspection fee are estimated under type of major inspection fee and power plants as follows:

Type of Power Plants	Type of Major Inspection Fee	
	Major Overhaul : MO	Minor Inspection : MI
	Useful lives (Year)	Useful lives (Year)
- Hydro Power Plants	6 - 12	2 - 4
- Thermal Power Plants	4 - 6	2
- Combined Cycle Power Plants	2 - 6	2 - 3
- Gas Turbine Power Plants	4 - 8	1 - 4
- Lignite Power Plants	8	2



Besides, cost of power plants commissioning after deduction of revenue from electric energy during power plants commissioning are recorded as the part of property, plant and equipment in work under construction item.

3.9 Assets and Liabilities under Finance Lease Agreements

Assets and liabilities under finance lease agreements are stated at the lower of fair values at inception or present values of the minimum lease payments less accumulated depreciation. A portion of lease payments is recognized as financial expenses and the remainder is deducted from the principle over the lease periods. Depreciations of those leased assets are calculated on the straight - line method over the estimated useful lives of each type of assets. In case the ownership of the assets is not transferred to the lessee at the end of the lease periods, depreciations are based on the shorter of the useful lives of the assets or the lease period.

Determining whether an arrangement is, or contains, a lease is based on the substance of the arrangement and requires an assessment that the arrangement meets the following criteria before the classification of leases.

1. Fulfillment of the arrangement is dependent on the use of a specific asset and
2. The agreement conveys a right to use the asset.

Determining whether a lease is a finance lease depends on the substance of the transaction rather than the form of the contract. Lease will be classified as a finance lease, if the arrangement represent individually or in combination situations as follows:

1. The lease transfers ownership of the asset to the lessee by the end of the lease term;
2. The lessee has the option to purchase the asset at a price that is expected to be sufficiently lower than the fair value at the date the option becomes exercisable for it to be reasonably certain, at the inception of the lease, that the option will be exercised;
3. The lease term is for the major part of the economic life of the asset even if title is not transferred;
4. At the inception of the lease the present value of the minimum lease payments amounts to at least substantially all of the fair value of the leased asset; and
5. The leased assets are of such a specialized nature that only the lessee can use them without major modifications.

3.10 Intangible Assets

3.10.1 Land rights

The land rights under transmission line have infinite useful lives because its future economic benefit is uncertain. Other land rights, which can be expected their useful lives, will be amortized according to the certain useful lives.



3.10.2 Computer software rights and software license

Computer software rights of EGAT are amortized as expenses over the expected useful lives not more than 5 years, which are revised the amortization method and the useful lives in every accounting period. The software license is amortized as expenses over the expected useful lives in 5 - 10 years.

3.10.3 Royalty on state property service

In 1990, with the approval of the Ministry of Finance, EGAT has been entitled to use land and building surrounding the Sirikit dam, which are state property without charge and EGAT recognized cost of dam in portion that use for generating electric power and surplus from Royalty on State Property Service as a Royalty on State Property Service account. It is recognized as expenses and written off from the Royalty on State Property Service. The balance is being amortized over 59 years, which is the remainder estimated useful lives of the dam.

3.10.4 Transmission system connection rights

Transmission system connection rights are amortized based on a straight - line method over the expected useful lives in 8 years.

3.10.5 Project development rights

The incurred costs on development projects are recognized as intangible assets when there are obvious possibilities that the projects will be success. The cost on development projects that has been capitalized is amortized from commencement of the commercial operation based on a straight - line method over the period of its expected benefit.

3.10.6 Research and development expenditure

Research and development expenditure is divided into 2 phases according to phase of activities as below:

1. Expenditure on research phase includes the expenditure of experiment to acquire new knowledge and understanding on scientific or technical. Gain or loss will be recognized when it is occurred.
2. Expenditure on development phase is related to a new product and process work plan, design or improvement. It will be recognized as an asset when the development cost can be reliably measured or the product or process has the commercial and technological feasibility as well as generate economic benefits. However, EGAT must have the intention and adequate resource to apply the gained knowledge to achieve the development so that the asset can be utilized or sold.

The development expenditure which will be recognized as an asset consists of cost of materials, labor, and others, which directly attributed to the preparation of asset for its intended use and borrowing cost.



The development expenditure, recognized as asset, is stated of cost less accumulated amortization. In case of the prototype asset, EGAT will separate cost of tangible asset from intangible asset in order to classify tangible asset as property, plant and equipment according to type of asset.

3.11 Goodwill

Goodwill represents the excess of the cost of acquisition of the group of subsidiaries over the fair value of the Group's share of the identifiable net assets of the acquired subsidiary, joint venture or associate at the acquisition date.

Goodwill is measured at cost less accumulated impairment losses. Goodwill is tested for impairment. The carrying amounts of the Group's assets are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, the assets' recoverable amounts are estimated. For goodwill, the recoverable amount is estimated at each reporting date, when indicators of impairment are identified.

3.12 Project development cost for collection

Project development cost for collection of subsidiary will record as an asset when the Ministry of energy approved the principle of investment project. In any case, if Board of Directors consider and approve the termination of the project, the entity will write off the project development cost for collection which recognized as an asset then immediately recognize as an expense in the period which it incurred.

3.13 Deferred Charges of the Lignite Mine

3.13.1 Overburden removal costs

The costs of overburden removal expended in each year are calculated by multiply the quantity of lignite extracted from the mine in that period by 6.09 (the stripping ratio is 6.09:1, which is the ratio of the overburden bears to the total economically lignite) and multiply by the average cost per cubic metre of overburden removed. In case the actual stripping ratio in each period is more than 6.09, the excess is recorded as the deferred charges. However, the accumulated of overburden removal costs is not more than the deferred charges.

3.13.2 Minerals resource exploration and preliminary development costs

Minerals resource exploration and preliminary development costs are recognized as expenses for the year in which they are incurred. Any exploration done as a part of a power development plan and long - term mining plan, are recognized as deferred charges and amortized in the proportion that deferred expenses bears to the total economically mineable reserves and multiplied by the quantity of lignite extracted during the year.

3.13.3 Resettlement costs

Resettlement costs expended in each year are calculated by dividing the total actual resettlement costs by the total lignite mineable reserves over the useful lives of the power plants multiplied by the quantity of lignite extracted during the year. The resettlement costs in areas, which are not mined for lignite, will be recognized as expense in the period as incurred.

3.13.4 Mineral patent costs

Mineral patent costs paid as an extra to the government are calculated by 0.1% of the total mineral value, each of them has value exceeding Baht 50 million. Mineral fields with lesser value are exempted from such patent costs.

Each patent is granted a period of 25 years. Mineral patent costs are recognized as deferred charges and amortized over the period of patent.

3.14 Foreign Currency

Foreign currency transactions are translated into Thai Baht using the Bank of Thailand's reference exchange rate prevailing at the transaction date. Assets and liabilities dominated in foreign currency are translated into Thai Baht using the exchange rate at the end of accounting period. Gain or loss on foreign exchange is recognized as either revenues or expenses for all amounts in that accounting period.

3.15 Employee Benefit Obligations

Employee Benefit Obligations of EGAT, subsidiaries were measured and recognized as follows:

1. Short - term employee benefits are recognized as expenses in statements of income when incurred. However, short - term employee benefits in case of leave with accumulated compensation are recognized when the services are rendered.

2. Post - employee benefits - defined contribution plans

EGAT and subsidiaries have jointly established a provident fund which is legally separate from EGAT and subsidiaries. The fund is monthly contributed by employees, EGAT and its subsidiaries. Provision liabilities will not be recorded for the contributions. However, the contributions will be recognized as expenses in statement of income when incurred.

3. Post - employee benefits - defined benefit plans

The obligation under the defined benefit plan is determined based on actuarial techniques, using the project unit credit method, in order to determine present value of the obligation, current service cost, past service cost, and net interest. These are recognized as a liability in statements of financial position and expenses in statements of income.

In case of EGAT has the differences between actual employee benefits paid and actuarial estimated, EGAT will not recognized the differences until there is assumptions revision in accordance with



actuarial, which revised every 3 years or whether there is any indication. Any actuarial gains and losses are recognized in statements of comprehensive income.

4. Other long - term employee benefits

The obligation under the defined benefit plan is determined based on actuarial techniques, using the project unit credit method, in order to determine present value of the obligation, current service cost, past service cost, and net interest. These are recognized as a liability in statements of financial position and expenses in statements of income.

In case of EGAT has the differences between actual employee benefits paid and actuarial estimated, EGAT will not recognize the differences until there is assumptions revision in accordance with actuarial, which will be revised every 3 years or whether there is any indication. Any actuarial gains and losses are recognized in statements of income in the period in which they arise.

Since employee benefits are expenses benefits, the expenses will be allocated to cost of assets, liabilities, cost of electric energy sales, selling and administrative expenses, and cost of sales of other goods and services according with employee's duty, and likewise salary, wage, and other benefits practices.

3.16 Provision Liabilities for Mine Reclamation

EGAT recognizes provision liabilities for mine reclamation of lignite mine in Mae Moh District, Lampang, which will arise in the future. The Mining Act defines that the reclamation shall take place after mine closure. As a result, EGAT shall recognize provision liabilities for mine reclamation. For reclamation costs recognized as expenses in the reporting period are calculated by estimation of total reclamation costs, divided by total expected quantity of extracted lignite over the mining life, multiplied by the quantity of extracted lignite for each period.

3.17 Staff AID Fund and Provident Fund

EGAT has established the Staff AID Fund to provide welfare for employees after leaving EGAT. EGAT contributes to the fund on a monthly basis at the rate of 10% of salaries of its employees being the fund's members. Contributions are recognized as expense in EGAT's statements of income in full amount and the accounting transactions of the fund have been consolidated in EGAT's financial statements.

On January 1, 1995, EGAT has set up the Provident Fund in accordance with the Provident Fund Act, B.E. 2530, which the Ministry of Finance prescribed the policy that the state owned enterprises contribute to the Provident Fund at the rate approved by the Ministry of Finance. The employees have the privilege to contribute to the Fund at the minimum rate of 3% of salaries but not more than the combined rate that EGAT contributes to the Fund. EGAT recognizes contributions paid to the provident fund as

expenses in the reporting period. In addition, the provident fund is an entity that is legally separate from EGAT.

3.18 Deferred Income

3.18.1 Contributions for construction

In case cash contributions received from EGAT's direct customers towards project construction, after completion of the project, assets will be owned by EGAT, are accounted for as deferred contributions and released to revenues over the useful lives of the related assets.

In case cash contributions received from independent power producers towards project construction, after completion of the project, assets will be owned by EGAT, are accounted for as deferred contributions and released to revenues over the period of the power purchase contracts.

In the event that independent power producers operate construction and assets of the project are transferred to EGAT after completion, those assets are accounted for as EGAT's assets and matched with deferred contributions which are released to revenues over the period of the power purchase contracts.

3.18.2 Income from donation

Income from donation, which is assets or cash received from governments and foreign financial institutions in forms of discount of interest or grants to be used for project development of EGAT as identified by donors, is recorded as deferred income under liabilities. Deferred income is recognized as revenue over the useful lives of fixed assets or, in case of cash from donation is recognized according to actual expenditures incurred.

3.19 Revenue from Electric Energy Sales

Revenue from electric energy sales is recognized according to metered delivery units at the selling point under the power purchase agreement. Revenue from automatic tariff adjustment (Ft) is recognized according to the occurred Ft revenue in that period which comprised of the actual collected Ft revenue in accordance with the approval of the Energy Regulatory Commission (ERC) and recognized the accrued Ft revenue or unearned Ft revenue, which came from the difference of the calculated Ft price under the formula Ft with the collected Ft price in that period.

Deferred revenue for electricity compensation has been occurred from receiving fuel costs or electricity compensation from fuel suppliers or other power producers, However, such compensation has not been approved by the ERC to be included in the tariff structure. EGAT will recognized that compensation as electricity revenue when ERC has approved it.



3.20 Revenue from Sales of Other Goods and Services

3.20.1 Revenue from sales of other goods such as the revenue from fuel providing to affiliates of EGAT and revenue from sales of Hydrogen gas, distilled water, chemicals and by products from generating electricity. It is recognized as income upon the delivery of products and when the significant risks and rewards of ownership are transferred to the customers.

3.20.2 Revenue from services such as revenue from running the machinery and power plant maintenance services, communications system and telecommunication services are recognized as income by percentage of completion at the statements of financial position date.

3.21 Interest Income

Interest income is recognized on a time proportion basis and effective rate of return on assets.

3.22 Finance Costs

Finance costs include interest expenses, commitment charges and other expenses on long term loans. Interest expenses of long term loans for acquisition of non - current assets that are under construction are recognized as capitalized, while after the completion of construction period are recognized as expenses. Interest expenses on loans for working capital are recognized as expenses in the period they incurred.

3.23 Related Parties

Related parties refer to individuals or enterprises, which directly or indirectly manage or control, or are controlled by EGAT or are under common control, including subsidiaries and fellow subsidiaries. Besides, related parties refer to individuals or enterprises, including associate and shareholder which have directly or indirectly vote and significant influence to EGAT, directors, management or employees of the EGAT.

In considering each possible related parties relationship, EGAT attends to the substance of the relationship and not merely the legal form.

3.24 Financial Instruments

Financial assets presented in the financial statements include cash and cash equivalents, temporary investments, trade accounts receivable - others, and trade accounts receivable - related parties. Financial liabilities presented in the financial statements include trade accounts payable - others, trade accounts payable - related parties, other accounts payable and loans. The accounting policies applied to those particular items are separately disclosed in the individual policy statements associated with them.

EGAT uses the financial instruments to mitigate foreign currency risk and fluctuations in interest rate. The main derivative financial instruments consisted of forward foreign exchange contracts and cross currency and interest rate swap agreements and cash flow hedge.

Forward foreign exchange contracts

The forward foreign exchange contracts are financial instruments to protect against the risk of exchange rate fluctuations, are agreements enabling EGAT to buy a specific amount of foreign currency at a pre - agreed rate on a fixed future time. The forward foreign exchange contracts are not recognized in the financial statements at agreement date but gains or losses will be recognized in the statements of income on any due dated as specified in the contracts.

Cross currency and interest rate swap agreements

The cross currency and interest rate swap agreements are financial instruments to protect against the risk of fluctuations in foreign exchange rate and interest rate associated with foreign currency borrowings. The swap agreements are not recognized in the financial statements at agreement date but the differential will be recognized in the statements of income on any due dated as specified in the contracts.

Cash flow hedge

Cash flow hedge is a hedging instrument of the exposure to variability in cash flows that is attributable to a particular risk associated with assets or liabilities. The portion of the gain or loss on the hedging instrument that is determined to be an effective hedge shall be recognized in other comprehensive income, and the ineffective portion of the gain or loss on the hedging instrument shall be recognized as other incomes or expenses in statements of income.

3.25 Capital Risk Management

The subsidiary's objectives of capital management are to safeguard the subsidiary's ability to provide returns for shareholders, to be beneficial for other stakeholders and to maintain proper capital structure to reduce the cost of capital.

3.26 Operating Segments Disclosure

EGAT and its subsidiaries have adopted Thai Financial Reporting Standard No.8, Operating Segments. The Operating Segments Disclosure is reported on the basis of internal reports of EGAT and its subsidiaries that are received and regularly reviewed by Chief Operating Decision Maker (CODM) in order to allocate resources to the segment and assess its performance. In addition, CODM of EGAT is board of directors of EGAT.

EGAT and its subsidiaries engage in the single operating segment which is generating, acquiring, transmission or distribution electric energy, including other business concerning or related to the main activities of EGAT or joint arrangements with other parties to operate such activities. Thus, revenues,



income from operations and assets presented in the financial statements are considered as operating segment reporting.

4. Thai Accounting Standards (TASs), Thai Financial Reporting Standards (TFRSs), Thai Standing Interpretations and Thai Financial Reporting Interpretations promulgated by the Federation of Accounting Professions (FAP).

Effective for accounting periods beginning on or after January 1, 2016

- ◆ Thai Accounting Standard No. 1 (revised 2015) Presentation of Financial Statements
- ◆ Thai Accounting Standard No. 2 (revised 2015) Inventories
- ◆ Thai Accounting Standard No. 7 (revised 2015) Statement of Cash Flows
- ◆ Thai Accounting Standard No. 8 (revised 2015) Accounting Policies, Changes in Accounting Estimates and Errors
- ◆ Thai Accounting Standard No. 10 (revised 2015) Events after the Reporting Period
- ◆ Thai Accounting Standard No. 11 (revised 2015) Construction Contracts
- ◆ Thai Accounting Standard No. 12 (revised 2015) Income Taxes
- ◆ Thai Accounting Standard No. 16 (revised 2015) Property, Plant and Equipment
- ◆ Thai Accounting Standard No. 17 (revised 2015) Leases
- ◆ Thai Accounting Standard No. 18 (revised 2015) Revenue
- ◆ Thai Accounting Standard No. 19 (revised 2015) Employee Benefits
- ◆ Thai Accounting Standard No. 20 (revised 2015) Accounting for Government Grants and Disclosure of Government Assistance
- ◆ Thai Accounting Standard No. 21 (revised 2015) The Effects of Changes in Foreign Exchange Rates
- ◆ Thai Accounting Standard No. 23 (revised 2015) Borrowing Costs
- ◆ Thai Accounting Standard No. 24 (revised 2015) Related Party Disclosures
- ◆ Thai Accounting Standard No. 26 (revised 2015) Accounting and Reporting by Retirement Benefit Plans
- ◆ Thai Accounting Standard No. 27 (revised 2015) Separate Financial Statements
- ◆ Thai Accounting Standard No. 28 (revised 2015) Investments in Associates and Joint Ventures
- ◆ Thai Accounting Standard No. 29 (revised 2015) Financial Reporting in Hyperinflationary Economies
- ◆ Thai Accounting Standard No. 33 (revised 2015) Earnings per Share
- ◆ Thai Accounting Standard No. 34 (revised 2015) Interim Financial Reporting

◆Thai Accounting Standard No. 36 (revised 2015)	Impairment of Assets
◆Thai Accounting Standard No. 37 (revised 2015)	Provisions, Contingent Liabilities and Contingent Assets
◆Thai Accounting Standard No. 38 (revised 2015)	Intangible Assets
◆Thai Accounting Standard No. 40 (revised 2015)	Investment Property
◆Thai Accounting Standard No. 41	Agriculture
◆Thai Financial Reporting Standard No. 2 (revised 2015)	Share - based Payment
◆Thai Financial Reporting Standard No. 3 (revised 2015)	Business Combinations
◆Thai Financial Reporting Standard No. 4 (revised 2015)	Insurance contracts
◆Thai Financial Reporting Standard No. 5 (revised 2015)	Non - current Assets Held for Sale and Discontinued Operations
◆Thai Financial Reporting Standard No. 6 (revised 2015)	Exploration for and Evaluation of Mineral Resources
◆Thai Financial Reporting Standard No. 8 (revised 2015)	Operating Segments
◆Thai Financial Reporting Standard No. 10 (revised 2015)	Consolidated Financial Statements
◆Thai Financial Reporting Standard No. 11 (revised 2015)	Joint Arrangements
◆Thai Financial Reporting Standard No. 12 (revised 2015)	Disclosure of Interest in Other Entities
◆Thai Financial Reporting Standard No. 13 (revised 2015)	Fair Value Measurement
◆Thai Standing Interpretation No. 10 (revised 2015)	Government Assistance - No Specific Relation to Operating Activities
◆Thai Standing Interpretation No. 15 (revised 2015)	Operating Leases - Incentives
◆Thai Standing Interpretation No. 25 (revised 2015)	Income Taxes - Changes in the Tax Status of an Entity or its Shareholders
◆Thai Standing Interpretation No. 27 (revised 2015)	Evaluating the Substance of Transactions Involving the Legal Form of a Lease
◆Thai Standing Interpretation No. 29 (revised 2015)	Service Concession Arrangements: Disclosures
◆Thai Standing Interpretation No. 31 (revised 2015)	Revenue - Barter Transactions Involving Advertising Services



◆Thai Standing Interpretation No. 32 (revised 2015)	Intangible Assets - Web Site Costs
◆Thai Financial Reporting Interpretation No. 1 (revised 2015)	Changes in Existing Decommissioning, Restoration and Similar Liabilities
◆Thai Financial Reporting Interpretation No. 4 (revised 2015)	Determining Whether an Arrangement Contains a Lease
◆Thai Financial Reporting Interpretation No. 5 (revised 2015)	Rights to Interests arising from Decommissioning, Restoration and Environmental Rehabilitation Funds
◆Thai Financial Reporting Interpretation No. 7 (revised 2015)	Applying the Restatement Approach under TAS 29 (revised 2015) Financial Reporting in Hyperinflationary Economies
◆Thai Financial Reporting Interpretation No. 10 (revised 2015)	Interim Financial Reporting and Impairment
◆Thai Financial Reporting Interpretation No. 12 (revised 2015)	Service Concession Arrangements
◆Thai Financial Reporting Interpretation No. 13 (revised 2015)	Customer Loyalty Programmes
◆Thai Financial Reporting Interpretation No. 14 (revised 2015)	TAS 19 (revised 2015) - The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interaction
◆Thai Financial Reporting Interpretation No. 15 (revised 2015)	Agreements for the Construction of Real Estate
◆Thai Financial Reporting Interpretation No. 17 (revised 2015)	Distributions of Non - cash Assets to Owners
◆Thai Financial Reporting Interpretation No. 18 (revised 2015)	Transfers of Assets from Customers
◆Thai Financial Reporting Interpretation No. 20 (revised 2015)	Stripping Costs in the Production Phase of a Surface Mine
◆Thai Financial Reporting Interpretation No. 21	Levies

The management of EGAT has assessed and determined the potential impact of adopting Thai Accounting Standards (TASs), Thai Financial Reporting Standards (TFRSs), Thai Standing Interpretations and Thai Financial Reporting Interpretations. There will have no material impact on the financial statements.

5. The Effects of Adjustment on Financial Statements of EGAT, Subsidiaries, Associates, and Joint ventures

The effect of compliance with new Thai Financial Report

Presentation of Financial Statements

Since January 1, 2015, EGAT has adopted Thai Accounting Standard No. 1 (revised 2014), Presentation of Financial Statements. This revised standard requires items in other comprehensive income that will be reclassified to profit or loss in subsequent periods and items that will not be subsequently reclassified to profit or loss. This revised standard affects only for presentation and has no impact on EGAT's financial positions or performances.

Consolidated Financial Statements

Since January 1, 2015, EGAT has adopted Thai Financial Reporting Standard No. 10, Consolidated Financial Statements. This standard defines the principle of control, which is that an investor controls an investee when it has rights or interest on returns from its involvement with the investee, those rights or interest on returns is varied as a result of the investee's performance, and the investor has the ability to direct the activities that affect the amount of the investor's returns. The changes required management to exercise significant judgment to reconsider all entities to determine which entities in the group are controlled by EGAT and its subsidiaries. The impact of the adoption of this standard is presented in the "Adjustment of financial statements and reclassification".

Joint Arrangements

Since January 1, 2015, EGAT has adopted Thai Financial Reporting Standard No. 11, Joint Arrangements. This standard has eliminated the option to apply proportionate consolidation method for joint ventures. Instead, joint arrangements that meet the definition of a joint venture must be accounted for as an investment using the equity method. The impact of the adoption of this standard is presented in the "Adjustment of financial statements and reclassification".

Disclosure of Interests in Other Entities

Since January 1, 2015, EGAT has adopted Thai Financial Reporting Standard No. 12, "Disclosure of Interest in Other Entities". EGAT disclosed material information of subsidiaries, associates and joint ventures by presenting the detail of significant transactions of each entity which are not separately presented in consolidated financial statements.



Adjustment of financial statements and reclassification

EGAT had adjusted the consolidated financial statements due to the adoption of Thai Financial Reporting Standard No. 10, Consolidated Financial Statements, and Thai Financial Reporting Standard No. 11, Joint Arrangements, by using retrospective method. In addition, the subsidiaries have certain fair value adjustments related to Thai Accounting Standard No. 17, Leases, and change the recognition of project development cost which was previously recorded as assets when the project was approved by the Ministry of Energy or the cabinet, to be recorded when the principles of investment projects are approved. Moreover, the subsidiaries reclassified some transactions in conformity with the presentation of the consolidated financial statements for the year ended December 31, 2015.

In 2015, EGAT reclassified transactions as follows:

1. Deposit for electricity compensation, which EGAT previously included in cash and cash equivalents, will be presented in deposit for deferred revenue for electricity compensation due to the restriction for intended use. It is presented as non - current asset.
2. Deferred revenue for electricity compensation, which previously presented as current liability, reclassifies as non - current liability.

The Effects of consolidated and separate statements of financial position as at December 31, 2014, consolidated statements of income for the year ended December 31, 2014, consolidated statements of comprehensive income for the year ended December 31, 2014, balance brought forward of consolidated statements of changes in equity for the year ended December 31, 2015 and December 31, 2014 and balance of consolidated statements of changes in equity for the year ended December 31, 2014 are summarized as follows:

Unit : Million Baht

	Consolidated financial statement			
	Before restated	Restated	Reclassified	As restated
	and reclassified			and reclassified
Statements of financial position as at December 31, 2014				
Cash and cash equivalents	66,103.36	(169.29)	(3,288.00)	62,646.07
Temporary investments	28,946.39	(33.25)	-	28,913.14
Trade accounts receivable - others	63,221.06	(62.73)	-	63,158.33
Trade accounts receivable - related parties	2,538.51	2.53	-	2,541.04
Other accounts receivable	7,471.08	(8.50)	(5.84)	7,456.74
Materials and supplies	13,384.01	(1.49)	-	13,382.52

Unit : Million Baht

Consolidated financial statement

	Before restated	Restated	Reclassified	As restated
	and reclassified			and reclassified
Other current assets - Others	1,807.35	(0.01)	-	1,807.34
Investments in associates	19,261.67	-	642.88	19,904.55
Investments in joint ventures	10,535.02	643.55	(642.88)	10,535.69
Other long - term investments	4,065.09	(0.40)	-	4,064.69
Property, plant and equipment	260,073.85	(1,053.58)	-	259,020.27
Work under construction	45,605.00	(4.13)	-	45,600.87
Other intangible assets	28,641.73	(5.32)	-	28,636.41
Project development cost for collection	-	344.98	-	344.98
Deposit for deferred revenue for electricity compensation	-	-	3,288.00	3,288.00
Other non - current assets	3,055.01	(1.46)	-	3,053.55
Trade accounts payable - others	54,555.58	(52.49)	-	54,503.09
Trade accounts payable - related parties	7,563.88	46.85	-	7,610.73
Other accounts payable	10,866.80	(20.87)	(5.84)	10,840.09
Accrued interest expenses	1,189.89	(0.14)	-	1,189.75
Accrued expenses	5,205.08	(1.78)	-	5,203.30
Current portion of long - term loans	8,958.81	(130.82)	-	8,827.99
Current portion of finance lease liabilities - others	4.17	(0.51)	-	3.66
Long - term loans	72,499.70	(548.75)	-	71,950.95
Finance lease liabilities - others	3.54	(1.09)	-	2.45
Employee benefit obligations	14,580.47	(0.68)	-	14,579.79
Retained earnings - unappropriated	247,911.02	450.02	-	248,361.04
Other components of owners' equity	1,166.72	(88.84)	-	1,077.88



Unit : Million Baht

Consolidated financial statement

	Before restated and reclassified	Restated	Reclassified	As restated and reclassified
Statements of income				
for the year ended December 31, 2014				
<u>Revenues</u>				
Revenue from electric energy sales	536,318.41	(406.90)	-	535,911.51
Revenue from sales of other goods and services	21,410.08	(241.41)	-	21,168.67
Other revenues	6,574.80	(2.22)	-	6,572.58
Share of profit (loss) from investments in associates	1,331.03	(10.75)	67.15	1,387.43
Share of profit (loss) from investments in joint ventures	1,047.97	98.26	(67.15)	1,079.08
<u>Expenses</u>				
Cost of electric energy sales	460,197.88	(533.41)	-	459,664.47
Cost of sales of other goods and services	19,445.92	34.81	-	19,480.73
Administrative Expenses	17,302.59	(364.88)	-	16,937.71
Finance costs	25,709.67	(30.62)	-	25,679.05
Income taxes	1,281.94	(12.56)	-	1,269.38
<u>Profit for the year</u>				
Profit for the year	42,140.08	343.64	-	42,483.72
Statements of comprehensive income				
For the year ended December 31, 2014				
Gain (loss) on available - for - sale investments valuation	567.46	-	(0.08)	567.38
Share of other comprehensive income (loss) of associates	(115.68)	10.75	-	(104.93)
Share of other comprehensive income of joint ventures	-	-	0.08	0.08
Other comprehensive income (loss) for the year - net of taxes	(848.17)	10.75	-	(837.42)

Unit : Million Baht

Consolidated financial statement

	Before restated	Restated	Reclassified	As restated
	and reclassified			and reclassified
Statements of changes in owners' equity				
as at January 1, 2015				
Retained earnings - unappropriated	247,911.02	450.02	-	248,361.04
Gain (loss) on available - for - sale				
investments valuation	610.00	-	(0.06)	609.94
Share of other comprehensive income				
(loss) of associates	339.70	(88.84)	-	250.86
Share of other comprehensive income of				
joint ventures	-	-	0.06	0.06
Total owners' equity	372,502.17	361.18	-	372,863.35
Statements of changes in owners' equity				
as at January 1, 2014				
Retained earnings - unappropriated	227,449.97	106.38	-	227,556.35
Gain on available - for - sale				
investments valuation	354.60	-	0.02	354.62
Share of other comprehensive income				
(loss) of associates	455.38	(99.59)	-	355.79
Share of other comprehensive loss of				
joint ventures	-	-	(0.02)	(0.02)
Total owners' equity	351,543.08	6.79	-	351,549.87



Unit : Million Baht

Separate financial statement

	Before restated		As restate	
	and reclassified	Restated	Reclassified	and reclassified
Statements of financial position as at				
December 31, 2014				
Cash and cash equivalents	55,120.09	-	(3,288.00)	51,832.09
Deposit for deferred revenue for electricity compensation	-	-	3,288.00	3,288.00

6. Supplementary Information

6.1 Cash and Cash Equivalents comprise

Unit : Million Baht

	Consolidated financial statement		Separate financial statement	
	Dec 31, 15	Dec 31, 14	Dec 31, 15	Dec 31, 14
Cash on hand	7.92	7.14	7.21	6.65
Cash in banks current and saving accounts	35,984.14	44,350.04	33,795.94	41,825.44
Fixed deposits not more than 3 months	32,347.17	10,225.34	28,149.12	10,000.00
Treasury bills not more than 3 months	2,979.86	-	2,979.86	-
Fixed deposit receipts	1,328.46	8,063.55	-	-
Total	72,647.55	62,646.07	64,932.13	51,832.09

6.2 Temporary investments comprise

Unit : Million Baht

	Consolidated financial statement		Separate financial statement	
	Dec 31, 15	Dec 31, 14	Dec 31, 15	Dec 31, 14
Fixed deposits more than 3 months but not more than 12 months	25,886.43	18,135.01	23,869.30	17,017.27
Fixed deposit receipts	4,038.39	3,304.00	-	-
Debenture	60.00	-	-	-
Government bonds more than 3 months	-	7,038.28	-	6,997.28
Investments in trading securities	418.30	435.85	-	-
Total	30,403.12	28,913.14	23,869.30	24,014.55

6.3 Trade Accounts Receivable - Others comprise

Unit : Million Baht

	Consolidated financial statement		Separate financial statement	
	Dec 31, 15	Dec 31, 14	Dec 31, 15	Dec 31, 14
Receivable from electric energy sales				
Metropolitan Electricity Authority	25,992.83	27,234.60	25,992.83	27,234.60
Provincial Electricity Authority	31,115.25	30,569.51	31,115.25	30,569.51
Others	5,186.34	4,746.55	5,186.34	4,746.55
	62,294.42	62,550.66	62,294.42	62,550.66
Services and others receivable	809.56	655.45	270.93	228.79
Total	63,103.98	63,206.11	62,565.35	62,779.45
Less : Allowance for doubtful accounts	(47.83)	(47.78)	(47.83)	(47.78)
Balance	63,056.15	63,158.33	62,517.52	62,731.67

Trade accounts receivable - others can be analyzed by categories and outstanding period as follows:

Unit: Million Baht

	Consolidated financial statement			
	Electric energy sales	Service and others	Total	
Outstanding period			Dec 31, 15	Dec 31, 14
Undue portion	59,546.53	744.93	60,291.46	61,619.52
Overdue not more than 6 months	1,767.42	13.83	1,781.25	1,262.44
Overdue more than 6 months to				
1 year	-	0.54	0.54	0.08
Overdue more than 1 year	980.47	50.26	1,030.73	324.07
Total	62,294.42	809.56	63,103.98	63,206.11
Less : Allowance for doubtful accounts	-	(47.83)	(47.83)	(47.78)
Balance	62,294.42	761.73	63,056.15	63,158.33



Unit: Million Baht

Outstanding period	Separate financial statement			
	Electric	Service and	Total	
	energy sales	others	Dec 31, 15	Dec 31, 14
Undue portion	59,546.53	213.87	59,760.40	61,202.65
Overdue not more than 6 months	1,767.42	6.26	1,773.68	1,252.65
Overdue more than 6 months to				
1 year	-	0.54	0.54	0.08
Overdue more than 1 year	980.47	50.26	1,030.73	324.07
Total	62,294.42	270.93	62,565.35	62,779.45
Less : Allowance for doubtful				
accounts	-	(47.83)	(47.83)	(47.78)
Balance	62,294.42	223.10	62,517.52	62,731.67

6.4 Related Parties Transactions

The companies that have transactions with EGAT as at December 31, 2015 are as follows:

Company	Country of Incorporation/ Nationality	Relationship
EGAT International Co., Ltd.	Thailand	Subsidiary, EGAT has 100% shareholding
EGAT Diamond Service Co., Ltd.	Thailand	Subsidiary, EGAT has 45% shareholding
Ratchaburi Electricity Generating Holding Plc.	Thailand	Subsidiary, EGAT has 45% shareholding
District Cooling System and Power Plant Co., Ltd.	Thailand	Joint venture of EGAT, EGAT has 35% shareholding
Electricity Generating Plc.	Thailand	Associate, EGAT has 25.41% shareholding
Ratchaburi Electricity Generating Co., Ltd.	Thailand	Subsidiary of Ratchaburi Electricity Generating Holding Plc.
Ratchaburi Energy Co., Ltd.	Thailand	Subsidiary of Ratchaburi Electricity Generating Holding Plc.
RATCH - Lao Services Co., Ltd.	Lao PDR	Subsidiary of Ratchaburi Electricity Generating Holding Plc.
RH International Corporation Ltd.	Thailand	Subsidiary of Ratchaburi Electricity Generating Holding Plc.
RATCH O&M Co., Ltd.	Thailand	Subsidiary of Ratchaburi Electricity Generating Holding Plc.
Tri Energy Co., Ltd. (In liquidation process)	Thailand	Subsidiary of Ratchaburi Electricity Generating Holding Plc.
Ratchaburi Alliances Co.,Ltd.	Thailand	Subsidiary of Ratchaburi Electricity Generating Holding Plc.
Khanom Electricity Generating Co., Ltd.	Thailand	Related party of EGAT

Company	Country of Incorporation/ Nationality	Relationship
EGCO Engineering and Services Co., Ltd.	Thailand	Related party of EGAT
Gulf Electric Plc.	Thailand	Related party of EGAT
BLCP Power Co., Ltd.	Thailand	Related party of EGAT
Eastern Water Resources Development and Management Plc.	Thailand	Related party of EGAT
Hongsa Power Co., Ltd.	Lao PDR	Related party of EGAT
Phufai Mining Co., Ltd.	Lao PDR	Related party of EGAT
RATCH - Australia Corporation Ltd.	Australia	Related party of EGAT
Nam Ngiep1 Power Co., Ltd.	Lao PDR	Related party of EGAT

Related Parties Transactions the details are as follows:

6.4.1 Trade accounts receivable - related parties comprise

	Unit : Million Baht			
	Consolidated financial statement		Separate financial statement	
	Dec 31, 15	Dec 31, 14	Dec 31, 15	Dec 31, 14
Subsidiaries	-	-	496.30	357.33
Associate	-	6.21	-	6.21
Joint venture	7.05	7.24	7.05	7.24
Other related parties	1,800.45	2,527.59	1,800.45	2,527.59
Total trade accounts receivable				
- related parties	1,807.50	2,541.04	2,303.80	2,898.37

Trade accounts receivable - related parties can be analyzed by categories and aging schedule as follows:

	Unit : Million Baht			
	Consolidated financial statement		Separate financial statement	
	Dec 31, 15	Dec 31, 14	Dec 31, 15	Dec 31, 14
Undue portion	1,807.44	2,541.04	2,291.84	2,888.34
Overdue not more than 6 months	0.06	-	11.96	10.03
Total trade accounts receivable				
- related parties	1,807.50	2,541.04	2,303.80	2,898.37



6.4.2 Long - term loans to related parties

Long - term loans to related parties in consolidated financial statement are the transactions of the group of EGAT's subsidiaries comprise of:

		Unit : Million Baht	
		<u>Consolidated financial statement</u>	
		<u>Dec 31, 15</u>	<u>Dec 31, 14</u>
Long - term loans to related parties		47.29	43.20
Total		<u>47.29</u>	<u>43.20</u>

6.4.3 Trade accounts payable - related parties comprise

		Unit : Million Baht			
		<u>Consolidated financial statement</u>		<u>Separate financial statement</u>	
		<u>Dec 31, 15</u>	<u>Dec 31, 14</u>	<u>Dec 31, 15</u>	<u>Dec 31, 14</u>
Subsidiaries		-	-	8,274.11	10,357.38
Associate		-	226.51	-	226.51
Joint venture		134.66	133.88	134.66	133.88
Other related parties		8,150.92	7,250.34	8,150.92	7,250.34
Total trade accounts payable					
- related parties		<u>8,285.58</u>	<u>7,610.73</u>	<u>16,559.69</u>	<u>17,968.11</u>

6.4.4 Long - term loans from related parties

Long - term loans from related parties in consolidated financial statement are the transactions of the group of EGAT's subsidiaries comprise of:

		Unit : Million Baht	
		<u>Consolidated financial statement</u>	
		<u>Dec 31, 15</u>	<u>Dec 31, 14</u>
Long - term loans from related parties		1,071.60	1,095.46
Total		<u>1,071.60</u>	<u>1,095.46</u>

6.4.5 Revenues and expenses - related parties comprise

	Unit : Million Baht			
	Consolidated financial statement		Separate financial statement	
	2015	2014	2015	2014
Revenues				
Revenue from electric energy sales				
Subsidiary	-	-	203.39	205.03
Associate	0.05	36.70	0.05	36.70
Other related parties	377.45	71.06	377.45	71.06
Revenue from sales of other goods and services				
Subsidiaries	-	-	2,594.24	2,939.31
Associate	0.28	3,355.89	0.28	3,355.89
Joint venture	96.84	88.13	96.84	88.13
Other related parties	12,768.41	15,371.15	12,768.41	15,371.15
Expenses				
Cost of electric energy sales				
Subsidiary	-	-	18.56	17.23
Joint venture	1,011.43	1,098.98	1,011.43	1,098.98
Other related party	388.83	-	388.83	-
Cost of sales of other goods and services				
Subsidiaries	-	-	2,050.38	2,545.40
Associate	0.12	3,332.26	0.12	3,332.26
Joint venture	101.51	99.45	101.51	99.45
Other related parties	12,238.44	15,123.27	12,238.44	15,123.27

6.4.6 Executives' remunerations

For the year ended December 31, 2015, Executives' remunerations are as follows:

	Unit : Million Baht			
	Consolidated financial statement		Separate financial statement	
	2015	2014	2015	2014
Directors' remunerations				
Meeting remuneration and bonuses	36.34	44.75	3.78	2.13
	36.34	44.75	3.78	2.13



Unit : Million Baht

	Consolidated financial statement		Separate financial statement	
	2015	2014	2015	2014
Management's remunerations				
Salaries, bonuses and other short - term				
employee benefits	204.30	204.64	54.63	54.12
Post - employee benefit and other long - term				
employee benefits	17.16	16.20	1.52	1.35
	<u>221.46</u>	<u>220.84</u>	<u>56.15</u>	<u>55.47</u>
Total	<u>257.80</u>	<u>265.59</u>	<u>59.93</u>	<u>57.60</u>

6.5 Accrued / Surplus Revenue from Electric Energy Sales according to Automatic Tariff Adjustment (Ft) and Deferred Revenue for Electricity Compensation

As at January 1, 2015, EGAT has the surplus revenue from electric energy sales according to automatic tariff adjustment (Ft) in the amount of Baht 4,872.38 million. As at January 9, 2015, Energy Regulatory Commission (ERC) has approved the Ft of wholesale for January - April 2015, which was equivalent to 55.92 satang per unit for MEA and 40.31 satang per unit for PEA. As at April 30, 2015, ERC has approved the Ft of wholesale for May - August 2015, which was equivalent to 46.25 satang per unit for MEA and 31.38 satang per unit for PEA. As at September 3, 2015, ERC has approved the Ft of wholesale for September - December 2015, which was equivalent to 42.84 satang per unit for MEA and 28.42 satang per unit for PEA. As at November 27, 2015, ERC has approved the Ft of wholesale for November - December 2015, which deducted to -3.39 satang per unit for MEA and -3.03 satang per unit for PEA. However, the actual cost of purchasing fuel and electricity in such period are lower than the estimated Ft calculating formula, so that as of December 31, 2015, EGAT had surplus Ft revenue in the amount of Baht 7,022.82 million.

As at January 1, 2015 and December 31, 2015, EGAT had recorded deferred revenue for electricity compensation in the amount of Baht 3,386.83 million and Baht 7,552.73 million respectively. Deferred revenue for electricity compensation increased by Baht 4,165.90 million due to the fact that EGAT had received more compensation for the fuel or electricity from fuel suppliers or other electricity producers. In 2015, the Energy Regulatory Commission (ERC) has made the approval in the meeting 67/2558 (No.377) that deferred revenue for electricity compensation will be presented in non - current liabilities which the deposit for Ft management will be separately presented from cash and cash equivalents. This deposit account is placed restriction that EGAT is not allowed to use for other purposes.

6.6 Other Accounts Receivable comprise

	Unit : Million Baht			
	Consolidated financial statement		Separate financial statement	
	Dec 31, 15	Dec 31, 14	Dec 31, 15	Dec 31, 14
Employee accounts receivable	121.40	217.90	114.83	214.06
Other accounts receivable	726.33	651.61	312.43	498.64
Less : Allowance for doubtful accounts	(11.73)	(12.37)	(11.73)	(12.37)
Total	836.00	857.14	415.53	700.33
Advances and Prepaid	5,121.33	1,753.98	4,993.32	1,582.09
Accrued revenues	418.11	242.55	196.35	173.03
Input tax	3,814.71	4,603.07	3,814.71	4,599.08
Balance	<u>10,190.15</u>	<u>7,456.74</u>	<u>9,419.91</u>	<u>7,054.53</u>

6.7 Materials and Supplies comprise

	Unit : Million Baht			
	Consolidated financial statement		Separate financial statement	
	Dec 31, 15	Dec 31, 14	Dec 31, 15	Dec 31, 14
Fuel oil for power plant	4,838.48	5,889.02	3,761.77	4,769.06
Lignite stock	1,946.72	1,550.94	1,946.72	1,550.94
Spare parts, other materials and supplies	11,893.96	12,175.61	9,874.42	9,698.04
Less : Allowance for obsolescence	(6,586.67)	(6,233.05)	(5,441.12)	(5,292.70)
Balance	<u>12,092.49</u>	<u>13,382.52</u>	<u>10,141.79</u>	<u>10,725.34</u>

6.8 Investment in Subsidiaries, Associates, and Joint Ventures

6.8.1 Details of subsidiaries, associate, and joint venture of EGAT

Company	Country of incorporation/ Nationality	Business	Shareholding (%)	
			Dec 31, 15	Dec 31, 14
Subsidiaries				
EGAT International Co., Ltd.	Thailand	Investing in electricity generation and related businesses in foreign countries	100	100
EGAT Diamond Service Co., Ltd.	Thailand	Gas turbine maintenance including components and spare parts	45	45
Ratchaburi Electricity Generating Holding Plc.	Thailand	Investing in companies with the purpose of electricity generation and supply	45	45



Company	Country of incorporation/ Nationality	Business	Shareholding (%)	
			Dec 31, 15	Dec 31, 14
Associate				
Electricity Generating Plc.	Thailand	Generation and supply of electricity	25.41	25.41
Joint venture				
District Cooling System and Power Plant Co., Ltd.	Thailand	Generation and supply of electricity and chilled water	35	35

6.8.2 Details of subsidiaries, associates, and joint ventures of subsidiaries

Company	Country of incorporation/ Nationality	Business	Shareholding (%)	
			Dec 31, 15	Dec 31, 14
Direct subsidiaries of subsidiary : Ratchaburi Electricity Generating Holding Plc.				
Ratchaburi Electricity Generating Co., Ltd.	Thailand	Generation and supply of electricity and investment in electricity business	100	100
Ratchaburi Energy Co., Ltd.	Thailand	Power plant development and operation and investment in electricity business	100	100
RATCH - Lao Services Co., Ltd.	Lao PDR	Operation and maintenance services	100	100
RH International Corporation Ltd.	Thailand	Investment in electricity business	100	100
RATCH O&M Co., Ltd.	Thailand	Operation and maintenance services	100	100
Tri Energy Co., Ltd. (In liquidation process)	Thailand	Generation and supply of electricity	100	100
Ratchaburi Alliances Co., Ltd.	Thailand	Investment in electricity business	100	100
Indirect subsidiaries of subsidiary : Ratchaburi Electricity Generating Holding Plc.				
RH International (Mauritius) Corporation Ltd.	Mauritius	Investment in electricity business in foreign country	100	100
RH International (Singapore) Corporation Ltd.	Singapore	Investment in electricity business in foreign country	100	100
RATCH - Australia Corporation Ltd. and its subsidiaries	Australia	Power plant development and operation and investment in electricity business	80	80
RATCH - China Power Co., Ltd.	Hongkong	Investment in electricity business in foreign country	100	-
RE Solar 1 Co., Ltd.	Thailand	Generation and supply of electricity	100	-

Company	Country of incorporation/ Nationality	Business	Shareholding (%)	
			Dec 31, 15	Dec 31, 14
Associated company of subsidiary: EGAT International Co., Ltd.				
Nam Ngiep1 Power Co., Ltd.	Lao PDR	Generation and supply of electricity	30	30
Associates of subsidiary: Ratchaburi Electricity Generating Holding Plc.				
First Korat Wind Co., Ltd.	Thailand	Generation and supply of electricity	20	20
K.R. Two Co., Ltd.	Thailand	Generation and supply of electricity	20	20
Perth Power Partnership (Kwinana)	Australia	Generation and supply of electricity	24	24
Joint ventures of subsidiary: Ratchaburi Electricity Generating Holding Plc.				
Chubu Ratchaburi Electric Services Co., Ltd.	Thailand	Operation and maintenance services	50	50
South East Asia Energy Ltd. and subsidiary	Thailand	Investment in electricity business	33.33	33.33
Nam Ngum 3 Power Co., Ltd.	Lao PDR	Generation and supply of electricity	25	25
Xe-Pien Xe-Nam Noy Power Co., Ltd.	Lao PDR	Generation and supply of electricity	25	25
KK Power Co., Ltd.	Cambodia	Generation and supply of electricity	50	50
Ratchaburi Power Co., Ltd.	Thailand	Generation and supply of electricity	25	25
Nava Nakorn Electricity Generating Co., Ltd.	Thailand	Generation and supply of electricity and steam	40	40
Ratchaburi World Cogeneration Co., Ltd.	Thailand	Generation and supply of electricity and steam	40	40
Solarta Co., Ltd.	Thailand	Generation and supply of electricity	49	49
Solar Power (Korat 3) Co., Ltd.	Thailand	Generation and supply of electricity	40	40
Solar Power (Korat 4) Co., Ltd.	Thailand	Generation and supply of electricity	40	40
Solar Power (Korat 7) Co., Ltd.	Thailand	Generation and supply of electricity	40	40
Songkhla Biomass Co., Ltd.	Thailand	Generation and supply of electricity	40	40
Songkhla Biofuel Co., Ltd.	Thailand	Supply the biomass fuel	40	40
Ayudhya Power Co., Ltd.	Thailand	Generation and supply of electricity	-	45
Oversea Green Energy Co., Ltd.	Thailand	Power plant management services	60	60
Berkprai Cogeneration Co., Ltd.	Thailand	Generation and supply of electricity and steam	35	35
Hongsa Power Co., Ltd.	Lao PDR	Generation and supply of electricity	40	40
Phufai Mining Co., Ltd.	Lao PDR	Generation and supply of coal	37.50	37.50
RICI International Investment Co., Ltd.	Singapore	Investment in electricity business in foreign country	60	60



6.8.3 Investments in associates and joint ventures in the consolidated financial statements

Company	Unit : Million Baht							
	Shareholding (%)		Cost Method		Equity Method		Dividend	
	Dec 31, 15	Dec 31, 14	Dec 31, 15	Dec 31, 14	Dec 31, 15	Dec 31, 14	Dec 31, 15	Dec 31, 14
Associates								
Electricity Generating Plc.	25.41	25.41	1,587.55	1,587.55	18,670.03	17,659.36	836.08	836.08
Nam Ngiep 1 Power Co., Ltd.	30	30	966.76	926.16	681.81	643.93	-	-
First Korat Wind Co., Ltd.	20	20	399.20	399.20	518.31	530.69	122.00	112.00
K.R. Two Co., Ltd.	20	20	365.40	365.40	418.83	427.69	104.00	124.10
Perth Power Partnership (Kwinana)	24	24	618.53	618.53	573.97	642.88	118.10	72.46
Total Associates			3,937.44	3,896.84	20,862.95	19,904.55	1,180.18	1,144.64
Joint ventures								
District Cooling System and Power Plant Co., Ltd.	35	35	584.50	584.50	706.73	643.55	15.36	-
Chubu Ratchaburi Electric □ Services Co., Ltd.	50	50	10.00	10.00	88.54	79.27	-	20.00
South East Asia Energy Ltd. and its subsidiary	33.33	33.33	2,202.25	2,202.25	3,057.12	2,993.55	79.28	72.67
Nam Ngum 3 Power Co., Ltd.	25	25	0.45	0.45	-	-	-	-
Xe-Pien Xe-Nam Noy □ Power Co., Ltd.	25	25	934.22	675.32	1,101.57	647.72	-	-
KK Power Co., Ltd.	50	50	15.44	15.44	-	-	-	-
Ratchaburi Power Co., Ltd.	25	25	1,831.25	1,831.25	4,068.13	4,054.63	480.00	400.00
Nava Nakorn Electricity □ Generating Co., Ltd.	40	40	400.80	400.80	353.84	368.58	-	-
Ratchaburi World □ Cogeneration Co., Ltd.	40	40	1,000.00	500.00	1,162.01	526.37	-	-
Solarta Co., Ltd.	49	49	545.96	545.96	929.35	808.80	51.74	105.43
Solar Power (Korat 3) Co., Ltd.	40	40	75.50	75.50	99.62	109.41	33.83	7.93
Solar Power (Korat 4) Co., Ltd.	40	40	79.70	77.96	97.90	106.38	33.55	12.51
Solar Power (Korat 7) Co., Ltd.	40	40	75.50	74.20	93.65	101.93	34.49	15.93
Songkhla Biomass Co., Ltd.	40	40	98.40	80.00	76.24	71.83	-	-
Songkhla Biofuel Co., Ltd.	40	40	0.40	0.40	0.37	0.37	-	-
Ayudhya Power Co., Ltd.	-	45	-	18.10	-	13.93	-	-
Oversea Green Energy Co., Ltd.	60	60	9.60	0.60	8.37	0.59	-	-
Berkprai Cogeneration Co., Ltd.	35	35	8.75	8.75	8.55	8.51	-	-
Hongsa Power Co., Ltd.	40	40	6,019.82	983.12	4,561.57	-	-	-
Phufai Mining Co., Ltd.	37.50	37.50	0.63	0.63	26.44	0.27	-	-
RICI International Investment Co., Ltd.	60	-	306.57	-	315.33	-	-	-
Total Joint Ventures			14,199.74	8,085.23	16,755.33	10,535.69	728.25	634.47
Grand Total			18,137.18	11,982.07	37,618.28	30,440.24	1,908.43	1,779.11

During the year 2015, a subsidiary of EGAT had paid up the increased share capital of Hongsa Power Co., Ltd., Ratchaburi World Cogeneration Co., Ltd., Songkhla Biomass Co., Ltd., Xe - Pien Xe - Nam Noy Power Co., Ltd., Oversea Green Energy Co., Ltd., Solar Power (Korat 4) Co., Ltd., Solar Power (Korat 7) Co., Ltd. and had invested in RIC International Investment Co., Ltd., which are joint ventures. And EGAT had paid up the increased share capital of Nam Ngiep 1 Power Co., Ltd. which is an associate of subsidiary of EGAT.

6.8.4 Investments in subsidiaries, associate, and joint venture in the separate financial statements

Company	Unit : Million Baht					
	Shareholding (%)		Cost Method		Dividend	
	Dec 31, 15	Dec 31, 14	Dec 31, 15	Dec 31, 14	Dec 31, 15	Dec 31, 14
Subsidiaries						
EGAT International Co., Ltd.	100	100	6,108.00	4,362.00	-	-
EGAT Diamond Service Co., Ltd.	45	45	280.35	280.35	-	-
Ratchaburi Electricity Generating Holding Plc.	45	45	6,525.00	6,525.00	1,481.18	1,481.18
Total Subsidiaries			12,913.35	11,167.35	1,481.18	1,481.18
Associate						
Electricity Generating Plc.	25.41	25.41	1,587.55	1,587.55	836.08	836.08
Total Associate			1,587.55	1,587.55	836.08	836.08
Joint venture						
District Cooling System and Power Plant Co., Ltd.	35	35	584.50	584.50	15.36	-
Total Joint Venture			584.50	584.50	15.36	-
Grand Total			15,085.40	13,339.40	2,332.62	2,317.26



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

6.8.5.1 Movements in investments in associates and joint ventures accounted under the equity method in the consolidated financial statements

	Unit : Million Baht	
	Dec 31, 15	Dec 31, 14
Balance at the beginning (Before adjustment)	29,796.69	30,204.08
Change in accounting policy	643.55	545.20
Balance at the beginning (After adjustment)	30,440.24	30,749.28
Share of profit from investments - equity method	2,314.28	2,466.51
Retained earnings - legal reserve	4.37	-
Additional payment of share capital in joint ventures	6,132.61	417.28
Additional payment of share capital in associates	40.60	623.84
Sale of investments in joint ventures	(13.97)	(10.94)
Gain from sale of investments in joint ventures/ associates	-	10.94
Transfer development cost to investment	-	138.87
Investments in joint ventures before changing status	-	(2,163.16)
Available - for - sale investments	51.37	(88.33)
Currency translation differences of the company settled in foreign country	849.54	25.03
Loss from cash flow hedge	(106.27)	(94.71)
Actuarial loss	(18.78)	-
Capital surplus of associates accounted under the equity method	(55.57)	-
Dividend received	(1,908.43)	(1,779.11)
Exchange rate adjustment	92.45	(59.42)
Others	(204.16)	204.16
Balance at the end (After adjustment)	<u>37,618.28</u>	<u>30,440.24</u>

6.8.5.2 Movements in investments in subsidiaries, associate, and joint venture accounted for under the cost method in the separate financial statements

	Unit : Million Baht	
	Dec 31, 15	Dec 31, 14
Balance at the beginning	13,339.40	12,085.40
Additional investments	1,746.00	1,254.00
Balance at the end	<u>15,085.40</u>	<u>13,339.40</u>



6.8.6 Financial information of subsidiaries that have material non-controlling interests, associate, and joint venture

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

Unit : Million Baht

Company	Country of incorporation/ Nationality	Non-controlling interests	
		Shareholding (%)	
		2015	2014
EGAT Diamond Service Co., Ltd.	Thailand	55	55
Ratchaburi Electricity Generating Holding Plc.	Thailand	55	55

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

Summary of financial position as at December 31, 2015 and 2014

Unit : Million Baht

	2015		2014	
	EDS	RATCH	EDS	RATCH
Current assets	112.63	25,983.50	150.06	31,407.67
Non-current assets	409.23	66,621.56	439.62	64,827.36
Current liabilities	(50.34)	(11,658.07)	(86.37)	(16,049.97)
Non-current liabilities	(41.74)	(20,527.15)	(72.60)	(18,985.67)
Net assets	429.78	60,419.84	430.71	61,199.39
Owners of the parent	193.40	27,188.93	193.82	27,539.73
Non-controlling interests	236.38	33,230.91	236.89	33,659.66



Summary of comprehensive income or loss for the years ended December 31, 2015 and 2014

	Unit : Million Baht			
	2015		2014	
	EDS	RATCH	EDS	RATCH
Revenues	172.69	59,326.28	207.85	59,048.31
Expenses	(175.20)	(54,903.64)	(195.22)	(51,638.78)
Profit (loss) before taxes	(2.51)	4,422.64	12.63	7,409.53
Income taxes	-	(1,407.72)	-	(1,269.38)
Net profit (loss)	(2.51)	3,014.92	12.63	6,140.15
Other comprehensive income (loss)	1.58	(502.98)	-	(679.40)
Total comprehensive income (loss)	(0.93)	2,511.94	12.63	5,460.75
Owners of EGAT	(0.42)	1,130.37	5.68	2,457.34
Non - controlling interests	(0.51)	1,381.57	6.95	3,003.41
Total dividend paid to Non - controlling interests	-	1,810.60	-	1,810.60

Summary of cash flows for the years ended December 31, 2015 and 2014

	Unit : Million Baht			
	2015		2014	
	EDS	RATCH	EDS	RATCH
Operating activities	42.55	9,256.17	26.48	9,841.55
Investing activities	(6.91)	(6,248.03)	(14.26)	(2,419.72)
Financing activities	(34.17)	(6,740.69)	(25.69)	(4,366.29)
Others	-	574.02	-	129.73
Net increase (decrease) in cash and cash equivalents	1.47	(3,158.53)	(13.47)	3,185.27

6.8.6.2 Financial information of the associate of EGAT, after accounting policy adjustment is as follows:

Summary of financial position as at December 31, 2015 and 2014 - Electricity Generating Plc.

	Unit : Million Baht	
	2015	2014
Current assets	19,403.18	17,136.89
Non - current assets	158,675.84	142,875.54
Current liabilities	(15,918.94)	(18,733.88)
Non - current liabilities	(88,176.74)	(70,825.62)
Net assets	73,983.34	70,452.93

Summary of profit or loss for the years ended December 31, 2015 and 2014 - Electricity Generating Plc.

	Unit : Million Baht	
	2015	2014
Revenues*	24,902.61	24,687.33
Expenses	(19,791.94)	(18,583.11)
Profit (loss) before taxes	5,110.67	6,104.22
Income taxes	(750.40)	(751.22)
Net profit (loss)	<u>4,360.27</u>	<u>5,353.00</u>

* Including gain (loss) on foreign exchange rate

6.8.6.3 Financial information of the joint venture of EGAT, after accounting policy adjustment is as follows:

Summary of financial position as at December 31, 2015 and 2014 - District Cooling System and Power Plant Co., Ltd.

	Unit : Million Baht	
	2015	2014
Current assets	1,010.73	929.78
Non - current assets	2,924.31	3,085.85
Current liabilities	(699.94)	(580.01)
Non - current liabilities	(1,195.88)	(1,572.92)
Net assets	<u>2,039.22</u>	<u>1,862.70</u>

Summary of profit or loss for the years ended December 31, 2015 and 2014 - District Cooling System and Power Plant Co., Ltd.

	Unit : Million Baht	
	2015	2014
Revenues*	2,918.15	3,045.76
Expenses	(2,639.05)	(2,760.06)
Profit (loss) before taxes	279.10	285.70
Income taxes	(60.30)	(8.93)
Net profit (loss)	<u>218.80</u>	<u>276.77</u>

* Including gain (loss) on foreign exchange rate

6.9 Property, Plant and Equipment comprise

	Consolidated financial statement													Total	
	Land	Structures	Reservoirs and dams	Power plants	Equipment for power plants	Control system	Transmission system	Communication system	Coal handling system	Machinery	Large-sized spare parts for mine equipment	Vehicles	Other materials and supplies		Deferred charges of major inspection fee
Cost as at Jan 1, 15	8,948.78	29,377.31	29,094.25	304,526.16	35,471.05	867.82	162,820.12	6,939.31	6,174.20	6,549.87	42.85	2,989.70	10,564.10	5,992.28	610,336.82
Effects on change in accounting policy adjustment	-	(55.87)	-	(1,696.71)	-	-	-	-	-	-	-	-	(1.51)	-	(1,733.11)
Effect on business acquisitions adjustment and TRIC 4	(30.92)	-	-	46.75	(15.83)	-	-	-	-	-	-	-	-	-	-
Cost as at Jan 1, 15 (Adjusted)	8,917.86	29,321.44	29,094.25	302,876.20	35,455.22	867.82	162,820.12	6,939.31	6,174.20	6,549.87	42.85	2,989.70	10,562.59	5,992.28	608,603.71
Increase during the year	893.16	12.76	-	349.68	428.58	-	154.71	6.78	-	417.00	-	166.71	1,198.69	-	3,628.07
Transferred from work under construction	-	1,880.59	270.91	20,363.28	1,206.70	3.74	9,879.59	152.57	309.81	7.32	-	-	16.38	2,725.45	36,816.34
Exchange rate differences from currency translation	(11.57)	9.65	-	(464.67)	-	-	-	-	-	-	-	-	(0.08)	-	(466.67)
Reclassification	-	(0.70)	1.98	202.73	(206.54)	-	(0.37)	0.48	-	2.59	-	(2.53)	(1.81)	-	(4.17)
Disposal/ write-off	(21.46)	(41.41)	-	(420.66)	(161.47)	(15.13)	(904.73)	(93.09)	-	(153.67)	-	(139.81)	(481.36)	(1,982.89)	(4,415.68)
Cost as at Dec 31, 15	9,777.99	31,182.33	29,367.14	322,906.56	36,722.49	856.43	171,949.32	7,006.05	6,484.01	6,823.11	42.85	3,014.07	11,294.41	6,734.84	644,161.60
Accumulated depreciation / Amortization as at Jan 1, 15	-	(18,790.38)	(10,563.48)	(187,014.37)	(21,442.91)	(729.16)	(81,760.19)	(5,852.23)	(4,669.14)	(5,294.42)	(42.85)	(2,455.13)	(7,821.09)	(2,805.01)	(349,227.77)
Effects on change in accounting policy adjustment	-	22.88	-	668.44	-	-	-	-	-	-	-	-	0.80	-	(12.59)
Accumulated depreciation / Amortization as at Jan 1, 15 (Adjusted)	-	(18,767.50)	(10,563.48)	(186,345.93)	(21,442.91)	(729.16)	(81,760.19)	(5,852.23)	(4,669.14)	(5,294.42)	(42.85)	(2,455.13)	(7,820.29)	(2,805.01)	(348,548.24)
Depreciation/Amortization for the year	-	(1,138.06)	(458.06)	(10,893.40)	(3,527.94)	(30.23)	(5,699.91)	(247.45)	(133.73)	(256.98)	-	(154.31)	(718.07)	(2,143.57)	(25,401.71)
Exchange rate differences from currency translation	-	0.60	-	191.32	-	-	-	-	-	-	-	-	0.02	-	191.94
Reclassification	-	0.36	(0.42)	(129.55)	130.49	-	0.37	(0.21)	-	(0.79)	-	0.79	(0.15)	-	0.89
Disposal/ write-off	-	38.00	-	136.09	161.47	11.84	692.70	91.34	-	153.67	-	137.78	476.38	1,982.89	3,882.16
Accumulated depreciation / Amortization as at Dec 31, 15	-	(19,866.60)	(11,021.96)	(197,041.47)	(24,678.89)	(747.55)	(86,767.03)	(6,008.55)	(4,802.87)	(5,398.52)	(42.85)	(2,470.87)	(8,062.11)	(2,965.69)	(369,874.96)
Accumulated impairment as at Jan 1, 15	-	(1.18)	-	(1,034.02)	-	-	-	-	-	-	-	-	-	-	(1,035.20)
As at Dec 31, 15	-	(1.18)	-	(1,034.02)	-	-	-	-	-	-	-	-	-	-	(1,035.20)
Net book value as at Dec 31, 14	8,917.86	10,552.76	18,530.77	115,496.25	14,012.31	138.66	81,059.93	1,087.08	1,505.06	1,255.45	-	534.57	2,742.30	3,187.27	259,020.27
As at Dec 31, 15	9,777.99	11,314.55	18,345.18	124,831.07	12,043.60	108.88	85,182.29	997.50	1,681.14	1,424.59	-	543.20	3,232.30	3,769.15	273,251.44

Unit : Million Baht





Unit : Million Baht

Separate financial statement

	Land	Structures	Reservoirs and dams	Power plants	Equipment for power plants	Control system	Transmission system	Communication system	Coal handling system	Machinery	Large - sized spare parts for mine equipment	Vehicles	Other materials and supplies	Deferred charges of major inspection fee	Total
Cost as at Jan 1, 15	7,480.41	28,626.12	29,094.25	279,383.97	35,455.22	867.82	162,820.12	6,939.31	6,174.20	6,358.71	42.85	2,944.76	9,951.23	5,992.28	582,131.25
Increase during the year	893.16	12.45	-	1.43	428.58	-	154.71	6.78	-	416.96	-	166.71	1,181.97	-	3,262.75
Transferred from work under construction	-	1,880.52	270.91	20,347.87	1,206.70	3.74	9,879.59	152.57	309.81	3.50	-	-	9.69	2,725.45	36,790.35
Reclassification	-	(0.70)	1.98	202.73	(206.54)	-	(0.37)	0.48	-	2.59	-	(2.53)	(1.81)	-	(4.17)
Disposal / write - off	-	(41.41)	-	(232.10)	(161.47)	(15.13)	(904.73)	(93.09)	-	(153.67)	-	(119.15)	(469.72)	(1,982.89)	(4,173.36)
Cost as at Dec 31, 15	8,373.57	30,476.98	29,367.14	299,703.90	36,722.49	856.43	171,949.32	7,006.05	6,484.01	6,628.09	42.85	2,989.79	10,671.36	6,734.84	618,006.82
Accumulated depreciation / Amortization as at Jan 1, 15	-	(18,637.86)	(10,563.48)	(176,337.06)	(21,442.91)	(729.16)	(81,760.19)	(5,852.23)	(4,669.14)	(5,262.80)	(42.85)	(2,415.85)	(7,488.15)	(2,805.01)	(338,006.69)
Depreciation/Amortization for the year	-	(1,102.09)	(458.06)	(9,991.63)	(3,527.94)	(30.23)	(5,699.91)	(247.45)	(133.73)	(237.52)	-	(151.80)	(629.00)	(2,143.57)	(24,352.93)
Reclassification	-	0.36	(0.42)	(129.55)	130.49	-	0.37	(0.21)	-	(0.79)	-	0.79	(0.15)	-	0.89
Disposal / write - off	-	38.00	-	16.96	161.47	11.84	692.70	91.34	-	153.67	-	119.15	465.48	1,982.89	3,733.50
Accumulated depreciation / Amortization as at Dec 31, 15	-	(19,701.59)	(11,021.96)	(186,441.28)	(24,678.89)	(747.55)	(86,767.03)	(6,008.55)	(4,802.87)	(5,347.44)	(42.85)	(2,447.71)	(7,651.82)	(2,965.69)	(358,625.23)
Accumulated impairment	-	-	-	(15.33)	-	-	-	-	-	-	-	-	-	-	(15.33)
As at Jan 1, 15	-	-	-	(15.33)	-	-	-	-	-	-	-	-	-	-	(15.33)
As at Dec 31, 15	-	-	-	(15.33)	-	-	-	-	-	-	-	-	-	-	(15.33)
Net book value	7,480.41	9,988.26	18,530.77	103,031.58	14,012.31	138.66	81,059.93	1,087.08	1,505.06	1,095.91	-	528.91	2,463.08	3,187.27	244,109.23
As at Dec 31, 14	8,373.57	10,775.39	18,345.18	113,247.29	12,043.60	108.88	85,182.29	997.50	1,681.14	1,280.65	-	542.08	3,019.54	3,769.15	259,366.26

EGAT's property, plant and equipment has included other asset financial lease agreements (other than power plants), which the ownership of such assets will not be transferred to EGAT at the end of the lease periods, in property, plant and equipment. As at Dec 31, 2015, the cost value of these assets are Baht 52.99 million, accumulated depreciation are baht 2.54 million, and net book value are Baht 50.45 million.



As at December 31, 2015 and 2014, EGAT has buildings and equipment fully accumulated depreciation, while being in use. The cost value of these assets before deduction of accumulated depreciation were Baht 120,925.48 million and Baht 106,615.07 million respectively, which comprise

	Unit : Million Baht	
	Separate financial statement	
	Dec 31, 15	Dec 31, 14
Structures	10,009.78	9,503.82
Reservoirs and dams	15.50	15.50
Power Plants	63,830.53	53,674.54
Equipment for power plants	10,743.48	9,634.43
Control system	459.85	457.59
Transmission system	17,357.33	15,131.13
Communication system	4,778.90	4,403.08
Coal handling system	3,260.52	3,260.52
Machinery	3,685.42	3,734.90
Large - sized spare parts for mine equipment	42.85	42.85
Vehicles	1,886.62	1,925.01
Other materials and supplies	4,854.70	4,831.70
Total	<u>120,925.48</u>	<u>106,615.07</u>

As at December 31, 2015, Nong Jok power plant - unit 2 and 3 with some equipments of Lankrabue power plant - unit 11 were sent to Japan for alleviating the electricity shortage during the summer of 2011 due to a natural disaster Tsunami. The cost value of the power plants and the equipments are Baht 1,924.34 million and Baht 61.06 million respectively. They have fully accumulated depreciation, so the remaining net book values are Baht 47 and Baht 2, respectively.

6.10 Work under Construction comprise

Unit : Million Baht

	Consolidated financial statement											Total				
	Structures	Reservoirs and dams	Power plants	Equipment for power plants	Control system	Transmission system and exploration	Communication system	Coal handling system	Machinery	Other materials and supplies	Major inspection fee		Computer Software	Research and development	Materials for work under construction of transmission system	Materials in transportation
Balance as at Jan 1, 15	1,981.20	463.61	12,491.38	-	25.84	19,619.56	403.69	749.39	3.77	13.93	599.96	1.30	-	2,238.48	7,012.89	45,605.00
Effects on change in accounting policy adjustment	-	-	(4.13)	-	-	-	-	-	-	-	-	-	-	-	-	(4.13)
Balance as at Jan 1, 15 (adjusted)	1,981.20	463.61	12,487.25	-	25.84	19,619.56	403.69	749.39	3.77	13.93	599.96	1.30	-	2,238.48	7,012.89	45,600.87
Increase during the year	2,438.27	90.49	14,875.65	574.87	5.16	9,543.40	187.78	300.60	0.05	14.53	2,578.45	20.72	3.22	2,813.45	6,974.57	40,421.21
Reclassification	-	-	5.60	-	-	-	-	-	-	(5.60)	-	-	-	-	-	-
4,419.47	554.10	27,368.50	574.87	31.00	29,162.96	591.47	1,049.99	3.82	22.86	3,178.41	22.02	3.22	5,051.93	13,987.46	86,022.08	
Transferred to property, plant, equipment and others	(1,880.53)	(270.91)	(20,995.11)	(574.87)	(3.27)	(9,873.93)	(152.57)	(309.81)	(3.82)	(19.94)	(2,725.45)	(6.12)	-	(6.13)	-	(36,822.46)
Transferred to work under construction of power plants and transmission system	-	-	-	-	-	-	-	-	-	-	-	-	-	(3,134.63)	(8,857.11)	(11,991.74)
Transferred to materials for work under construction of transmission system	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(1,533.75)	(1,533.75)
Balance as at Dec 31, 15	2,538.94	283.19	6,373.39	-	27.73	19,289.03	438.90	740.18	-	2.92	452.96	15.90	3.22	1,911.17	3,596.60	35,674.13

Unit : Million Baht

	Separate financial statement											Total			
	Structures	Reservoirs and dams	Power plants	Equipment for power plants	Control system	Transmission system and exploration	Communication system	Coal handling system	Other materials and supplies	Major inspection fee	Computer Software		Research and development	Materials for work under construction of transmission system	Materials in transportation
Balance as at Jan 1, 15	1,981.20	463.61	12,487.25	-	25.84	19,619.56	403.69	749.39	7.74	599.96	1.30	-	2,238.48	7,012.89	45,590.91
Increase during the year	2,438.26	90.49	14,865.84	574.87	5.16	9,543.40	187.78	300.60	5.45	2,578.45	20.72	3.22	2,813.45	6,974.57	40,402.26
4,419.46	554.10	27,353.09	574.87	31.00	29,162.96	591.47	1,049.99	13.19	3,178.41	22.02	3.22	5,051.93	13,987.46	85,993.17	
Transferred to property, plant, equipment and others	(1,880.52)	(270.91)	(20,979.70)	(574.87)	(3.27)	(9,873.93)	(152.57)	(309.81)	(13.19)	(2,725.45)	(6.12)	-	(6.13)	-	(36,796.47)
Transferred to work under construction of power plants and transmission system	-	-	-	-	-	-	-	-	-	-	-	-	(3,134.63)	(8,857.11)	(11,991.74)
Transferred to materials for work under construction of transmission system	-	-	-	-	-	-	-	-	-	-	-	-	-	(1,533.75)	(1,533.75)
Balance as at Dec 31, 15	2,538.94	283.19	6,373.39	-	27.73	19,289.03	438.90	740.18	-	452.96	15.90	3.22	1,911.17	3,596.60	35,671.21

Borrowing costs in the amount of Baht 376.45 million are from loans for construction of power plants and transmission expansion, which are capitalized to cost of assets, included in the increasing during the year and presented in investing activities of the statements of cash flows.



EGAT had work under construction project as follows:

Project	Unit : Million Baht			
	Consolidated financial statement		Separate financial statement	
	Dec 31, 15	Dec 31, 14	Dec 31, 15	Dec 31, 14
Expand Transmission System Project	21,284.20	21,470.21	21,284.20	21,470.21
Chana Combined Cycle Power Plant Project - Block 2	112.09	104.53	112.09	104.53
North Bangkok Combined Cycle Power Plant Project - Block 2	56.98	12,055.40	56.98	12,055.40
Wang Noi Combined Cycle Power Plant Project - Block 4	211.96	200.17	211.96	200.17
Mae Moh Thermal Power Plant Project (Replacement) - Units 4-7	1,567.95	-	1,567.95	-
Others	12,440.95	11,770.56	12,438.03	11,760.60
Total	35,674.13	45,600.87	35,671.21	45,590.91

As at December 31, 2015, Mae Moh Thermal Power Plant Project (Replacement) - Units 4-7 had 18.10 percentages of completion.

Three power plants were completed and transferred to asset comprise the North Bangkok Combined Cycle Power Plant Project - Block 2 on December 1, 2015, Chana Combined Cycle Power Plant Project - Block 2 on April 8, 2014 (Train 1) and May 9, 2014 (Train 2) and Wang Noi Combined Cycle Power Plant Project - Block 4 on March 9, 2014. However, the three projects have incomplete construction in the remaining part of the additional surrounding development in the power plants (Facilities) that will be transferred to asset after completion.

6.11 Goodwill comprise

	Unit : Million Baht	
	Consolidated financial statement	
	Dec 31, 15	Dec 31, 14
Balance at the beginning	648.90	763.74
Decrease from disposal of investment	-	(117.08)
Differences from exchange rate adjustment	25.94	2.24
	674.84	648.90
Less: Allowance for impairment	(375.37)	(375.37)
Balance at the end	299.47	273.53

6.12 Other Intangible Assets comprise

Unit : Million Baht

	Consolidated financial statement						Total
	Land rights	Computer software rights and software license	Royalty on state property service	Gas piped system rights	Transmission system connection rights	Project development rights	
Cost as at Jan 1, 15	27,318.90	1,774.71	474.77	6.25	29.69	6,251.83	35,856.15
Effects on change in accounting policy adjustment	-	(2.29)	-	(6.25)	-	-	(8.54)
Cost as at Jan 1, 15 (adjusted)	27,318.90	1,772.42	474.77	-	29.69	6,251.83	35,847.61
Increase during the year	703.49	72.86	-	-	-	-	776.35
Transferred from work under construction	-	6.12	-	-	-	-	6.12
Exchange rate differences from currency translation	-	(2.24)	-	-	-	(65.44)	(67.68)
Reclassification	-	(0.38)	-	-	(29.69)	-	(30.07)
Disposal / write - off	-	(20.90)	-	-	-	-	(20.90)
Cost as at Dec 31, 15	28,022.39	1,827.88	474.77	-	-	6,186.39	36,511.43
Accumulated amortization as at Jan 1, 15	(3,839.82)	(1,167.92)	(260.88)	(2.66)	(17.20)	(1,925.94)	(7,214.42)
Effects on change in accounting policy adjustment	-	0.56	-	2.66	-	-	3.22
Accumulated amortization as at Jan 1, 15 (adjusted)	(3,839.82)	(1,167.36)	(260.88)	-	(17.20)	(1,925.94)	(7,211.20)
Amortization for the year	(0.89)	(241.58)	(6.34)	-	(3.02)	(265.09)	(516.92)
Exchange rate differences from currency translation	-	0.15	-	-	-	33.83	33.98
Reclassification	-	0.24	-	-	20.22	-	20.46
Disposal / write - off	-	20.87	-	-	-	-	20.87
Accumulated amortization as at Dec 31, 15	(3,840.71)	(1,387.68)	(267.22)	-	-	(2,157.20)	(7,652.81)
Net book value							
As at Dec 31, 14	23,479.08	605.06	213.89	-	12.49	4,325.89	28,636.41
As at Dec 31, 15	24,181.68	440.20	207.55	-	-	4,029.19	28,858.62





Unit : Million Baht

	Separate financial statement			Total
	Land rights	Computer software rights and software license	Royalty on state property service	
Cost as at Jan 1, 15	27,318.90	1,673.90	474.77	29,467.57
Increase during the year	703.49	41.29	-	744.78
Transferred from work under construction	-	6.12	-	6.12
Reclassification	-	(0.38)	-	(0.38)
Disposal / write - off	-	(20.90)	-	(20.90)
Cost as at Dec 31, 15	28,022.39	1,700.03	474.77	30,197.19
Accumulated amortization				
as at Jan 1, 15	(3,839.82)	(1,115.24)	(260.88)	(5,215.94)
Amortization for the year	(0.89)	(224.92)	(6.34)	(232.15)
Reclassification	-	0.24	-	0.24
Disposal / write - off	-	20.87	-	20.87
Accumulated amortization as at Dec 31, 15	(3,840.71)	(1,319.05)	(267.22)	(5,426.98)
Net book value				
As at Dec 31, 14	23,479.08	558.66	213.89	24,251.63
As at Dec 31, 15	24,181.68	380.98	207.55	24,770.21

6.13 Land Awaiting Development comprise

Unit : Million Baht

	Consolidated financial statement		Separate financial statement	
	Dec 31, 15	Dec 31, 14	Dec 31, 15	Dec 31, 14
Balance at the beginning	2,557.59	2,548.72	2,239.51	2,239.51
Increase (Decrease) during the year	(8.87)	8.87	-	-
	2,548.72	2,557.59	2,239.51	2,239.51
Less: Allowance for impairment	(423.43)	(423.43)	(423.43)	(423.43)
Balance at the end	2,125.29	2,134.16	1,816.08	1,816.08



As at December 31, 2015, EGAT has had the land awaiting development of Baht 1,816.08 million appropriated for construction of new power plants to support the additional demand of electric energy. Due to the change in power development planning, the construction of new power plants has been postponed. Details of the land awaiting development are comprised of:

- Land at Ao - Phai, Chonburi Province of 122 Rai is valued at Baht 9.05 million.

- Land at Tap Sakae, Prachuap Khiri Khan Province of 4,029 Rai is valued at Baht 2,223.43 million with accumulated impairment in the amount of Baht 423.43 million. As a result, the net book value of land was Baht 1,800 million.

- Land surrounding Carrier Gas Station on Phet Kasem Road at Ratchaburi Province of 37 Rai is valued at Baht 3.75 million.

- Land surrounding Bannasan substation at Nampu, Bannasan, Suratthani Province is valued at Baht 3.28 million.

6.14 Income Taxes and Deferred Taxes

6.14.1 Income taxes

	Unit : Million Baht	
	Consolidated financial statement	
	2015	2014
Income taxes :		
Current income taxes	1,223.18	1,460.46
Income taxes of previous year which is over recorded	7.90	(14.51)
Total	1,231.08	1,445.95
Deferred taxes :		
Change in temporary differences	176.64	(176.57)
Total	176.64	(176.57)
Grand total	1,407.72	1,269.38



6.14.2 Deferred tax assets and deferred tax liabilities

Unit : Million Baht

	Consolidated financial statement			
	Assets		Liabilities	
	Dec 31, 15	Dec 31, 14	Dec 31, 15	Dec 31, 14
Deferred tax assets (liabilities)	6,321.73	7,455.99	(8,172.66)	(9,169.70)
Set - off of taxes	(6,214.35)	(7,404.37)	6,214.35	7,404.37
Net deferred tax assets (liabilities)	107.38	51.62	(1,958.31)	(1,765.33)

6.14.3 Movements in deferred tax assets and deferred tax liabilities

Unit : Million Baht

	Consolidated financial statement				
	As at	Business	Gain or	Exchange rate	As at
	Jan 1, 15	Combination	Loss	differences	Dec 31, 15
Deferred tax assets :					
Allowance for obsolescence of spare parts and supplies and allowance for declining in value of spare parts and supplies	222.76	-	41.36	-	264.12
Property, plant and equipment	6,129.64	-	(705.20)	-	5,424.44
Provision for employee benefits	22.02	-	3.40	-	25.42
Finance leases liabilities	0.07	-	0.02	-	0.09
Loss carry forward	1,081.50	-	(449.25)	(24.59)	607.66
Total	7,455.99	-	(1,109.67)	(24.59)	6,321.73
Deferred tax liabilities :					
Depreciation and amortization	(2,609.37)	-	162.82	59.10	(2,387.45)
Finance leases receivable - related parties	(6,323.68)	-	685.52	-	(5,638.16)
Others	(236.65)	-	84.69	4.91	(147.05)
Total	(9,169.70)	-	933.03	64.01	(8,172.66)



Unit : Million Baht

Consolidated financial statement

	As at Jan 1, 14	Business Combination	Gain or Loss	Exchange rate differences	As at Dec 31, 14
Deferred tax assets :					
Allowance for obsolescence of spare parts and supplies	122.07	60.06	40.63	-	222.76
Property, plant and equipment	5,230.15	1,556.84	(657.35)	-	6,129.64
Provision for employee benefits	18.92	-	3.10	-	22.02
Finance leases liabilities	0.03	-	0.04	-	0.07
Losses carry forward	1,039.49	-	155.70	(113.69)	1,081.50
Total	6,410.66	1,616.90	(457.88)	(113.69)	7,455.99
Deferred tax liabilities :					
Depreciation and amortization	(2,814.93)	-	(17.27)	222.83	(2,609.37)
Finance leases receivable - related parties	(6,738.98)	(324.53)	739.83	-	(6,323.68)
Others	(167.51)	-	(88.11)	18.97	(236.65)
Total	(9,721.42)	(324.53)	634.45	241.80	(9,169.70)



6.15 Other Non - Current Assets comprise

Unit : Million Baht

	Consolidated financial statement				
	Overburden removal costs	Minerals resource exploration and preliminary development costs	Resettlement costs	Mineral Patent costs	Total
- Deferred Charges of the Lignite Mine					
Deferred charges as at Jan 1, 15	100,734.45	645.67	1,988.44	281.14	103,649.70
Increase during the year	5,857.88	-	-	-	5,857.88
Deferred charges as at Dec 31, 15	106,592.33	645.67	1,988.44	281.14	109,507.58
Amortization as at Jan 1, 15	(100,734.45)	(325.13)	(1,740.78)	(68.98)	(102,869.34)
Increase during the year	(5,857.88)	(9.40)	(47.91)	(11.25)	(5,926.44)
Amortization as at Dec 31, 15	(106,592.33)	(334.53)	(1,788.69)	(80.23)	(108,795.78)
Net book value					
As at Dec 31, 14	-	320.54	247.66	212.16	780.36
As at Dec 31, 15	-	311.14	199.75	200.91	711.80
- Others					
As at Dec 31, 14					2,273.19
As at Dec 31, 15					2,716.12
Total other non - current assets					
As at Dec 31, 14					3,053.55
As at Dec 31, 15					3,427.92

Unit : Million Baht

	Separate financial statement				
	Overburden removal costs	Minerals resource exploration and preliminary development costs	Resettlement costs	Mineral Patent costs	Total
- Deferred Charges of the Lignite Mine					
Deferred charges as at Jan 1, 15	100,734.45	645.67	1,988.44	281.14	103,649.70
Increase during the year	5,857.88	-	-	-	5,857.88
Deferred charges as at Dec 31, 15	106,592.33	645.67	1,988.44	281.14	109,507.58
Amortization as at Jan 1, 15	(100,734.45)	(325.13)	(1,740.78)	(68.98)	(102,869.34)
Increase during the year	(5,857.88)	(9.40)	(47.91)	(11.25)	(5,926.44)
Amortization as at Dec 31, 15	(106,592.33)	(334.53)	(1,788.69)	(80.23)	(108,795.78)
Net book value					
As at Dec 31, 14	-	320.54	247.66	212.16	780.36
As at Dec 31, 15	-	311.14	199.75	200.91	711.80
- Others					
As at Dec 31, 14					743.33
As at Dec 31, 15					1,707.06
Total other non - current assets					
As at Dec 31, 14					1,523.69
As at Dec 31, 15					2,418.86

6.16 Trade Accounts Payable - Others are as follows :

	Unit : Million Baht			
	Consolidated financial statement		Separate financial statement	
	Dec 31, 15	Dec 31, 14	Dec 31, 15	Dec 31, 14
Trade payable - electric energy purchased	33,904.05	30,818.94	33,904.05	30,818.94
Trade payable - fuel for electricity generating	8,674.84	10,718.60	8,674.84	10,718.60
Trade payable - fuel for providing	896.90	1,322.00	896.90	1,322.00
Others	9,222.35	11,643.55	2,240.85	2,834.27
Total	52,698.14	54,503.09	45,716.64	45,693.81



6.17 Accrued Remittance to the Ministry of Finance

In the year 2015, the Ministry of Finance prescribed that EGAT has to calculate the accrued remittance to the Ministry of Finance in 45% of profit before provision of bonus expense. However, the amount of remittance may vary depending on the revision from the Ministry of Finance. As at January 1, 2015, EGAT has accrued remittance to the Ministry of Finance in the amount of Baht 8,380.71 million which increased in the amount of Baht 60.19 million. On April 29, 2015, EGAT remitted to the Ministry of Finance in accordance with the notice of EGAT no. 921101/33323 in the amount of Baht 8,440.90 million. On August 31, 2015, the Ministry of Finance dispatched an official document in order to inform EGAT about increasing the remittance in amount of Baht 7,000 million and EGAT remitted to the Ministry of Finance in accordance with the notice of EGAT no. 921101/66376.

As at December 31, 2015, EGAT recorded the provision for the remittance to the Ministry of Finance for the year 2015 in the amount of Baht 16,047.08 million. However, in September and October 2015, EGAT remitted for the six months ended June 30, 2015 in the amount of Baht 7,000.00 and 2,833.09 million respectively, totaling Baht 9,833.09 million. Therefore, EGAT has accrued remittance to the Ministry of Finance in the amount of Baht 6,213.99 million as at December 31, 2015.

6.18 Long - Term loans comprise

	Unit : Million Baht			
	Consolidated financial statement		Separate financial statement	
	Dec 31, 15	Dec 31, 14	Dec 31, 15	Dec 31, 14
Balance at the beginning	80,778.94	82,515.28	64,280.62	70,896.37
Increase during the year	2,126.31	10,274.21	-	-
Repayments	(9,464.21)	(11,473.96)	(8,065.86)	(6,457.89)
Gain on exchange rate from repayments	(10.21)	(20.60)	(10.21)	(20.60)
Gain on derivatives from repayments	(0.64)	(1.61)	(0.64)	(1.61)
(Gain) Loss on exchange rate adjustment /				
Exchange rate differences from				
currency translation	1,291.99	(514.38)	(11.44)	(135.65)
Reclassification deferred financing fee				
to other non-current liabilities	22.50	-	-	-
	74,744.68	80,778.94	56,192.47	64,280.62
Less : Current portion of long - term loans	(6,814.54)	(8,827.99)	(5,584.60)	(8,076.72)
Balance at the end	67,930.14	71,950.95	50,607.87	56,203.90

Long - Term loans comprise

	Consolidated financial statement			
	Dec 31, 15		Dec 31, 14	
	Foreign	Million	Foreign	Million
	currencies	Baht	currencies	Baht
Unit : million		Unit : million		
Local sources secured by the Ministry of Finance:				
EGAT bonds				
Fixed rate due within 2015 - 2020	-	2,000.00	-	5,000.00
		<u>2,000.00</u>		<u>5,000.00</u>
Local sources unsecured by the Ministry of Finance:				
Ministry of Finance loans				
Fixed rate due within 2015 - 2027	-	73.35	-	78.50
EGAT bonds				
Fixed rate due within 2015 - 2033	-	53,300.00	-	58,100.00
Debenture				
Fixed rate due within 2015 - 2022	-	1,998.06	-	721.33
Other financial institutions				
Floating rate due within 2015 - 2018	-	69.86	-	99.81
Fixed rate due in 2016	-	1,200.00	-	1,200.00
		<u>56,641.27</u>		<u>60,199.64</u>
Foreign sources secured by the Ministry of Finance:				
Loans				
Euro:				
Fixed rate due within 2015 - 2037	20.58	819.12	27.31	1,102.12
		<u>819.12</u>		<u>1,102.12</u>
Foreign sources unsecured by the Ministry of Finance:				
Loans				
AUD Dollars:				
Floating rate due in 2015	-	-	20.00	505.09
Debenture				
Japanese Yen:				
Fixed rate due in 2026	15,000.00	4,481.78	15,000.00	4,112.27
Dollars:				
Fixed rate due in 2019	300.00	10,802.51	300.00	9,859.82
		<u>15,284.29</u>		<u>14,477.18</u>
Total		<u>74,744.68</u>		<u>80,778.94</u>
Less: Current portion of long - term loans		<u>(6,814.54)</u>		<u>(8,827.99)</u>
Balance		<u><u>67,930.14</u></u>		<u><u>71,950.95</u></u>



As at December 31, 2015 and 2014, the fee of subsidiaries for advance financing is in the amount of Baht 22.50 million and Baht 32.61 million respectively from loan of AUD Dollars 100 million for the period from the year 2013 to 2018. In 2014, the company intends to exercise its right to such loans, thus it still shows the offset against long - term loans payable as a whole. In 2015, EGAT has not drawn down such loan.

	Separate financial statement			
	Dec 31, 15		Dec 31, 14	
	Foreign currencies	Million Baht	Foreign currencies	Million Baht
	Unit : million		Unit : million	
Local sources secured by the Ministry of Finance:				
EGAT bonds				
Fixed rate due within 2015 - 2020	-	2,000.00	-	5,000.00
		<u>2,000.00</u>		<u>5,000.00</u>
Local sources unsecured by the Ministry of Finance:				
Ministry of Finance loans				
Fixed rate due within 2015 - 2027	-	73.35	-	78.50
EGAT bonds				
Fixed rate due within 2015 - 2033	-	53,300.00	-	58,100.00
		<u>53,373.35</u>		<u>58,178.50</u>
Foreign sources secured by the Ministry of Finance:				
Loans				
Euro:				
Fixed rate due within 2015 - 2037	20.58	819.12	27.31	1,102.12
		<u>819.12</u>		<u>1,102.12</u>
Total		56,192.47		64,280.62
Less: Current portion of long - term loans		<u>(5,584.60)</u>		<u>(8,076.72)</u>
Balance		<u><u>50,607.87</u></u>		<u><u>56,203.90</u></u>

As at December 31, 2015 and 2014, long - term loans can be classified by interest rate as follows:

	Unit : Million Baht			
	Consolidated financial statement		Separate financial statement	
	Dec 31, 15	Dec 31, 14	Dec 31, 15	Dec 31, 14
Floating rate	69.86	99.81	-	-
Fixed rate	74,674.82	80,679.13	56,192.47	64,280.62
Total	<u><u>74,744.68</u></u>	<u><u>80,778.94</u></u>	<u><u>56,192.47</u></u>	<u><u>64,280.62</u></u>

Interest rate of long - term loans as at December 31, 2015 are as follows:

	<u>Consolidated financial statement</u>	<u>Separate financial statement</u>
EGAT bonds - local sources		
- Guaranteed by the Ministry of Finance	6.970% to 7.380%	6.970% to 7.380%
- The Ministry of Finance does not guarantee.	3.240% to 6.235%	3.240% to 6.235%
Loans - local sources		
- The Ministry of Finance does not guarantee.	3.000% to 4.600%	3.000% to 3.000%
Loans - foreign sources		
- Guaranteed by the Ministry of Finance	0.750% to 8.000%	0.750% to 8.000%
Debenture		
- The Ministry of Finance does not guarantee.	2.720% to 3.500%	

6.19 Finance Leases Liabilities - Power plants

Unit : Million Baht

	<u>Consolidated financial statement</u>					
	<u>Current portion</u>		<u>Non - current portion</u>		<u>Total</u>	
	<u>Dec 31, 15</u>	<u>Dec 31, 14</u>	<u>Dec 31, 15</u>	<u>Dec 31, 14</u>	<u>Dec 31, 15</u>	<u>Dec 31, 14</u>
Finance leases liabilities	48,090.08	32,611.70	583,422.82	335,119.91	631,512.90	367,731.61
Less : Deferred interest expenses	(33,513.13)	(22,389.77)	(332,822.06)	(198,724.64)	(366,335.19)	(221,114.41)
Net	<u>14,576.95</u>	<u>10,221.93</u>	<u>250,600.76</u>	<u>136,395.27</u>	<u>265,177.71</u>	<u>146,617.20</u>

Unit : Million Baht

	<u>Separate financial statement</u>					
	<u>Current portion</u>		<u>Non - current portion</u>		<u>Total</u>	
	<u>Dec 31, 15</u>	<u>Dec 31, 14</u>	<u>Dec 31, 15</u>	<u>Dec 31, 14</u>	<u>Dec 31, 15</u>	<u>Dec 31, 14</u>
Finance leases liabilities	55,786.43	41,052.99	626,956.18	386,277.87	682,742.61	427,330.86
Less : Deferred interest expenses	(38,013.93)	(27,403.46)	(351,360.17)	(221,691.81)	(389,374.10)	(249,095.27)
Net	<u>17,772.50</u>	<u>13,649.53</u>	<u>275,596.01</u>	<u>164,586.06</u>	<u>293,368.51</u>	<u>178,235.59</u>

6.20 Employee Benefit Obligations

EGAT's employees will receive retirement benefits under Thai labour law when employees have completed their terms in accordance with agreements between employees and EGAT. Employee benefits liability is a defined benefits obligation calculated by using the projected unit credit method on an actuarial basis. This basis determines the present value of future payments by discounting the future cash flows using the yields on government bonds with a currency and term similar to the estimated term of the benefit obligations. Any expenses related to benefits are recognized in profit or loss in order to attribute benefits to periods of service.



Movement in the present value of the defined benefit obligations is as follows:

	Unit : Million Baht			
	Consolidated financial statement		Separate financial statement	
	Dec 31, 15	Dec 31, 14	Dec 31, 15	Dec 31, 14
Balance at the beginning (before adjustment)	14,580.47	14,051.25	14,469.21	13,955.72
Retrospective adjustment	(0.68)	(0.59)	-	-
Balance at the beginning (after adjustment)	14,579.79	14,050.66	14,469.21	13,955.72
Current service costs	603.53	587.95	588.17	572.69
Interest on obligations	545.54	533.01	541.17	529.00
Past service costs	115.23	-	115.23	-
Acquired from business combination	-	7.47	-	-
Decrease from business disposal	-	(0.31)	-	-
Actuarial (gain) loss from post-employment				
employee benefit obligation	450.32	(0.10)	451.89	-
Actuarial gain from other long-term				
employee benefits obligation	(1.89)	-	(1.89)	-
Actual payment	(896.19)	(598.53)	(893.80)	(588.20)
Foreign exchange adjustment	(0.07)	(0.36)	-	-
Balance at the end	15,396.26	14,579.79	15,269.98	14,469.21

Expenses recognized in the statements of income and as part of cost of assets / liabilities are shown in the statements of financial position for the year ended December 31, 2015 are as follows:

	Unit : Million Baht			
	Consolidated financial statement		Separate financial statement	
	Dec 31, 15	Dec 31, 14	Dec 31, 15	Dec 31, 14
Expenses realized in statements of income				
Cost of sales	699.44	624.73	699.44	624.73
Selling expenses	7.77	6.57	7.77	6.57
Administrative expenses	427.93	377.75	408.20	358.48
Total	1,135.14	1,009.05	1,115.41	989.78
Cost of assets / liabilities realized in				
statements of financial position				
Materials and supplies	42.63	39.00	42.63	39.00
Work under construction	83.04	71.53	83.04	71.53
Provision liabilities for mine reclamation	1.60	1.38	1.60	1.38
Total	127.27	111.91	127.27	111.91
Grand Total	1,262.41	1,120.96	1,242.68	1,101.69

Actuarial loss from post - employment benefit obligation recognized in the statements of comprehensive income are as follows:

	Unit : Million Baht			
	Consolidated financial statement		Separate financial statement	
	Dec 31, 15	Dec 31, 14	Dec 31, 15	Dec 31, 14
Gain from experience adjustments	(522.95)	-	(523.46)	-
Loss from changes in financial assumptions	976.76	-	978.51	-
Gain from changes in demographic assumptions	(3.49)	-	(3.16)	-
Total	450.32	-	451.89	-

Principal actuarial assumptions of EGAT are as follows:

	Annual percentage (%)	
	2015	2014
Discount rate	3.3	3.9
Inflation rate		
Consumer price index	3.0	3.5
Post - employment medical care	10	10
Resignation rate	0.0 - 0.7	0.0 - 0.8
Salary escalation rate	6 - 11	6 - 11
Mortality rate, by table	TMO08	TMO08

(Thai mortality table A.D.2008)(Thai mortality table A.D.2008)

Sensitivity analysis of principal actuarial assumptions used in determining the present value of benefit obligations of EGAT as at December 31, 2015 are as follows:

	Unit : Million Baht	
	Increase (decrease) in present value of the obligation	
	Increase 1%	Decrease 1%
Discount rate	(1,559.34)	1,953.89
Salary increasing rate	898.45	(796.42)
Medical Inflation rate	871.46	(664.20)

Weighted average duration of the benefit obligations of EGAT's group is 18 years.

Due to the differences in operational environment of EGAT's group, including limitations on the estimation of assumptions and sensitivity analysis based on actuarial principles, the principal assumptions and their sensitivity analysis could not be reasonably applied. Thus only EGAT has been presented.



6.21 Provision Liabilities for Mine Reclamation are as follows :

	Unit : Million Baht			
	Consolidated financial statement		Separate financial statement	
	Dec 31, 15	Dec 31, 14	Dec 31, 15	Dec 31, 14
Balance at the beginning	2,141.00	2,080.31	2,141.00	2,080.31
Increase during the year	113.58	130.38	113.58	130.38
	2,254.58	2,210.69	2,254.58	2,210.69
Less : Mine reclamation expenses	(78.13)	(64.01)	(78.13)	(64.01)
Depreciation	(7.18)	(5.68)	(7.18)	(5.68)
Balance at the end	2,169.27	2,141.00	2,169.27	2,141.00

6.22 Other Non - Current Liabilities comprise

	Unit : Million Baht			
	Consolidated financial statement		Separate financial statement	
	Dec 31, 15	Dec 31, 14	Dec 31, 15	Dec 31, 14
Deferred Income				
Balance at the beginning	6,576.82	6,359.11	6,576.82	6,379.11
Add : Contribution received	424.60	406.15	424.60	386.15
Asset transferred	174.45	178.65	174.45	178.65
	7,175.87	6,943.91	7,175.87	6,943.91
Less : Recognized to other revenue	(347.19)	(311.01)	(347.19)	(311.01)
Contribution refunded	(3.90)	(54.74)	(3.90)	(54.74)
Decrease in depreciation	(1.34)	(1.34)	(1.34)	(1.34)
Balance at the end	6,823.44	6,576.82	6,823.44	6,576.82
Retention	5,035.94	5,433.33	5,035.94	5,433.33
Cash received from breaking agreement in case of conflict	-	574.12	-	574.12
Others	1,102.06	1,670.75	1,058.77	1,339.65
Total	12,961.44	14,255.02	12,918.15	13,923.92

6.23 Owners' Equity

Contribution from The Government comprise

	Unit : Million Baht			
	Consolidated financial statement		Separate financial statement	
	Dec 31, 15	Dec 31, 14	Dec 31, 15	Dec 31, 14
Contribution for supporting capital	6,507.64	6,507.64	6,507.64	6,507.64
Contribution for supporting construction of the Srinagarind, Bang Lang, Vajiralongkorn, Rajjaprabha and Pak Mun Dam	4,364.75	4,364.75	4,364.75	4,364.75
Less : Accumulated depreciation	(1,932.75)	(1,870.41)	(1,932.75)	(1,870.41)
Depreciation for the period	(62.33)	(62.33)	(62.33)	(62.33)
	2,369.67	2,432.01	2,369.67	2,432.01
Balance	8,877.31	8,939.65	8,877.31	8,939.65

6.24 Revenue from Sales of Other Goods and Services comprise

	Unit : Million Baht			
	Consolidated financial statement		Separate financial statement	
	2015	2014	2015	2014
Revenue from telecommunication services	340.03	573.19	340.03	573.19
Revenue from fuel providing	11,871.98	18,098.06	12,864.67	19,810.63
Revenue from operation and maintenance services	1,404.32	1,245.62	2,982.64	2,450.18
Others	1,150.78	1,251.79	496.96	551.66
Total	14,767.11	21,168.66	16,684.30	23,385.66

EGAT has the revenue from telecommunication business, which has been approved to operate telecommunication business by The National Telecommunications Commission on March 15, 2007.



6.25 Cost of Electric Energy Sales comprise

Unit : Million Baht

	Consolidated financial statement		Separate financial statement	
	2015	2014	2015	2014
Electric energy purchased	320,327.55	308,992.22	320,346.11	309,009.45
Fuel	163,112.45	181,464.10	118,481.20	139,150.67
Generating expenses	34,496.68	34,652.75	29,252.01	29,632.55
Transmission expenses	10,823.31	10,770.07	10,823.31	10,770.07
Total	528,759.99	535,879.14	478,902.63	488,562.74
Finance Leases - Power plants				
Electric energy purchased	(203,699.27)	(196,028.58)	(203,699.27)	(196,028.58)
Fuel	101,644.34	102,339.15	147,015.45	145,313.44
Generating expenses	17,685.62	17,474.76	21,753.69	21,357.21
	(84,369.31)	(76,214.67)	(34,930.13)	(29,357.93)
Total	444,390.68	459,664.47	443,972.50	459,204.81

6.26 Cost of Sales of Other Goods and Services comprise

Unit : Million Baht

	Consolidated financial statement		Separate financial statement	
	2015	2014	2015	2014
Cost of telecommunication services	19.31	29.83	19.31	29.83
Cost of fuel providing	11,871.98	18,098.06	12,864.67	19,810.63
Cost of operation and maintenance services	769.28	904.08	1,808.65	1,721.58
Others	387.32	448.75	275.79	308.88
Total	13,047.89	19,480.72	14,968.42	21,870.92

EGAT recorded cost of telecommunication services to dual with revenue from telecommunication services since March 15, 2007 that EGAT has received the approval to operate telecommunication business by The National Telecommunications Commission. However, cost of telecommunication services excludes selling expense, administrative expense and finance cost, which each of expenses is shown in each of categories of expenses in statements of income.

6.27 Other Revenues comprise

	Unit : Million Baht			
	Consolidated financial statement		Separate financial statement	
	2015	2014	2015	2014
Interest income	1,810.72	1,973.40	1,392.46	1,666.56
Dividend income	269.42	235.95	2,389.97	2,317.26
Profit on disposal of assets	119.92	277.41	-	277.61
Gain on foreign exchange	-	1,045.56	-	675.37
Gain on changes in the fair value of derivatives	140.63	107.62	140.63	107.62
Contribution income	347.19	303.14	347.19	303.14
Gain on sale of investment	1.73	-	-	-
Fine income	383.76	372.50	383.76	372.49
Income on disposal of fly ash and scrap	383.59	392.80	383.59	392.80
Miscellaneous income	(521.21)	41.01	(521.21)	41.01
Others	464.20	1,823.19	359.40	169.53
Total	<u>3,399.95</u>	<u>6,572.58</u>	<u>4,875.79</u>	<u>6,323.39</u>

In the year 2014, EGAT recognized fine revenue from dispute with Idreco S.P.A. Co., Ltd. in the amount of Baht 235.92 million, that the case is terminated.

6.28 Other Expenses comprise

	Unit : Million Baht			
	Consolidated financial statement		Separate financial statement	
	2015	2014	2015	2014
Loss on foreign exchange	1,587.42	-	419.76	-
Loss on foreign exchange under finance Leases	10,429.12	271.35	10,579.83	276.78
Loss on disposal of assets	-	-	2.53	-
Others	14.06	184.28	14.06	55.32
Total	<u>12,030.60</u>	<u>455.63</u>	<u>11,016.18</u>	<u>332.10</u>



6.29 Finance Costs comprise

Unit : Million Baht

	Consolidated financial statement			
	Interest expenses	Expenses relating to the loans	Total	
			2015	2014
Capitalized to work under construction	331.55	44.90	376.45	326.08
Finance costs in the statements of income	4,302.58	104.33	4,406.91	4,449.94
Finance costs - Finance Leases	27,290.98	-	27,290.98	21,229.11
	31,593.56	104.33	31,697.89	25,679.05
Total	31,925.11	149.23	32,074.34	26,005.13

Unit : Million Baht

	Separate financial statement			
	Interest expenses	Expenses relating to the loans	Total	
			2015	2014
Capitalized to work under construction	331.55	44.90	376.45	326.08
Finance costs in the statements of income	2,958.48	58.18	3,016.66	2,925.83
Finance costs - Finance Leases	32,318.92	-	32,318.92	26,774.34
	35,277.40	58.18	35,335.58	29,700.17
Total	35,608.95	103.08	35,712.03	30,026.25



6.30 Share of Profit (Loss) from Investments in Associates comprise

	Unit : Million Baht	
	Consolidated financial statement	
	2015	2014
Electricity Generating Plc.	1,085.85	1,324.65
First Korat Wind Co., Ltd.	109.62	127.77
K.R. Two Co., Ltd.	95.14	109.08
Perth Power Partnership (Kwinana)	80.37	67.15
Nam Ngiep 1 Power Co., Ltd.	38.74	(241.23)
Total	1,409.72	1,387.42





6.31 Performance of EGAT

The performance of EGAT in net income of 2015 was Baht 30,780.25 million. EGAT recorded the provision of expenses and liabilities of bonus for employees and directors in the amount of Baht 4,960.08 million for the 2015 financial statements.

In April 2015, the Ministry of Finance approved EGAT to allocate the 2014 net income for bonus payment to the employees and directors in the amount of Baht 4,457.40 million. EGAT recorded the provision of bonus in 2014 in the amount of Baht 4,537.55 million so, EGAT recorded the high difference of the provision of bonus in the amount of Baht 80.15 million, that brought about to decrease the expenses in the year 2015.

6.32 Expenses by Nature comprise

	Unit : Million Baht			
	Consolidated financial statement		Separate financial statement	
	2015	2014	2015	2014
Electric energy purchased	116,628.28	112,963.64	116,646.84	112,980.87
Work performed by the entity and capitalized	(30,508.00)	(23,064.59)	(30,508.00)	(23,064.59)
Raw materials and consumables used	169,463.14	183,837.61	125,151.63	142,830.78
Fuel - Finance leases	101,644.34	102,339.15	147,015.45	145,313.44
Management's remunerations	347.51	349.98	148.40	140.65
Employee benefit expenses	29,174.69	28,493.33	28,622.21	27,957.42
Depreciation of property, plant and equipment	25,311.72	25,614.53	24,262.93	24,501.24
Depreciation of finance leases assets	13,164.67	11,336.18	13,164.67	11,336.18
Amortization of intangible assets	516.67	547.24	231.91	231.38
Hire and maintenance expenses	10,543.91	8,334.11	9,168.77	6,766.02
Other expenses	50,048.51	45,935.95	51,154.55	47,224.83
Total	486,335.44	496,687.13	485,059.36	496,218.22

7. Power Development Fund

The legislation of Energy Industry Act B.E.2550, which shall come into effect on December 11, 2007, determined to set up the power development fund to support extensive electricity service provision to various localities and to develop the local communities affected by the operation of a power plant. Anyhow, Energy Regulatory Commission (ERC) has power and duty to manage the fund, ERC declared about delivery the money to the power development fund for electricity industry licensees in type of license B.E.2553 which determines electricity industry licensees shall deliver the money to the fund in 2 periods as follows:

1. During the power plant construction from the date starting from the conducting of the construction in accordance with the contract for services and comply with the electricity industry licenses until the commercial operation date (COD) and have to deliver annually by calculating the money from estimate of installed capacity of power plant at the rate of Baht 50,000 per megawatt per year. In case of the construction is less than 1 year, EGAT has to deliver the money in accordance with percentage of month which construction had been conducted but it must not be less than Baht 50,000 per year.

2. During electricity generating the date starting from the commercial operation date, EGAT has to deliver monthly by calculating the money based on electric energy produced for sales and internal use which exclude electric energy using in production process in station service. It was separated by the types of fuels using in generating power such as natural gas, fuel oil, diesel, coal, lignite etc.

In 2014 ERC declared about the remittance to the power development fund for electricity industry licensees, as follows:

1. The announcement on the remittance to the power development fund for electricity industry licensees to support the use of renewable energy and the technology used in the operation of electricity industry with less environmental impact B.E.2557, which requires licensees to remit to the power development fund based on the electricity charged to consumers at the rate of Baht 0.005 per net unit sold in the billing month;





2. The announcement on the remittance to the power development fund for electricity industry licensees to support society and people to have knowledge, awareness and participation in the electricity B.E. 2557, which requires the licensees to remit to the power development fund based on the electricity charged to consumers at the rate of Baht 0.002 per net unit sold in the billing month.

EGAT had contribution provision for the power development fund which can be categorized as follows:

1. The power plant of EGAT including both under construction and declared commercial operation power plants for the years ended December 31, 2015 and 2014 in the amount of Baht 878.31 million and Baht 947.71 million respectively;

2. The supporting of using renewable energy and the technology used in the operation of electricity industry with less environmental impact for the year ended December 31, 2015 in the amount of Baht 10.43 million; and

3. The supporting society and people with knowledge, awareness and participation in the electricity for the year ended December 31, 2015 in the amount of Baht 4.17 million.

8. Contingent Asset

Power Purchase Agreement of Power Plant Project, Nam Theun 2 and Nam Ngum 2

From the year 2010, EGAT entered into the Power Purchase Agreement with Lao People's Democratic Republic (Lao PDR) of Nam Theun 2 power plant project and Nam Ngum 2 power plant project. The power purchase guarantee in accordance with annual supply target specified that in case of the power plants have supply excess, they don't charge EGAT for the excess. However, the excess will be accumulated to set off in the following year when the power plants have lower supply than annual supply target (supply shortfall). On the other hand, if EGAT has dispatch shortfall, the power plants will charge in the amount of the buying guarantee of EGAT whereas EGAT has to pay in advance and be able to receive amount of energy at a later month to make up the dispatch.

In case of EGAT accepts the supply excess, EGAT is able to apply the amount accumulated to set off. During the agreement period, if it has no supply shortfall, EGAT will pay for accrued electricity expense for supply excess with the excess electricity rate which is less than normal electricity rate (Baht 0.57 for Nam Theun 2 power plant project and Baht 1.145 for Nam Ngum 2 power plant project) at the end of the period. Period of Nam Theun 2 power plant ends at 13th anniversary from March 8, 2010 and period of Nam Ngum 2 power plant ends 10th anniversary from running the machinery. However, both of the projects have to include period of time extended because of unpredictable events.

Besides, EGAT will get the refund 25% of accrued electricity expense which paid at the end of the period. It calculates by accumulated supply excess plus excess energy or excess revenue less accumulated dispatch shortfall. At this time, EGAT is not able to estimate because there is no certainty about amount of contingent assets.





9. Contingent Liabilities

As at December 31, 2015, contingent liabilities excluded from the separate financial statements, are the calling for EGAT to pay additional compensation, which are the Civil Court judged that EGAT was liable for the additional payment of 53 lawsuits in the amount of Baht 77.04 million in case of calling for compensation of land rights, Infringement, breach of contract and relating to employment.

10. Commitments

10.1 Long - Term Power Purchase Agreements

As a result of the government's policy on decreasing the government's investment burden and encouraging private sector to be involved in the power generation industry, the Government approved an investment program for the power generation in new project by private sector (Independent Power Producers known as IPPs) who will sell power to EGAT.

As at December 31, 2015, EGAT has entered into 83 Power Purchase Agreements which can be divided by 2 categories as follows:

(1) Long - term power purchase agreements with hydro power plants - Capability to generate electricity of the power plants shall depend on water level in the dam and production plan of each power plant. Therefore, EGAT the obligation of the electricity generated by hydro power plants cannot be estimated reliably. Nowadays, EGAT has 7 electric power purchase agreements with hydro power plants which consist of Theun Hinboun power plant, Houay Ho power plant, Nam Theun 2 power plant, Nam Ngum 2 power plant, Xaiyaburi power plant, Xe - Pien Xe - Nam Noy power plant and Nam Ngiep 1 power plant.

(2) Long - term power purchase agreements from thermal power plants and combined - cycle power plants - At present, EGAT has 76 power purchase agreements from thermal power plants and combined - cycle power plants that total commitments to the end of all contracts amounting to approximately Baht 5,551,649 million and total production capacity of 13,048 megawatts.

	<u>Company</u>	<u>Capacity</u> (megawatt)	<u>Remaining life</u> <u>of contract</u> (years)	<u>Amount</u> (Million Baht)	<u>Availability</u> <u>payment (AP)</u> (Million Baht)	<u>Energy</u> <u>payment (EP)</u> (Million Baht)
Power producers						
Independent Power Producers (IPPs)						
Khanom Electricity Generating Company Limited (KEGCO)						
- Unit 4	1	930	26 (2016-2041)	414,161	83,070	331,091
Gulf SRC Company Limited (GSRC)	1	2,500	27 (2021-2047)	1,029,919	217,008	812,911
Gulf PD Company Limited (GPD)	1	2,500	27 (2023-2049)	1,031,940	218,261	813,679
Small Power Producers (SPPs)	73	7,118	2-26 Years	3,075,629	637,413	2,438,216
Total	76	13,048		5,551,649	1,155,752	4,395,897





10.2 Fuel Purchase Agreements

EGAT has entered to 4 natural gas purchase agreements for power plant with PTT Public Company Limited. The agreement remaining amount is Baht 263,862 million, which the details are as follows:

1. Natural gas purchase agreement for power plants of EGAT in the amount of Baht 1,316,452 million was signed on November 7, 1996 and had been enforced since November 7, 1996 - December 31, 2015. This agreement covered the sale of natural gas to all the power plants of EGAT, exclude the power plants mentioned No.2 of this contract. Nevertheless, it was ended on December 31, 2015. Currently, the detail of new agreement is under consideration, so it has to be temporary extended this agreement for one year. Thus this agreement will be ended on December 31, 2016 with expanded amount of Baht 41,709 million; and

2. Natural gas purchase agreements for Lankrabue, Nam Phong and Chana power plants are made separately into 3 agreements with the remaining years of agreements between 8.5 months to 16 years and 8 months. The total amount remaining of these agreements are Baht 222,153 million.

10.3 Hire - Purchase Agreements

EGAT has entered to the local and foreign hire - purchase agreements, which the details are as follows:

10.3.1 There are 347 agreements of local hire - purchase agreements and their amount as contract is Baht 49,537.96 million with the remaining life of contract in 0.5 month to 9 years and 11.5 months. The rest of amount as contract is approximately Baht 20,619.89 million.

10.3.2 There are 211 agreements of foreign hire - purchase agreements and their amount as contract is Baht 127,953.37 million. Some contracts have the remaining life of contract in 0.5 month to 10 years and 6 months and some contracts are not indicated the contract period. The rest of amount as contract from the conversion of foreign currency under the average buying and selling exchanged rate on December 31, 2015, which announced by the Bank of Thailand was approximately Baht 59,834.77 million.



10.4 Letter of Credit

On December 31, 2015, EGAT has unused letter of credit, which are not expired amounting to approximately Baht 13,144.64 million.

10.5 Share Pledge Contract

Since August 15, 2014, a subsidiary has pledged share of its associates as guarantee for loan in order to support the operation of such associates, according to the credit condition of financial institutions with Bangkok Bank Public Company Limited (as representative in accordance with the collateral of the Laos law, who has the power to act representing guaranteed creditors). This pledge is redeemable when there is full payment to all guaranteed creditors.

11. Disclosure of Financial Instruments

EGAT uses the financial instruments to decrease uncertainty from uncontrollable outside factors. The main derivative financial instrument was forward foreign exchange contracts.

11.1 Forward Foreign Exchange Contracts

EGAT has conducted a forward foreign exchange contracts to mitigate the risk of fluctuations in foreign exchange rate associated with foreign loan repayment, the electric energy purchased from foreign countries, goods and services. Forward foreign exchange contracts are contracts to buy foreign currency at a pre - agreed exchange rate on a specified future time and are not realized in the financial statements on the contract date.

As at December 31, 2015, EGAT has no remaining forward foreign exchange contract.





11.2 Fair Value of Financial Assets and Liabilities

As at December 31, 2015 and 2014, fair value and book value of financial assets and liabilities are as follows:

	Book Value	Consolidated financial statement			
		Fair Value			
		Level 1	Level 2	Level 3	Total
Unit : Million Baht					
As at December 31, 2015					
Current					
Held for trading securities	418.30	418.30	-	-	418.30
Current portion of long - term local loans	(6,635.24)	-	(6,762.06)	-	(6,762.06)
Current portion of long - term local loans (EGATIF)	(414.48)	(414.48)	-	-	(414.48)
Current portion of long - term foreign loans	(179.30)	-	(242.23)	-	(242.23)
Non - Current					
Infrastructure fund (EGATIF)	5,370.16	5,370.16	-	-	5,370.16
Equity securities available for sale	4,270.19	4,270.19	-	-	4,270.19
Long - term local loans	(50,007.97)	-	(55,065.51)	-	(55,065.51)
Long - term local loans (EGATIF)	(20,440.52)	(20,440.52)	-	-	(20,440.52)
Long - term foreign loans	(639.82)	-	(570.23)	-	(570.23)
Debentures	(17,282.35)	-	(17,978.78)	-	(17,978.78)
Contracts					
Forward contracts	-	-	1.08	-	1.08
Interest rate swap and cross currency swap contracts	-	-	(3,927.01)	-	(3,927.01)

	Book Value	Separate financial statement			
		Fair Value			
		Level 1	Level 2	Level 3	Total
Unit : Million Baht					
As at December 31, 2015					
Current					
Current portion of long - term local loans	(5,405.30)	-	(5,507.00)	-	(5,507.00)
Current portion of long - term local loans (EGATIF)	(414.48)	(414.48)	-	-	(414.48)
Current portion of long - term foreign loans	(179.30)	-	(242.23)	-	(242.23)
Non - Current					
Infrastructure fund (EGATIF)	5,370.16	5,370.16	-	-	5,370.16
Long - term local loans	(49,968.05)	-	(55,025.59)	-	(55,025.59)
Long - term local loans (EGATIF)	(20,440.52)	(20,440.52)	-	-	(20,440.52)
Long - term foreign loans	(639.82)	-	(570.23)	-	(570.23)

	Unit : Million Baht			
	Consolidated financial statements		Separate financial statement	
	Fair value	Book value	Fair value	Book value
As at December 31, 2014				
Current				
Held for trading securities	435.85	435.85	-	-
Current portion of long - term local loans	(7,955.70)	(7,835.09)	(7,925.76)	(7,805.15)
Current portion of long - term foreign loans	(306.31)	(271.57)	(306.31)	(271.57)
Debentures	(729.84)	(721.33)	-	-
Non - Current				
Equity securities available for sale	3,575.43	3,575.43	-	-
Long - term local loans	(61,554.91)	(56,643.22)	(60,256.57)	(55,373.35)
Long - term foreign loans	(795.69)	(830.55)	(795.69)	(830.55)
Debentures	(14,473.29)	(13,972.09)	-	-
Contracts				
Forward foreign exchange contracts	0.59	-	-	-
Interest rate swap and cross currency swap contracts	4,638.94	-	-	-

Financial instruments carried at fair value

Fair value hierarchy

The table above analyses recurring fair value measurements for financial assets and liabilities. These fair value measurements are categorised into different levels in the fair value hierarchy based on the inputs to valuation techniques used. The different levels are defined as follows.

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities that the group can access at the measurement date.
- Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.
- Level 3: unobservable inputs for the asset or liability.

EGAT determines Level 2 fair values for short-term and long - term loans, derivatives financial instruments and also fixed interest rate bonds by calculating the present value of the estimated cash flow, which based on the nearby term discount rate. Forward foreign exchange contracts, interest rate swap and cross currency swap contracts are calculated by financial institutions, which are contractor of EGAT.



12. Infrastructure Fund

On November 27, 2014, the Board of EGAT approved model of infrastructure fund structure for North Bangkok Combined Cycle Power Plant - Block 1 which required EGAT to quarterly remit net revenue (availability of payments (AP1) net insurance premium) of North Bangkok Combined Cycle Power Plant - Block 1 throughout the contractual period, according to the contract between EGAT and such fund. The amount of fund is not less than Baht 19,000 million, and the estimated contractual period is 20 years.

EGAT will record receipt from sale of investment units in amount of Baht 20,855 million (amount of investment units 2,085.50 million at par value of Baht 10 per unit) as liabilities. The remitted net revenue will be paid in respect of the return and repayment of investment until the maturity date of the contract. For the purpose that EGAT appointed the following representatives.

1. Krung Thai Asset Management Public Company Limited (KTAM) as the fund manager
2. Siam Commercial Bank as the financial advisor and underwriter

EGAT hold the investment in amount of Baht 5,213.75 million (amount of investment units 521.38 million), representing 25% of the units sold and has been prohibited to sell investment units for 5 years. In 2015, EGAT received dividend income in the amount of Bath 57.35 million.

As at December 31, 2015 EGAT has outstanding current portion of long - term loans from infrastructure fund in the amount of Bath 414.48 million, long - term loans from infrastructure fund in the amount of Bath 20,440.52 million and accrued interest expense in the amount of Bath 353.77 million.

13. Mae Moh mine case

Since the Supreme Administrative Court has sentenced on the Mae Moh mine case that EGAT has to comply with the measures on prevention and mitigation around Mae Moh mining areas. EGAT together with government agencies and community representatives inspected the area of the concession no. 3-6/2530 and 30-46/2535 of EGAT and there was preliminary conclusion that the construction of golf course and botanical areas did not overlap the mining areas that were revived by planting fast growing trees. In addition, EGAT has implemented other as follows:

1. EGAT appointed a joint committee by Lampang province command no. 1244/2558 dated April 17, 2015 to consider the evacuation of dwelling who are affected that may lead to danger to life and properties and want to migrate to other areas away from the affected area of radius 5 kilometers.

2. EGAT requested to change the measures on environmental impact prevention and mitigation which included the dust reduction, cropping in the wetland and transportation of soil crust disposal. EGAT got approval from Department of Primary Industries and Mines (DPIM), according to the letter no. OG 0511/1856 dated April 27, 2015, to allow EGAT to comply with the approval from the Office of Natural Resources and Environmental Policy and Planning (ONEP) as mentioned in the letter no. TS1009.2/7595 dated October 27, 2010.

On June 17, 2015, The Chiangmai Administrative Court and the prosecutors had inspected the actual condition of the disputed area and made a supplementary report of inspection. In addition, The Chiangmai Administrative Court notified EGAT about the court order on the litigant argument and the termination of execution according to the letter no. SP 0006.4/1816 dated December 11, 2015.

14. Subsequent Events

On February 24, 2016, infrastructure fund for North Bangkok Combined Cycle Power Plant - Block 1, Electricity Generating Authority of Thailand, declared dividend payment and shareholders book closing which became effective on February 29, 2016 in amount of Baht 0.115 per investment unit. EGAT has invested in amount of 521.38 million units so dividend income received is Baht 59.96 million.

15. Reclassification Transactions

EGAT reclassified some transactions in the financial statements for the year ended December 31, 2014 for conformity with the presentation of the financial statements for the year ended December 31, 2015.

16. Issuance Dated of Financial Statements

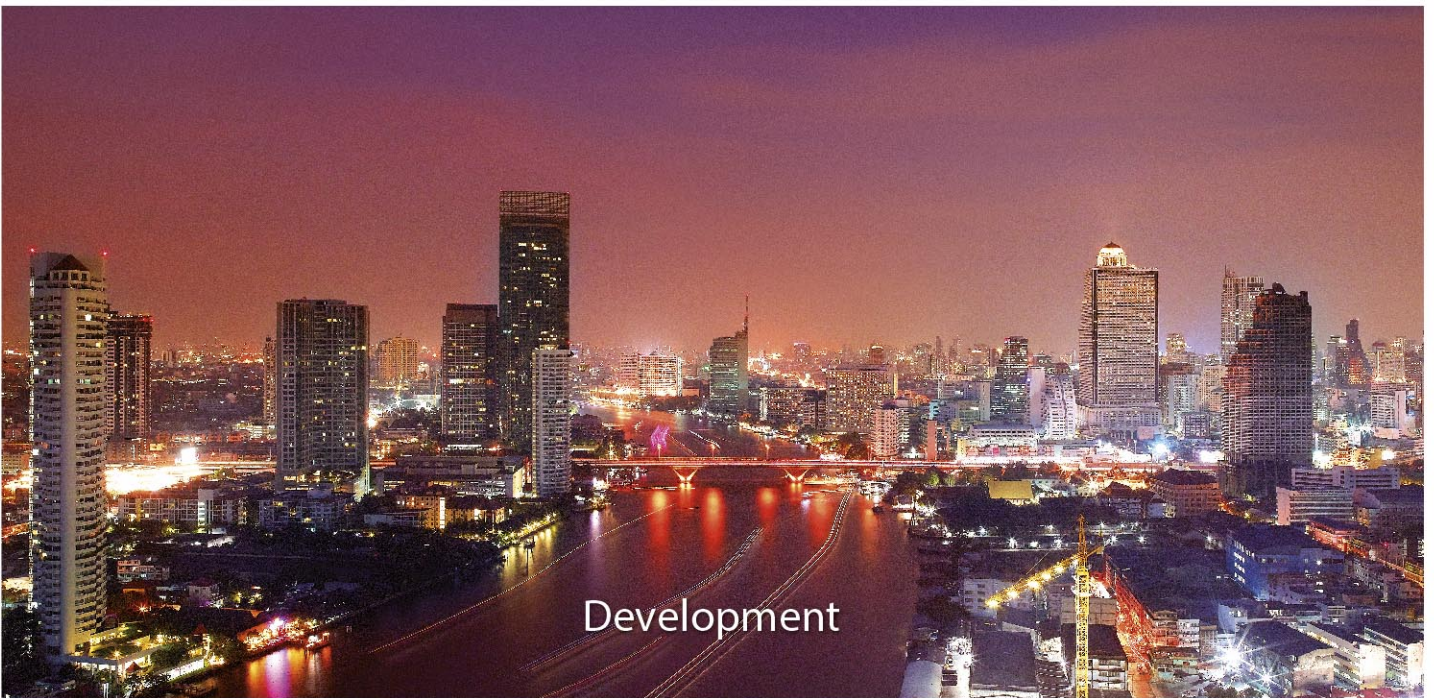
Governor of EGAT approved these financial statements for issuance on March 21, 2016.





Audit Fee

EGAT's financial statements are audited by the Office of the Auditor General of Thailand. For Fiscal year 2015, audit fees and expenses total Baht 4,020,000 comprising Baht 2,200,000 fee for the annual audit, Baht 1,500,000 fees for the reviews of quarterly financial statements totaling three quarters or Baht 500,000 for each quarter and Baht 320,000 fees for the audits of account unbundling.



Development



Conservation



Both sides of life

EGAT always cares for

There are always two sides to everything.
That's why we EGAT people, go to great lengths to strike the balance
between securing the country's energy future
and ensuring the wellbeing of communities and the environment.

We are committed to creating a sustainably better future for all.



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