



EKARAT ENGINEERING (PUBLIC) CO.,LTD.

ANNUAL  
REPORT | **2017**

รายงานประจำปี 2560



“  
**TURN ON OPEN LIFE OPEN VIEW  
ACCESS TO ALTERNATIVE ENERGY  
IN TO EKARAT ENGINEERING**  
”



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## FINANCIAL HIGHLIGHTS

### Summary of Financial Information of Ekarat Engineering Public Company Limited

Items	Units	2017	2016
Revenue from the sale of goods	(Million Baht)	1,398.98	1,341.29
Revenue from services and repairing	(Million Baht)	193.63	212.28
Revenue from installation of solar electric generating system	(Million Baht)	41.36	44.72
Revenue from sales of electricity current	(Million Baht)	47.42	21.71
Gross Profit	(Million Baht)	329.08	227.06
Net Profit	(Million Baht)	50.87	(65.92)
Total Assets	(Million Baht)	2,001.70	2,106.15
Total Liabilities	(Million Baht)	806.78	928.52
Total Shareholders' Equity	(Million Baht)	1,194.92	1,177.62
Paid-up share capital	(Million Baht)	1,074.63	1,074.63
Par Value	(Baht)	0.80	0.80
Earning Per Share	(Baht)	0.038	(0.054)
Book Value per Share	(Baht)	0.89	0.88
Gross Profit Margin	(%)	19.57	14.02
Net Profit Margin	(%)	2.93	(3.97)
ROA	(%)	4.53	(2.18)
ROE	(%)	4.29	(5.29)



## Summary of Financial Information of Ekarat Engineering Public Company Limited and Subsidiary

Items	Units	2017	2016
Revenue from the sale of goods	(Million Baht)	1,400.17	1,342.85
Revenue from services and repairing	(Million Baht)	193.61	212.28
Revenue from installation of solar electric generating system	(Million Baht)	43.25	46.36
Revenue from sales of electricity current	(Million Baht)	47.42	21.71
Gross Profit	(Million Baht)	330.14	238.14
Net Profit	(Million Baht)	44.30	(62.39)
Total Assets	(Million Baht)	2,011.90	2,119.19
Total Liabilities	(Million Baht)	810.95	928.96
Total Shareholders' Equity	(Million Baht)	1,200.95	1,190.25
Paid-up share capital	(Million Baht)	1,074.63	1,074.63
Par Value	(Baht)	0.80	0.80
Earning Per Share	(Baht)	0.033	(0.051)
Book Value per Share	(Baht)	0.89	0.88
Gross Profit Margin	(%)	19.60	14.67
Net Profit Margin	(%)	2.56	(3.77)
ROA	(%)	4.20	(2.00)
ROE	(%)	3.71	(4.96)



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Audit Committee's Report





## MESSAGE FROM THE CHAIRMAN

**Mr. Vichit Yamboonrueng** Chairman of the Board

Throughout the year 2017, although the economic overview on domestic was likely to improve, due to the government expenditure on infrastructure projects. On the other hand, the investment on private sector, especially the construction and the industrial sectors continued to slow down. And it is a key factor that affect the performance of Ekarat Engineering Public Company Limited. Therefore, the performance in the first six months did not meet the target and business plan as our expected. However, the company work really hard to find a new strategy and that's cause the improvement on profitability in the last six month of the year.

For Solar Energy business, the consumption on solar energy for power generation has grown a lot, due to the support from the government. The government aim to support in renewable energy, such as solar rooftop project which investors can install the solar cell on their rooftop for self-consumption. Moreover, the innovation on technology of solar cell nowadays, can help us reduce the cost. As a result, the company's revenue in solar energy business has increased from 2016 by selling solar panel which has been certified by TIS and the International Standard (IEC). And also the company's revenue increase from the sales of electricity on our Solar Farms.



In 2018, the trend on transformer and solar industry is still on the upward direction due to the demand on electricity and the GDP growth rate is also in upward trend. Therefore, the company has set 3 years business plan (2018 to 2020) and target according to economic trends, society, environment, and also to response on customer needs. There are 3 main things of the policies to focus on. First, to focus on profit. Second, focus on Organization development. Third, to focus on the investment by searching for the new technology in order to improve on production system and to reduce the cost.

Finally, the Board of Directors would like to express our sincere gratitude to all shareholders, customers, partners, supportive financial institutions and our employees for supporting us. The company is commit to ethical and focus on the future goal. Our main goal is to move forward and create sustainable growth to the organization. In addition, to be the leader in transformer industry, and also focus on corporate social responsibility in order to create the maximum benefits all stakeholders.

On behalf of the Directors and Management Team  
Ekarat Engineering Public Company Limited



(Mr. Vichit Yamboonrueng)  
Chairman of the Board





## AUDIT COMMITTEE'S REPORT

The Audit Committee of Ekarat Engineering Public Company Limited was appointed by the resolution of the Board of Director on February 18, 2005. The members of the Audit Committee are Mr. Vinai Vittavasarnvej as the Chairman of the Committee, Mr. Wara Tongprasin and Mr. Pitak Chaicharoen as the Audit Committee members, and Mrs. Suwannee Sujaritvanichpong – Internal audit Manager, as the secretary of the Audit Committee. Each of the Audit Committee members is not the executive or staff or related person with the company.

Since January 1 – December 31, 2017, the Audit Committee held 6 meetings. The Audit Committee has invited the management and/or the company's auditors to attend the meeting for discuss or inform the board as the agenda required. The Audit Committee's meeting considered the subjects as stipulated duties as follows:

1. Reviewed, commented, and provided suggestion, the company's quarterly and annually financial statements before submitting to the Board of Directors for approval.
2. Consider the related transactions between the company, the subsidiaries and the person who might have the conflict of interests. The Audit Committee did not find any transactions that might indicate the conflict of interests.
3. Presented the Internal audit reports and corrective suggestions to the Board of Directors.
4. Evaluated the company's and subsidiaries' internal controls, which comprise the organization and environment, risk management, management operation control, information system and communication, and monitoring system. The Audit Committee will present to the board for consideration in the said matters
5. Recommended Office of SP Audit Company Limited to be the company's auditors for year 2018 including company's auditor remuneration.
6. The Audit Committee considered the Corporate Governance and Risk Management system and agreed that the Corporate Governance and Risk Management system of the company is efficient.
7. The Audit Committee evaluated the operation of Audit Committee time by time and adjusted the Audit Committee charter to conform to related rules and regulations.

On behalf of the Audit Committee,



(Mr. Vinai Vittavasarnvej)

Chairman of the Audit Committee



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## GENERAL INFORMATION

### General Information

Company name	:	Ekarat Engineering Public Company Limited
Address	:	9/291 Floor 28 <sup>th</sup> , U.M. Tower, Ramkamhaeng Road, Suanluang, Bangkok 10250, Thailand
Registration No.	:	0107537002711
Website	:	www.ekarat-transformer.com
Registered Capital	:	Baht 1,074,631,523.20 divided into 1,343,289,404 Ordinary shares at Par value of 0.80 Baht each
Paid-up Capital	:	Baht 1,074,631,523.20 divided into 1,343,289,404 Ordinary shares at Par value of 0.80 Baht each
Telephone No.	:	02-719-8777 (Automatic 30 lines)
Fax. No.	:	02-719-8760

### Securities Registrar

Company Name	:	Thailand Securities Depository Company Limited
Address	:	93 Rachadapisek Road, Dindaeng, Bangkok 10400, Thailand
Telephone No.	:	0-2009-9000
Fax. No.	:	0-2009-9991

### Auditor

Auditors	:	Miss Yupin Chumjai	C.P.A No. 8622 or
	:	Miss Susan Eiamvanicha	C.P.A No. 4306 or
	:	Mr. Suchart Panitcharoen	C.P.A No. 4475 or
	:	Miss Chuenta Chommern	C.P.A No. 7570 or
	:	Miss Wandee Eiamvanicha	C.P.A No. 8210 or
	:	Mr. Kietisak Vanichhanon	C.P.A No. 9922
Company Name	:	SP Audit Company Limited	
Address	:	503/31, 18 <sup>th</sup> (A) Floor, KSL Tower, Si Ayutthaya Rd., Ratchathewi, Bangkok, Thailand 10400	
Telephone No.	:	0-2642-6172-4	
Fax. No.	:	0-2642-6253	



## NATURE OF BUSINESS

### PRODUCTS AND SERVICES

The company products and services can comprise of 4 activities. :



**1. Distribution Transformer** – The Company is the Distribution Transformer manufacturer and distributor. The Company can produce either Oil Type Distribution Transformer or Dry Type Distribution Transformer which have the electric power between 1 kVA. to 30,000 kVA.

**2. Services** – The Company has 10 sell representatives through out the country. The service provided to the customer is Distribution Transformer Maintenance and Repairing Service and Electric System Maintenance Service.



*The 1<sup>st</sup> Solar Farm at Srimahaphote District, Prachinburi Province*

**3. Solar Farm** – The Company is the electrical power generator by generating electricity from photovoltaic 2 places. The first is at Prachinburi province which has power capacity 1.26 Megawatt per year and selling to Provincial Electricity Authority (PEA) and received the adder supporting from PEA for 10 years. The second is at Nonthaburi province which has power capacity 3.35 Megawatt per year and selling to Metropolitan Electricity Authority (MEA) and received Feed-in-Tariff 5.66 Baht per unit for 25 years.



*The 2<sup>nd</sup> Solar Farm at Bangbuathong District, Nonthaburi Province*

**4. Solar Cell** – The company is a manufacturer of Solar Module and can produce Solar Cell with the capacity of 60 Megawatt per year. The solar panels can produce power from 30 watts to 340 watts Which was granted by TIS 2580-2553 Or equivalent to IEC 61730 and TIS 1843-2553 Or equivalent to IEC 61215 for the usage as raw material for Solar Module assembly and for sell as the merchandise both local market and foreign market.



## MARKET CONDITIONS AND COMPETITION

### DISTRIBUTION TRANSFORMER

Ekarat Engineering Public Company Limited is concentrated in manufacture the high quality Distribution Transformer and Transformer parts. The factors that support quality of Ekarat's transformer are design with computer programs, used of high quality raw materials. The Company use the Copper strips instead of Copper wires which made Ekarat's transformer can endure the electric shock. Ekarat's staffs are experience and skillful and with the modern technology of machinery, the Company can also produce Hermetically Sealed Oil Type Distribution Transformer and Dry Type Cast Resin, which received the technology from Starkstrom-Geratebau GmbH, Germany.

The company was the leader in Thailand to use the Water-Based Paints technology from Germany in the production of Transformer Tank. The said technology is friendly to the environment because there is no toxic chemical in the paints.

The customer of Distribution Transformer can be divided into 3 categories, Government and State Enterprises sector (Metropolitan Electricity Authority and Provincial Electricity Authority), Private sector (Contractors and Others company) and Foreign sector. In 2017, the company has the proportion of Private sector, Government and State Enterprises, Foreign clients equal to 62.81%, 27.32%, 9.87% respectively.

#### Industry and Competition

The demand of Distribution Transformer is depending on the increment of demand on electrical power which is conforming to the GDP. The electric power peak demand in year 2015, 2016 and 2017 is 27,345 29,619 and 30,303 MW, respectively or equal to the growth rate of 5.39%, 8.32% and 2.31%, respectively. The increasing in GDP in year 2015, 2016, and 2017 is percentage of 2.8 3.1 and 3.9 respectively. The demand on electrical power is increasing by the year. This reason supporting the growth opportunity of Distribution Transformer Business.

At present, there are about 25 transformer manufacturers in the market. As a result, the competition of transformer business is higher than in the past. However, the company still be the leader in the Distribution Transformer's market shares. The average of market shares from 2015-2017 is about 20% and the company's major competitors are Thai Maxwell Electric Co.,Ltd., Charoenchai Transformer Co.,Ltd. and Tirathai PCL.



## SERVICES AND MAINTENANCES

The service, we offer to the customer is maintenance and repairing the distribution transformer and with the vast network of representatives, the company can also sale the distribution transformer to replace the damage of broken transformer through the representatives.

### Industry and Competition

The growth of Service has a direct variation to the sale of distribution transformer and it can also grow with the service in electric system for a huge manufacturer plant. The competition in Services is not desperate; the strength of the company has the number of representatives in the industry. The company has 10 representatives throughout the country. The competitors of Services are Thai Maxwell Co., Ltd., R. Support Co., Ltd., A.B.B. Co., Ltd., Charoenchai Transformer Co., Ltd., and Tirathai Public Co., Ltd.

In 2017, we committed to develop the maintenance service of distribution transformer to more efficiency because the customers were strict with the high safety standards. Therefore, the company had to improve equipment and tools as well as service personal who are trained in Thai Labor Standards and always checks employee's health before working.

## SOLAR ENERGY BUSINESS

Ekarat Engineering Public Company Limited is a manufacturer and distributor of Solar Panel (Crystalline Silicon). The capacity of the solar panel that we can produce is 30 Watts to 340 Watts depend on customer demand. The Company's solar panel has the efficiency about 12%-15% for changing the solar energy to electric energy. The solar panels can be use for 20-25 years and had tested before shipped to the customer. The price of the module has direct variation to the price of raw materials likes solar cell because the solar cell is the main raw material and has the high price. The Company has the customer in both local and overseas which operated the business by distributing the solar module or solar module installation.

### Industry and Competition

The situation of renewable energy investment in Thailand from now until 2018 can continue to grow. It is expected to see more investment in solar energy. Especially after unlocking the restrictions whether it is the progress of the Government Solar Farm Project and agricultural cooperatives, including the release of solar rooftops which is a pilot project to promote public participation in electricity generation. The proportion of solar energy used in Thailand in 2017 of 2,697.26 MW increased from the year 2016 with 2,446.12 MW.



In addition, the solar business is likely to expand its business abroad, especially in Asia. This will be a strategy that will help the company to increase its business opportunities.

The competition in the solar business is quite high. Especially, the service of installation of solar system which is growing up. It resulted to have new competitive in the solar business.

## SOLAR FARM

The Company is the electrical power generator by generating electricity from photovoltaic 2 places. The first is at Prachinburi province which has power capacity 1.26 Megawatt per year and selling to Provincial Electricity Authority (PEA) and received the adder supporting from PEA for 10 years. The second is at Nonthaburi province which has power capacity 3.35 Megawatt per year and selling to Metropolitan Electricity Authority (MEA) and received Feed-in-Tariff 5.66 Baht per unit for 25 years.

## Industry and Competition

The company's Solar Farm business does not have the competition due to the electricity current generated will sell directly to the government.

## BUSINESS PLAN FOR 3 YEARS (2018-2020)

The economic outlook for 2018-2020 forecasts that the GDP will grow by 3.7% - 4.0% and after the election year 2018, which is pushing for increased investment (data from the PDP development in Thailand in 2015 - 2079). The demand for transformer distribution has increased by an average of 5,000 MW per year. The competition is higher in terms of price, quality and service. While ASEAN countries such as Burma, Laos and Cambodia have a very high GDP growth rate of 7% (According to the news, watch the ASEAN Post Today on March 2, 2560) provides an opportunity to supply power to these countries is increasing.

Solar power is a new alternative energy and environmentally friendly. Nowadays, solar cell system are cheaper than in the past and the future electricity prices tend to be higher. It makes the operators have idea to save electricity by installing solar panels on the roof. The planned development of energy production PDP year 2015-2036 plan to install the solar power plant averaged 200 MW. The government is considering the installation of solar roof liberalization this year. It is the driving force for the rapid growth of the solar market. It is expected that in the period of 1-3 years will have more investment projects to install solar panels on the roof both in the private sector and government agencies. The opportunity to sell solar panels, including the installation of solar power generation system on the roof for the operator to add more.





The Company has prepared a business plan three years (2018-2020). There are three main areas of focus: profit-oriented, the progress of the organization and investment. The four main strategies are sales, investment, production and human resources.

### 1. Sale

Focus on increasing revenue and profit with plans to increase revenues both the transformer and increase service revenue growth of approximately 10% per year and plans to sell solar average of about 400 million baht per year.

### 2. Investment

Focus on investment projects with solar roof private and power plant sectors with plans to invest about 600 million in the 3-year rate of return of at least IRR 10%.

### 3. Production

Focus on cost reduction and production efficiency by improving design and process and adding machines. The business plan is a plan to reduce costs by about 3-5% of the cost of sales and increased production by 10% per year.

### 4. Human Resources

Focus on personnel management to work effectively. Using employee turnover principle and use machinery to replace workers. Including organizational restructuring, improving the work of each agency to ensure consistency and maximum performance.

The company will focus on increasing sales, reducing costs and increasing profits by focusing on the production of transformers to keep pace with customer demand and focus on the solar business by increasing market share. This will result in the company achieving its goals.





## RELATED PARTY TRANSACTIONS

The Group incurred business transactions with related entities which have the same group of shareholders. The significant remaining balances and inter-company transactions between the Group with related entities and persons are as follows:-

### 1. INTER-ASSETS AND LIABILITIES ARE AS FOLLOWS:-

Type of items	(Unit : Baht)			
	Consolidated financial statements		Separate financial statements	
	As at December 31,		As at December 31,	
	2017	2016	2017	2016
• Trade receivable				
Ekarat Solar Co., Ltd.	-	-	6,272,621	28,021,450
• Other receivable				
Ekarat Solar Co., Ltd.	-	-	14,014	97,708
Ekarat Energy Co., Ltd.	-	-	8,000	38,000
Total	-	-	22,014	135,708
• Prepaid guarantee fee				
KV Asset Company Limited	-	570,181	-	570,181
Khun Theeraya Kanokpruk	-	570,181	-	570,181
Total	-	1,140,362	-	1,140,362
• Trade payables				
Ekarat Solar Co., Ltd.	-	-	903,329	2,776,182
• Other Trade payables				
Ekarat Solar Co., Ltd.	-	-	64,000	-
• Service receivable deposit				
Ekarat Solar Co., Ltd.	-	-	348,000	-
• Accrued construction costs				
Ekarat Solar Co., Ltd.	-	-	-	1,404,024
Short-term loan due from and interest receivable				
Ekarat Solar Co., Ltd.				
• Short-term loan due from				
Beginning balance	-	-	189,378,250	189,378,250
Repaid in the year	-	-	(178,881,264)	-



Type of items	(Unit : Baht)			
	Consolidated financial statements		Separate financial statements	
	As at December 31,		As at December 31,	
	2017	2016	2017	2016
Ending balance	-	-	10,496,986	189,378,250
Less Allowance for doubtful debts	-	-	(10,496,986)	(189,378,250)
Net	-	-	-	-
• Interest receivable				
Interest receivable	-	-	152,494	38,207,174
Less Allowance for doubtful debts	-	-	(152,494)	(38,207,174)
Net	-	-	-	-
Total short-term loan due from and interest receivable	-	-	-	-

For the year ended December 31, 2017 and 2016, there was movement in the allowance for interest receivable as follows: -

	(Unit : Baht)	
	Separate financial statements	
	2017	2016
As at January 1,	38,207,174	29,564,873
Plus Increase during in year	7,343,679	10,067,834
Less Repayment during in year	(45,398,359)	(1,425,533)
As at December 31,	152,494	38,207,174

On 21 September 2017, The Board of Directors of the Company resolved that to forgiveness the debt from restructuring, on December 2013 total amounted to Baht 218.00 million, consisting of principal of Baht 178.88 million and accrued interest receivable of Baht 39.12 million to Ekarat Solar Co., Ltd. (subsidiary company, 99.99% shares held by the Company). The management believes that the subsidiary company has no ability to repay the debt to the Company. There was no impact on the profit for the year periods ended December 31, 2017, because of the Company had recorded allowance for doubtful accounts of loans and accrued interest receivables in total amount already.



## 2. INTER-REVENUES AND EXPENSES ARE AS FOLLOWS: -

(Unit : Baht)

Type of items	Consolidated financial statements		Separate financial statements	
	For the year ended December 31,			
	2017	2016	2017	2016
• Revenue from sales of goods				
Ekarat Solar Co., Ltd.	-	-	131,510	-
• Revenue from installation service				
Ekarat Solar Co., Ltd.	-	-	13,413,564	26,104,151
• Revenue from services				
Chula Engineering Company Limited	-	5,250,000	-	5,250,000
• Interest income				
Ekarat Solar Co., Ltd.	-	-	7,343,679	10,067,834
• Other income				
Ekarat Solar Co., Ltd.	-	-	14,014	140,750
• Purchase of goods				
Ekarat Solar Co., Ltd.	-	-	8,243,107	603,968
• Cost of service				
Chula Engineering Company Limited	-	4,495,856	-	4,495,856
• Doubtful debt				
Ekarat Solar Co., Ltd.	-	-	7,343,679	10,067,834
• Rental expenses				
Ekarat Energy Co., Ltd.	-	-	24,000	24,000
• Guarantee fee				
KV Asset Company Limited	1,517,780	3,523,033	1,517,780	3,523,033
Khun Theeraya Kanokpruk	1,517,780	3,523,033	1,517,780	3,523,033
Total	3,035,560	7,046,066	3,035,560	7,046,066
• Directors and key management compensation				
Short-term benefits	18,414,500	18,998,500	18,414,500	18,998,500
Post-employment benefits	220,973	472,184	220,973	472,184
Directors’ remuneration	6,429,000	7,020,000	6,429,000	7,020,000
Total	25,064,473	26,490,684	25,064,473	26,490,684



### Policy of setting prices

	Policy
Price of sale-purchase goods	Mutually agreed price based on market
Rental and services income	Mutually agreed price based on contract
Interest income	Based on the agreed price according to the interest rates of domestic commercial banks.
Guarantee fee	4% of credit facilities from financial institution

### 3. RELATIONSHIP OF RELATED COMPANIES

Consisted of: -

Name of companies	Nationality	Nature of relationship	Related by
Ekarat Solar Co., Ltd.	Thai	Subsidiary	Direct shares holding of 99.99%
Ekarat Energy Co., Ltd.	Thai	Subsidiary	Direct shares holding of 99.99%
KV Asset Company Limited	Thai	Related company	Mutually director and shareholder
Chula Engineering Company Limited	Thai	Related company	Joint shares holding
Khun Theeraya Kanokpruk	Thai	Major shareholder	Direct shares holding more than 5%



## RISK FACTORS

The company is aware of the important of risk management of the organization by forming the Risk Management Committee to evaluate the potential risk and assign the strategies to conform to the objectives and goals of the company. However, even the company has the Risk Committee to prevent the risk, but in 2016 the company and its subsidiary still have the risk factors as shown below:-

### 1. DISTRIBUTION TRANSFORMER BUSINESS RISK

#### 1.1 Risk related to relying on specific Distribution Transformer's customer

Most of the company's revenue came from the sale of Distribution Transformer. In year 2015, 2016, and 2017, the company had the sale revenue from sales of Distribution Transformer to the Metropolitan Electric Authority and the Provincial Electric Authority in the amount of Baht 267.60 million, Baht 113.31 million, and Baht 370.25 million or 12.92%, 7.80%, and 23.77%, respectively, of the Transformer revenue and Services revenue of the company. However, considering in the total revenue of every customer sector in year 2017 of Baht 1,681.26 million increased by Baht 61.39 million compared to year 2016 or increased 3.79%. The proportion of the revenue in public sector in 2016 is Baht 113.31 million and in 2017 is Baht 370.25 million increased by Baht 256.94 million or increased 266.76%.

Moreover, the revenue from public sector in 2017 increased from the adoption of the 2016 budget merger with the 2017 budget for auction on transformer. The approach to reduce the risk of dependence on public customers by continue to seek new private clients.

#### 1.2 Risk related to the unstable of Distribution Transformer's raw materials price

In 2017, the company has the major revenue from the sale of Distribution Transformer. In the production of Distribution Transformer used the local raw material and imported material likes Silicon steel, Copper wire, Copper plate, Transformer Oil, etc. Therefore, the company may affect from the unstable of the material price in the global market. For example, the average price of Silicon steel procured in 2017 compared to 2016 decreased by 2.73%, the average price of Copper strip procured in 2017 increased by 6.33% compared to 2016, and the average price of Transformer Oil procured in 2017 decreased by 1.98% compared to 2016. From the factor aforesaid, didn't affect the total cost of production of transformers significantly. However, the company planed and stocked the materials for the production for 3 months.



### 1.3 Risk related to the quality of the Distribution Transformer's raw material

Distribution Transformer is a very important part in the electricity system. If the transformer malfunctions the effect will cause the damage of the industry and resident. Therefore, we need to select the raw material likes Silicon steel, Copper wire, Copper plate, Insulator paper, transformer oil, and transformer tank, in the production of high quality distribution transformer. To avoid the risk from low quality of raw material, the company has the procedure follow ISO 9001 standard which comprise with Design, assign the characteristic of raw materials, monitoring and testing. The company also carefully selects the supplier to make the company confident that the raw material meets the standard qualification.

### 1.4 Risk related to relying on skilled staffs to produce the Distribution Transformer

In 2017, 87.84% of the revenue from sale of Distribution Transformer and Services came from the sale of Distribution Transformer which is rely on the experience staffs to produce and develop the quality of Distribution Transformer to be accepted. Therefore, relying on the skilled staffs in specific field of work is important to producing Distribution Transformer and operation of the company. Anyway, with the good operation system awarded ISO 9001, ISO standard has the operating manual, training, and operation process. In case of the company recruit a new staff, the standard will help the new comer to understand the process of work which will make a new staff can operate soon. In additional, the company has the training program to develop the staff continuously. The company also awarded the benefit or has the policy to stimulate the staffs. For example, Provident Fund, Bonuses, Loyalty awards, this will reduce the turn over rate of the staffs.

## 2. SOLAR ENERGY BUSINESS RISK

### Risk related to the government power purchasing policy.

In 2017, the government changed the power purchasing policy for both Solar rooftop and Solar farm. The progress is as follow :

### 2.1 Risk related Anti-Damping Law.

Risk related Anti-Damping Law's the Europe Union and the United States about Solar Cell from China. Chinese entrepreneurs have set up factories to produce cells and solar cells in Thailand more than past, in order to avoid that law and to get the Certificate of Origin. That make the competition for Solar Cell is higher. The company has to find ways to reduce the operating cost to be competitive.



## 2.2 Risk related to the government power purchasing policy.

2.2.1 According to Energy Regulatory Commission (ERC) had issued the regulations to purchase electric current from PV power plant and published in the government gazette since 2015 and issued the bidding of Solar Power Plant for government agencies and agricultural cooperatives programme 800 MW.

However, the department of energy saving had announced and promoted the benefit of using solar cell to the government sector. That is a great opportunity for the company to increase sales and installation of solar panel even more of these project.

2.2.2 According to The Board of Investment of Thailand (BOI) has announced the benefits for general entrepreneurs who install Solar Rooftop for use in the business since January 2015. This promotion will be expire on December 2020. That is a great opportunity for the company to increase sales.

## 3. FINANCIAL RISK

### 3.1 Interest rate Risk

The company has the risk due to the uncertainty of the interest rate in the market due to the company has the bank deposit and credit line in a commercial bank. The bank code the interest rate as follow:-

1. Facilities limit, which the rate of MLR per year.
2. L/C and/or T/R and/or short term loan or L/G, if the loan is Baht currency the rate is MOR per year; and if the loan is foreign currency the rate might be SIBOR or LIBOR from the highest rate which the bank offer or determine by the bank in each time in the day before the beginning of interest terms on each term 2 working days.

Therefore, the company might have the uncertainty of the interest rate that might change from the situation of the market. The interest rate in 2016 and 2017 for MLR is 6.25% and 6.25% per annum; MOR is 7.12% and 7.12% per annum, respectively. The change in the said interest rate is very low therefore the company doesn't use the financial derivative to protect the said risk.



### 3.2 Foreign exchange rate risk

The company order the material to produce the Distribution Transformer from overseas likes Silicon steel, Coil Cast Resin and Ekarat Solar Co., Ltd. (subsidiary), the player in Solar Energy Business, import the main material, Silicon Wafer, include with others material. The quote price will be paid mainly in U.S. Dollar and EURO. The company and subsidiary made a Forward contract which can be execute to prevent the exchange rate risk in the amount of \$3.1 million with a commercial bank and closely monitor the exchange rate. In the additional, the company determines other related factors to reduce the exchange rate risk and increase the efficiency in financial management.

## 4. ECONOMY AND POLITICAL RISK

From the slightly economic growth caused from the change in political situation and continuously effect through 2018, the economic forecast from economic agencies forecast that, Thai's GDP will grow 4.0% mainly from the government investment in infrastructure and energy. In industrial and export, there is no significant signal of growth in short term from the lack of confident, if the government can accelerate the investment project within the first half of year, the expansion of economic can be achieve the target.

However, Overview of the domestic economic were continuously slow down. The government had set a strategy for the management of the Eastern Economic Corridor (EEC), which aims to enhance the overall image of investment promotion and increase competitiveness and bring Thailand's economic growth in the long term. It is expected that there will be a large amount of demand for transformers and solar panels, especially in 2018 continue to 2019. This market is competitive in quality. This is a significant business opportunity and expect to push up sales to compensate for the recession and other industries.

## 5. ASEAN ECONOMIC COMMUNITY RISK

From the joining into AEC, Thailand as one of the members might has the risk from the crash of tax burden which increase the competition of Thai and other members entrepreneurs. The customers will benefit from the competition and select the product from quality. However, from the past, Thai's Transformer industry is stronger than the others in ASEAN which will give the opportunity to Thai's Transformer industry to expand the business to overseas. Therefore, Ekarat Engineering Public Company Limited, the leader in Transformer business of Thailand might receive the benefit from joining AEC.





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## STRUCTURE OF SHAREHOLDING AND MANAGEMENT

### DIVIDEND PAYMENT POLICY

The company and the subsidiary have the dividend policy to pay the dividend to the shareholders about 50% of Net profit after corporate income tax and legal reserve each year. Therefore, the company's Board of Directors is able to acts inappropriate with this policy time by time under the condition to use the profit in the best interest for the shareholders likes pay back the loan, use for investment or other subject related to the company operation. However, the dividend payment must approve by the Annual General Meeting and approved by the Board of Directors.

### SHAREHOLDERS

List of top 10 Shareholders as at December 29, 2017

Shareholders' Name	Shares	(%)
1. KV assets Co., Ltd.*	170,000,000	12.656
2. Miss Teeraya Kanokpruk	128,550,000	9.570
3. Miss Chadchada Kanokpruk	100,000,000	7.444
4. Mr. Poompat Numpaisarn	55,500,000	4.132
5. Mr. Kongkrai Kanokpruk	26,240,000	1.953
6. Miss Uravee Kanokpruk	26,000,000	1.936
7. Mr. Jeerapong Itsarangkul Na Ayuttaya	20,000,000	1.489
8. Mrs. Paradee Chiamchanya	20,000,000	1.489
9. Mr. Pornchai Tongvanij	16,131,587	1.201
10. Mr. Preecha Pinthong	10,250,038	0.763
<b>Total</b>	<b>572,671,625</b>	<b>42.633</b>

\* Data from Thailand Securities Depository Co., Ltd. for the depositor



Remarks :

\* List of KV Asset Co., Ltd. shareholders

Shareholders' Name	Shares	(%)
1. Miss Rompissri Noichai boon	99,275	18.05
2. Mr. Vornpahol Sangtian	41,250	7.50
3. Miss Pimolwan Sangtian	41,250	7.50
4. Miss Wanravee Topongkasame	17,188	3.13
5. Mrs. Daranee Kantamara	27,500	5.00
6. Mr. Danucha Noichai boon	48,125	8.75
7. Mr. Daroonwat Noichai boon	27,500	5.00
8. Miss Chompicha Noichai boon	99,275	18.05
9. Mr. Ruengrat Noichai boon	17,188	3.13
10. Mr. Visitsak Noichai boon	17,187	3.12
11. Miss Peerayachan Noichai boon	97,075	17.65
12. Miss Khanittha Topongkasame	17,187	3.12
<b>Total</b>	<b>550,000</b>	<b>100.00</b>



## NUMBER OF COMPANY'S STOCK HOLDING BY THE DIRECTORS AS OF DECEMBER 29, 2017

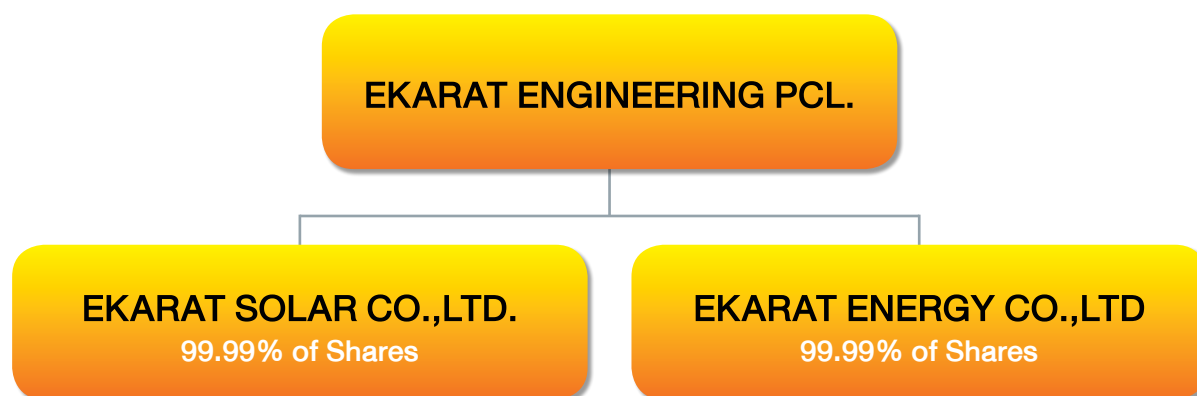
Name	Position(s)	Shares			
		December 30, 2016		December 29, 2017	
		Amount	(%)	Amount	(%)
Mr. Vichit Yamboonruang	Independent Director / Chairman of the Board	1,407,310	0.105	1,407,310	0.105
Mr. Vinai Vittawasgarnvej	Independent Director / Chairman of Audit Committee	-	-	-	-
Mr. Pitak Chaicharoen	Independent Director / Audit Committee / Chairman of Nomination and Remuneration Committee	340,544	0.025	340,544	0.025
Mr. Wara Tongprasin	Independent Director / Audit Committee	108,039	0.008	108,039	0.008
Mr. Chatri Siripanichkorn	Independent Director / Nomination and Remuneration Committee	-	-	-	-
Mr. Wiwat Sangtian	Director	170,000	0.013	170,000	0.013
Miss Urawee Kanokpruk	Director / Nomination and Remuneration Committee	26,000,000	1.936	26,000,000	1.936
Mr. Danucha Noichaiboon	Managing Director / Nomination and Remuneration Committee / Chairman of Risk Management Committee	3,063,720	0.228	1,271,111	0.095
Mr. Anan Santichewasatian	Director / Risk Management Committee	-	-	-	-
Mrs. Daranee Kantamara	Director	1,895,453	0.141	1,895,453	0.141
Total		32,985,066	2.456	31,192,457	2.322



## BUSINESS STRUCTURE OF EKARAT ENGINEERING PCL.

Ekarat Engineering Public Company Limited has 2 subsidiaries :

- Ekarat Solar Company Limited
- Ekarat Energy Company Limited

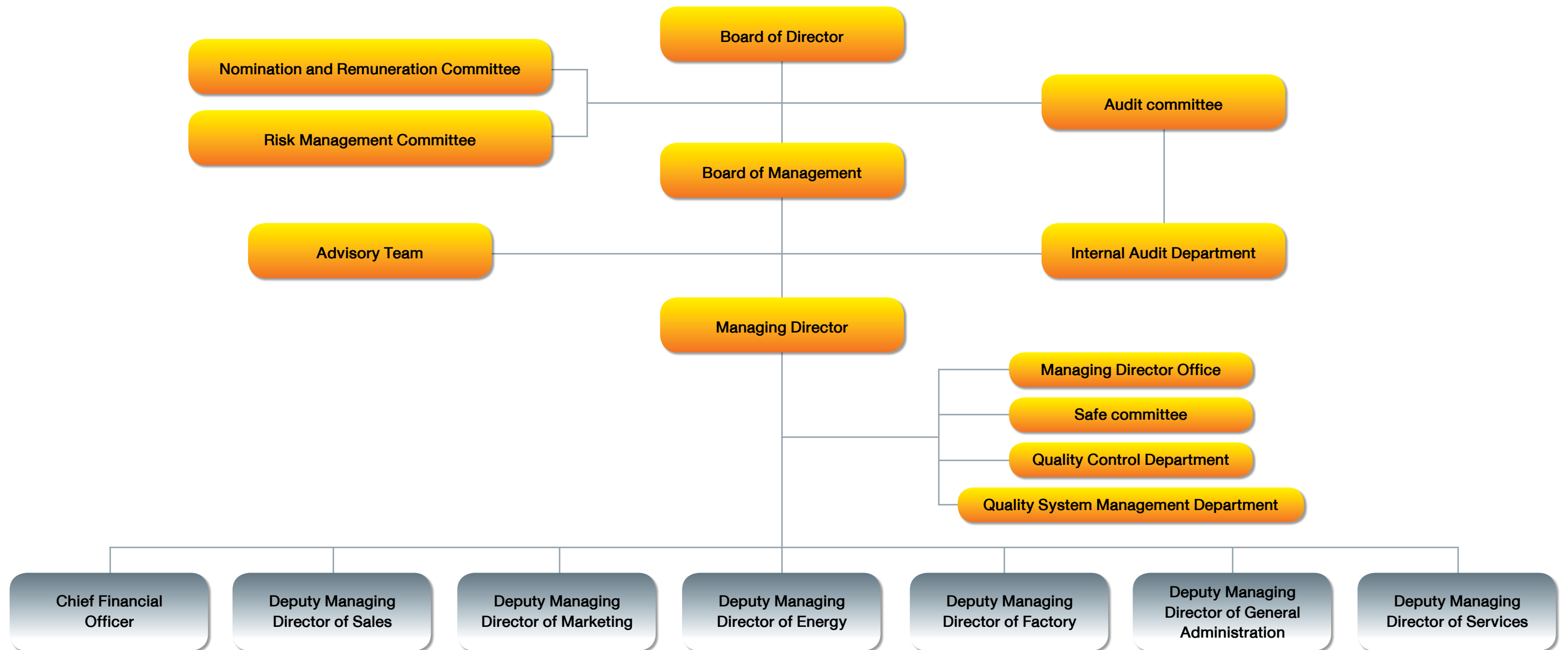


Name	EKARAT SOLAR COMPANY LIMITED
Nature of Business	A manufacturer and distributor Solar Module and Solar Cell, as well as design and installation services for Solar Cell and other renewable energy systems and consulting in energy conservation.
Head Office	9/291, 28th Fl.,U.M.Tower, Ramkhamhaeng Road, Suanluang, Bangkok 10250
Company Registration Num.	0105547051020
Website	<a href="http://www.ekarat-solar.com">http://www.ekarat-solar.com</a>
Telephone	0 2719 8777
Fax	0 2719 8760-2

Name	EKARAT ENERGY COMPANY LIMITED
Nature of Business	All operators in the energy business, manufactures and sells electricity from Solar Cells and invests in the energy industry. Including both domestic and foreign power plants.
Head Office	9/291, 28th Fl.,U.M.Tower, Ramkhamhaeng Road, Suanluang, Bangkok 10250
Company Registration Num.	0105558067828
Telephone	0 2719 8777
Fax.	0 2719 8760-2



## ORGANIZATION CHART 2017



## BOARD OF DIRECTORS

There were 10 Directors in the Board of Directors as at December 31, 2017 as follow:

- |     |              |                  |  |
|-----|--------------|------------------|--|
| 1.  | Mr. Vichit   | Yamboonruang     | Independent Director/Chairman of the Board   |
| 2.  | Mr. Vinai    | Vittavasgarnvej  | Independent Director/Chairman of Audit Committee   |
| 3.  | Mr. Pitak    | Chaicharoen      | Independent Director/Audit Committee/<br>Chairman of Nomination and Remuneration Committee |
| 4.  | Mr. Wara     | Tongprasin       | Independent Director/Audit Committee   |
| 5.  | Mr. Chatri   | Siripanichkorn   | Independent Director/Nomination and<br>Remuneration Committee                              |
| 6.  | Mr. Wiwat    | Sangtian         | Director   |
| 7.  | Miss Urawee  | Kanokpruk        | Director/Nomination and Remuneration Committee   |
| 8.  | Mr. Danucha  | Noichaiboon      | Director/ Chairman of Risk Management Committee/<br>Nomination and Remuneration Committee  |
| 9.  | Mr. Anan     | Santichewasatian | Director/Risk Management Committee   |
| 10. | Mrs. Daranee | Kantamara        | Director   |

The director No.8 or 9 or 10, authorized to sign on behalf of the company where by two of them must co-sign and affix with company seal, having Miss Nuanchan Sirikul to act as secretary of the company.

### Scope of power and duties of the Board of Directors

The directors shall sincerely and faithfully perform their duties and carefully act in the best interest of the company to be in accordance with the objectives, rules and regulations of the company and the resolution of the shareholders' meeting and the matter legally required the approval of the shareholders' meeting. The conclusion of scope of power and duties of the Board of Directors are as follow:

1. Prescribe the Corporate Governance of the company and acting in the best interest of shareholders by performing its duties with responsibility, faithfulness and honesty under laws, the Company's Articles of Association and the resolution of Shareholders' Meeting.
2. Reviewing the operating plan, budgets, business goals and business policies including examine and monitor the company performance for the stability and benefits of the balance of all parties.
3. Defining and reviewing the Organization Management Structure, the Board of Directors Diversity for the Board's performance appropriate for achieving the objectives and goals of business operations.



4. Consider, and determine the company rules, codes and regulations including appropriate remuneration structure along with business goals.
5. Specifying risk management policies and overseeing to ensure effective risk management systems with reviewing and assessing the systems periodically.
6. Issue the Balance sheet and Income statement as of the end of company account period which audit by the company auditor and submit to the shareholders' meeting for the approval.
7. Appoint the annual general meeting of shareholder at least once a year and the director's meeting at least once a quarter. Each directors should attend the meetings not less than 75% of total Board of Directors Meetings.
8. Overseeing and monitoring to ensure the selection and nomination process of Deputy Managing Director or above positions is carried out transparently.
9. Appoint and authorize one or many directors or the third party to perform an action for the Board of Directors under the control of the Board of Directors; or gland the power to a person to perform as the Board of Directors in the period of time including the demotion and modification of the power.
10. Reviewing top executives development plans and the succession plan and overseeing to ensure the effective performance assessment of top executives on an annual basis.
11. Assessing the performances of the Board of Directors annually by performing two types of assessments, namely that of the Board and its Sub-committees as a whole and that of each individual director as a self-assessment with monitoring the assessment results of the Board.
12. Recognizing the roles, duties and responsibilities of the Board of directors, respecting the rights of shareholders ensuring the equitable and transparent treatment of shareholders and other stakeholders and receive accurate information.
13. Developing their knowledge and competency related to their duties consistently through courses or curricula related to directorial duties of seminars that enhance their knowledge.

By the power and authorities mentioned above, the power and authorities is not including the related transaction, alien of enterprise, acquisition and disposition of assets by rules and regulations of The Stock Exchange of Thailand and the company must respect the rules and regulation of The Stock Exchange of Thailand in the matter of transactions. Furthermore, the power and authorities above are not including to others transaction that conduct by the company's rule and regulations which need the approval of shareholders' meeting.





### The Board of Director's Meeting

1. The meeting of the Board of Directors shall be scheduled in advance and at least once every three months at the head office or branches or nearby provinces.
2. The director shall attend at least 75% of all the board meetings held during the year.
3. The quorum of not less than two-thirds of all Board members is eligible to vote at the meeting to pass a resolution.
4. Invitation, details of the meeting and supporting documents shall be sent to each director at least 7 days in advance of the meeting date.
5. The Company Secretary is responsible for preparing the minutes of meeting to be submitted to the Board of Directors for approval in the first agenda of the next meeting and shall be certified by Chairman of the Board.

### Board self- Assessment

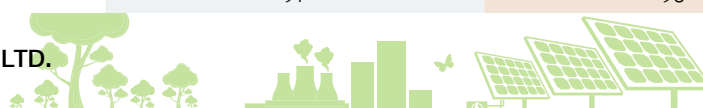
The company has stipulated a performance assessment and a review of the performance results of the Board of Directors and Sub-committees on a yearly basis. The assessment is divided into two types ;

1. The performance assessment of the Board of Directors as a whole.
2. The Board self-assessment

To ensure the efficient and effective performance of the duties of the Board according to the Corporate Governance Principles. To improve the performance of the Board of Directors and review the problems and obstacles that have occurred in the past year. The Corporate Secretary distributed the assessment forms to each director for assessing the performance of the Board of Directors and the Sub-committees in which he serves. Afterwards, the Corporate Secretary summarized and presented the results of the performance assessment to the Board of Directors for acknowledgment.

In 2017, the performance assessment results of the Board of Directors and the Sub-committees were summarized as follows:

Board of Directors/Sub-committees	Performance assessment results for the committee as a whole (%)	Performance assessment results for the committee Self -assessment (%)
Board of Directors	97	99
The Audit Committee	98	99
The Nomination and Remuneration Committee	96	99
The Risk Management Committee	97	98



## AUDIT COMMITTEE

As of December 31, 2017, the member of Audit Committee is as follow:

- |              |                |                                 |
|--------------|----------------|---------------------------------|
| 1. Mr. Vinai | Vittavasgarvej | Chairman of the Audit Committee |
| 2. Mr. Pitak | Chaicharoen    | Audit Committee                 |
| 3. Mr. Wara  | Tongprasin     | Audit Committee                 |

Secretary of the Audit Committee is the manager of Internal Audit Department, Mrs. Suwannee Sujaritvanitchpong.

### Scope of power and duties of the Audit Committee

1. To review the Company's financial statements to ensure they are accurate, complete, and reliable.
2. To review the efficiency and effectiveness of the Company's Internal Controls and Internal Audit procedures by included the bellowing topics.
  - 2.1 Give the consent to appointed, rotated, layoff, and determine to reward the head of Internal Audit.
  - 2.2 Determine the independent of Internal Audit Division, in term of operation, reporting and structure.
3. To review the efficiency and effectiveness of the Company's risk management systems.
4. To review practices to ensure compliance with rules and regulations of the Stock Exchange of Thailand, and other related authorities.
5. Determine and selected to nominate and remunerate the company auditor and considering the independent of company auditor which might give the company other services.
6. Meeting with the company auditor without the management for receive the comment from auditor at least once a year.
7. To review and submit an opinion on Internal Audit plans, practices of the Internal Audit group and coordinate with external auditors and report the performance of Audit Committee to the Board of Directors at least 4 times a year.
8. To consider disclosure of corporate information so it is reliable and adequate especially in the case of any related transactions or potential conflict of interest.



9. To prepare a report on corporate governance reviewed by the audit committee and signed by the Chairman of the Audit Committee for disclosure in the Company's annual report. The information including with:

- The accuracy, completion, and reliable of Company financial report.
- The adequacy of internal control system.
- To review practices to ensure compliance with rules and regulations of the Stock Exchange of Thailand, and other related authorities.
- The suitability of the external auditor.
- Conflict of interest transactions.
- Opinions or comments received by applying follow the AC's charter.

10. To perform other tasks assigned by the Board of Directors and Audit committee approved.

### The responsibility of the Audit Committee

The Audit Committee has the responsible to the Board of Directors in terms of the duties received from the Board of Directors but the responsibility in the activities, which the company get involve, with other party is the Board of Directors obligation.

## NOMINATION AND REMUNERATION COMMITTEE

As of December 31, 2017, there were 4 members of the Nomination and Remuneration Committee as follow:

- |    |             |                |   |
|----|-------------|----------------|---|
| 1. | Mr. Pitak   | Chaicharoen    | Chairman of the Nomination and Remuneration Committee |
| 2. | Miss Urawee | Kanokpruk      | Nomination and Remuneration Committee                 |
| 3. | Mr. Danucha | Noichai boon   | Nomination and Remuneration Committee                 |
| 4. | Mr. Chatri  | Siripanichkorn | Nomination and Remuneration Committee                 |

Secretary of the Nomination and Remuneration Committee is Mr. Danucha Noichai boon

### Scope of power and duties of the Nomination and Remuneration Committee

1. Assign the policies, qualification, and procedure for the nomination of the director and management level.
2. Determine the nomination policies for the benefit of the company.
3. Nominate and select the qualify person follow the related rules and regulations and present to the Board of Directors for the appointment of Director or management level.



4. Control and monitor the suitable size and structure of the Board of Directors and adjust the size and structure to conform to the changing environment.

5. Present to the Board of Directors for the nomination of the directors replacing the resigned directors from the articles of association.

6. Give the proposal and evaluation of the management level.

7. To perform other tasks assigned by the Board of Directors.

8. Broach with the rules of Board of Directors compensation, Executive Board compensation, Others Committee, and the advisor of the company to approve by the Board of Directors.

For the Managing Director, Deputy Managing Director or above positions, and Internal Audit Department Manager compensation is determined by the Chief Executive Officer and pass through the Remuneration Committee to accept and pass through the Board of Directors to approve.

9. Broach with the rules of Board of Directors annual compensation to approve by the Board of Directors before the shareholders' meeting approval.

10. Determine the employee's bonus to approve by the Board of Directors.

11. Determine the employee's annual adjusted salary to approve by the Board of Directors.

12. Determine the rules and regulations of the company that concern to the benefit of the employee by the order of the Board of Directors.

## RISK MANAGEMENT COMMITTEE

As of December 31, 2017, there were 7 members in the Risk Management Committee as follow:

1.	Mr. Danucha	Noichai boon	Chairman of the Risk Management Committee
2.	Mr. Anan	Santichewasatian	Risk Management Committee
3.	Mr. Vithep	Vachirabhahu	Risk Management Committee
4.	Mr. Daroonwat	Noichai boon	Risk Management Committee
5.	Mr. Paithoon	Indaravisute	Risk Management Committee
6.	Mrs. Supaporn	Chansuroj	Risk Management Committee
7.	Mr. Somphong	Rob-loak	Risk Management Committee and Secretary

As of July 24, 2017, there were a committee who passed away, namely Mr. Weera Niyomthai, Risk Management Committee.



### Scope of power and duties of the Risk Management Committee

1. Evaluate, analyze, and develop the framework of risk management and the method of risk evaluation in the future.
2. Assign the policies of overall risk management of the company which include any important type of risk likes business risk, competitive, production, procurement, credit risk, liquidity risk, and exchange rate risk.
3. Assign the conform strategies with the company risk management policies which can be evaluate, monitor, and control the risk
4. Assign the sufficient policies and risk management including with the efficiency of the system and follow the policies.
5. Report the result of approach to the Board of Directors to modify direct to the policies and regulations of risk management and notice to the Audit Committee for the proper audit.

The Risk Management Committee has the meeting at least once in 3 months. The quorum is comprised at least half of the total number of Risk Management Committee and the meeting use the majority vote of the committee attend the meeting. Therefore, the Risk Management Committee must report to the Board of Directors every 6 months.

### THE MANAGEMENT BOARD

As of December 31, 2017, there were 3 members in the Management Board as follow:

- |    |              |                  |   |
|----|--------------|------------------|---|
| 1. | Mr. Danucha  | Noichaiboon      | Director/Managing Director  |
| 2. | Mr. Anan     | Santichewasatian | Director/Chief Financial Officer  |
| 3. | Mrs. Daranee | Kantamara        | Director/Deputy Managing Director of General<br>Administration Division |

### Scope of power and duties of the Management Board

1. Report and present the business policies, Goals, operation plan, business strategies, and annual budgeting of the company for the Board of Directors approval.
2. Control and monitor the company's operation to go along with rules, regulations, business policies, business plan, and business strategies by the resolution of the Board of Directors and/or the resolution of the shareholders' meeting



3. Determine and assign the Human Resource Management policies, IT Technology, expand the businesses, Personal Relations, and regulated the operation to meet the company's goal.

4. Determine and approve to bid in the project or be a contractor for the agencies or the person.

5. Approve the appoint, hire, dismiss, assign fees, compensation, bonus, and workfare for the employee and Management team, except for appoint, hire, transfer, and dismiss Internal Audit Department Manager and officer which need the approval of the Audit Committee. For the appointment, hire, transfer, and dismiss of Deputy Managing Director and higher positions and the advisors, the Remuneration Committee will be determine and pass the subject to the Board of Directors to approve. The Management Board is authorized to perform the financial transactions:

5.1 If conducted in the business plan or budget which is already approved, the Management Board can use in the line that already approved.

5.2 If not in concern with 5.1 above, the Management Board can approve the financial amount not over Baht 20 million and the amount mentioned is include with the financial transactions, capital expenditure and can approve for the financial obligations (Loan) in any kind of financial tools which not over Baht 20 million and the affiliate, when the transaction is finish, the Management Board need to report the conclusion to the Board of Director.

6. The Management Board has the power to authorize one or more than one person to perform an action for the Management Board which the action is under the control of the Management Board within the period of time and the Management Board can cancel of modify the authority or power.

7. Perform the tasks received from the Board of Directors.

In order that, the authorities give to the Management Board will act under the regulations and law and rules and regulation of the company; In case of any actions which develop the conflict of interest to any member of the Management Board or the conflict person (Notification from SEC). The Management Board has the authority to present the subject to the Audit Committee and the Board of Director will approve by voting, the director and the person who connect to the subject cannot vote for the approval.



## MANAGEMENT TEAM

As of December 31, 2017, there were 5 members of the Management Team as follow:

- |                  |                  |  |
|------------------|------------------|--|
| 1. Mr. Danucha   | Noichai boon     | Managing Director                                  |
| 2. Mr. Anan      | Santichewasatian | Chief Financial Officer                            |
| 3. Mr. Vithep    | Vachirabhahu     | Senior Deputy Managing Director of Marketing       |
| 4. Mrs. Daranee  | Kantamara        | Deputy Managing Director of General Administration |
| 5. Mr. Daroonwat | Noichai boon     | Deputy Managing Director of Service and Sale       |

As of July 24, 2017, there were a executive who passed away, namely Mr. Weera Niyomthai, Deputy Managing Director of Energy.

### Scope of power and duties of Managing Director

1. Bring forward the policies from the Board of Directors and Responsible for all of the management received.
2. Assign the strategies to meet the goal for operation and policies.
3. Approve the important investment that code in the annual budget which approved from the Board of Directors.
4. Approve the operation plan and the policies in each division, also monitor the operation of the company to conform to the plan and policies.
5. Issue orders, rules, notices, memo for the benefit of the company and the organization tidiness.
6. Approve to appoint, hire, transfer, and dismiss of the employee whose position below the Deputy Managing Director.
7. Assign the third party, by approval of Managing Director, to manage and operate for the Managing Director in the necessary matter and not above authorized financial amount
8. Determine and bring forward the expenditure budget for the approval of the Board of Directors.
9. Conduct the employees to work with ethics, morals, laws, and cultural to the shareholders, customers and employees and related person.
10. Operated in the normal manner of the company, and in case of the important subject, Managing Director must present to the Board of Directors or the Management Board for the approval.



11. Support and develop the organization and employees in term of skill and the cultural of organization.

12. Support and encourage the education and develop new technology to increase the production and develop the business by using the resources in full capability.

13. Act with honest and care for the best of company.

In order that, the authorities give to Managing Director will act under the regulations, law and rules and regulation of the company; In case of any actions which develop the conflict of interest to Chief Executive Officer or any related person (Notification from SEC).

## RECRUITMENT OF DIRECTORS

### • Board of Directors

The Company has the policy to recruit by consideration on several factors, such as, knowledge, capability and experience related to the business, etc. and has prescribed principles to appoint and withdraw the directors as follows:-

1. The Board of Directors is consisted of at least 5 persons and not less than half of total directors must domicile in the kingdom and duly qualified according to the requirement of the law.

2. The shareholders' meeting shall appoint the directors based on majority votes according to the principles and methods as follows:-

2.1 One shareholder shall have one share per one vote.

2.2 The shareholder shall vote to elect the director individually.

2.3 The person earned highest mark respectively shall be elected as director equal to the number of directors required or elected in such election. In case of equal vote, the Chairman shall cast the final vote.

3. In every annual ordinary meeting, 1/3 of directors shall be resigned from their position. In case of number of directors are not equally separated into 3 parts, the nearest number to 1/3 of the directors resigned in first or second years after company formation shall be resigned by mean of lot drawing. For subsequent year, the directors assuming his position for the longest time shall be resign; such resigned director may be re-elected to assume the position.





4. Not only the directors resign from the assign period, but also can be dismissing from the position if:

4.1 Pass away

4.2 Quit

4.3 Lack of the qualification or not pass the qualification of Public Company Law

4.4 The shareholders' meeting vote for resignation of the directors by the meeting must have half of the voting rights.

4.5 Judge by the court.

5. If the director wishes to quit from the position, the letter of resignation must be applied to the company and the effective date will be the date that the company received the letter and the resigned director can notice to the registrar.

6. In case of vacancy by any reason other than the rotation, the Board of Directors shall elect any qualified person who is not prohibited by law to assume such position in the following meeting except in case of the remaining period is less than 2 months, such elected director shall retain the position only for such remaining period.

7. In case of the Board of Directors is resign, the directors must act for the operation of the company as necessary until the new Board of Directors is selected, except the court order if resign from 4.5

The resigned Board of Directors will conduct the shareholders' meeting to appoint the new Board of Directors within 1 month after the resigned date and send the notification appointment to shareholders at least 14 days before the meeting.

8. In case of the directors is not enough to form a quorum; the remaining directors can act for the company in the matter of conducting the shareholders' meeting to elect the directors in the available position.

The shareholders' meeting will be held within 1 month from the date that the number of the directors cannot form a quorum. The replacing director(s) remaining period is equal to the remaining time of resigned director(s).



## • Audit Committee

The company has the criteria to select the Audit Committee and Independent Directors by determine the minimum qualification assigned by SEC. Furthermore, the selection will be made based on experience, education, and renowned person for the best image of company. The selected person must not have direct or indirect conflict of interest with the company, subsidiaries, affiliate, or major shareholders. The selected person is independence, free from the control of the Management team, major shareholders and its relative and one of the members in Audit Committee must expertise in Accounting and Finance. The term of Audit Committee is 3 years and the Chairman will be select by the member of the Committee.

## REMUNERATION OF THE BOARD OF DIRECTORS AND THE MANAGEMENT TEAM

### A. Remuneration of the Board of Directors and the Committees

#### 1. Monthly Allowance

1.1 Chairman of the Board	Baht 44,000 per month
1.2 Directors	Baht 22,000 per month
1.3 Chairman of the Audit Committee	Baht 20,000 per month
1.4 Audit Committees	Baht 10,000 per month

#### 2. Allowance for each meeting

2.1 Chairman of the Remuneration Committee	Baht 15,000 per meeting
2.2 Remuneration Committees	Baht 10,000 per meeting
2.3 Chairman of the Risk Management Committee	Baht 15,000 per meeting
2.4 Risk Management Committees (Directors)	Baht 10,000 per meeting
2.5 Risk Management Committees	Baht 5,000 per meeting



## Remuneration of the Board of Directors and the Committees

Name-Surname	Position	Appointed Date	Amount (in Thousand)	
			2016	2017
Mr. Vichit Yamboonruang	Independent Director/Chairman of the Board	Feb. 28, 2011	818	778
Mr. Vinai Vittavasgarnvej	Independent Director/Chairman of the Audit Committee	Jun. 11, 2012	694	654
Mr. Pitak Chaicharoen	Independent Director/Audit Committee/Chairman of the Nomination and Remuneration Committee	Feb. 21, 2007	619	564
Mr. Wara Tongprasin	Independent Director/Audit Committee	Jun. 17, 2009	574	534
Mr. Chatri Siripanichkorn	Independent Director/Nomination and Remuneration Committee	July 12, 2016	131	434
Miss Urawee Kanokpruk	Director/Nomination and Remuneration Committee	Feb. 28, 2011	484	434
Mr. Wiwat Sangtian	Director	Jun 25, 2014	454	414
Mr. Danucha Noichaiboon	Director/Chairman of the Risk Management Committee/ Nomination and Remuneration Committee	Jan. 15, 2011	499	434
Mr. Anan Santichewasatian	Director/Risk Management Committee	Jan. 31, 2007	464	414
Mrs. Daranee Kantamara	Director	Jan. 15, 2011	454	414

## B. Remuneration of the Management

### Remuneration of the Management Team

Remuneration	2016	2017
Number of person	6	5
Salaries	15,000,000	13,518,000
Bonuses	971,100	1,321,500
Provident Fund	273,660	194,400

Others Benefit

Car, Fuel Expense, and Mobile Expense

As of July 24, 2017, there were a executive who passed away, namely Mr. Weera Niyomthai, Deputy Managing Director of Energy.



## NUMBER OF BOARD OF DIRECTORS MEETING AND NUMBER OF EACH DIRECTOR ATTENDED IN THE MEETING FOR YEAR 2017

Name of Director	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8	Total
Mr. Vichit Yamboonruang	/	/	/	/	/	/	/	/	8/8
Mr. Vinai Vittavasarnvej	/	/	/	/	/	/	/	/	8/8
Mr. Pitak Chaicharoen	/	/	/	/	/	/	/	/	8/8
Mr. Wara Tongprasin	/	/	/	/	/	/	X	/	7/8
Mr. Chatri Siripanichkorn	X	/	/	/	/	/	/	/	7/8
Mr. Wiwat Sangtian	/	/	/	/	/	/	/	/	8/8
Miss Urawee Kanokpruk	/	/	/	/	/	/	/	/	8/8
Mr. Danucha Noichaiboon	/	/	/	/	/	/	/	/	8/8
Mr. Anan Santichewasatian	/	/	/	/	/	/	/	/	8/8
Mrs. Daranee Kantamara	/	/	/	/	/	/	/	/	8/8

/ means Attended the Meeting

X means Absented the Meeting

## CORPORATE GOVERNANCE

Ekarat Engineering Public Company Limited recognizes the importance of the operation principles. The Board of Directors have the policy to behave under the best practices for the Director which conducted from Code of Best Practices for Directors of Listed Company that governed by The Stock Exchange of Thailand. The assigned principles must able to do practically. In addition, the Company has adopted the Good Corporate Governance to develop the policies which will increase the ability to the competition, management, and operation for the value added and efficiency of the company which will give the security and confidential to the stakeholders.

### • Rights of the Shareholders

1. The company gives the equal treatment for all shareholders as the right to vote in the annual general meeting of Shareholders and right to receive the dividend as the number of holding company's stock.
2. The company must proposes the remuneration of the Directors to the Shareholders in the annual general meeting of Shareholders in every year and the Remuneration Committee will consider for the rules and reason for the remuneration of the directors and others committee.



3. The company has the policy in the subject of the remuneration for each committee and declares in the Annual Report. The shareholders are able to acknowledge the principle and the approach of the Remuneration Committee.

4. For the agenda of the director(s) appointment, the company has given the opportunity to the shareholders to consider and voting for each nominee.

5. The company gives the opportunity to the shareholders to propose the agenda and nomination of new board members by shareholders in every year. The requirement and procedure are declared on the website of the company and notify to the shareholders via the website of SET.

6. The company has the minimum requirement for the Annual General Meeting of Shareholders' appointment letter as follow:

6.1 In the event of AGM, the company must declare the information of the nominee who will be elected by the shareholders. The information consist of Name and Surname, Education, Work Experience, Number of the company directed, and if the nominee is the ex-director the detail of the Board of Directors meeting attended will be acquire in the said letter.

6.2 In the agenda of appointing the company's auditor, the company must declare the name of the auditor(s), the company of the auditor(s), the independent of the auditor(s), and the auditor(s) fee.

6.3 In the agenda of approving the dividend paid to the shareholders, the company must declare the dividend policy, the dividend rate, and the reasons will be acquired if the agenda is subject to refrain from paying the dividend.

6.4 The objective and reasons will be acquired in each agenda.

6.5 The Board of Directors' opinions is declared in each agenda.

7. The company has the minimum requirement for the Annual General Meeting of Shareholders' minute as follow:

7.1 The detail of the voting and counting procedure

7.2 The details of questions and answers during the meetings

7.3 The resolutions of the meeting and the record of voting in each agenda

8. The record of directors' name who attended the AGM is acquired in the Annual report.

9. In the AGM, the company has the policy that the Chairman of the Board, the Chairman of the committees, Directors, and the Executives attend the meeting to answer the question from the shareholders.



10. The AGM's agenda cannot be added if not declared in the AGM's appointment letter.

11. The AGM's appointment letter and other documents will be made in English for the convenience of foreign shareholders.

- **Equal treatment for the Shareholders**

1. In AGM, each shareholder has the voting right of one share one vote.

2. The company gives the opportunity to the shareholders to propose the agenda and nomination of new Board members via the channel conduct by the company.

3. The company has the policy to prevent the executives or the employees from using the company information trading the company's stock. The punishment will be made if the executives or the employees use the company information trading the company's stock.

4. In case of the related transaction(s) occur, the company will follow the rules of SET and declare the information, detail, and reasons to the public.

5. The company and the subsidiary will reveal and verify the related transaction(s).

6. The company provided the proxy form attached with the AGM's appointment letter for the convenience of the shareholders who cannot attend the AGM.

7. The company will notify the shareholders of the evident, and documents which apply with the proxy form in the AGM's appointment letter.

8. For the convenience of the shareholders, the company used the minimum requirement of the documents acquire for the proxy voting.

9. The company must send the AGM's appointment letter to the company's registrar before the AGM 21 days.

10. The company has declared the AGM's schedule and appointment letter on the company's website in advance. The investors and shareholders can access to download the documents before the AGM 21 days.

11. The company uses the Cumulative Voting for the agenda of nomination of new Board members in AGM.

12. The company has a subsidiary and the company holds 99.99% of register capital in the subsidiary. Therefore, the company is necessary for the company to give the loan to the subsidiary.



## • Disclosure and Transparency

1. The company disclosed the organization chart and structure of shareholders in the annual report for the shareholder to understand the structure of the company. The information must include the number of stock holding by the directors and executive management.

2. The annual report of the company consist of Financial Highlights, Message from the Chairman, Message from the CEO, Audit Committee's Report, General Information, Nature of Business, Market Conditions and Competition, Related Party Transactions, Risk Factors, Structure of Shareholding and Management, Board of Directors, Management Team, Management Discussion and Analysis, The Board of Directors' obligation for the Financial Statements, and Auditor's Report and the Company's and Subsidiary's Financial Statements.

3. The company disclosed the related party transaction of the company and subsidiary which approved by the Board of Directors in the company annual report and form 56-1.

4. The company has the policy subject to trading and transfer of company's stock. The Directors who traded the company's stock must report the transaction to the related unit to report to SEC.

5. The company has appointed the Audit Committee to consider and select the auditor of the company in every year and the auditor selected by the Audit Committee must pass the requirement of SEC.

6. The company has the mediums to communicate with the public likes Annual Report, Company Visit by the Analyst, Press release.

7. The company has the policy to report the Financial Statement comply with the rules and regulations appointed by SET, SEC, and Ministry of Commerce.

8. The company must report the Financial Report not later than the last date of sending the report directed by SET, SEC and Ministry of Commerce.

9. The company has the channel to propose the company's news via the company's website for the investor to reach the information.

10. The company has the Investor Relations unit to provide the information and communication with the shareholders and related agency.

11. The Financial Report of the company must review or audited without qualifying clause by the company's auditor. The investor can be assuring of using the information to make a decision.

12. The Company provides opportunities for stakeholders both inside and outside the organization to report clues or complaints about various offenses which be negative impact on the company, such as illegal activities, Corruption, Code of Conduct or conflicts of interest. For more information, can read at [http://www.ekarat-transformer.com/ir\\_index.php](http://www.ekarat-transformer.com/ir_index.php).



### • The Directors' Responsibility

1. The Board of Directors of the company conducted the Good Governance Policy by subject to transparency, accountability, fair treat to related party.
2. The Board of Directors of the company conducted the Business Ethics Policy and Ethical manual for the Directors, Executive, and employees to be a guideline.
3. The Board of Directors has appointed the quality management team to set the Vision and Mission of the company to achieve the Goal by review annually.
4. The company has the internal audit unit to monitor partial unit of the company and the internal audit has the duty to report directly to the Audit Committee of the company.
5. The Audit Committee of the company has to notify the Board of Directors in the subject of Duty report, Number of meeting of the Audit Committee, Evaluate and Review the internal audit system, Monitoring the operation, the company's auditor consideration, Financial Report review, and Monitor and Comment for the overall operation.
6. The Board of Directors has appointed the Risk Management Committee to set the policy for risk management and suggest the risk preventive proposal.
7. For the effective operation, the company clearly divided the role and decision power between the Director and Executive. Therefore, Chairman of the Board and Managing Director are different persons and both positions must be selected by the Board of Directors.
8. The company has set the Audit Committee's role and responsibility and the members of the Audit Committee are the Independent Directors.
9. The company has appointed the Remuneration Committee and clearly set the role and responsibility.
10. The Board of Directors conducted "The Board of Directors' obligation for the Financial Statements" in every year. The investor can be assuring of the correction and completion of the company's Financial Report.
11. The Board of Directors is defined succession plan for the top executives and the plan is reviewed annually.





### • **Overseeing the internal information utilization**

The company has the rules and regulations to prevent the employee and management, who know the internal information related to the company performance, to trade the stock of the company since the day that received the information until the information was sent to the public. Any news or information that affected the price of stock is prohibited.

The company has the policies to be honest to the customers, allies, and shareholders. The employees of management, who used the internal information personally or publicly or builds the conflict of interest, will be punished.

The company is notified to the Director and Management Team of the company about the duty to report amount of company stock each director or management holding including their spouse and their minor child. Furthermore, the change in amount of holding stock must be reported to the SEC in the next official day.

The Company has imposed penalties for non-compliance with internal data protection measures. The mail has been circulated to employees and executives.

### • **The policies of Human Resource Management**

The company has the policies to develop the staffs for the operational potential and reasonable benefit for every employee. The company also concerns about the working environment which will be safe for life and property of the employee. Job promotion, rotation, award, and penalty will be applied. The development of staff experience and skills by giving the opportunity to the employee is the way the company used.

The company applied for the Provident fund which is the benefit of the employee by deducting 3% of the salary and the company will double the amount, and the employee will get 100% of the total amount if work not less than 5 years or 75% if work not less than 3 years.



## SOCIAL RESPONSIBILITY

### Corporate policy

Ekarat Engineering Public Company Limited is operating under good corporate governance concepts and focus on developing our business together with the environment and social. We concentrate on both internal and external stakeholders including with the public. The Company had set our policies as follow:

1. Produce the standard quality products that satisfy the customer.
2. Maintain the quality of the environment and prevent the pollution that might cause by our production, activities, and products
3. The Company strongly promote both internal and external to comply with Anti-Corruption principle.
4. Operating under any laws, rules and regulations that related
5. Use natural resources and any kinds of energy efficiently is our staffs' duties
6. The Company will appropriately contribute its staffs, budget, tools, and equipment to improve the quality, safety, and health of the environment and community
7. This policy is well published to staffs and stakeholders.
8. This policy must up-to-date and concern about the effect to staffs and stakeholders.

### Anti-Corruption Policy

Ekarat Engineering Public Company Limited and its subsidiary are conducting their business operations with fair strategy and transparency, adhering to the principle of excellent quality of the products and strictly complying with applicable laws and regulations. The Company is committed to fight against all forms of corruption by forbidding Member of the boards, Executives, Managers and all Employees to associate with or to be involved in any inappropriate business whether to benefit or to preserve its interest unless the cases are permitted by laws, regulations, standards, customs, or business traditions.

Nevertheless, the Company will regularly make the assessment on the possible corruption risk which may occur in the process and communicate to the stakeholders and public our Anti-Corruption policy.



## Energy Conservation Policy

In the current situation, energy problems are a major problem. It has a great impact on the economy and the environment. So that the company focuses on the quality of production and recognize the importance of the environment and energy conservation. The energy management system has been implemented within the company to achieve the objectives and the goal is to promote energy efficiency and maximize efficiency. All executives and employees are committed to the energy conservation policy. The Company The notice should be repealed at 013/2559 and shall comply with this notification. The details are as follows.

1. The Company operates and develops energy management systems in an appropriate and continuous manner. It is required to be part of the Company's operations. Every business must take into account energy conservation in line with the law and energy management, as well as other relevant requirements.

2. The company continue to improve the efficient use of energy and resources of the company. It is suitable for the type and amount of energy used, as well as the technology installed and good practice.

3. The company targets energy conservation in 2017 by,

- 3.1 Transformer

- 3.1.1 Reduce the power consumption of the machine up to 370 kWh / EA.

- 3.1.2 Reduce power consumption per kVA up to 0.80kWh / kVA.

- 3.2 Solar Panel

- 3.2.1 Reduce energy consumption per panel up to 42.2 kWh / panel

- 3.2.2 Reduce power consumption per kW up to 178.8 kWh / kW

- 3.3 Transformer Tank

- 3.3.1 Reduction of energy consumption in the production of tank not exceeding 428.45 kWh / EA.

- 3.3.2 Reduce energy consumption in kVA production up to 1.26 kWh / kVA.

and communicate to all employees to understand and perform correctly.



4. Energy conservation is the responsibility of the management and employees in all level of the Company that implementing the prescribed measures, monitor and report to the energy management team.

5. The company provided the necessary support. Including human resources, budget, working time, training, energy conservation activities, design to improve energy performance, essential Information. As well as supporting the procurement of goods and products that are energy efficient and contribute to the presentation of ideas for energy development.

6. The Management and Energy Management Working Group will review and revise policy, performance targets and energy plans annually.

7. The company is ready and willing to promote cooperate with the public on energy conservation activities, government, society and the general public.

This energy conservation policy will be communicated to all employees and stakeholders.

## ROLE OF STAKEHOLDERS

### Shareholders

1. The company has the policy to acts with honestly and equally to the shareholders by notifies the information and gives the opportunity to propose the comment.

2. The company gave the opportunity to the shareholders to reports and requests any subjects via the company's Investor Relations unit which will report to the company's secretary to attach the said matters into the agendas and the shareholders can propose the requests and reports to [secretary@ekarat-transformer.com](mailto:secretary@ekarat-transformer.com)

### Staffs and Employees

1. The company has the policy of the safety, welfare, and benefit, including with the working procedure for the employee as the employee manual.

2. The company has the provident fund to sustain the employees in the long-term and raise the morale of the employees.

3. The company has promoted and developed personal and training to educated the staffs and develop the organization. In the year 2017, the training hours is 8,067.50 hours, average staffs of 829 staffs, the average training hours is 9.73 hours per staff.



4. The Company set the principle of personal rights. This principle is follows Thai's labor standard law.

5. The Company is support the education by receiving under graduation trainees each year (not over 70 persons) and the rate of wages paid is Baht 150 per person.

The company realized the important of employees, so we had to talk with the representation of our employees about their need, impact or recommendations for take care them by law in term of healthy, social protection, safety in the workplace and provides the opportunity for personnel development by equally and regardless of preventing and solving drug problems in the workplace. It is managed according to standard criteria for preventing and solving drug problems in the business establishments of Chachoengsao province and received a certificate from Chachoengsao Province on August 17, 2016, effective to August 16, 2019.

The investors can access for more information via Form 56-1

### Competitors

The Company competed with fair, applicable with the law, and follow the guide in the Company's ethics manual. For more details, please visit us at : <http://www.irplus.in.th/Listed/AKR/pdf/นโยบายการกำกับดูแลกิจการที่ดีและคู่มือจรรยาบรรณของบริษัท.pdf>

### Suppliers and Creditors

1. The company has the policy to acts with honestly to the suppliers and applied the standard to do business with the suppliers.

2. The company acts with honestly to the creditors and conforms to the creditors' term. The working procedure of the company states the procedure of payment which will be made to the creditors.

3. The Company has issued the rules not to pirate to intellectual properties. For full related rules please visit: <http://www.irplus.in.th/Listed/AKR/pdf/นโยบายการกำกับดูแลกิจการที่ดีและคู่มือจรรยาบรรณของบริษัท.pdf>

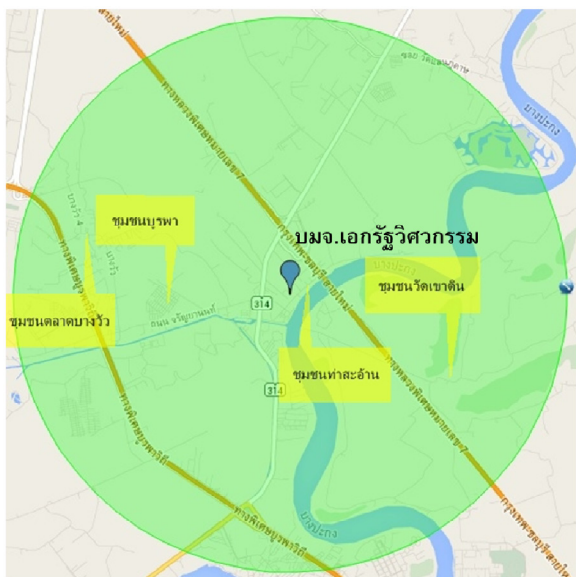
### Customers

The company has the policy to acts with honestly, equally, and responsible to the customers. Therefore, the customers can trust and confident to do business with the company and for a long-term relationship.



## Communities and Environment

The company realized the important of community and environment by assign the practical of working and awarded ISO 9001:2000, ISO 14001, ISO 50001:2011, Green Industry System Award Level 3, Systematic Environmental Management Award from Ministry of Industry, and others certificates as prove of social responsibility. In 2016, the company is committed to develop green industry continuous from level 3 (Green system) to level 4 (Green Culture) On September 11, 2017, the Company was awarded the “Green Industry Green Industry” level 4 “Green Culture” or “Green Culture” from the Department of Industrial Works. Everybody in the organization is committed to working with the environment in all aspects of business as part of corporate culture.



The Company attaches the importance to working with the community. By providing a consultation with community representatives to give special attention to those groups who have received special treatment since the dialogue, analyze issues in a step-by-step to gather information from the community appropriately. Before implementing activities in community development.

Layout around factory (radius of 1-5 km.)





## IN THE YEAR 2017, CSR ACTIVITIES WERE CARRIED OUT TO DEMONSTRATE THE COMMUNITY AND SOCIETY'S RESPONSIBILITIES.



- On April 2, 2017, the Company participated in the opening ceremony of the H.R.H. Princess Maha Chakri Sirindhorn's Project with Division of highway Bangkok.



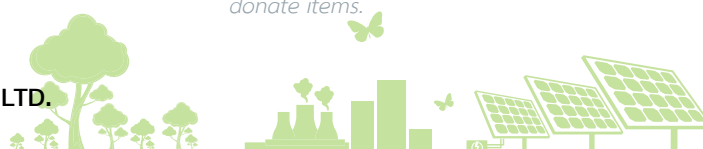
- On May 28, 2017, the Company and employees jointly offered scholarships to 10 poor students for a scholarship worth 1,000 baht each. They also participated in supporting the construction of a playground, sports equipment and help the poor house of students of Wittayakomkee School, Ladkrabang, Bangkok.



- On June 14, 2017, the Company served necessary things and food to 500 monks at monks' conferences at Wat Bang Kaeo, Chachoengsao province.



- On June 30, 2017, The company is affiliated with the International Association of Disabled Persons organized the children's day activities for students at Wat Lat Pad School, Ang Thong province by Mrs.Daranee Kantamara, Deputy Managing Director representatives provide scholarships and lunches and donate items.





- On September 19, 2017 Mr. Daroonwat Noichaiboon, Deputy of Managing Director in Service and Sale was the company representatives received a certificate in the “Hundreds of Hearts for the Redemption of the Year” in 2017, organized by the Greenhouse Gas Management Organization (Public Organization) at Centara Grand at Central Plaza Ladprao by Dr. Crichimi Sima, Permanent Secretary of Ministry of Resources Nature and Environment presided over the ceremony. The event was held to acknowledge and honor the businesses and sectors that have contributed to the reduction of greenhouse gas emissions.



- On October 15, 2560, the Royal Kathin Robes and support money in the Red Cross of Chachoengsao together with the industry of Chachoengsao province.



- On July 26, 2016. The company participated in the marine animal breeding activity to be honor to Maha Vajiralongkorn Bodindradebayavarangkun.



- On September 21, 2017, the Company donated money to support the Royal Ceremony of His Majesty King Bhumibol Adulyadej given to Bangkok District, Chachoengsao province.



- On November 16, 2017, Mr. Kitiphon Thiwakanon, Manager of Managing Director office was the company representatives received a needle of honor from Dr. Thanat Werasiri, Engineering Institute of Thailand as an organization dedicated to sending personnel to assist and organize events for the EIT for all along.







• On October 22, 2017, the company join the Kathin Ceremony at Wat Bang Kaew in Chachoengsao province.



• On December 25, 2017, the company was a co-sponsors the 3rd Thai Boxing Fight Against Narcotics Contest at Wat Tha Sa An, Chachoengsao province.



• On November 20, 2017, the company donated scholarships to students in faculty of Engineering, at Kasetsart University Sriracha Campus.

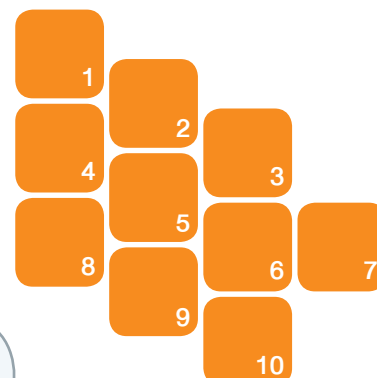


• On December 7, 2017, Dr.Wiwat Sangtian, Director was the company repreaentatives participated in "1 glass 1 brave project" by donating an unused glass of water to Sirinart Rajini Ecosystem Learning Center, Pranburi, Prachuap Khiri Khan.

The investors can access for more information via  
[http://www.ekarat-transformer.com/news/frontend/news\\_all/cate/5](http://www.ekarat-transformer.com/news/frontend/news_all/cate/5)



## BOARD OF DIRECTORS



**1. Mr. Vichit Yamboonruang**  
Independent Director/  
Chairman of the Board

**2. Mr. Vinai Vittawasgarvej**  
Independent Director/  
Chairman of Audit Committee

**3. Mr. Pitak Chaicharoen**  
Independent Director/  
Chairman of Nomination and  
Remuneration Committee/  
Audit Committee

**4. Mr. Wara Tongprasin**  
Independent Director/  
Audit Committee

**5. Mr. Chattri Siripanichkorn**  
Independent Director/ Nomination  
and Remuneration Committee

**6. Miss Urawee Kanokpruk**  
Director/Nomination and  
Remuneration Committee

**7. Mr. Wiwat Sangtian**  
Director

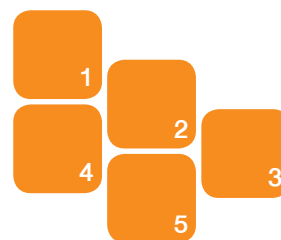
**8. Mr. Danucha Noichai boon**  
Director/ Nomination and Remuneration  
Committee/ Chairman of Risk Management  
committee

**9. Mr. Anan Santichewasatian**  
Director/ Risk Management  
committee

**10. Mrs. Daranee Kantamara**  
Director



## MANAGEMENT TEAM



**1. Mr. Danucha Noichaiboon**  
Managing Director

**2. Mr. Anan Santichewasatian**  
Chief Financial Officer

**3. Mr. Vithep Vachirabhahu**  
Senior Deputy Managing Director  
of Marketing

**4. Mrs. Daranee Kantamara**  
Deputy Managing Director of  
General Administration

**5. Mr. Daroonwat Noichaiboon**  
Deputy Managing Director of  
Service and Sale





## MANAGEMENT DISCUSSION AND ANALYSIS

### FINANCIAL ANALYSIS AND PERFORMANCE OF YEAR 2017 COMPARED TO YEAR 2016

Throughout the year 2017, although the economic overview on domestic was likely to improve, due to the government expenditure on infrastructure projects. On the other hand, the investment on private sector, especially the construction and the industrial sectors continued to slow down. And it is a key factor that affect the performance of Ekarat Engineering Public Company Limited. Therefore, the performance in the first six months did not meet the target and business plan as our expected. However, the company work really hard to find a new strategy and that's cause the improvement on profitability in the last six month of the year.

The company had total revenues in year 2017 and 2016 of Baht 1,732.27 million and Baht 1,656.50 million, respectively or increase 4.57%. The company Gross Profit Margin in year 2017 and 2016 is 19.60%, and 14.67 %, respectively.

The Profit(Loss) before financial cost and tax of the company in year 2017 and 2016 is 5.00% and (2.56%), respectively. The Net Profit(Loss) in year 2017 and 2016 show the amount of Baht 44.30 million and Baht (62.39) million, respectively.

### OPERATION ANALYSIS

#### Revenues

The company has the revenues comprised in 4 activities was Sales of Distribution Transformers, Services and maintenances, Installation of solar electric generating system and Sales of electricity current.

1. The revenue from the sales of goods in year 2017 and 2016 is Baht 1,400.17 million and Baht 1,342.85 million, respectively or increase 4.27 %.
2. The revenue from services and maintenances in year 2017 and 2016 is Baht 193.61 million and Baht 212.28 million, respectively or decrease 8.79%
3. The revenue from installation of solar electric generating system in year 2017 and 2016 is Baht 43.25 million and Baht 46.36 million, respectively or decrease 6.71%.
4. The revenue from sales of electricity current in year 2017 and 2016 is Baht 47.42 million and Baht 21.71 million, respectively or increase 118.42%



### Cost of sales

1. The company has the cost of the sale of goods in year 2017 and 2016 of Baht 1,168.84 million and Baht 1,233.84 million, respectively. The proportion of cost of the sale of goods to the revenue from the sale of goods in year 2017 and 2016 is 83.48% and 91.88%, respectively. The proportion of Cost of the sale of goods to the revenue from the sale of goods in year 2017 is decrease if compare to year 2016 about 8.40%.
2. The Cost of the sale of services and maintenances in year 2017 and 2016 is Baht 117.78 million and Baht 135.65 million, respectively. The proportion of cost of the sale of services and maintenances to the revenue from the sale of services and maintenances in 2017 is 60.83% lower than year 2016 which is 63.90% or decrease 3.07%.
3. The Cost of the sale of installation of solar electric generating system in year 2017 and 2016 is Baht 39.42 million and Baht 46.12 million, respectively. The proportion of cost of the sale of installation of solar electric generating system to the revenue from the sale of installation of solar electric generating system in 2017 is 91.13% lower than year 2016 which is 99.47% or decrease 8.34%.
4. The Cost of the sales of electricity current in year 2017 and 2016 is Baht 21.39 million and Baht 11.47 million, respectively. The proportion of cost of electricity current to the revenue from sales of electricity current in year 2017 and 2016 about 45.10% and 52.84%, respectively or decrease 7.74%.

### Selling and Administration Expenses

The company has the selling and administration expenses in year 2017 and 2016 of Baht 291.39 million and Baht 302.25 million, respectively. The proportion of the selling and administration expenses to Total revenues in year 2017 and 2016 is 16.82% and 18.25%, respectively or decrease 1.43%.

### Gross Profit

The company has the gross profit margin from the sale of goods in year 2017 and 2016 is 16.52% and 8.12%, respectively. The gross profit margin from services and maintenances in year 2017 and 2016 is 39.17% and 36.10%, respectively. The gross profit margin from installation of solar electric generating system in year 2017 and 2016 is 8.87% and 0.53%, respectively. The gross profit margin from the sales of electricity current in year 2017 and 2016 is 54.90% and 47.16%, respectively.



The increase in the gross profit margin of the sale of goods caused from increased of sales and lower production costs. The increase in the gross profit margin of services and maintenances and installation of solar electric generating system caused from lower production costs.

### Net Profit

The Company has the Net Profit (loss) before the corporate income tax in year 2017 and 2016 of Baht 50.02 million and Baht (74.47) million, respectively or increase 167.17%.

The company has the corporate income tax expense paid in year 2017 and 2016 of Baht (5.72) million and Baht 12.08 million. The Net Profit(loss) in year 2017 and 2016 is Baht 44.30 million and Baht (62.39) million increase Baht 106.70 million or 171% compare to year 2016.

## FINANCIAL ANALYSIS

### Assets

As at December 31, 2017 and 2016, the company has the total assets of Baht 2,011.90 million and 2,119.19 million, respectively or decreases Baht 107.29 million or 5.06%. The decrease in assets of the Company caused from the decreasing of Trade receivables about 44.84% and the increasing of inventories about 28.07% from year 2016.

### Trade and Others receivable

As at December 31, 2017 and 2016, the Company has Trade and Others receivable after deducted allowance for doubtful debt of Baht 250.32 million and Baht 453.83 million, respectively.

The company has the credit terms for the customer about 30-90 days. The average collection days in year 2017 and 2016 are 78 and 104 days, respectively. It found that the company could collect debt from customers faster from last year.

### Inventories

The company has the Inventories (Net) after deducted the allowance for devaluation of inventories at December 31, 2017 and 2016 of Baht 516.29 million and Baht 403.13 million, respectively. In year 2017, the Inventories comprise of Finished goods deducted the allowance for devaluation of inventories Baht 112.12 million, Work in process Baht 90.57 million, Raw Material Baht 264.80 million, Supplies Baht 8.92 million, and Materials in transit Baht 39.88 million. The inventories turnover ratio in year 2017 and 2016 is 8.96 and 7.63 times.



## Liabilities

As at December 31, 2017 and 2016, the Company has the liabilities of Baht 810.95 million and Baht 928.96 million or decreased Baht 118.01 million. The cause of the decreasing of the Liabilities is the Company partially repaid the long-term loans from financial institutions.

## Trade and Other Payable

As at December 31, 2017 and 2016, the Company recorded Trade and Other payables of Baht 270.43 million and Baht 300.45 million, respectively or decreased Baht 30.02 million.

The company received the credit terms from the creditor about 30-60 days. The average repayment days of year 2017 and 2016 are 88 and 70 days, respectively.

## Shareholders' Equity

As at December 31, 2017 and 2016, the Company shareholders' equity is Baht 1,200.95 million and Baht 1,190.23 million, respectively or increase Baht 10.72 million because the company had Net profit from operation of Baht 44.30 million, Legal reserve of Baht 2.54 million and Dividend paid Baht 33.58 million.

## Capital Structure Suitability

The company's Debt to Equity (D/E) ratio at December 31, 2017 and 2016 is 0.68 and 0.78 times, respectively. The D/E ratio decreased from the decreasing of the liabilities and increasing of the retaining earning.



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The Board of Directors' obligation  
for the Financial Statements

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Auditor's Report and the Company's  
Subsidiary Financial Statements





## THE BOARD OF DIRECTORS' OBLIGATION FOR THE FINANCIAL STATEMENTS

The Board of Directors of Ekarat Engineering Public Company Limited concerned to the duty and responsibility of the completeness and accuracy of the financial statements. The financial statements of Ekarat Engineering Public Company Limited were prepared in accordance with the rules and regulations of the company and generally accepted accounting standards in Thailand. Appropriate accounting policies were selected and applied consistently and were accompanied by careful judgment. All of the important data is disclosed in Notes to financial statements accurately which audited by Certified Public Accountant and reviewed by the Audit Committee.

The Board of Directors has appointed the Audit Committee, which comprised with the Independent Directors, to review and responsible for the quality of the financial statements and Internal audit. The observation of Audit Committee related to these matters is appeared in the Audit Committees' Report which is in this annual report.

The Board of Directors has ensured the accuracy and appropriated disclosure of the Company's financial statements disclosed in the annual report year 2017 and the financial statements were prepared in accordance with the generally accepted accounting standards. The Internal audit of the company was accurate and appropriated.



Mr. Danucha Noichaiboon  
Managing Director





**EKARAT ENGINEERING PUBLIC COMPANY LIMITED  
AND SUBSIDIARIES**

**AUDITOR'S REPORT AND FINANCIAL STATEMENTS  
FOR THE YEAR ENDED DECEMBER 31, 2017**



## INDEPENDENT AUDITOR'S REPORT

To the Shareholders of Ekarat Engineering Public Company Limited and its subsidiaries

### Opinion

I have audited the accompanying consolidated and separate financial statements of Ekarat Engineering Public Company Limited and its subsidiaries (the Group) and of Ekarat Engineering Public Company Limited (the Company), which comprise the consolidated and separate statements of financial position as at December 31, 2017, and the related consolidated and separate statements of comprehensive income, consolidated and separate statements of changes in shareholders' equity and consolidated and separate statements of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In my opinion, the accompanying consolidated and separate financial statements present fairly, in all material respects, the consolidated and separate financial position of the Ekarat Engineering Public Company Limited and its subsidiaries and of Ekarat Engineering Public Company Limited as at December 31, 2017, and its consolidated and separate financial performance and its consolidated and separate cash flows for the year then ended in accordance with Thai Financial Reporting Standards.

### Basis for Opinion

I conducted my audit in accordance with Thai Standards on Auditing. My responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of my report. I am independent of the Group in accordance with the Federation of Accounting Professions under the Royal Patronage of his Majesty the King's Code of Ethics for Professional Accountants together with the ethical requirements that are relevant to our audit of the financial statements, and I have fulfilled my other ethical responsibilities in accordance with these requirements. I believe that audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.



## Key Audit Matters

Key audit matters are those matters that, in my professional judgment, were of most significance in my audit of the financial statements of the current period. These matters were addressed in the context of my audit of the financial statements as a whole, and in forming my opinion thereon, and I do not provide a separate opinion on these matters.

### Allowance for doubtful accounts

*Reference to Note to Financial Statement No.5.2 and No.8*

The adequacy of the allowance for doubtful accounts is important that the management must use highly judgment to determine whether a debtor has the opportunity to cannot collect money, and definition expected amount to be refund which is a process that implicated uncertainties inevitable due to relies on assumptions and by many factors. Therefore, I have to focus on testing the reasonableness of management's discretion to determine the amount of the allowance for doubtful accounts that may have occurred. The value will be determined by many factors, such as the amount to be covered by the insurance contract, the financial condition of the debtor, economic and political environment of the debtor and payment history by considering the factors that mentioned above together with the outstanding balance of aging report. I determined that is key audit matter in my auditing.

### How my audit addressed the key audit matter.

I have evaluated and tested the effectiveness of the internal control system which the management used to prepare the allowance for doubtful accounts report. The method is as follows:

- Test the effectiveness of the control system used to recognize the allowance for doubtful accounts of the Group. It starts with understanding the revenue recognition control system and trade receivables in the annual test, it is designed to recognize income and trade receivables are accurate and complete. This will result in the Group 's outstanding aging records being accurate and complete including testing of data access control systems of debtors from unrelated person.



- Test to calculate the number of outstanding days in the separated aging report (Report). Completeness test of the transaction by reconciliation report to the general ledger. Test control system used by the management in the credit approval process to reduce the opportunity of bad debt in the future and test of validate the crediting period for each customer with evidence approved by the authority.
- Test the appropriateness of the allowance for doubtful accounts policy set by the management by test of appropriateness of the debt aging period and the expected rate of loss from the receivables received during the period and after the end of period.

Based on such tests, I found that the management's assumptions used in estimating the allowance for doubtful accounts are reasonable.

### Allowance for diminution in value of inventories

*Reference to Note to Financial Statement No.5.3 and No.9*

Indicates that the inventories are going to be out of date will be determined by the age of the inventories in the inventory report at the end of the period. The management determines the expected price returns of the inventories are indications that it is out of date in each age range. The management's judgment to evaluate the net realizable value of out of date inventories is a process that related to uncertainty which unavoidable. Due to the assumptions in this matter mainly require management experience. Therefore, I focus on importance to the appropriateness of the allowance for diminution in value of inventories and determined that is key audit matter in my auditing.

### How my audit addressed the key audit matter.

I have evaluated and tested the effectiveness of inventory control in the annual test. The control system will affect the reliability of important information that will be used to calculate the allowance for diminution in value of inventories. The method is as follows:

- Test the appropriateness of data used by the Group to determine slow-moving or out-of-date inventories that data will come from the product aging report at the end of the period. I have tested the accuracy of the received date with the recorded document in to the inventory report and recalculate the data to test the accuracy of the report.



- Test the appropriateness of the percentage that the management expects the value of the inventories to decline if the product has a longer life by considering that the discount rate of the inventory in each age range is consistent with the expected selling price based on the product's condition. Analysis of the turnover rate of each type of inventories. The management inquiries about plan will be used to manage dead stock inventories and attend the stock checking at the end of the period to observe the store location, storage method and the overall physical condition of the inventories.

Based on such tests, I found that the management's assumptions are used to estimate the values of inventories allowance for diminution in value are reasonable.

### Classification of leases contract

*Reference to Note to Financial Statement No.3 and No.22*

In classifying the lease contract as a finance lease or operating lease, the management must be consider to the substance of the transaction rather than the contractual form. The management is required to use judgment in determining the classification each contract of Group whether are in a financial lease. Therefore, I focus on importance to the appropriateness of the classification of leases contract and determined that is key audit matter in my auditing.

### How my audit addressed the key audit matter.

I have auditing as follows:

- Tests the appropriateness of the management's judgment in classifying the lease as a finance lease contract or operating lease contract by considering the substance of the lease contract with the relevant financial reporting standards with reviewing the terms of use of the assets and the length of time that the Group has benefited from the use of the assets as specified in the lease contract.
- Test the accuracy of records in related transaction to leases contract in accordance with relevant financial reporting standards.

Based on such tests. I have determined that the management's judgment in the matter of classification of the lease contract as financial leases contract or operating leases contract are reasonable.



## Other Information

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

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

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

When I read the annual report, if I conclude that there is a material misstatement therein, I am required to communicate the matter to those charge with governance to correct the materially misstatement.

## Responsibilities of Management and Those Charge with Governance for the Financial Statements

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

In preparing the financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

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

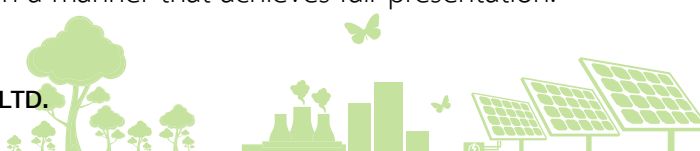


## Auditor's Responsibilities for the Audit of the Financial Statements

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

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

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If I conclude that a material uncertainty exists, I have required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.





- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. I am responsible for the direction, supervision and performance of the group audit. I remain solely responsible for my audit opinion.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

I also provide those charged with governance with a statement that I have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on my independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, I determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. I describe these matters in my auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, I determine that a matter should not be communicated in my report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

SP Audit Company Limited



(Miss Yuphin Chumjai)

Certified Public Accountant (Thailand) No.8622

Bangkok

February 27, 2018



# EKARAT ENGINEERING PUBLIC COMPANY LIMITED AND SUBSIDIARIES

## STATEMENTS OF FINANCIAL POSITION

### As at December 31, 2017

(Unit : Baht)

Assets	Notes	Consolidated financial statements			Separate financial statements		
		December 31,	December 31,	January 1,	December 31,	December 31,	January 1,
		2017	2016	2016	2017	2016	2016
			(Restated)	(Restated)		(Restated)	(Restated)
Current assets							
Cash and cash equivalents items	28.1	51,949,449	65,127,597	86,661,811	45,522,131	60,330,474	82,364,075
Short-term investments	7	69,085	69,085	69,085	69,085	69,085	69,085
Trade and other receivables	6.1 และ 8	250,325,538	453,828,080	461,394,053	251,514,866	456,359,945	461,253,239
Short-term loan and interest receivable to related parties	6.1	-	-	-	-	-	-
Inventories	9	516,292,259	403,128,468	466,811,022	514,138,612	400,968,783	464,388,604
Other current assets		3,366,790	6,103,613	1,143,555	3,071,127	1,354,348	849,162
Total current assets		822,003,121	928,256,843	1,016,079,526	814,315,821	919,082,635	1,008,924,165
Non-current assets							
Investments in subsidiary companies	10	-	-	-	2,499,925	2,499,925	2,499,925
General investments	11	-	-	-	-	-	-
Investment properties	12	1,631,755	1,631,755	1,312,938	1,631,755	1,631,755	1,312,938
Assets for rent	13	7,464,646	3,168,910	4,721,352	7,464,646	3,168,910	4,721,352
Property, plant and equipment	14	1,113,444,696	1,130,607,096	1,078,533,664	1,108,448,838	1,124,558,195	1,071,409,249
Intangible assets	15	9,716,819	10,047,434	1,679,702	9,716,819	10,047,434	1,679,702
Obligated bank deposits	16	4,650,000	1,650,000	6,000,000	4,650,000	1,650,000	6,000,000
Prepaid rent under operating lease	17	4,880,307	5,075,857	-	4,880,307	5,075,857	-
Deferred tax assets	18	26,631,732	32,353,430	18,680,491	26,631,732	32,353,430	18,680,491
Withholding tax		17,857,216	6,051,382	-	17,840,582	5,733,462	-
Other non-current assets		3,619,927	346,872	905,889	3,619,927	346,872	427,166
Total non-current assets		1,189,897,098	1,190,932,736	1,111,834,036	1,187,384,531	1,187,065,840	1,106,730,823
Total assets		2,011,900,219	2,119,189,579	2,127,913,562	2,001,700,352	2,106,148,475	2,115,654,988

Note to financial statements are parts of these financial statements.



# EKARAT ENGINEERING PUBLIC COMPANY LIMITED AND SUBSIDIARIES

## STATEMENTS OF FINANCIAL POSITION (CONTINUED)

### As at December 31, 2017

(Unit : Baht)

Liabilities and shareholders' equity	Notes	Consolidated financial statements			Separate financial statements		
		December 31,	December 31,	January 1,	December 31,	December 31,	January 1,
		2017	2016	2016	2017	2016	2016
			(Restated)	(Restated)		(Restated)	(Restated)
Current liabilities							
Short-term loans from financial institutions	19	209,941,739	218,551,046	141,466,425	209,941,739	218,551,046	141,466,425
Trade and other payables	6.1 และ 20	270,426,007	300,446,417	194,686,056	271,010,705	304,623,012	197,959,358
Accrued expenses	6.1 และ 8	56,383,259	62,645,750	57,758,697	51,494,914	58,085,605	53,169,392
Advance received for goods and services		33,612,987	35,750,241	62,140,231	33,960,987	35,750,241	60,296,886
Current portion of :							
Loans from financial institutions	21	21,729,479	101,479,279	99,299,340	21,729,479	101,479,279	99,299,340
Liabilities under financial lease contracts	22	12,267,098	17,815,176	17,522,330	12,267,098	17,815,176	17,522,330
Accrued income tax		-	-	20,723,452	-	-	20,723,452
Other current liabilities		9,676,989	8,286,216	11,109,736	9,461,139	8,230,214	11,083,017
Total current liabilities		614,037,558	744,974,125	604,706,267	609,866,061	744,534,573	601,520,200
Non-current liabilities							
Long-term loans from financial institutions	21	110,725,169	96,940,131	94,479,108	110,725,169	96,940,131	94,479,108
Liabilities under financial lease contracts	22	8,837,211	17,846,096	40,342,227	8,837,211	17,846,096	40,342,227
Employee benefit obligations	23	71,863,307	69,203,843	62,248,531	71,863,307	69,203,843	62,248,531
Other non-current liabilities		5,488,309	-	-	5,488,310	-	-
Total non-current liabilities		196,913,996	183,990,070	197,069,866	196,913,997	183,990,070	197,069,866
Total liabilities		810,951,554	928,964,195	801,776,133	806,780,058	928,524,643	798,590,066

Note to financial statements are parts of these financial statements.



# EKARAT ENGINEERING PUBLIC COMPANY LIMITED AND SUBSIDIARIES

## STATEMENTS OF FINANCIAL POSITION (CONTINUED)

### As at December 31, 2017

(Unit : Baht)

Shareholders' equity	Notes	Consolidated financial statements			Separate financial statements		
		December 31,	December 31,	January 1,	December 31,	December 31,	January 1,
		2017	2016	2016	2017	2016	2016
			(Restated)	(Restated)		(Restated)	(Restated)
Share capital							
Authorized share capital							
1,343,289,404 Ordinary shares @ Baht 0.80 each		1,074,631,523	1,074,631,523	1,074,631,523	1,074,631,523	1,074,631,523	1,074,631,523
Issued and paid-up share capital							
1,343,289,404 Ordinary shares @ Baht 0.80 each		1,074,631,523	1,074,631,523	1,074,631,523	1,074,631,523	1,074,631,523	1,074,631,523
Retained earnings							
Appropriated							
Legal reserve	24	25,182,581	22,638,835	22,638,835	25,182,581	22,638,835	22,638,835
Unappropriated		101,134,561	92,955,026	228,867,071	95,106,190	80,353,474	219,794,564
Total shareholders' equity		1,200,948,665	1,190,225,384	1,326,137,429	1,194,920,294	1,177,623,832	1,317,064,922
Total liabilities and shareholders' equity		2,011,900,219	2,119,189,579	2,127,913,562	2,001,700,352	2,106,148,475	2,115,654,988

Note to financial statements are parts of these financial statements.



## EKARAT ENGINEERING PUBLIC COMPANY LIMITED AND SUBSIDIARIES

### STATEMENTS OF CASH FLOWS

As at December 31, 2017

(Unit : Baht)

Consolidated financial statements		Separate financial statements	
2017	2016	2017	2016
	(Restated)		(Restated)

#### Cash flows from operating activities

Profit (loss) before income tax expenses	50,023,443	(74,474,502)	56,596,624	(78,003,547)
Doubtful debt (reverse)	(9,724,081)	7,408,604	(9,926,500)	17,087,305
(Gain) loss on devaluation of goods	5,954,620	(34,159,823)	10,591,352	(2,882,350)
Loss on impairment of fixed assets	-	11,491,821	-	11,572,115
Amortization	1,060,314	812,769	1,060,314	812,769
Amortization of prepaid rent under operating lease	203,369	-	203,369	-
Depreciation	104,891,195	100,981,674	103,838,152	99,944,272
Current service and interest	6,035,964	6,732,300	6,035,964	6,732,300
Indemnity income as assets	-	(1,822,101)	-	(1,990,405)
(Gain) loss from disposals of fixed assets	1,035	(112,098)	1,035	(112,098)
(Gain) loss from disposals assets for rent	(7,861,256)	(5,431,389)	(7,861,256)	(5,431,389)
Unrealized (gain) loss on exchange rate	(1,676,872)	2,329,894	(1,502,146)	1,293,494
Interest expenses	28,355,024	19,737,727	28,355,024	18,841,827
Interest income	(280,769)	(495,876)	(7,602,299)	(10,546,484)
Write-off assets to be expenses	438,345	944,695	120,547	877,595
Transferred liabilities to be revenue	(981,297)	(7,259,408)	(981,297)	(5,386,903)
Profit from operations before changes in operating assets and liabilities	176,439,034	26,684,287	178,928,883	52,808,501
Operating assets (increase) decrease				
Trade and other receivable	212,488,163	50,055	214,008,147	(2,623,042)
Inventories	(134,295,962)	9,749,987	(138,938,729)	(21,805,494)
Other current assets	2,736,822	(4,960,058)	(1,716,779)	(505,186)
Other non-current assets	(3,590,852)	317,831	(3,273,055)	-

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



## EKARAT ENGINEERING PUBLIC COMPANY LIMITED AND SUBSIDIARIES

### STATEMENTS OF CASH FLOWS (CONTINUED)

As at December 31, 2017

(Unit : Baht)

	Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016
		(Restated)		(Restated)
Operating liabilities increase (decrease)				
Trade and other payables	(20,178,234)	93,364,624	(23,770,131)	97,091,435
Accrued expenses	(5,668,320)	6,653,881	(5,996,520)	6,653,881
Advance received for goods and services	(1,952,247)	(22,805,527)	(1,604,247)	(22,805,527)
Employee benefit obligations	(3,376,500)	(7,738,050)	(3,376,500)	(7,738,050)
Other current liabilities	1,390,763	-	1,230,913	(2,852,802)
Other non-current liabilities	5,488,310	-	5,488,310	-
Cash paid from operating activities	229,480,977	101,317,030	220,980,292	98,223,716
Interest expenses	(29,458,669)	(19,485,076)	(29,458,671)	(18,589,176)
Income tax	(11,805,835)	(26,774,834)	(12,107,119)	(26,456,914)
Net cash received (used) from operating activities	188,216,473	55,057,120	179,414,502	53,177,626
Cash flows from investing activities				
Cash paid for acquired of intangible assets	(635,700)	(9,180,500)	(635,700)	(9,180,500)
Cash proceeds from disposal of assets for rent	12,172,132	11,050,288	12,172,132	11,050,288
Cash proceeds from disposal of property, plant and equipment	2,336	113,467	2,336	113,467
Cash paid for acquired of assets for rent	(3,142,127)	(6,984,848)	(3,142,127)	(6,984,848)
Cash paid for acquired of property, plant and equipment	(69,821,699)	(58,216,893)	(69,821,699)	(58,255,003)
Cash received from interest income	278,436	507,099	7,450,212	1,915,825
Increase (Decrease) in assets payable	(13,746,612)	(2,311,414)	(13,746,612)	(2,311,414)
(Increase) Decrease in deposit for assets	-	(409,000)	-	(409,000)
(Increase) Decrease in prepaid expenses under operating lease	-	(5,085,348)	-	(5,075,857)
(Increase) decrease of obligated bank deposits	(3,000,000)	4,350,000	(3,000,000)	4,350,000
Net cash received (used) from investing activities	(77,893,234)	(66,167,149)	(70,721,458)	(64,787,042)

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



## EKARAT ENGINEERING PUBLIC COMPANY LIMITED AND SUBSIDIARIES

### STATEMENTS OF CASH FLOWS (CONTINUED)

As at December 31, 2017

(Unit : Baht)

	Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016
		(Restated)		(Restated)
<b>Cash flows from financing activities</b>				
Increase (decrease) short-term loans from financial institutions	(6,929,803)	75,068,389	(6,929,803)	75,068,389
Repayment of liabilities under lease contracts	(17,982,989)	(22,203,285)	(17,982,989)	(22,203,285)
Proceeds from long-term loans from financial institutions	41,059,869	103,940,131	41,059,869	103,940,131
Repayment of Long-term loans from financial institutions	(106,070,000)	(100,080,000)	(106,070,000)	(100,080,000)
Dividend paid	(33,578,464)	(67,149,420)	(33,578,464)	(67,149,420)
Net cash received (used) from financing activities	(123,501,387)	(10,424,185)	(123,501,387)	(10,424,185)
Net cash and cash equivalents items (decrease) increase-net	(13,178,148)	(21,534,214)	(14,808,343)	(22,033,601)
Cash and cash equivalents items at the beginning of the year	65,127,597	86,661,811	60,330,474	82,364,075
Cash and cash equivalents items at the end of the year	51,949,449	65,127,597	45,522,131	60,330,474

*Additional disclosure (Note 28.2)*

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





## EKARAT ENGINEERING PUBLIC COMPANY LIMITED AND SUBSIDIARIES

### STATEMENTS OF COMPREHENSIVE INCOME

As at December 31, 2017

(Unit : Baht)

	Notes	Consolidated financial statements		Separate financial statements	
2017		2016	2017	2016	
		(Restated)		(Restated)	
Revenue from operation					
Revenue from sales of goods		1,400,167,061	1,342,854,042	1,398,976,909	1,341,290,668
Revenue from services and maintenance		193,609,686	212,277,411	193,633,686	212,277,411
Revenue from installation of solar electric generating system		43,253,928	46,362,818	41,358,780	44,718,484
Revenue from sales of electricity current		47,424,226	21,709,691	47,424,226	21,709,691
Total revenue from operation		1,684,454,901	1,623,203,962	1,681,393,601	1,619,996,254
Cost from operation					
Cost of goods sold		(1,168,843,718)	(1,233,837,405)	(1,164,695,674)	(1,201,348,115)
Cost of services and maintenance		(117,779,979)	(135,653,208)	(117,779,979)	(135,653,208)
Cost from installation of solar electric generating system		(39,416,004)	(46,118,712)	(38,011,980)	(47,500,826)
Cost of electricity current sales		(21,386,724)	(11,472,014)	(21,229,974)	(11,316,486)
Reversed revenue (loss) on devaluation of goods		(6,886,386)	42,015,330	(10,591,352)	2,882,350
Total cost from operation		(1,354,312,811)	(1,385,066,009)	(1,352,308,959)	(1,392,936,285)
Gross profit		330,142,090	238,137,953	329,084,642	227,059,969
Other incomes		47,815,197	33,295,974	54,976,015	38,830,404
Loss on impairment of fixed assets		-	(11,572,116)	-	(11,572,116)
Selling expenses		(125,940,612)	(119,713,990)	(125,538,412)	(119,713,990)
Administrative expenses		(165,447,614)	(182,538,184)	(165,384,793)	(180,526,026)
Financial cost		(36,545,518)	(32,084,139)	(36,540,828)	(32,081,788)
Profit (loss) before income tax expenses		50,023,443	(74,474,502)	56,596,624	(78,003,547)
Income tax (revenue) expenses	26	(5,721,698)	12,080,727	(5,721,698)	12,080,727
Profit (loss) for the year		44,301,745	(62,393,775)	50,874,926	(65,922,820)

Note to financial statements are parts of these financial statements.



## EKARAT ENGINEERING PUBLIC COMPANY LIMITED AND SUBSIDIARIES

### STATEMENTS OF COMPREHENSIVE INCOME (CONTINUED)

As at December 31, 2017

(Unit : Baht)

	Notes	Consolidated financial statements		Separate financial statements	
2017		2016	2017	2016	
		(Restated)		(Restated)	
Other comprehensive income					
Item that is reclassified to profit or loss latter					
Actuarial losses	23	-	(7,961,062)	-	(7,961,062)
Inpracticable of income tax		-	1,592,212	-	1,592,212
Other comprehensive income (loss) for the year-net income tax		-	(6,368,850)	-	(6,368,850)
Total comprehensive income (loss) for the year		44,301,745	(68,762,625)	50,874,926	(72,291,670)
Profit (loss) attributable to for the year					
Shareholders of the Parent Company		44,301,745	(62,393,775)	50,874,926	(65,922,820)
Non-controlling interests of the subsidiaries		-	-	-	-
Profit (loss) for the year		44,301,745	(62,393,775)	50,874,926	(65,922,820)
Comprehensive income (loss) attributable to for the year					
Shareholders of the Parent Company		44,301,745	(68,762,625)	50,874,926	(72,291,670)
Non-controlling interests of the subsidiaries		-	-	-	-
Total comprehensive income (loss) for the year		44,301,745	(68,762,625)	50,874,926	(72,291,670)
Earnings (loss) per share					
Basic earning (loss) per share	27	0.033	(0.051)	0.038	(0.054)

Note to financial statenemts are parts of these financial statements.



# EKARAT ENGINEERING PUBLIC COMPANY LIMITED AND SUBSIDIARIES

## STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

As at December 31, 2017

(Unit : Baht)

	Notes	Consolidated financial statements			
		Issued and paid-up share capital	Retained earnings		
			Appropriated legal reserve	Unappropriated	Total
Balance as at January 1, 2016 (Before Restated)		1,074,631,523	22,638,835	229,283,833	1,326,554,191
Accounting error adjustment					
Impracticable from retrospective restatement	3	-	-	(416,762)	(416,762)
Balance as at January 1, 2016 (After Restated)		1,074,631,523	22,638,835	228,867,071	1,326,137,429
Transaction with shareholder on directly recorded to equity					
Dividend paid	24	-	-	(67,149,420)	(67,149,420)
Total transaction with shareholder on directly recorded to equity		-	-	(67,149,420)	(67,149,420)
Total comprehensive loss for the year					
Loss for the year (Restated)		-	-	(62,393,775)	(62,393,775)
Other comprehensive loss for the year		-	-	(6,368,850)	(6,368,850)
Total comprehensive loss for the year (Restated)		-	-	(68,762,625)	(68,762,625)
Balance as at December 31, 2016 (After Restated)		1,074,631,523	22,638,835	92,955,026	1,190,225,384
Balance as at December 31, 2016 (Before Restated)		1,074,631,523	22,638,835	93,582,718	1,190,853,076
Accounting error adjustment					
Impracticable from retrospective restatement	3	-	-	(627,692)	(627,692)
Balance as at December 31, 2016 (After Restated)		1,074,631,523	22,638,835	92,955,026	1,190,225,384
Transaction with shareholder on directly recorded to equity					
Dividend paid	24	-	-	(33,578,464)	(33,578,464)
Appropriated legal reserve	24	-	2,543,746	(2,543,746)	-
Total transaction with shareholder on directly recorded to equity		-	2,543,746	(36,122,210)	(33,578,464)
Total comprehensive income for the year					
Profit for the year		-	-	44,301,745	44,301,745
Total comprehensive income for the year		-	-	44,301,745	44,301,745
Balance as at December 31, 2017		1,074,631,523	25,182,581	101,134,561	1,200,948,665

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



## EKARAT ENGINEERING PUBLIC COMPANY LIMITED AND SUBSIDIARIES

### STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

As at December 31, 2017

(Unit : Baht)

	Notes	Separate financial statements			
		Issued and paid-up share capital	Retained earnings		
			Appropriated legal reserve	Unappropriated	Total
Balance as at January 1, 2016 (Before Restated)		1,074,631,523	22,638,835	220,211,326	1,317,481,684
Accounting error adjustment					
Impracticable from retrospective restatement	3	-	-	(416,762)	(416,762)
Balance as at January 1, 2016 (After Restated)		1,074,631,523	22,638,835	219,794,564	1,317,064,922
Transaction with shareholder on directly recorded to equity					
Dividend paid	24	-	-	(67,149,420)	(67,149,420)
Total transaction with shareholder on directly recorded to equity		-	-	(67,149,420)	(67,149,420)
Total comprehensive loss for the year					
Loss for the year (Restated)		-	-	(65,922,820)	(65,922,820)
Other comprehensive loss for the year		-	-	(6,368,850)	(6,368,850)
Total comprehensive loss for the year (Restated)		-	-	(72,291,670)	(72,291,670)
Balance as at December 31, 2016 (After Restated)		1,074,631,523	22,638,835	80,353,474	1,177,623,832
Balance as at December 31, 2016 (Before Restated)		1,074,631,523	22,638,835	80,981,166	1,178,251,524
Accounting error adjustment					
Impracticable from retrospective restatement	3	-	-	(627,692)	(627,692)
Balance as at December 31, 2016 (After Restated)		1,074,631,523	22,638,835	80,353,474	1,177,623,832
Transaction with shareholder on directly recorded to equity					
Dividend paid	24	-	-	(33,578,464)	(33,578,464)
Appropriated legal reserve	24	-	2,543,746	(2,543,746)	-
Total transaction with shareholder on directly recorded to equity		-	2,543,746	(36,122,210)	(33,578,464)
Total comprehensive income for the year					
Profit for the year		-	-	50,874,926	50,874,926
Total comprehensive income for the year		-	-	50,874,926	50,874,926
Balance as at December 31, 2017		1,074,631,523	25,182,581	95,106,190	1,194,920,294

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



## EKARAT ENGINEERING PUBLIC COMPANY LIMITED AND SUBSIDIARIES

### NOTES TO FINANCIAL STATEMENT

#### For The Year Ended December 31, 2017

### 1. GENERAL INFORMATION

EKARAT ENGINEERING PUBLIC COMPANY LIMITED AND SUBSIDIARIES was registered as a public company under the registration number 0107537002711 on December 9, 1994 and was listed companies in The Stock Exchange of Thailand on August 7, 2006. Its head office is situated at 9/291 UM Tower, 28th Floor, Ramkhamhaeng Road, Suanluang, Suanluang, Bangkok. And there are four branches of the factory have the following locations:

**Factory 1** : 190/1 Moo 6 Hoklee Canal, Bangpakong River, Tambon Thasa-An, Amphur Bangpakong, Chachoengsao Province.

**Factory 2** : 7/242 Moo 6 Tambon Mabyangporn, Amphur Pluakdang, Rayong Province.

#### Solar thermal power plant :

**Factory 1** : 365, 365/1 Moo 3 Tambon Kroksomboon Amphur Sri-mahapo Prachinburi Province.

**Factory 2** : 78 Moo 9 Tambon Lahore Amphur Bang Bua Thong Nonthaburi Province.

The Group's business operations are engaged in the manufacture and distribution transformers and the manufacture and distribution of solar farms.

### 2. BASIS OF THE FINANCIAL STATEMENTS PREPARATION

The consolidated and the separate financial statements were prepared in accordance with the generally accepted accounting principle under the Accounting Act B.E. 2543, which include the already announced accounting standards, financial reporting standards and their interpretation including accounting guidance issued by the Federation of Accounting Professionals established under the Accounting Professions Act B.E. 2547 which reach the conclusion to be promulgated.

The financial statements issued for Thai reporting purposes are prepared in the Thai language. This English translation of the financial statements has been prepared for the convenience of readers not conversant with the Thai language.

The presentation in the financial statements are presented in accordance with the determination stated in the Notification of the Department of Business Development dated September 28, 2011, issued under the Accounting Act, B.E. 2543.



The financial statements were prepared and presented currency in Thai Baht which the functional currency of the Group and using historical cost basis except those disclosed otherwise in the accounting policies.

The Federation of Accounting Profession (FAP) has notified to apply the following financial reporting standards to the financial statements having an accounting period beginning on or after January 1, 2017

#### Effective

TFRS No. 2 Share-based Payment (revised 2016)	January 1, 2017
TFRS No. 3 Business Combinations (revised 2016)	January 1, 2017
TFRS No. 4 Insurance Contracts (revised 2016)	January 1, 2017
TFRS No. 5 Non-current Assets Held for Sale and Discontinued Operations (revised 2016)	January 1, 2017
TFRS No. 6 Exploration for and Evaluation of Mineral Resources (revised 2016)	January 1, 2017
TFRS No. 8 Operating Segments (revised 2016)	January 1, 2017
TFRS No. 10 Consolidated Financial Statements (revised 2016)	January 1, 2017
TFRS No. 11 Joint Arrangements (revised 2016)	January 1, 2017
TFRS No. 12 Disclosure of Interests in Other Entities (revised 2016)	January 1, 2017
TFRS No. 13 Fair Value Measurement (revised 2016)	January 1, 2017

#### date

#### Effective

TAS No. 1 Presentation of Financial Statements (revised 2016)	January 1, 2017
TAS No. 2 Inventories (revised 2016)	January 1, 2017
TAS No. 7 Statement of Cash Flows (revised 2016)	January 1, 2017
TAS No. 8 Accounting Policies, Changes in Accounting Estimates and Errors (revised 2016)	January 1, 2017
TAS No. 10 Events after the Reporting Period (revised 2016)	January 1, 2017
TAS No. 11 Construction Contracts (revised 2016)	January 1, 2017
TAS No. 12 Income Taxes (revised 2016)	January 1, 2017
TAS No. 16 Property, Plant and Equipment (revised 2016)	January 1, 2017
TAS No. 17 Leases (revised 2016)	January 1, 2017
TAS No. 18 Revenue (revised 2016)	January 1, 2017
TAS No. 19 Employee Benefits (revised 2016)	January 1, 2017
TAS No. 20 Accounting for Government Grants and Disclosure of Government Assistance (revised 2016)	January 1, 2017
TAS No. 21 The Effects of Changes in Foreign Exchange Rates (revised 2016)	January 1, 2017
TAS No. 23 Borrowing Costs (revised 2016)	January 1, 2017

#### date



## Effective

TAS No. 24 Related Party Disclosures (revised 2016)	January 1, 2017
TAS No. 26 Accounting and Reporting by Retirement Benefit Plans (revised 2016)	January 1, 2017
TAS No. 27 Separate Financial Statements (revised 2016)	January 1, 2017
TAS No. 28 Investments in Associates and Joint Ventures (revised 2016)	January 1, 2017
TAS No. 29 Financial Reporting in Hyperinflationary Economies (revised 2016)	January 1, 2017
TAS No. 33 Earnings per Share (revised 2016)	January 1, 2017
TAS No. 34 Interim Financial Reporting (revised 2016)	January 1, 2017
TAS No. 36 Impairment of Assets (revised 2016)	January 1, 2017
TAS No. 37 Provisions, Contingent Liabilities and Contingent Assets (revised 2016)	January 1, 2017
TAS No. 38 Intangible Assets (revised 2016)	January 1, 2017
TAS No. 40 Investment Property (revised 2016)	January 1, 2017
TAS No. 41 Agriculture (revised 2016)	January 1, 2017
TAS No. 104 Accounting for Troubled Debts Restructurings (revised 2016)	January 1, 2017
TAS No. 105 Accounting for Investments in Debt and Equity Securities (revised 2016)	January 1, 2017
TAS No. 107 Financial Instruments: Presentation and Disclosures (revised 2016)	January 1, 2017

## date

## Effective

TFRIC No. 1 Changes in Existing Decommissioning, Restoration and Similar Liabilities (revised 2016)	January 1, 2017
TFRIC No. 4 Determining whether an Arrangement contains a Lease (revised 2016)	January 1, 2017
TFRIC No. 5 Rights to Interests arising from Decommissioning, Restoration and Environmental Rehabilitation Funds (revised 2016)	January 1, 2017
TFRIC No. 7 Applying the Restatement Approach under TAS 29 (revised 2016) Financial Reporting in Hyperinflationary Economies (revised 2016)	January 1, 2017
TFRIC No. 10 Interim Financial Reporting and Impairment (revised 2016)	January 1, 2017
TFRIC No. 12 Service Concession Arrangements (revised 2016)	January 1, 2017
TFRIC No. 13 Customer Loyalty Programmers (revised 2016)	January 1, 2017
TFRIC No. 14 TAS 19 (revised 2016) - The Limit on a Defined Benefit Assets, Minimum Funding Requirements and their Interaction (revised 2016)	January 1, 2017

## date





## Effective

## date

TFRIC No. 15 Agreements for the Construction of Real Estate (revised 2016)	January 1, 2017
TFRIC No. 17 Distributions of Non-cash Assets to Owners (revised 2016)	January 1, 2017
TFRIC No. 18 Transfers of Assets from Customers (revised 2016)	January 1, 2017
TFRIC No. 20 Stripping Costs in the Production Phase of a Surface Mine (revised 2016)	January 1, 2017
TFRIC No. 21 Levies (revised 2016)	January 1, 2017
TSIC No. 10 Government Assistance – No Specific Relation to Operating Activities (revised 2016)	January 1, 2017
TSIC No. 15 Operating Leases - Incentives (revised 2016)	January 1, 2017
TSIC No. 25 Income Taxes - Changes in the Tax Status of an Entity or its Shareholders (revised 2016)	January 1, 2017
TSIC No. 27 Evaluating the Substance of Transactions Involving the Legal Form of a Lease (revised 2016)	January 1, 2017
TSIC No. 29 Service Concession Arrangements : Disclosures (revised 2016)	January 1, 2017
TSIC No. 31 Revenue - Barter Transactions Involving Advertising Services (revised 2016)	January 1, 2017
TSIC No. 32 Intangible Assets - Web Site Costs (revised 2016)	January 1, 2017
Guide on Accounting for Insurance Business in Determining Financial Instruments as Financial Instruments Presented with Fair Value through Profit or Loss	January 1, 2017

Management has assessed that there is no impact on the consolidated financial statements in the period of initial adopted.

In preparation of financial statements in conformity with generally accepted accounting principles the management has to make estimates and assumptions that affect the application of policies and reported amounts of assets, liabilities, income and expenses. The estimates and underlying assumptions are resulted from experience and other factors that the management has reasonably assurance under such circumstance. Actual results may differ from these estimates.

The estimates and underlying assumptions so used in preparation of the financial statements are reviewed on regular basis. Revisions to accounting estimates are recognized in the period in which estimates are revised and in any future periods affected. The areas of estimation uncertainty and critical judgments in applying accounting policies that have the most significant effect on the amount recognized in the Group' financial statements include:-



### Allowance for doubtful debt

In determining an allowance for doubtful accounts, the management needs to make judgment and estimates based upon, among other things, past collection history, aging profile of outstanding debts and the prevailing economic condition.

### Allowance for slow moving and obsolete inventories / Allowance for the cost of goods exceeding net realizable value

The management is required to estimate allowance for slow moving and obsolete inventories whenever the inventories are expected to depreciate or become obsolete by considering on the basis of their current physical condition status and popularity trend among consumers.

Net realizable value is the estimated selling price in the ordinary course of business less the estimated costs to complete and to make the sale.

### Depreciation of plant and equipment and investment properties

In determining depreciation of plant and equipment and investment properties, the management is required to make estimates of the useful lives and residual values of the Group's plant and equipment and investment properties. The management will review the estimate useful lives and residual values when there are any changes from the estimates made during the prior periods, derecognition of the dilapidated asset or cease of usage from disposal or disused.

### Amortization of intangible asset

Intangible asset are amortised by a straight-line method over estimate useful life and will also be considered about decline in value if there is an indication. In recording and measuring the initial value as well as considering decline in value of intangible asset, it needs the managements judgment in estimating the net realizable value in the future.

### Deferred tax assets

Deferred tax assets are recognized for deductible temporary differences and unused tax losses to the extent that it is probable that taxable profit will be available against which the temporary differences and losses can be utilized. Significant management judgment is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and level of estimate future taxable profits.



### Estimate on employee benefit obligations

The present value of the estimate on employee retirement benefit is calculated using various assumptions, including discount rate, which is used to determine the expenses related to the employee retirement benefits. Any change in these assumptions would affect the estimate of employee retirement benefits. The Group determines the appropriate discount rate annually and applied to measure the present value of estimated future cash flows for the settlement of the employee benefit obligations, using the said determined appropriate discount rate. The discount rate is the yield of government bonds that have maturity date approximating the terms of the Group's obligations.

### Lease agreement

In determining whether a lease is to be classified as an operating lease or finance lease, the management is required to use judgment regarding whether significant risk and rewards of ownership of the leased asset have been transferred, taking into consideration terms and conditions of the arrangement.

### Revenue and costs of installation service

Revenue and costs of installation service are recognized by using the percentage of completion method. The stage of completion is measured by reference to the completion of a physical proportion of the contract work performed as assessed by the project engineers.

### Estimated cost of installation service

The Group estimates costs of installations service based on details of the construction work, taking into account the volume and value of construction materials to be used in the project, labour costs and other miscellaneous costs to be incurred to complete the construction service, taking into account the direction of the movement in these costs. Estimates are reviewed regularly or whenever actual costs differ significantly from the figures used in the original estimates.

Other estimates are disclosed under related caption in these notes to financial statements.



### 3. RESTATED AND RECLASSIFICATION THE FINANCIAL STATEMENT

#### 3.1 Recognition transactions of financial lease contract

In accordance with TAS 17 (Revised 2016) regarding the lease, the lessee must classify the lease contract that transfers all substantially or the most of the risks and rewards that the owner will receive from the leased asset as a finance lease. Although in the end, there is not transfer of ownership of the asset to the tenant. In classifying a lease as a finance lease or operating lease, the Company must consider the substance over form of contract. Therefore, the Company's management had been the lease contract reclassification of 38 contracts, the lease term of 60 months, which the Company has previously recorded as operating lease contract to financial lease contract. The management reconsidered all the substance lease contracts, the Company (the lessee) was the sole beneficiary of the leased assets throughout the useful life of the asset even if there is no transfer of ownership. The management is also revising the transaction all of lease contract as reclassified as finance leases since the commencement of the lease by recognized property, plant and equipment in consolidated and separated financial statements as at January 1, 2016 and December 31, 2016 were increased to Baht 17.78 million and Baht 13.07 million, respectively, and recognized liabilities under financial lease contract in consolidated and separated financial statements as at January 1, 2016 and December 31, 2016 increased to Baht 18.19 million and Baht 13.70 million respectively. Such adjustment is affecting consolidated and separated financial statements for the previous year as stated in Note to Financial Statement No.3.3.

#### 3.2 Certain transactions in the consolidate and separate statements of financial position as at January 1, 2016 and as at December 31, 2016

Which have already been included in these interim financial statements, have been reclassified to correspond with the presentation of the financial statements for the year ended December 31, 2017, with no effect to the reported income for the year or shareholders' equity. Which effects to the interim financial statements is described in notes to interim financial statements No. 3.3.



### 3.3 Total effects on the financial statement

Recognition transactions of financial lease contract as mention No. 3.1 and reclassification the financial statement as mention on No. 3.2 have effect the consolidated financial statements as at January 1, 2016 and December 31, 2016 are as follows:-

(Unit : Thousand Baht)

	Consolidated financial statements			Separate financial statements		
	Before restated	Restated	After restated	Before restated	Restated	After restated
<b>Statements of financial position as at January 1, 2016</b>						
Trade and other receivables	462,538	(1,144)	461,394	462,061	(808)	461,253
Trade receivable - related parties	-	-	-	41	(41)	-
Other current assets	-	1,144	1,144	-	849	849
Property, plant and equipment	1,060,756	17,778	1,078,534	1,053,631	17,778	1,071,409
Trade and other payables	205,796	(11,110)	194,686	205,722	(7,763)	197,959
Trade payable - related parties	-	-	-	3,320	(3,320)	-
Current portion of :						
long-term loans from financial institutions	112,344	(13,045)	99,299	112,344	(12,264)	100,080
liabilities under financial lease contracts	4,478	13,045	17,523	4,478	16,744	21,222
Other current liabilities	-	11,110	11,110	-	11,084	11,084
Long-term loans from financial institutions	109,080	(14,601)	94,479	109,080	(14,601)	94,479
Liabilities under financial lease contracts	7,546	32,796	40,342	7,547	28,315	35,862
Retained earnings unappropriated	229,284	(417)	228,867	220,211	(417)	219,794



(Unit : Thousand Baht)

	Consolidated financial statements			Separate financial statements		
	Before restated	Restated	After restated	Before restated	Restated	After restated
<b>Statements of financial position as at December 31, 2016</b>						
Trade and other receivables	465,665	(11,837)	453,828	435,291	21,069	456,360
Trade receivable - related parties	-	-	-	28,157	(28,157)	-
Other current assets	-	6,104	6,104	-	1,354	1,354
Property, plant and equipment	1,117,535	13,072	1,130,607	1,111,486	13,072	1,124,558
Withholding tax	-	6,051	6,051	-	5,733	5,733
Other non-current assets	666	(319)	347	347	-	347
Trade and other payables	308,733	(8,287)	300,446	310,077	(5,454)	304,623
Trade payable - related parties	-	-	-	2,777	(2,777)	-
Current portion of :						
long-term loans from financial institutions	111,089	(9,610)	101,479	111,089	(9,610)	101,479
liabilities under financial lease contracts	3,788	14,027	17,815	3,788	14,027	17,815
Other current liabilities	-	8,286	8,286	-	8,230	8,230
Long-term loans from financial institutions	101,930	(4,990)	96,940	101,930	(4,990)	96,940
Liabilities under financial lease contracts	3,573	14,273	17,846	3,573	14,273	17,846
Retained earnings unappropriated	93,583	(628)	92,955	80,981	(628)	80,353
<b>Statement of comprehensive income for the year ended December 31, 2016</b>						
Revenue from services and maintenance	258,616	(46,339)	212,277	256,995	44,718	212,277
Revenue from service of installing solar electric generating system	-	46,362	46,362	-	44,718	44,718
Other incomes	33,296	-	33,296	28,763	(10,067)	38,830
Reverse doubtful debt	-	-	-	1,425	(1,425)	-
Cost of goods sold	(1,182,947)	(50,890)	(1,233,837)	(1,151,620)	(49,728)	(1,201,348)
Cost of services and maintenance	(181,772)	46,119	(135,653)	(183,154)	47,501	(135,653)
Cost of service of installing solar electric generating system	-	(46,119)	(46,119)	-	(47,501)	(47,501)
Administrative expenses	(228,570)	46,032	(182,538)	(216,777)	36,251	(180,526)
Directors compensation	(5,520)	5,520	-	(5,520)	5,520	-
Financial cost	(31,188)	(896)	(32,084)	(31,186)	(896)	(32,082)
Loss for the year	(62,183)	(211)	(62,394)	(65,712)	(211)	(65,923)
Total comprehensive loss for the year	(68,552)	(211)	(68,763)	(72,081)	(211)	(72,292)
Shareholders of the Parent Company						
<b>Loss for the year</b>	(62,183)	(211)	(62,394)	(65,712)	(211)	(65,923)
<b>Total comprehensive loss for the year</b>	(68,552)	(211)	(68,763)	(72,081)	(211)	(72,292)
<b>Basic loss per share</b>	(0.046)	(0.005)	(0.051)	(0.049)	(0.005)	(0.054)



#### 4. BASIS OF THE CONSOLIDATED FINANCIAL STATEMENTS PREPARATION

- 4.1 The consolidated financial statements consist of the financial statements of the Company and subsidiaries (together called “Group”).
- 4.2 A subsidiary companies are enterprise under the control of the Group. This control occurs when the Group have a controlling power directly or indirectly in giving direction of financial policy and operation of that company in order to derive benefits from that subsidiary companies. Also the financial statements of the subsidiary companies will be combined into the consolidated financial statements of the Group commencing from the date of control until the cessation date of such control.
- 4.3 The consolidated financial statements are prepared by using the same accounting policies for similar accounting items or events.
- 4.4 The accounting period of the subsidiary companies ends on the same date as that of EKARAT ENGINEERING PUBLIC COMPANY LIMITED.
- 4.5 The consolidated financial statements confines the accounts of the Company and its subsidiary companies after eliminating inter-company transaction items. The balances between the Company and subsidiary companies, significant intra-group transactions, investments in subsidiary companies and share capital of subsidiary companies have already been eliminated from the consolidated financial statements. The Company holds directly shares at the percentage of :

Company name	Nature of business	Incorporated in	Percentage of shareholding	
			2017	2016
Ekarat Solar Co., Ltd.	Distributor of solar cell	Thailand	99.99%	99.99%
Ekarat Energy Co., Ltd.	Operate on solar electric power	Thailand	99.99%	99.99%

#### 5. ACCOUNTING POLICIES

Significant accounting policies used in the preparation of the financial statements can be summarized as follows : -

- 5.1 Cash and cash equivalents items include cash, bank deposits in the forms of savings and current accounts, and fixed accounts not exceeding three months and not subject to withdrawal restrictions.





5.2 Trade and other receivable are stated at their invoice value less allowance for doubtful accounts. The allowance for doubtful accounts is assessed primarily on analysis of payment histories and future expectations of customer payments. Bad debts are written off when incurred.

5.3 Inventories are recorded at cost adjusted by allowance for inventories that are slow-moving or obsolete (if any) or net realizable value, whichever is the lower. Cost is computed as follows :

- Raw materials are value at cost by using the First-in, First-out method.
- Finished goods and work in process are valued at cost by using the specific identification method.

Net realizable value is the estimated selling price in the ordinary course of business less the expenses necessary to make the sale.

#### 5.4 Investments

5.4.1 Short-term investments as securities for trading in marketable equity instruments are show at fair value. The difference between carrying amount and fair value are shown as unrealized profit and loss in the statement of income for the year.

5.4.2 In the separate financial statements, the investments in subsidiary companies are recorded by the cost method less accumulated allowance for impairment and recorded the recognition of the change of the investments value in the statement of comprehensive income when the investments has been disposed or impaired.

5.4.3 General investments are non-marketable equity instruments, shown at cost net off by allowance for accumulated impairment (if any) and change in value of general investments is recognized in the statements of income when they are sold or impaired.

5.5 Investment properties have been recorded the initial value at cost. Afterward, the Group have been recorded the investment properties as lands at cost less allowance for accumulated impairment (if any).

The Group are recognized the difference between the net amount received from disposal and the carrying amount of asset in profit or loss of the period that investment properties have been taken off from the account.

5.6 Assets for rent are inventories for rent or lend to customer have been recorded the initial value at cost. Afterward, the Group recorded assets for rent at cost less accumulated depreciation and allowance for accumulated impairment (if any). Depreciations are calculated by the straight-line method over the useful life for 5 years.



5.7 Property, plant and equipments recorded the initial value at cost. Afterward, the Group have been recorded the property, plant and equipment at cost less accumulated depreciation and allowance for accumulated impairment (if any) and depreciation is calculated by the straight-line method over the following estimated useful lives :-

• Office buildings	40 years
• Buildings and construction	20-25 years
• Buildings improvement	10-15 years
• Machinery, tools and equipment	5-18 years
• Furniture and office equipment	3-5 years
• Vehicles and other fixed assets	5 years

The Group did not carry depreciation for land, land improvements and assets under construction. and in case of impairment of assets, the Group will calculate the depreciation of the assets by using the carrying amount after deducting allowance for loss on impairment (if any) over the remaining useful life of the asset.

Property, plant and equipment shall be eliminated from accounts on disposal or no future economic benefits are expected from its usage or disposal. Profit or losses arising on disposal is recognized on the statement of comprehensive income when the said asset is eliminated from accounts.

5.8 Intangible assets are shown at cost less by accumulated, amortized expense and allowance for impairment (if any) of that asset. The Group makes amortization of intangible asset with certain useful life systematically throughout the useful life of such asset and will review the period and method for amortization of intangible assets with certainty in useful life at least at the end of every year. Amortized expense will be recognized in the statement of comprehensive income based on period expected the economic benefits of the assets.

5.9 Impairment of assets, the Group assesses at each statement of financial position date whether there is an indication that an asset may be impaired. If any such indication exists, the Group make an estimate of the asset's recoverable amount. When the carrying amount of the asset exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount. Impairment losses are recognized in statements of comprehensive income.



The recoverable amount of assets is the greater of fair value less costs to sell the asset and value in use.

An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

5.10 Trade and other payables are stated at cost.

5.11 Interest bearing liabilities are shown at cost and state the expense related to the incurrence of debt as the expense for the year.

5.12 Employee benefits

#### Short-term employee benefits

The Group recognizes salaries, wages, bonuses, contributions to social security fund and provident fund as expense when incurred.

#### Post-employment benefits

The Group has obligations in respect of the severance payments it must make to employees upon retirement under labor law. The defined benefit plan is defined as the post-employment benefit plan.

The obligation under the defined benefit plans is determined by a professionally qualified independent actuary based on actuarial techniques, using the projected unit credit method on a regular basis. The projected unit credit method considers each period of service as giving rise to an additional unit of benefit entitlement and measures each unit separately to build up the final obligation. Past service costs are recognized on a straight-line basis over the average period until the amended benefits become vested. Gains or losses on the curtailment or settlement of defined benefit obligations are recognized when the curtailment or settlement occurs.

Actuarial gains and losses arising from post-employment benefits are recognized immediately in other comprehensive income. The defined benefit obligations are measured at the present value of estimated future cash flows using a discount rate that is similar to the interest rate on government bond.



- 5.13 Estimation of liabilities: The Group will record liability estimates whenever there is certainty that liability or obligation will occur at present legally or by estimation from the result connected with the past event. Such obligation is expected to cause damage to loss of useful or economic resources in order to make payment toward obligation and the amount to be paid is respectfully estimated. If payment made toward liability estimated is recovered fully or partly with certainty, the Group will recorded the recovered payment as asset separately but the amount so recorded must be more than the amount of related liability estimate and the related expense with the liability estimate will be shown in the statement of comprehensive income in the net amount after recovered expense already recognized.
- 5.14 The recording of long-term lease contracts of the Group (finance lease and hire purchase contract) is both an asset and a liability made in the statement of financial position at the same amount equivalent to fair value of leased asset as at the commencing date of the agreement or the present value of the minimum amount payable under the agreement whichever is the lower. The discount rate to be used in calculating such present value is the interest rate specified in the lease agreement. The interest rate that paid by the Group at the date of commencement of the contract by reference with the interest rate of loans that have terms and the guarantee is similar to the lease contract. The directly related initial cost is included in the cost of the asset and the paid lease fee will be appropriated partly as financial expense and other to reduce the principle. The financial expense will be apportioned to various periods throughout the term of agreement so that the interest rate compared to the remaining amount of debt at each period is constant. Depreciation policy for lease assets conforms to depreciable assets owned by the Group.

### Sale and lease back

In case of sale and lease back result in financial leasing contract, the return from selling asset at the value higher than the book value will be recognized as deferred income in the statement of financial position and successively amortized into the statement of comprehensive income in the duration of the leasing contract.



In case of sale and lease back result in operating lease, the Group will recognize gains or losses in the statement of comprehensive income immediately if sale price is equivalent to the fair value. If the sale price is lower than the fair value, the Group will recognize losses in the statement of comprehensive income immediately unless the Group is covered loss by rent payment in the future in lower than market price. In this case, the Group will record the loss from sale as differed item in the statement of financial position and successively amortize into the statement of comprehensive income according to the ratio of the rent paying each time in the period that the Group expect to use the asset. If the sale price is higher than the fair value, the Group will recognize the gain as deferred income in the statement of financial position and successively amortize into the statement of comprehensive income according to the period expected to use the asset.

5.15 Incomes recognition, revenue recognized excludes value added taxes and is arrived at after deduction of trade discounts.

5.15.1 Revenue from sale of goods is recognized in the statements of comprehensive income when the significant risks and rewards of ownership have been transferred to the buyer. No revenue is recognized if there is continuing management involvement with the goods or there are significant uncertainties regarding recovery of the economic benefit due from the sale of goods or render of services or the amount of the revenue and cost incurred could not be reasonably measured or the probable return of goods.

5.15.2 Revenue from service and maintenance recognized upon service completion and in accordance with the service contract.

5.15.3 Revenue from installation of solar electric generating system are recognized by the percentage of completion method. The stage of completion is measured by referencing to the completion of a physical proportion of the contract work performed as assessed by the project engineers.

The recognised revenues which have not yet been due as per contracts have been shown under the caption of “Unbilled receivables” in the statements of financial position.

5.15.4 The Group recognizes revenue from sales of electricity current. on delivery of goods or on customer acceptance. Sale are recognized based on units of sale delivered at the applicable tariff rates.



5.15.5 Subsidy from government the Group has received the subsidy from government as increment from purchasing price of electricity energy in accordance with the supporting project for the minor electricity generator who used cycle energy in the form of solar energy at the price of Baht 8 per kilowatt per hour in compliance with the announcement of the Provincial Power Authority and the resolution of the Board of Energy Policy dated March 9, 2009. The subsidy period is 10 years from the electricity trading date. The Company starts to trade electricity since April 2010. Such subsidy was recognized as income from disposal of electricity current and recognized income when the electricity current is distributed to the Provincial Power Authority.

5.15.6 Rental income is recognize based on the term of the lease.

5.15.7 Interest income is recognised on an accrual basis based on the effective interest rate.

5.15.8 Other incomes are recognized by accrual basis.

#### 5.16 Expenses recognition

5.16.1 The Group recognizes costs from installation of solar electric generating system by the percentage of completion method. The stage of completion is measured by referencing to the completion of a physical proportion of the contract work performed as assessed by the project engineers. The estimated total cost is determined by the Group's project engineers or its responsible person, which is subject to change. The related actual costs are taken up as incurred on an accrual basis. Expected loss on each project is provided and charged as expense in the period when the estimated total costs of the project exceed its total contracted income.

The actual cost of services incurred but not yet recognised as cost of services in profit or loss has been regarded as "Construction in progress" under current assets in the statement of financial position, while contracts of which calculated costs of construction exceed incurred costs of construction are shown as "Unbilled cost" under current liabilities in the statement of financial position.

Construction in progress include the cost of raw materials, direct labour and other expenses incurred for each project. Such construction in progress and project management in progress are valued at the lower of cost or net realisable value.



- 5.16.2 Payments made under operating leases are recognized in the statement of comprehensive income on a straight line method over the term of the lease. Contingent rentals are charged to the statement of comprehensive income for the accounting period in which they are incurred.
- 5.16.3 Financial cost consists of interest expense or other expenses in similar nature charged and includes interest default to the statement of comprehensive income in the year such expenses are incurred except in case that they are partly recorded as cost of assets due to the effect of long period of time used to acquire construction or produce such assets prior to direct utilization or for sale. Interest which is part of installment amount under finance lease contract is charged to the statement of comprehensive income by effective rate method.
- 5.16.4 Other expense is recognized on accrual basis.
- 5.17 Foreign currency transactions are translated into Baht at the rates ruling on the occurrence dates. Monetary assets and liabilities denominated in foreign currency outstanding at ended period are translated into Thai Baht at the foreign exchange rate ruling at that date. Exchange gains or losses from translations are included as incomes or expenses in the income statement for the year.
- Non-monetary assets and liabilities, which are derived from accounting items denominated in foreign currencies, are recorded by initial cost basis converted into Baht using exchange rates at the occur rent date.
- 5.18 Income tax comprises current tax and deferred tax. Income tax is recognized in profit or loss except to the extent that related to items recognized in other comprehensive income or recognized directly in equity which will recognize in other comprehensive income or recognized directly in equity as same as that items.

#### Current tax

The Group recognize the current tax at the amount expected to be paid to the taxation authorities, are calculated based on taxable profits in accordance with Revenue Code.

#### Deferred tax

The Group recognize the deferred tax on temporary differences between the tax bases of assets and liabilities and their carrying amounts at the end of each reporting period, using the tax rates enacted at the end of the reporting period.





At each reporting date, the Group reviews and reduce the carrying amount of deferred tax assets to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilized.

5.19 The related parties and related companies with the Company and its subsidiaries meant individuals or enterprises which have the controlling power over the Company and its subsidiaries or are controlled by the Company and its subsidiaries either directly or indirectly, or under the same control with the Company and its subsidiaries. Furthermore, the related parties or related companies also meant the associated companies and the parties whose holding the shares with voting rights, either directly or indirectly, and have significant influence to the Company, important managers, directors or the employees of the Company and its subsidiaries who have the power to plan and control the operations of the Company and its subsidiaries including the family members close to the said persons which could persuade or power to persuade to act in compliance with the said persons and business that the said persons have control power or significant influence, either directly or indirectly.

## 5.20 Fair value measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between buyer and seller (market participants) at the measurement date. The Group apply a quoted market price in an active market to measure their assets and liabilities that are required to be measured at fair value by relevant financial reporting standards. Except in case of no active market of an identical asset or liability or when a quoted market price is not available, the Group measure fair value using valuation technique that are appropriate in the circumstances and maximize the use of relevant observable inputs related to assets and liabilities that are required to be measured at fair value.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy into three levels based on categories of input to be used in fair value measurement as follows :

- Level 1 Use of quoted market prices in an observable active market for such assets or liabilities.
- Level 2 Use of other observable inputs for such assets or liabilities, whether directly or indirectly.
- Level 3 Use of unobservable inputs such as estimates of future cash flows.



At the end of each reporting period, the Group determine whether transfers have occurred between levels within the fair value hierarchy for assets and liabilities held at the end of the reporting period that are measured at fair value on a recurring basis.

- 5.21 Basic earnings (loss) per share is calculated by dividing profit (loss) for the year of the Parent Company (excludes other comprehensive income) by the weighted average number of already issued and fully paid shares during the accounting year.
- 5.22 Section 116 of the Public Companies Act B.E. 2535 requires that a company shall allocate not less than 5% of its annual net profit, less any accumulated losses brought forward (if any), to a reserve account, until this account reaches an amount not less than 10% of the registered authorized capital.
- 5.23 The sectoral business operation is disclosed under the separate business sectors of the Group. The business segment is the business sector that source products or provide services which have different risks and return from the risks and return of the products or services provide by other business sectors.
- 5.24 Financial assets and liabilities carried on the statement of financial position include Bank deposit, trade receivables and payables , other receivables and payables, loan receivables and payables, receivable and payable under financial lease contracts. The important accounting policies and measurement of these items are disclosed in the respective accounting policies for related items.

## 6. BUSINESS TRANSACTIONS WITH RELATED PARTIES AND PERSON

The Group incurred business transactions with related entities which have the same group of shareholders. The significant remaining balances and inter-company transactions between the Group with related entities and persons are as follows : -



## 6.1 Inter-assets and liabilities are as follows:-

Type of items	(Unit : Baht)			
	Consolidated financial statements		Separate financial statements	
	As at December 31,		As at December 31,	
	2017	2016	2017	2016
• Trade receivable				
Ekarat Solar Co., Ltd.	-	-	6,272,621	28,021,450
• Other receivable				
Ekarat Solar Co., Ltd.	-	-	14,014	97,708
Ekarat Energy Co., Ltd.	-	-	8,000	38,000
Total	-	-	22,014	135,708
• Prepaid guarantee fee				
KV Asset Company Limited	-	570,181	-	570,181
Khun Theeraya Kanokpruk	-	570,181	-	570,181
Total	-	1,140,362	-	1,140,362
• Trade payables				
Ekarat Solar Co., Ltd.	-	-	903,329	2,776,182
• Other Trade payables				
Ekarat Solar Co., Ltd.	-	-	64,000	-
• Service receivable deposit				
Ekarat Solar Co., Ltd.	-	-	348,000	-
• Accrued construction costs				
Ekarat Solar Co., Ltd.	-	-	-	1,404,024
Short-term loan due from and interest receivable				
Ekarat Solar Co., Ltd.				
• Short-term loan due from				
Beginning balance	-	-	189,378,250	189,378,250
Repaid in the year	-	-	(178,881,264)	-
Ending balance	-	-	10,496,986	189,378,250
Less Allowance for doubtful debts	-	-	(10,496,986)	(189,378,250)
Net	-	-	-	-
• Interest receivable				
Interest receivable	-	-	152,494	38,207,174
Less Allowance for doubtful debts	-	-	(152,494)	(38,207,174)
Net	-	-	-	-
Total short-term loan due from and interest receivable	-	-	-	-



For the year ended December 31, 2017 and 2016, there was movement in the allowance for interest receivable as follows : -

	(Unit : Baht)	
	Separate financial statements	
	2017	2016
As at January 1,	38,207,174	29,564,873
Plus Increase during in year	7,343,679	10,067,834
Less Repayment during in year	(45,398,359)	(1,425,533)
As at December 31,	152,494	38,207,174

On 21 September 2017, The Board of Directors of the Company resolved that to forgiveness the debt from restructuring, on December 2013 total amounted to Baht 218.00 million, consisting of principal of Baht 178.88 million and accrued interest receivable of Baht 39.12 million to Ekarat Solar Co., Ltd. (subsidiary company, 99.99% shares held by the Company). The management believes that the subsidiary company has no ability to repay the debt to the Company. There was no impact on the profit for the year periods ended December 31, 2017, because of the Company had recorded allowance for doubtful accounts of loans and accrued interest receivables in total amount already.

6.2 Inter-revenues and expenses are as follows : -

(Unit : Baht)				
Type of items	Consolidated financial statements		Separate financial statements	
	For the year ended December 31,			
	2017	2016	2017	2016
• Revenue from sales of goods				
Ekarat Solar Co., Ltd.	-	-	131,510	-
• Revenue from installation service				
Ekarat Solar Co., Ltd.	-	-	13,413,564	26,104,151
• Revenue from services				
Chula Engineering Company Limited	-	5,250,000	-	5,250,000
• Interest income				
Ekarat Solar Co., Ltd.	-	-	7,343,679	10,067,834
• Other income				
Ekarat Solar Co., Ltd.	-	-	14,014	140,750
• Purchase of goods				
Ekarat Solar Co., Ltd.	-	-	8,243,107	603,968



(Unit : Baht)				
Type of items	Consolidated financial statements		Separate financial statements	
	For the year ended December 31,			
	2017	2016	2017	2016
• Cost of service				
Chula Engineering Company Limited	-	4,495,856	-	4,495,856
• Doubtful debt				
Ekarat Solar Co., Ltd.	-	-	7,343,679	10,067,834
• Rental expenses				
Ekarat Energy Co., Ltd.	-	-	24,000	24,000
• Guarantee fee				
KV Asset Company Limited	1,517,780	3,523,033	1,517,780	3,523,033
Khun Theeraya Kanokpruk	1,517,780	3,523,033	1,517,780	3,523,033
Total	3,035,560	7,046,066	3,035,560	7,046,066
• Directors and key management compensation				
Short-term benefits	18,414,500	18,998,500	18,414,500	18,998,500
Post-employment benefits	220,973	472,184	220,973	472,184
Directors’ remuneration	6,429,000	7,020,000	6,429,000	7,020,000
Total	25,064,473	26,490,684	25,064,473	26,490,684

### Policy of setting prices

	Policy
Price of sale-purchase goods	Mutually agreed price based on market
Rental and services income	Mutually agreed price based on contract
Interest income	Based on the agreed price according to the interest rates of domestic commercial banks.
Guarantee fee	4% of credit facilities from financial institution



### 6.3 Relationship of related companies

Consisted of : -

Name of companies	Nationality	Nature of relationship	Related by
Ekarat Solar Co., Ltd.	Thai	Subsidiary	Direct shares holding of 99.99%
Ekarat Energy Co., Ltd.	Thai	Subsidiary	Direct shares holding of 99.99%
KV Asset Company Limited	Thai	Related company	Mutually director and shareholder
Chula Engineering Company Limited	Thai	Related company	Joint shares holding
Khun Theeraya Kanokpruk	Thai	Major shareholder	Direct shares holding more than 5%

### 7. SHORT-TERM INVESTMENTS

Consisted of : -

	(Unit : Baht)	
	Consolidated and Separate financial statements	
	As at December 31,	
	2017	2016
Investment in equity instrument on marketable securities	1,128,315	1,128,315
Loss from change in fair value	(1,059,230)	(1,059,230)
Net	69,085	69,085

As at December 31, 2017 and 2016, the fair value of equity instrument on marketable securities, arranged in Tier 1, calculation by the last offer price.



## 8. TRADE AND OTHER RECEIVABLES

Consisted of : -

(Unit : Baht)

	Consolidated financial statements		Separate financial statements	
	As at December 31,		As at December 31,	
	2017	2016	2017	2016
Trade receivable				
• Related entities	-	-	6,272,621	28,021,450
• Other entities	234,137,151	452,701,599	223,935,077	417,039,190
Notes receivable	16,377,331	19,369,857	16,377,331	19,369,857
รวม	250,514,482	472,071,456	246,585,029	464,430,497
Less Allowance for doubtful debts	(21,601,967)	(31,644,205)	(15,654,880)	(25,872,784)
Total trade receivables	228,912,515	440,427,251	230,930,149	438,557,713
Other receivable				
• Other receivable				
Related entities	-	-	22,014	135,708
Other entities	4,991,615	4,671,231	4,311,929	4,654,799
• Deposit and advance payment for goods	11,779,614	4,197,026	11,779,614	4,197,026
• Prepaid expenses	6,091,795	7,098,739	6,091,795	7,098,738
• Others	2,568,879	5,902,733	2,398,245	5,734,841
Total	25,431,903	21,869,729	24,603,597	21,821,112
Less Allowance for doubtful debts	(4,018,880)	(8,468,900)	(4,018,880)	(4,018,880)
Total other receivable	21,413,023	13,400,829	20,584,717	17,802,232
Total trade and other receivable	250,325,538	453,828,080	251,514,866	456,359,945



Aging analyses for trade receivable were as follows : -

(Unit : Baht)

	Consolidated financial statements		Separate financial statements	
	As at December 31,		As at December 31,	
	2017	2016	2017	2016
<b>Trade receivable-related entities</b>				
• Not yet due	-	-	6,245,101	8,185,503
• Over due				
Less than 3 months	-	-	-	19,835,947
From 3 to 6 months	-	-	27,520	-
From 6 to 12 months	-	-	-	-
More than 12 months	-	-	-	-
Total	-	-	6,272,621	28,021,450
<b>Trade receivables-other entities</b>				
• Not yet due	123,993,471	277,992,500	123,744,696	270,866,689
• Over due				
Less than 3 months	76,137,075	115,848,882	72,130,863	93,083,705
From 3 to 6 months	6,820,104	5,113,181	6,820,104	5,113,181
From 6 to 12 months	3,684,998	20,453,423	3,684,998	20,453,423
More than 12 months	23,501,503	33,293,613	17,554,416	27,522,192
Total	234,137,151	452,701,599	223,935,077	417,039,190
<b>Notes receivable</b>				
• Not yet due	16,377,331	19,369,857	16,377,331	19,369,857
Total	250,514,482	472,071,456	246,585,029	464,430,497
Less Allowance for doubtful debts	(21,601,967)	(31,644,205)	(15,654,880)	(25,872,784)
Total trade receivables	228,912,515	440,427,251	230,930,149	438,557,713

The normal credit terms for the customer of the Group are approximately 30 days to 90 days.





For the year ended December 31, 2017 and 2016, there was movement in the allowance for doubtful debts of trade receivable as follows : -

(Unit : Baht)

	Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016
As at January 1,	31,644,205	28,287,520	25,872,784	20,067,706
Plus Increase during the year	797,714	11,076,967	622,048	11,076,967
Less Bad debt recovery	(10,373,472)	(2,749,712)	(10,373,472)	(2,749,712)
Bad debt	(466,480)	(4,970,570)	(466,480)	(2,522,177)
As at December 31,	21,601,967	31,644,205	15,654,880	25,872,784

As at December 31, 2016, the Company taken trade receivable amount of Baht 51.97 million to discount to bank in the notes No.19.

## 9. INVENTORIES

Consisted of : -

(Unit : Baht)

	Consolidated financial statements		Separate financial statements	
	As at December 31,		As at December 31,	
	2017	2016	2017	2016
Raw materials	264,802,587	256,989,899	258,041,481	248,002,576
Raw materials-in transit	39,876,601	5,932,183	39,876,600	5,932,183
Work-in-process	90,573,283	73,749,389	90,573,283	73,749,389
Finished goods	183,316,589	113,665,175	143,467,744	71,522,180
Supplies	8,923,477	18,037,480	7,829,547	16,821,146
Total	587,492,537	468,374,126	539,788,655	416,027,474
Less Allowance for decline in value of goods	(71,200,278)	(65,245,658)	(25,650,043)	(15,058,691)
Total	516,292,259	403,128,468	514,138,612	400,968,783



For the year ended December 31, 2017 and 2016, the Group have movement of allowance for decline in value of goods (cost of goods exceeding net realizable value and allowance for deteriorate and obsolete goods) as follow : -

(Unit : Baht)				
	Consolidated financial statement		Separate financial statements	
	2017	2016	2017	2016
As at January 1,	65,245,658	107,260,989	15,058,691	17,941,041
Plus Loss from cost of goods exceeding net realizable	7,519,625	(35,159,824)	10,749,378	(2,882,350)
Less Write-off the deteriorate goods	(1,565,005)	(6,855,507)	(158,026)	-
As at December 31,	71,200,278	65,245,658	25,650,043	15,058,691

## 10. INVESTMENTS IN SUBSIDIARY COMPANIES

As at December 31, 2017 and 2016, investments in subsidiaries consisted of : -

	Separate financial statements									
	Paid-up share capital		Percentage of Shareholding		Cost method		Allowance of impairment		Net value	
	(Million Baht)		(%)		(Baht)		(Baht)		(Baht)	
	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016
Ekarat Solar Co., Ltd.	1,000	1,000	99.99	99.99	999,999,930	999,999,930	(999,999,930)	(999,999,930)	-	-
Ekarat Energy Co., Ltd.	2.5	2.5	99.99	99.99	2,499,925	2,499,925	-	-	2,499,925	2,499,925
Total					1,002,499,855	1,002,499,855	(999,999,930)	(999,999,930)	2,499,925	2,499,925

## 11. GENERAL INVESTMENTS

As at December 31, 2017 and 2016, consisting general of investments consisted of : -

	Consolidated and Separate financial statements									
	Paid-up share capital		Percentage of Shareholding		Cost method		Allowance of impairment		Net value	
	(Million Baht)		(%)		(Baht)		(Baht)		(Baht)	
	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016
G.E.C. Engineering Company Limited	230	230	1.19	1.19	2,726,400	2,726,400	(2,726,400)	(2,726,400)	-	-
Saha Karn Engineering Company Limited	403	403	0.04	0.04	158,849	158,849	(158,849)	(158,849)	-	-
Total					2,885,249	2,885,249	(2,885,249)	(2,885,249)	-	-



## 12. INVESTMENT PROPERTIES

Consisted of : -

(Unit : Baht)		
Consolidated and Separate financial statements		
As at December 31,		
	2017	2016
Cost	12,973,886	12,973,886
Less Allowance for impairment	(11,342,131)	(11,342,131)
Net	1,631,755	1,631,755

As at December 31, 2017 and 2016, land at cost of Baht 12.42 million for the both year had areas 136 rais 1 ngan and 67 square registered ownership with a related company. (Total cost is Baht 17.92 million).

The level 2 fair value of investment property have calculated by “Market Approach” by comparable properties that are similar and traded that similar or different from the property appraised by sufficient number. The valuation must consider in various factors that affect the value of the property as assessed in comparison with market information to compare such as location, city plan, land plot, size of living space, building quality etc. and then analyse the property valuation by using various techniques such as Sale Adjustment - Grid Method, Weighted Quality Score (WQS) and so on.



### 13. ASSETS FOR RENT

For the year ended December 31, 2017 and 2016, the movement of assets for rent are as follows : -

(Unit : Baht)

	Consolidated and Separate financial statements			
	Repurchased transformer	Transformer reserved at center	Transformer for borrow-rent	Total
<b>Cost :</b>				
As at January 1, 2016	27,880,905	2,304,396	9,918,060	40,103,361
Acquisition	6,939,951	30,000	14,897	6,984,848
Transfer in	16,684,493	1,209,743	15,736,088	33,630,324
Transfer out	(16,446,959)	(1,176,560)	(17,510,180)	(35,133,699)
Disposal	(7,286,174)	(94,200)	(863,569)	(8,243,943)
As at December 31, 2016	27,772,216	2,273,379	7,295,296	37,340,891
Acquisition	3,103,995	-	38,132	3,142,127
Transfer in	23,547,570	867,062	16,193,630	40,608,262
Transfer out	(20,437,037)	(927,473)	(12,502,140)	(33,866,650)
Disposal	(9,712,019)	-	(608,031)	(10,320,050)
As at December 31, 2017	24,274,725	2,212,968	10,416,887	36,904,580
<b>Accumulated depreciation :</b>				
As at January 1, 2016	(24,114,177)	(2,216,653)	(9,051,180)	(35,382,010)
Depreciation for the year	(1,509,092)	(26,755)	(421,850)	(1,957,697)
Transfer in	(13,454,757)	(1,193,746)	(13,055,100)	(27,703,603)
Transfer out	11,902,906	1,109,802	15,233,578	28,246,286
Disposal	1,888,443	94,199	642,401	2,625,043
As at December 31, 2016	(25,286,677)	(2,233,153)	(6,652,151)	(34,171,981)
Depreciation for the year	(759,605)	(10,442)	(261,434)	(1,031,481)
Transfer in	(15,438,039)	(834,073)	(15,194,782)	(31,466,894)
Transfer out	18,365,463	887,266	11,968,519	31,221,248
Disposal	5,832,502	-	176,672	6,009,174
As at December 31, 2017	(17,286,356)	(2,190,402)	(9,963,176)	(29,439,934)
<b>Net book value :</b>				
As at December 31, 2016	2,485,539	40,226	643,145	3,168,910
As at December 31, 2017	6,988,369	22,566	453,711	7,464,646

#### Depreciation in the statements of comprehensive income for the years

End of December 31, 2016	1,957,697
End of December 31, 2017	1,031,481



## 14. PROPERTY, PLANT AND EQUIPMENT

For the year ended December 31, 2017 and 2016, the movement of property, plant and equipment are as follows : -

(Unit : Baht)

	Consolidated financial statements						
	Land and land improvement	Building and construction	Machinery, tools and equipment	Furniture and office equipment	Vehicles	Work under construction	Total
<b>Cost :</b>							
As at January 1, 2016	77,204,296	765,260,167	1,468,032,066	68,238,591	68,186,880	2,776,942	2,449,698,942
Acquisition	-	774,692	8,176,064	3,204,238	3,100	60,229,587	72,387,681
Transfer in	-	130,852,829	20,946,452	367,878	-	91,058,762	243,225,921
Transfer out	-	-	-	-	-	(152,704,186)	(152,704,186)
Disposal	-	-	(333,000)	(21,218)	(1,094,262)	-	(1,448,480)
As at December 31, 2016	77,204,296	896,887,688	1,496,821,582	71,789,489	67,095,718	1,361,105	2,611,159,878
Acquisition	26,830,000	5,205,300	12,164,276	3,660,444	3,426,038	26,981,358	78,267,416
Transfer in	-	18,168,500	1,461,399	-	-	8,777,805	28,407,704
Transfer out	-	-	-	-	-	(19,629,900)	(19,629,900)
Disposal	-	-	-	(545,564)	-	(29,390)	(574,954)
As at December 31, 2017	104,034,296	920,261,488	1,510,447,257	74,904,369	70,521,756	17,460,978	2,697,630,144
<b>Accumulated depreciation :</b>							
As at January 1, 2016	-	(357,132,231)	(677,108,334)	(54,555,171)	(34,431,664)	-	(1,123,227,400)
Depreciation for the year	-	(23,003,638)	(60,680,948)	(4,673,866)	(10,665,525)	-	(99,023,977)
Disposal	-	-	332,999	19,854	1,094,259	-	1,447,112
As at December 31, 2016	-	(380,135,869)	(737,456,283)	(59,209,183)	(44,002,930)	-	(1,220,804,265)
Depreciation for the year	-	(27,022,393)	(62,829,800)	(4,281,928)	(9,725,570)	-	(103,859,691)
Disposal	-	-	-	227,025	-	-	227,025
As at December 31, 2017	-	(407,158,262)	(800,286,083)	(63,264,086)	(53,728,500)	-	(1,324,436,931)



(Unit : Baht)

	Consolidated financial statements						
	Land and land improvement	Building and construction	Machinery, tools and equipment	Furniture and office equipment	Vehicles	Work under construction	Total
Accumulated allowance for impairment :							
As at January 1, 2016	(2,117,685)	(97,166,827)	(148,618,444)	(34,922)	-	-	(247,937,878)
(Increase) decrease	-	(16,631,162)	4,830,542	(10,019)	-	-	(11,810,639)
As at December 31, 2016	(2,117,685)	(113,797,989)	(143,787,902)	(44,941)	-	-	(259,748,517)
(Increase) decrease	-	-	-	-	-	-	-
As at December 31, 2017	(2,117,685)	(113,797,989)	(143,787,902)	(44,941)	-	-	(259,748,517)
Net book value :							
As at December 31, 2016	75,086,611	402,953,830	615,577,397	12,535,365	23,092,788	1,361,105	1,130,607,096
As at December 31, 2017	101,916,611	399,305,237	566,373,272	11,595,342	16,793,256	17,460,978	1,113,444,696

**Depreciation in the statements of comprehensive income for the years**

As at December 31, 2016	99,023,977
As at December 31, 2017	103,859,691



(Unit : Baht)

	Separate financial statements						
	Land and land improvement	Building and construction	Machinery, tools and equipment	Furniture and office equipment	Vehicles	Work under construction	Total
<b>Cost :</b>							
As at January 1, 2016	85,245,491	598,008,161	1,008,139,260	59,228,211	68,522,880	2,407,951	1,821,551,954
Acquisition	-	275,776	8,176,064	3,204,238	3,100	60,229,587	71,888,765
Transfer in	-	130,852,828	20,946,453	367,878	-	91,058,763	243,225,922
Transfer out	-	-	(333,000)	(21,219)	(1,094,262)	-	(1,448,481)
Disposal	-	-	-	-	-	(152,167,159)	(152,167,159)
As at December 31, 2016	85,245,491	729,136,765	1,036,928,777	62,779,108	67,431,718	1,529,142	1,983,051,001
Acquisition	26,830,000	5,205,300	12,164,277	3,660,468	3,426,038	26,809,811	78,095,894
Transfer in	-	18,168,499	1,461,399	-	-	8,949,351	28,579,249
Transfer out	-	-	-	-	-	(19,629,900)	(19,629,900)
Disposal	-	-	-	(545,564)	-	(29,390)	(574,954)
As at December 31, 2017	112,075,491	752,510,564	1,050,554,453	65,894,012	70,857,756	17,629,014	2,069,521,290
<b>Accumulated depreciation :</b>							
As at January 1, 2016	-	(260,900,148)	(379,938,625)	(44,433,348)	(34,665,211)	-	(719,937,332)
Depreciation for the year	-	(23,719,938)	(58,499,518)	(5,034,393)	(10,732,726)	-	(97,986,575)
Disposal	-	-	332,999	19,854	1,094,259	-	1,447,112
As at December 31, 2016	-	(284,620,086)	(438,105,144)	(49,447,887)	(44,303,678)	-	(816,476,795)
Depreciation for the year	-	(27,723,919)	(60,647,812)	(4,642,170)	(9,792,770)	-	(102,806,671)
Transfer in	-	-	-	-	-	-	-
Transfer out	-	-	-	-	-	-	-
Disposal	-	-	-	227,025	-	-	227,025
As at December 31, 2017	-	(312,344,005)	(498,752,956)	(53,863,032)	(54,096,448)	-	(919,056,441)
<b>Accumulated allowance for impairment :</b>							
As at January 1, 2016	(2,117,685)	(18,926,950)	(9,132,438)	(28,300)	-	-	(30,205,373)
(Increase) decrease	-	(16,631,162)	4,830,543	(10,019)	-	-	(11,810,638)
As at December 31, 2017	(2,117,685)	(35,558,112)	(4,301,895)	(38,319)	-	-	(42,016,011)
(Increase) decrease	-	-	-	-	-	-	-
As at December 31, 2017	(2,117,685)	(35,558,112)	(4,301,895)	(38,319)	-	-	(42,016,011)



(Unit : Baht)

	Consolidated financial statements						
	Land and land improvement	Building and construction	Machinery, tools and equipment	Furniture and office equipment	Vehicles	Work under construction	Total
<b>Net book value :</b>							
As at December 31, 2016	83,127,806	408,958,567	594,521,738	13,392,902	23,128,040	1,529,142	1,124,558,195
As at December 31, 2017	109,957,806	404,608,447	547,499,602	11,992,661	16,761,308	17,629,014	1,108,448,838

#### Depreciation in the statements of comprehensive income for the years

Ended of December 31, 2016	97,986,575
Ended of December 31, 2017	102,806,671

As at December 31, 2017 and 2016, according to the consolidated financial statements, asset amount of Baht 162.72 million and Baht 146.58 million respectively, to be asset under the project Solar Farm. The Company has right to operate in the project electricity current selling from a government agency for the period of 25 years. Such project is located at various land owners.

As at December 31, 2017 and 2016, according to the consolidated financial statement, the assets of at cost amount of Baht 195.76 million and 478.91 million respectively, were fully depreciated but most of them are still in use.

As at December 31, 2017 and 2016, according to the consolidated financial statements, the Group have mortgaged land with construction in carrying amount Baht 267.46 million and Baht 270.80 million respectively, (including building on the land in the future) and certain machines in carrying amount Baht 390.77 million and Baht 430.28 million respectively, were pledged as collaterals against credit facilities and obligation made to commercial banks as mentioned in the notes 19 and notes 21.

As at December 31, 2017 and 2016, according to the consolidated financial statements, machines and vehicles in carrying amount at Baht 61.84 million and Baht 72.68 million respectively, are under the financial lease contracts according with as mentioned in the notes 22.





## 15. INTANGIBLE ASSETS

For the year end December 31, 2017 and 2016 all intangible assets which the movement are as follows : -

	(Unit : Baht)		
	Consolidated financial statements		
	Computer software	Electricity current selling royalty	Total
<b>Cost :</b>			
As at January 1, 2016	26,863,080	-	26,863,080
Acquisition	155,500	9,025,000	9,180,500
As at December 31, 2016	27,018,580	9,025,000	36,043,580
Acquisition	729,699	-	729,699
Disposal	-	-	-
As at December 31, 2017	27,748,279	9,025,000	36,773,279
<b>Accumulated depreciation :</b>			
As at January 1, 2016	(22,756,283)	-	(22,756,283)
Depreciation for the year	(809,810)	(2,959)	(812,769)
As at December 31, 2016	(23,566,093)	(2,959)	(23,569,052)
Depreciation for the year	(699,314)	(361,000)	(1,060,314)
As at December 31, 2017	(24,265,407)	(363,959)	(24,629,366)
<b>Accumulated allowance for impairment :</b>			
As at January 1, 2016	(2,427,094)	-	(2,427,094)
(Increase) decrease	-	-	-
As at December 31, 2016	(2,427,094)	-	(2,427,094)
(Increase) decrease	-	-	-
As at December 31, 2017	(2,427,094)	-	(2,427,094)
<b>Net book value :</b>			
As at December 31, 2016	1,025,393	9,022,041	10,047,434
As at December 31, 2017	1,055,778	8,661,041	9,716,819
<b>Depreciation in the statements of comprehensive income for the years</b>			
Ended of December 31, 2016			812,769
Ended of December 31, 2017			1,060,314



	(Unit : Baht)		
	Separate financial statements		
	Computer software	Electricity current selling royalty	Total
<b>Cost :</b>			
As at January 1, 2016	19,675,965	-	19,675,965
Acquisition	155,500	9,025,000	9,180,500
As at December 31, 2016	19,831,465	9,025,000	28,856,465
Acquisition	729,700	-	729,700
As at December 31, 2017	20,561,165	9,025,000	29,586,165
<b>Accumulated depreciation :</b>			
As at January 1, 2016	(17,996,263)	-	(17,996,263)
Depreciation for the year	(809,810)	(2,959)	(812,769)
As at December 31, 2016	(18,806,073)	(2,959)	(18,809,032)
Depreciation for the year	(699,314)	(361,000)	(1,060,314)
As at December 31, 2017	(19,505,387)	(363,959)	(19,869,346)
<b>Net book value :</b>			
As at December 31, 2016	1,025,392	9,022,041	10,047,433
As at December 31, 2017	1,055,778	8,661,041	9,716,819
<b>Depreciation in the statements of comprehensive income for the years</b>			
Ended of December 31, 2016			812,769
Ended of December 31, 2017			1,060,314

As at December 31, 2017 and 2016 intangible assets valued at Baht 8.66 million and Baht 9.02 million respectively, is the right of electricity sales to project owners. This is in accordance with the compensation payment to “contract under Ground-based solar farm” as discussed in notes 32.4.



## 16. RESTRICTED BANK DEPOSITS

As at December 31, 2017 and 2016 the restricted bank deposits are used to guarantee credit and obligation with commercial bank as mentioned in the note 19 and note 32.2.

## 17. PREPAID EXPENSES UNDER OPERATION LEASE

Consisted of : -

	(Unit : Baht)
	Consolidated and Separate financial statements
As at January 1, 2017	5,075,857
Transfer in	7,819
Amortization	(203,369)
As at December 31, 2017	4,880,307

On August 22, 2016, the Company entered into agreement as supporter in the project Solar Farm operating with a government agency which is entitled for electricity selling and as project owner. The Company operated the project on land of the project owner for a period of 25 years, commenced on January 1, 2017 and ended December 31, 2041 and has to pay usage expenses total amount of Baht 26.09 million for five periods of five years each, at the various usage fee as indicated in the agreement as mentioned in note 32.4.

The minimum amounts to be paid in the future for land lease under abovementioned operating lease are as follows :

	(Unit : Baht)	
	Consolidated and Separate financial statements	
	As at December 31,	
	2017	2016
Within 1 year	883,610	883,610
Over 1 - 5 years	4,486,020	4,452,035
Over 5 years	17,536,260	18,453,855
Total	22,905,890	23,789,500



## 18. DEFERRED TAX

Deferred tax assets and liabilities as at December 31, 2017 and 2016, are as follows : -

(Unit : Baht)

	Consolidated and Separate financial statements	
	As at December 31,	
	2017	2016
Deferred tax assets	28,680,832	35,037,975
Deferred tax liabilities	(2,049,100)	(2,684,545)
Net	26,631,732	32,353,430

Movement of deferred tax assets and liabilities incurred during the year ended December 31, 2017 and 2016, are as follows : -

(Unit : Baht)

	Consolidated and Separate financial statements			
	As at January 1, 2017	Recognized of comprehens income (No. 26)	Recognized of other comprehens income (No. 26)	As at December 31, 2017
<b>Deferred tax assets</b>				
Allowance for in value of inventories	3,011,738	2,118,271	-	5,130,009
Allowance for impairment of fixed assets	7,708,960	(618,327)	-	7,090,633
Employee benefit obligations	13,840,769	531,892	-	14,372,661
Tax losses	10,476,508	(8,388,979)	-	2,087,529
Total	35,037,975	(6,357,143)	-	28,680,832
<b>Deferred tax liabilities</b>				
Depreciation from life expectancy change	(2,505,087)	134,313	-	(2,370,774)
Assets and liabilities under financial lease contracts	(179,458)	501,132	-	321,674
Total	(2,684,545)	635,445	-	(2,049,100)
Net	32,353,430	(5,721,698)	-	26,631,732



(Unit : Baht)

	Consolidated and Separate financial statements			
	As at January 1, 2017	Recognized of comprehens income (No. 26)	Recognized of other comprehens income (No. 26)	As at December 31, 2017
<b>Deferred tax assets</b>				
Allowance for in value of inventories	3,588,208	(576,470)	-	3,011,738
Allowance for impairment of fixed assets	5,737,375	1,971,585	-	7,708,960
Employee benefit obligations	12,449,706	(201,149)	1,592,212	13,840,769
Tax losses	-	10,476,508	-	10,476,508
Total	21,775,289	11,670,474	1,592,212	35,037,975
<b>Deferred tax liabilities</b>				
Depreciation from life expectancy change	(2,639,400)	134,313	-	(2,505,087)
Assets and liabilities under financial lease contracts	(455,399)	275,941	-	(179,458)
Total	(3,094,799)	410,254	-	(2,684,545)
Net	18,680,490	12,080,728	1,592,212	32,353,430

## 19. SHORT-TERM LOANS FROM FINANCIAL INSTITUTIONS

Consisted of : -

(Unit : Baht)

	Consolidated and Separate financial statements			
	As at December 31,			
	2017	Interest rate	2016	Interest rate
Promissory notes	70,000,000	MLR-0.5%	40,000,000	MLR-0.5
Trust receipts payable	134,249,767	MLR-0.5%	136,976,359	MLR-0.5%
Factoring payable	5,691,972	MOR-0.75%	41,574,687	MOR-0.75%
Total	209,941,739		218,551,046	

As at December 31, 2017 and 2016, the Company has overdrafts line and short-term loans from a local bank for credit amount of Baht 800.00 million and Baht 700.00 million respectively, and guaranteed by transferring the right in receivable under factoring agreement in note 8, bank deposits in note 16 and land with its construction and machinery in note 14.



## 20. TRADE AND OTHER PAYABLES

Consisted of : -

(Unit : Baht)

	Consolidated financial statements		Separate financial statements	
	As at December 31,		As at December 31,	
	2017	2016	2017	2016
<b>Trade payables</b>				
Related entities	-	-	903,329	4,180,206
Other entities	255,725,870	273,291,200	255,725,870	271,887,176
Total trade payable	255,725,870	273,291,200	256,629,199	276,067,382
<b>Other payable</b>				
Related entities	-	-	64,000	-
Other entities	9,011,272	12,275,079	9,009,266	12,271,468
• Assets payable	4,222,672	13,770,152	4,222,672	13,770,152
• Others	1,466,193	1,109,986	1,085,568	2,514,010
Total other payable	14,700,137	27,155,217	14,381,506	28,555,630
Total trade and other payable	270,426,007	300,446,417	271,010,705	304,623,012

## 21. LONG-TERM LOANS FROM FINANCIAL INSTITUTIONS

Consisted of : -

(Unit : Baht)

	Consolidated and Separate financial statements	
	As at December 31,	
	2017	2016
Long-term loans from financial institutions	133,690,000	198,700,131
Less Deferred front end fee	(1,235,352)	(280,721)
Total	132,454,648	198,419,410
Less Current portion of long-term loans	(21,729,479)	(101,479,279)
Net	110,725,169	96,940,131



The movements in the long-term loans from financial institutions for the year ended December 31, 2017 and 2016 are as follows : -

(Unit : Baht)		
Consolidated and Separate financial statements		
	2017	2016
As at January 1,	198,700,131	194,840,000
Plus : Borrowings during the year	41,059,869	103,940,131
Less : Repayment during the year	(106,070,000)	(100,080,000)
As at December 31,	133,690,000	198,700,131
Less Current portion	(21,972,000)	(101,760,000)
Long-term loan from financial institutions	111,718,000	96,940,131

As at December 31, 2017 and 2016, long-term loans from financial institutions are as follows :

Credit Line (Million Baht)		Outstanding balance (Thousand Baht)		Interest rate (% p.a.)		Repayment of principal and interest rate
2560	2559	2560	2559	2560	2559	
400.00	400.00	-	94.76	MLR-1%	MLR-1%	<ul style="list-style-type: none"> <li>• Loan for the purpose of paying for the assets of the subsidiary company, front end fee is charged at 1% per annum, repayable in instalments starting from 31 Jan 14 totalling 48 instalments at the rate of Baht 8.34 million per instalment.</li> <li>• Interest is paid monthly from the date of first withdrawal.</li> </ul>
120.00	120.00	108.69	103.94	MLR -1.50%	MLR -1.50%	<ul style="list-style-type: none"> <li>• Loan for the purpose of investing in a government authorized ground-based solar farm project. The repayment is a total of 120 instalments at the rate of Baht 1.00 million per instalment and must be repay by May 2027.</li> <li>• Interest is paid monthly from the date of first withdrawal.</li> </ul>
25.00	-	25.00	-	MLR -1.50%	-	<ul style="list-style-type: none"> <li>• Loan for the purpose Reimbursement of land. The repayment is a total of 48 instalments at the rate of Baht 0.521 million per instalment and must be repay by Dec 2021.</li> <li>• Interest is paid monthly from the date of first withdrawal.</li> </ul>
545.00	520.00	133.69	198.70			



## Collaterals

As at December 31, 2017 and 2016, the Company has lands and certain machines as mentioned in the notes 14 and the ordinary shares of Company held by a directors and related company as the collateral. During the year 2017, the Company received the ordinary shares return from financial institutions because of paid full amount of lease contract.

The Company has taken an insurance policy for machines and equipments for the highest amount acceptable to insurance company. The benefit derivable from such policy is to be given to the lending financial institution. Moreover, The Company must perform to compliance with the material loan contract example, to maintain the debt to equity ratio and debt repayment capacity ratio not more than the fixed on contracts until the completion of the repayment institution.

## 22. LIABILITIES UNDER FINANCIAL LEASE CONTRACTS

Consisted of : -

	(Unit : Baht)	
	Consolidated and Separate financial statements	
	As at December 31,	
	2017	2016
Liabilities under financial lease contracts		
• Within 1 year	13,060,043	19,493,977
• Over 1 year but not over 5 years	9,159,155	18,785,599
Total	22,219,198	38,279,576
Less Future interest of liabilities	(1,114,889)	(2,618,304)
Total present value of liabilities under financial lease	21,104,309	35,661,272
Less Current portion	(12,267,098)	(17,815,176)
Net	8,837,211	17,846,096

As at December 31, 2017 and 2016, the Company has entered into 42 and 45 financial lease respectively, with the several financial institutions. The term of payment at Baht 0.70 million and Baht 0.87 million respectively. And Company has entered into 2 sale and lease back machine contracts with a financial institution the term of payment at Baht 0.60 million and the contract duration of 3 years for both year. The vehicle's ownership still be the lessor until the Company decides to buy it.





## 23. EMPLOYEE BENEFIT OBLIGATIONS

For the year ended December 31, 2017 and 2016, changes in the present value of the employee benefit obligation as follows : -

	(Unit : Baht)	
	Consolidated and Separate financial statement	
	2017	2016
As at January 1,	69,203,843	62,248,531
Current service cost and interest	6,035,964	6,732,300
Actuarial losses arising from defined benefit plan	-	7,961,062
Actual benefit paid during the year	(3,376,500)	(7,738,050)
As at December 31,	71,863,307	69,203,843

(Revenue) expenses are recognized in the statement of comprehensive income for the year ended December 31, 2017 and 2016, as follows : -

### Statements of income

	(Unit : Baht)	
	Consolidated and Separate financial statement	
	2017	2016
Cost of sales	3,999,793	3,540,785
Administrative expenses	2,036,171	3,191,515
Total	6,035,964	6,732,300

### Statements of other comprehensive income

	(Unit : Baht)	
	Consolidated and Separate financial statement	
	2017	2016
Actuarial losses arising from defined benefit plan	-	7,961,062

Principal actuarial assumptions as at reporting date as at December 31, 2017 and 2016 as follows :

	Consolidated and Separate financial statements
Discount Rate	2.67% per annum
Employee turnover	Age-related scale and kind of employee (full time and part time)
Salary increment Rate	7.39% per annum



Changes in the actuarial assumption will affect to the employee benefit obligation for the year ended December 31, 2017 and 2016 as follows :

(Unit : Baht)

	Consolidated and Separate financial statements			
	2017		2016	
	Increase	Decrease	Increase	Decrease
Discount rate (0.50% movement)	(3,507,478)	3,783,067	(3,512,725)	3,793,327
Future salary increases rate (0.50% movement )	3,870,901	(3,623,460)	3,520,955	(3,301,056)
Employee turnover (1.00% movement)	(8,056,187)	9,354,405	(7,347,949)	8,500,470

## 24. DIVIDEND PAID AND LEGAL RESERVE

	Approved by	Dividend paid (Thousand Baht)	Dividend paid per share (Baht)	Date of Dividend payment	Appropriated legal reserve
Payment announced from the retained earnings of the year 2016	The Annual General Meeting of shareholders for the year 2017 held on Apr 27, 2017	33,578	0.025	25 พ.ค. 60	-
Payment announced from the profit of the year 2015	The Annual General Meeting of shareholders for the year 2016 held on Apr 28, 2016	67,149	0.05	27 พ.ค. 59	4.65

As at 31 December 2017, The Company appropriated legal reserve from the profit of the year is Baht 2.54 million.



## 25. NATURES OF EXPENSES

For the year ended December 31, 2017 and 2016 consist of :

(Unit : Baht)

	Consolidated financial statements		Separate financial statements	
	For the year ended December 31,			
	2017	2016	2017	2016
Changes in finished goods and work in progress (Increase) decrease	(86,475,309)	80,020,143	(88,769,458)	61,427,571
Raw material and supplies used	911,864,051	954,670,660	888,432,086	954,670,660
Loss(reversal)from decline in value of inventories	7,361,602	(34,159,823)	10,591,352	(2,882,350)
Loss on impairment of fixed assets	136,813	11,572,116	136,813	11,572,116
Employee Expense	280,782,940	268,242,033	280,782,940	268,242,033
Directors’ remuneration	19,935,473	20,970,684	19,935,473	20,970,684
Depreciation and amortization	105,951,509	101,794,443	104,898,466	100,757,041
Consulting in management	15,751,963	16,425,794	15,751,963	16,425,794
Commission and consulting in management	53,920,444	65,310,249	53,548,444	65,310,249

## 26. INCOME TAX

Income tax is recognized in profit or loss:

(Unit : Baht)

	Consolidated and Separate financial statements	
	For the year ended December 31,	
	2017	2016
Income tax expense for the current period	-	-
Deferred tax (revenues) expenses relating to temporary differences on initial recognition and reversal	5,721,698	(12,080,727)
Income tax (revenues) expenses	5,721,698	(12,080,727)

Income tax is recognized in other comprehensive income

(Unit : Baht)

	Consolidated and Separate financial statements	
	For the year ended December 31,	
	2017	2016
Actuarial losses arising from defined benefit plan	-	(1,592,212)



Affect the relationship between the income tax expense (revenue) with accounting profit.

(Unit : Baht)

	Consolidated financial statements		Separate financial statements	
	For the year ended December 31,			
	2017	2016	2017	2016
Profit before income tax expenses	50,023,442	(74,263,572)	56,596,624	(77,792,618)
Income tax was calculated tax rates at 20%	10,004,688	(14,852,714)	11,319,325	(15,558,523)
Effective income tax revenues and expenses to be added				
back (deducted) in computing taxable profit				
• Taxable (profit) loss of subsidiaries	128,510	(6,250,060)	-	-
• Revenues granted from BOI	(5,004,351)	(2,054,629)	(5,004,351)	(2,054,629)
• (Revenues) that are granted income tax exemption or expenses not treated as expenses	2,849,262	3,924,931	2,849,261	3,924,931
• (Revenues) expenses under the Revenues Code	(2,256,411)	7,151,745	(3,442,537)	1,607,494
Income tax (revenue) expenses	5,721,698	(12,080,727)	5,721,698	(12,080,727)

The Group have applied the reduced tax rate of 20% in measuring deferred tax assets as at December 31, 2017 and 2016, in accordance with the clarification issued by the FAP in 2012.

## 27. BASIC EARNINGS (LOSS) PER SHARE

Earnings (loss) per share is calculated by dividing profit (loss) for the year attributable to ordinary shareholders of the Parent Company (excluding other comprehensive income) by weighted average number of issued and paid-up ordinary shares during the year.

(Unit : Baht)

	Consolidated financial statements		Separate financial statements	
	For the year ended December 31,			
	2017	2016	2017	2016
Profit (loss) for the year (Baht)	44,301,744	(68,762,625)	50,874,926	(72,291,670)
Number of weighted average shares (shares)	1,343,289,404	1,343,289,404	1,343,289,404	1,343,289,404
Basic earnings (loss) per share (Baht)	0.033	(0.051)	0.038	(0.054)



## 28. ADDITIONAL CASH FLOW INFORMATION

### 28.1 Cash and cash equivalents items as following details :-

(Unit : Baht)

	Consolidated financial statements		Separate financial statements	
	For the year ended December 31,			
	2017	2016	2017	2016
Cash	725,000	871,897	725,000	871,897
Savings deposit	29,256,498	49,497,046	22,848,421	44,714,014
Current deposit	6,651,105	12,508,236	6,631,864	12,494,145
Cheque due for deposit	15,316,846	2,250,418	15,316,846	2,250,418
Total	51,949,449	65,127,597	45,522,131	60,330,474

### 28.2 Non- cash transactions

(Unit : Baht)

	Consolidated financial statements		Separate financial statements	
	For the year ended December 31,			
	2017	2016	2017	2016
• Transfer of other receivable to property, plant and equipment	649,000	788,000	649,000	788,000
• Transfer of other receivables to intangible assets	94,000	-	94,000	-
• Transfer of other receivables to prepaid rental	7,819	-	7,819	-
• Transfer of inventories to property, plant and equipment	8,494,349	91,058,762	8,949,349	91,058,762
• Transfer of inventories to asset for rent	6,495,966	1,154,541	6,495,966	1,154,541
• Transfer of asset for rent to inventories	-	2,115,233	-	2,115,233
• Acquisition assets under financial lease contracts	3,426,037	-	3,426,037	-



## 29. OPERATING SEGMENTS

Operating segments information in the consolidated financial statements for the years ended December 31, 2017 and 2016, the details are as follows : -

		(Unit : Million Baht)						
		Electricity current		Services		Goods production and distribution		Consolidated financial statements
		2017	2016	2017	2016	2017	2016	2017 2016
Revenues from sales and services		47.42	21.71	236.86	258.64	1,400.17	1,342.85	1,684.45 1,623.20
Gross profit		26.04	10.24	79.67	76.87	224.43	151.03	330.14 238.14
Selling and administrative expenses								(291.39) (302.25)
Profit (loss) from operation								38.75 (64.11)
Other income								47.82 33.29
Loss on impairment of fixed assets								- (11.57)
Finance costs								(36.55) (32.08)
Income tax (expenses) income								(5.72) 12.08
Profit (loss) for the year								44.30 (62.39)

For the year ended December 31, 2017, the Group have revenues from operation from major customer, as 13.35 % of the revenues from operation.

Details of the sectorial business assets in the consolidated financial statements as at December 31, 2017 and 2016, are as follows:-

		Goods production and distribution						
		Electricity current		Sell transformers		Sell solar cell		Total Condolitated financial statements
		2017	2016	2017	2016	2017	2016	2017 2016
Fixed assets		267.43	260.41	301.20	276.39	544.81	593.80	1,113.44 1,130.60
Other assets								898.46 988.59
Total assets								2,011.90 2,119.19



## 30. FINANCIAL INSTRUMENTS

### Financial risk management policy

The Group hold risk to change of interest rate and from nonperformance of contractual obligations by contract parties. The Group will consider to using appropriate financial instruments when it considers necessary to manage such risks. However, the Group do not have any policy to hold or issue any financial instruments for speculation or for trading.

### Risk on credit provision

The Group hold risk on credit provision relating to trade receivable but the Group have set the policy to undertake business activities only with reliable traders with good financial status in order to reduce the opportunity to incur financial loss. In addition, the Group do not have high concentration of credit risk since it has various over continent customer and a large customer base. The maximum exposure to credit risk is limited to the carrying amounts of receivables as stated in the statements of financial position.

### Risk liquidity

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

### Risk on interest rates

The Group have significant financial instruments its interest risk, which include loan from financial institutions, therefore, subject to risk in relation to floating interest rates which may be fluctuating in future thus possibly affecting the operating results and cash flows. As at December 31, 2017 and 2016, the significant financial instruments have the following details:- (in respect to interest rates, they are already shown in related notes to financial statements).

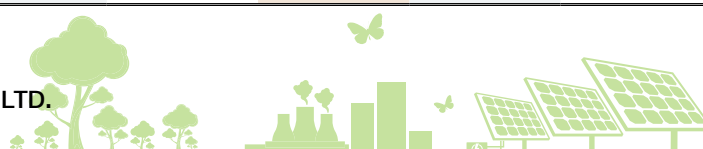


(Unit: Million Baht)

Consolidated financial statements						
As at December 31, 2017						
	Fixed interest rate			Floating Interest rate	Non Interest bearing	Total
	Within 1 years	more than 1 year to 5 years	more than 5 years			
<b>Financial assets</b>						
Cash and cash equivalents items	-	-	-	29	23	52
Trade and other receivables	-	-	-	-	234	234
Obligated bank deposits	-	-	-	5	-	5
<b>Total</b>	-	-	-	34	257	291
<b>Financial liabilities</b>						
Short-term loans from financial institutions	-	-	-	210	-	210
Trade and other payables	-	-	-	-	271	271
Liabilities under lease contracts	12	9	-	-	-	21
Loans from financial institutions	-	-	-	132	-	132
<b>Total</b>	12	9	-	342	271	634

(Unit: Million Baht)

Consolidated financial statements						
As at December 31, 2016						
	Fixed interest rate			Floating Interest rate	Non Interest bearing	Total
	Within 1 years	more than 1 year to 5 years	more than 5 years			
<b>Financial assets</b>						
Cash and cash equivalents items	-	-	-	49	16	65
Trade and other receivables	-	-	-	-	445	445
Obligated bank deposits	-	-	-	2	-	2
<b>Total</b>	-	-	-	51	461	512
<b>Financial liabilities</b>						
Short-term loans from financial institutions	-	-	-	219	-	219
Trade and other payables	-	-	-	-	300	300
Liabilities under lease contracts	18	18	-	-	-	36
Loans from financial institutions	-	-	-	198	-	198
<b>Total</b>	18	18	-	417	300	753





### Risk on exchange rates

The Group' exposure to foreign currency risk arises mainly from trading transactions that are denominated in foreign currencies.

As at December 31, 2017 and 2016, the Group entered into forward exchange contracts to not entered into risk hedge are summarized as follows :

	Consolidated financial statements			
	Trade receivable		Trust receipts/Trade payable	
	2017	2016	2017	2016
• US Dollar	121,050.00	685,459.68	5,442,991.17	3,705,238.68
• Euro	141,974.50	141,974.50	506,428.36	433,725.62
• Krona	-	-	811,000.00	598,800.00
	Separate financial statements			
	Trade receivable		Trust receipts/Trade payable	
	2017	2016	2017	2016
• US Dollar	119,050.00	683,459.68	5,442,991.17	3,705,238.68
• Euro	-	-	506,428.36	433,725.62
• Krona	-	-	811,000.00	598,800.00

### Fair values

The financial assets and liabilities possess book values which are comparable to market prices as these financial instruments will be due in the short time and bears interest rate comparable to market situation. As a result these financial assets and liabilities have reflected their fair values.



### 31. PROVIDENT FUND

The Group and their employees have jointly established a provident fund in accordance with the Provident Fund Act B.E. 2530. The Group and their employees contributed to the fund monthly at the rates depending on the working life of the employees. A local financial institution is managing the provident fund and will be paid to the employees upon termination in accordance with the fund rules. For the years ended December 31, 2017 and 2016, in the consolidated financial statements, the Group contributions amounted to approximately Baht 5.76 million and Baht 5.93 million respectively.

### 32. OBLIGATIONS AND CONTINGENT LIABILITIES

32.1 Apart from liabilities reflected in the financial statements, The Group still had other obligations as follows : -

(Unit : Thousand Baht)

Consolidated financial statements						
For the year ended December 31,						
	2017			2016		
	Credit facilities	Utilized	Available	Credit facilities	Utilized	Available
Letters of guarantee		224,752			288,471	
Promissory note	600,000	70,000	74,558	500,000	40,000	4,851
Letter of credit, trust receipt and packing credit		230,690			166,678	
Bank overdraft		-			-	
Local factoring	200,000	5,692	194,308	200,000	41,575	158,425
Long-term loans	545,000	545,000	-	520,000	503,941	16,059

The obligations and contingent liabilities are secured by bank deposit as mentioned in the notes 16, land with construction and certain machines as mentioned in the notes 14 and ordinary shares of a Company held by a director and related parties.



32.2 As at December 31, 2017 and 2016, the Company has commitment on hire of contractor, assets rental and other service agreements with the amount of Baht 26.09 million and Baht 40.20 million respectively.

32.3 On at 22 August 2016, the Company entered into a contract to support the ground-based solar farm electricity generation project installation for government and agricultural cooperatives, 2015, a 25 years project period, and the obligation to pay for such projects until the end of the project to the project owner which contain with land cost, electricity sale rights, minimum income guarantee payment to project owner and other relevant expenses. The Company has already paid some of the land usage fees as described in the notes 16. and electricity sale rights in the notes 14. The total amount payable as at December 31, 2017 was Baht 37.20 million. The Company has to supply electricity in to the commercial system on December 29, 2016.

32.4 On August 25, 2015, a subsidiary has filed the appeal for value added tax assessment of Revenue Department since that assessment is in corrected. As a result, Revenue Department has to refunded value added tax and surcharge including interest to a subsidiary total amount of Baht 6.02 million. And on April 3, 2017, the Supreme Court (Taxation division) affirmed a judgment of the Central Taxation Court's ruling to no repayment of VAT, The subsidiary company had been record allowance for impairment of the accounts receivable from the Revenue Department in the financial statements in the whole amount.

### 33. INVESTMENT PROMOTION PRIVILEGES

As at December 31, 2017 and 2016, the Company is granted certain right and privilege under the Investment Promotion Act B.E. 2520 by the Board of Investments as below :

33.1 The Company is granted the certain right and privilege as a promoted industry from the Board of Investment for electricity generating from solar cell type 7.1 the services business of utilities and basic services No.1105(1)/2010 dated February 5, 2010, which effective on December 14, 2009 and No. 1297(1)/2013 dated March 7, 2013, which dated February 5, 2010, which effective on December 14, 2009 and No. 1297(1)/2013 dated March 7, 2013, which



33.2 The Company is granted the certain right and privilege as a promoted industry from the Board of Investment for electricity generating from solar cell type 7.1.1.2 the services business of utilities and basic services No. 60-0018-1-00-1-0 dated January 11, 2017, which effective on November 7, 2016. The Company is granted right and privilege of taxable are as follows :

- Exemption of import duty on machinery as approved by the Board of Investment
- Exemption of payment of corporate income tax on net profit derived from promoted activity for the period of 8 years from the date of income earnings. In the case where a loss has been incurred during the period of receiving exemption of corporate income tax. The promoted Company is granted permission to deduct such annual loss from net profits accrued after the expiration of the period of exemption of corporate income tax for a period of not more than 5 years from the expiry of such period.
- Exemption on dividends derived from the promoted activity granted an exemption of corporate income tax shall be exempted for computation of taxable income throughout the period of the promoted receives the exemption of corporate income tax.
- Fifty percent reduction of the normal corporate income tax rate on the profits from the promoted activity for a period of 5 years after the expiry of the corporate income tax exemption period.
- Double deduction from taxable income of transportation, electricity and water costs for the period of 10 years after the expiry of the exemption period.
- Deduction from investment at 25 percent of the project's infrastructure installation or construction cost. This deduction is additional to normal depreciation.



The Company has income and expenses for the year ended December 31, 2017 and 2016, from the promoted activity granted as follows :

(Unit : Baht)

Separate financial statements			
For the year ended December 31, 2017			
	Promoted	Non-promoted	Total
Revenue from sales and services	46,657,164	1,634,736,437	1,681,393,601
Other income	-	53,911,959	53,911,959
Total revenues	46,657,164	1,688,648,396	1,735,305,560
Cost of sales	20,432,874	1,321,284,733	1,341,717,607
(Reversal) loss on devaluation of goods	-	10,591,352	10,591,352
Selling and administrative expenses	1,202,535	288,656,614	289,859,149
Finance costs	-	36,540,828	36,540,828
Total expenses	21,635,409	1,657,073,527	1,678,708,936
Profit before income tax	25,021,755	31,574,869	56,596,624

(Unit : Baht)

Separate financial statements			
For the year ended December 31, 2016			
	Promoted	Non-promoted	Total
Revenue from sales and services	20,835,565	1,599,160,689	1,619,996,254
Other income	-	38,830,404	38,830,404
Total revenues	20,835,565	1,637,991,093	1,658,826,658
Cost of sales	10,562,420	1,385,256,215	1,395,818,635
(Reversal) loss on devaluation of goods	-	(2,882,350)	(2,882,350)
Selling and administrative expenses	-	311,812,132	311,812,132
Finance costs	-	32,081,788	32,081,788
Total expenses	10,562,420	1,726,267,785	1,736,830,205
Profit (loss) before income tax	10,273,145	(88,276,692)	(78,003,547)



### 34. EVENTS AFTER THE REPORTING PERIOD

According to minutes of the Board of Directors meeting No. 2/2017, dated February 27, 2018, the Company has resolved to pay dividend from net profit of the year 2017 at the rate of 0.03 Baht.

### 35. APPROVAL OF THE FINANCIAL STATEMENTS

These consolidated and the separate financial statements have been approved for issuance by the Company's board of directors on February 27, 2018.





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