Ref. TSE(PCL)003/11-2019

14 November 2019

Subject Management Discussion and Analysis Quarter 3 Ended 30 September 2019

To The president

The Stock Exchange of Thailand

The Board Meeting of Thai Solar Energy Public Company Limited ("the Company") held on 14 November 2019 resolved to approve the Financial Statement Quarter 3/2019 (Reviewed) ended 30 September 2019. The Company would like to inform Management Discussion and Analysis details as follow;

## Management Discussion and Analysis for the three-month and six-month period ended 30 September 2019

#### 1. Revenue from Sales and Services

The group has total revenue from sales and services for the three-month period of Q3/2019 amounting of THB 360.82 million compared to THB 142.51 million, higher than the same period last year by THB 218.31 million or 153.19%. In the same time, total revenue from sales and services for the nine-month period of Q3/2019 amounting of THB 1,032.84 million compared to THB 308.51 million of the same period last year, which increased by THB 724.33 million or 234.78%.

• Increase in revenue from sales and services from COD of new projects

The group has revenue increased from fully recognized revenue of Biomass 4.60 MW in Surat Thani province which start operation date since March 2018 and revenue from projects distribution of electricity of new Biomass 17.60 MW in Nakhon Sri Thammarat province which start operation date since August 2018 and October 2018, total increase amounting of THB 136.09 million for the three-month period of Q3/2019 compared to THB 73.23 million of the same period last year, which increased by 185.84%. Total increase of revenue amounting of THB 501.05 million for the nine-month period compared to THB 114.40 million of the same period last year, which increased by 437.98%.

Moreover, the increment also came from distribution of electricity from the 7 solar farms in Japan, which started commercial operation date. The distribution of electricity in Japan increased from 8.24 MW to 21.74 MW in Q3/2019, total revenue increased amounting of THB 59.38 million for the three-month period of Q3/2019 compared to THB 31.54 million of the same period last year, which increased by 188.27%. Total increase of revenue amounting of THB 176.11 million for the nine-month period compared to THB 74.32 million of the same period last year, which increased by 236.96%.

• Increase in revenue from sales and services from new acquired projects

The group has revenue from new acquired projects in October 2018, March and August 2019, 2 MW solar farm in Angthong province, 5 MW in Ayudthaya province and 5 MW in Udornthani province, respectively. The group has revenue increased by THB 19.56 million for the three-month period of Q3/2019 and increased by THB 43.28 million for the nine-month period.

Consistency in revenue from sales and services from existing operating projects

In the same time, the revenue from Solar Rooftop projects 14 MW consistent comparing to the same period last year. The group recognized revenue from Solar Rooftop projects total of THB 25.90 million for the three-month period of Q3/2019 and THB 80.24 million for the nine-month period.

(The revenue from sales and services for the nine-month period did not include the revenue from 80 MW of solar farm which was THB 1,128 million, 3% increased from the same period last year. The company recognized this project performance in the statement of income in form of the contribution through share of profit from investments of 60% in joint ventures).

### 2. Cost of Sales and Expenses

· Increase in cost of sales and services of projects that started commercial operation date

Total cost of sales and services for the three-month period of Q3/2019 amounting of THB 226.15 million compared to THB 109.84 million of the same period last year, increased by THB 116.31 million or 105.89%. In the same time, the cost of sales and services for the nine-month period of Q3/2019 amounting of THB 645.79 million compared to THB 241.93 million of the same period last year, which increased by THB 403.86 million or 166.93% due to operation costs of Biomass projects, depreciation from the starting of commercial operation date of the projects and new acquired projects also with amortization of Power purchase agreement which from the starting of commercial operation date of the projects.

· Increase in company's gross profitability

The group's gross profit margin for the three-month period of Q3/2019 amounting of THB 134.67 million, compared to THB 32.67 million of the same period last year, increased by THB 102 million or 312.21%. Gross margin for the three-month period is 37.32% increased from 22.93% of Q3/2018. While gross profit margin for the nine-month period of Q3/2019 amounting of THB 387.05 million, compared to THB 66.58 million of the same period last year, increased by THB 320.47 million or 481.33%. Gross margin of Q3/2019 is 37.47% higher than Q3/2018 which shown 21.58%.

• Increase in administrative expenses partially support future sustainable growth

Total administrative expenses for the nine-month period of Q3/2019 amounting of THB 162.24 million compared to THB 151.42 million of the same period last year, increased by THB 10.82 million or 7.15%. The increasing mainly came from employee expenses to support new acquired projects and loss from exchange rate.

• Increase in finance costs of projects that started commercial operation date

Finance costs for the three-month period of Q3/2019 was THB 27.23 million, which decreased by THB 10.54 million or 27.18% comparing to the same period last year due to the principal repayment of the group. While finance costs for the nine-month period of Q3/2019 was THB 141.13 million, which increased by THB 50.62 million or 55.93%, comparing to the same period last year. The increasing mainly came from projects that started commercial operation date during the year.

# 3. Share of Profit from Investment in Joint Ventures

According to Thai Accounting Standards with regards to an investment in joint ventures, the company recognizes an investment in joint ventures based on equity method. This concept was applied for the 80-MW solar PV farm. The details are as followed;

Unit: THB million

Items	30 Sep	30 September		Increase (Decrease)	
	2019	2018	Amount	%	
For the three-month period					
Revenue	346.87	340.28	6.59	1.94	
Cost and expenses	(110.92)	(118.41)	7.49	6.32	
Net Profit	235.95	221.87	14.08	6.35	
Share of Profit from Joint Ventures (60%)	141.57	133.12	8.45	6.35	
For the nine-month period					
Revenue	1,128.23	1,103.72	24.51	2.22	
Cost and expenses	(336.01)	(359.29)	23.28	6.48	
Net Profit	792.22	744.43	47.79	6.42	
Share of Profit from Joint Ventures (60%)	475.33	446.66	28.67	6.42	

### Good and consistent performance of Joint ventures

Net profit of joint ventures for the three-month period of Q3/2019 amounting of THB 235.95 million compared to THB 221.87 million, increased by THB 14.08 million or 6.35%. The amount of share of profit from joint ventures amounting to THB 141.57 million comparing to THB 133.12 million of the same period last year, increased by THB 8.45 million or 6.35%.

For the nine-month period of Q3/2019, net profit of joint ventures amounting of THB 792.22 million compared to THB 744.43 million of the same period last year, increased by THB 47.79 million or 6.42%. The amount of share of profit from joint ventures amounting to THB 475.33 million comparing to THB 446.66 million of the same period last year, increased by THB 28.67 million or 6.42%. The company has consistent strong operation performance. Net profit from joint ventures would be categorized by the equity method in terms of share of profit from joint ventures.

### 4. Profit attributable to Owners of the parent

According to the consolidated financial statement for the three-month period of Q3/2019, the profit attribute to owners amounting of THB 204.80 million compared to THB 124.43 million of the same period last year, increased by THB 80.37 million or 64.59%. For the nine-month period of Q3/2019, the profit attribute to owners amounting of THB 559.92 million compared to THB 341.37 million of the same period last year, increased by THB 218.55 million or 64.02%.

The comprehensive income for the three-month period of Q3/2019 amounting of THB 165.70 million compared to comprehensive loss of THB 60.32 million of the same period last year, which increased by THB 226.02 million. The comprehensive income for the nine-month period of Q3/2019 amounting of THB 376.09 million compared to THB 289.38 million of the same period last year, which increased by THB 86.71 million.

Please be informed accordingly.

Your sincerely,

- signed (Mr. Somphop Prompanapitak)
 Chief Operating Officer