



บริษัท พลังงานบริสุทธิ์ จำกัด (มหาชน)  
Energy Absolute Public Company Limited

89 อาคารเอไอเอ แคปิตอล เซ็นเตอร์ ชั้น 16 ถนนรัชดาภิเษก แขวงดินแดง เขตดินแดง กรุงเทพฯ 10400  
โทรศัพท์ 02 248 2488-92, 02 002 3667-9 แฟกซ์ 02 248 2493 ทะเบียนเลขที่ 0107551000061

Ref : EA6208/013LT

9<sup>th</sup> August 2019

Subject Management Discussion and Analysis of Financial Statements  
for the six-month period ended 30<sup>th</sup> June 2019  
To The President of the Stock Exchange of Thailand

We, Energy Absolute Public Company Limited would like to report the result of the company and subsidiaries (all together as the “Company”) for the six-month period ended 30<sup>th</sup> June 2019 which has been approved by the meeting of the Board of Directors No 3/2019 held on 9<sup>th</sup> August 2019. The details are as follows:-

Overview of operating results for the three-month and six-month periods ended 30<sup>th</sup> June 2019

	Year 2019		Year 2018		Increase (Decrease)			
	Three-month Period	Six-month Period	Three-month Period	Six-month Period	Three-month Period		Six-month Period	
	Baht Million	Baht Million	Baht Million	Baht Million	Baht Million	%	Baht Million	%
Revenue from sales and services	3,614.14	6,700.33	2,906.28	5,835.44	707.86	24.36	864.89	14.82
Other Income	26.00	28.25	19.31	24.25	6.69	34.65	4.00	16.49
Accounting gain on business combination achieved in stages, net	-	-	-	894.58	-	-	(894.58)	
<b>Total Revenue</b>	<b>3,640.14</b>	<b>6,728.58</b>	<b>2,925.59</b>	<b>6,754.27</b>	<b>714.55</b>	<b>24.42</b>	<b>(25.69)</b>	<b>(0.38)</b>
<b>Profit attributable to Owners of the parent</b>	<b>1,442.44</b>	<b>2,653.16</b>	<b>984.93</b>	<b>2,931.68</b>	<b>457.51</b>	<b>46.45</b>	<b>(278.52)</b>	<b>(9.50)</b>
<b>Basic earnings per share (Baht per share)</b>	<b>0.39</b>	<b>0.71</b>	<b>0.26</b>	<b>0.79</b>	<b>0.13</b>	<b>46.15</b>	<b>(0.08)</b>	<b>(10.13)</b>

**Note:**

According to Financial Statements for the six-month period ended 30<sup>th</sup> June 2018, there is significant circumstance from the classification of the investment in AMITA from an associate company to be a subsidiary company. Therefore, the financial statements of AMITA have been fully consolidated to the Group’s financial statements from the date on which control is transferred to the Group. As a result, this consequently caused accounting gain on business combination achieved without the transfer of consideration (AMITA), net of Baht 894.58 million in accordance with Thai Financial Reporting Standard 3 (revised 2017) Business Combination.



## **Net Profit**

For the three-month period ended 30<sup>th</sup> June 2019, the Company earned the net profit of Baht 1,442.44 million, increased by Baht 457.51 million (or increased 46.45%) as compared to the same period of last year which incurred the total net profit of Baht 984.93 million. And for the six-month period ended 30<sup>th</sup> June 2019, the Company earned the net profit of Baht 2,653.16 million, decrease by Baht 278.52 million (or decreased by 9.50%) as compared to the same period of last year which incurred the total net profit of Baht 2,931.68 million.

To be considered, net profit from normal business operation (excluding accounting gain, unrealized gain from FX and other income) for three-month periods ended 30<sup>th</sup> June 2019 was Baht 1,353.37 million, increased by Baht 400.36 million (or increased by 42.01%) and the net profit for the six-month period ended 30<sup>th</sup> June 2019, the Company earned the net profit of Baht 2,477.92 million, increase by Baht 460.26 million (or increase by 22.81%) as compared to the same period of last year which incurred the total net profit of Baht 2,017.66 million. The reasons are as follows:

## **Revenue**

For the three-month period ended 30<sup>th</sup> June 2019, the Company earned the total revenue of Baht 3,640.14 million, increased by Baht 714.55 million (or increased by 24.42%) as compared to the same period of last year which incurred the total revenue of Baht 2,925.59 million. And for the six-month period ended 30<sup>th</sup> June 2019, the Company earned total revenue of Baht 6,728.58 million, decreased by Baht 25.69 million (or decreased by 0.38%) as compared to the same period of last year which incurred the total revenue of Baht 6,754.27 million.

To be considered, revenue from normal business operation (excluding accounting gain and other income) for three-month periods ended 30<sup>th</sup> June 2019 was Baht 3,614.14 million, increased by Baht 707.86 million (or increased by 24.36%) and the six-month period ended 30<sup>th</sup> June 2019, the Company earned the total revenue of Baht 6,700.33 million, increase by Baht 864.89 million (or increased by 14.82%). The reasons are summarized as follows:

### **1. Manufacturing and distributing Biodiesel Products :**

For the three-month and six-month periods ended 30<sup>th</sup> June 2019, the revenues from B100 increased by Baht 20.72 million and decrease by Baht 44.54 million (or increased by 2.57% and decreased by 2.64%) respectively. This is the result of lower of selling price by 19.84% due to oversupply of palm product in market and surplus of B100 capacity from B100 producers causing high price completion to gain market share.

For pure glycerin: The revenues, for the three-month and six-month periods ended 30<sup>th</sup> June 2019 decreased by Baht 18.08 million and Baht 41.58 million (or decreased by 23.71% and 24.62%) This is the result of lower of selling price by 34.75% as compared to the same period of last year.



Details	Three-month Period			Six-month Period		
	Year 2019	Year 2018	% Change	Year 2019	Year 2018	% Change
<b>Revenue from Biodiesel</b>	<b>826.79</b>	<b>806.07</b>	<b>2.57%</b>	<b>1,642.94</b>	<b>1,687.48</b>	<b>-2.64%</b>
Sale volume (Million Litres)	50.28	39.40	27.61%	100.45	82.67	21.51%
<b>Explanation</b> Selling price declined as the result of oversupply of palm product in market and surplus of B100 capacity from B100 producers causing high price completion to gain market share.						
AVG Selling price (Baht/Litre)	16.44	20.15	-18.40	16.36	20.41	-19.84
<b>Explanation</b> Lower of B100 selling price resulted from lower of raw material price due to oversupply of palm product in market and surplus of B100 capacity from B100 producers causing high price completion to gain market share.						

<b>Revenue from Glycerin</b>	<b>58.18</b>	<b>76.26</b>	<b>- 23.71%</b>	<b>127.33</b>	<b>168.91</b>	<b>- 24.62%</b>
Sale volume (Million kg.)	3.27	2.82	15.96%	7.07	6.12	15.52%
AVG Selling price (Baht/kg.)	17.82	27.04	-34.10%	18.01	27.60	-34.75%
<b>Explanation</b> Sale volume increase compared to the same period in previous year from expansion of domestic customer base while average selling price start declining as a result of surplus of Glycerine in regional market caused by B100 producers in Indonesia accelerating B20 production to support the government's policy for using B100 proportion in high-speed diesel to be 20%.						

## 2. Generating and distributing Electricity :

For the three-month and six-month periods ended 30<sup>th</sup> June 2019, the revenues increased by Baht 813.48 million and Baht 1,026.84 million (or increased by 43.38% and 27.15%) respectively. This is due to Hanuman project, wind power plant of subsidiary companies in Chaiyaphum Province was commenced operation wind power total 260-MW on 25<sup>th</sup> January (90 MW), 22<sup>nd</sup> March (48MW), 30<sup>th</sup> March 2019 (42 MW) and 13<sup>rd</sup> April 2019 (80 MW) respectively resulting to revenue recognition gradually adding up in 1<sup>st</sup> quarter for this year and fully resulting to revenue recognition in 2<sup>nd</sup> quarter. Including of revenue increased from wind power plant of subsidiary companies at Songkla and Nakorn Si-Thammarat Province total 126-MW, due to high wind speed of monsoon that normally occurs at the end of year 2018 (Dec) to the beginning of this year (Jan).



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Details	Three-month Period			Six-month Period		
	Year 2019	Year 2018	% Change	Year 2019	Year 2018	% Change
<b>Revenue from Solar power plants</b>	<b>1,674.25</b>	<b>1,573.98</b>	<b>6.37%</b>	<b>3,181.31</b>	<b>3,066.10</b>	<b>3.76%</b>
Sales volume (GWh)	171.47	162.29	5.66%	324.99	314.77	3.25%
Avg. Selling Price (Baht/kWh)	9.76	9.70	0.62%	9.79	9.74	0.51%
<b>Explanation</b>						
The increase of sales volume resulted from the intensity of the sunlight increases from the amount of rainfall is less than the prior year. However, average selling price per kWh increase 0.51% due to the increase of ft.						
<b>Revenue from Wind power plants</b>	<b>1,014.96</b>	<b>301.75</b>	<b>236.36%</b>	<b>1,628.06</b>	<b>716.43</b>	<b>127.24%</b>
Sales volume (GWh)	162.51	47.91	239.20%	260.28	115.16	126.02%
Avg. Selling Price (Baht/kWh)	6.25	6.30	-0.79%	6.26	6.22	0.64%
<b>Hadkunghan wind power Plant 126-MW</b>						
Sales volume (GWh)	57.83	47.91	20.71%	130.58	115.16	13.39%
Avg. Selling Price (Baht/kWh)	6.29	6.30	-0.16%	6.31	6.22	1.45%
<b>Hanuman wind power Plant 260-MW</b>						
Sales volume (GWh)	104.68	-	100%	129.70	-	100%
Avg. Selling Price (Baht/kWh)	6.22	-	100%	6.20	-	100%
<b>Explanation</b>						
Hanuman 1, 8, 5, 9 wind power plants totaling of 180 MW started COD on 25 <sup>th</sup> January, 22 <sup>nd</sup> March and 30 <sup>th</sup> March 2019 respectively. As a result, revenue recognition from these wind farms was added in 1 <sup>st</sup> quarter for this year and remaining 80 MW of Hanuman 10 started COD on 13 <sup>rd</sup> April 2019. Resulting to revenue recognition gradually adding up in 1 <sup>st</sup> quarter for this year and fully resulting to revenue recognition in 2 <sup>nd</sup> quarter.						
For Hadkunghan wind power plant, wind speed was higher comparing to the same period in previous year due to delaying of monsoon that normally occurs at the end of year (Dec) to the beginning of this year (Jan). As a result, causing increase in sale volume. In addition, average selling price per kWh increased due to the increase of ft.						

- Other revenue for the six-month periods ended 30<sup>th</sup> June 2019, Total Baht 116.39 million from revenue recognition from AMITA sales battery product amounting Baht 103.98 million (EA shares holding 77.21%) and ESM for consulting fee Baht 11.91 million (EA shares holding 99.99)
- Accounting gain on business combination achieved in stages (AMITA), net of Baht 894.58 million in accordance with Thai Financial Reporting Standard 3 (revised 2017) Business Combination. This is resulted from increasing in controlling power in board level and management level of AMITA since the first quarter of year 2018. Therefore, the company has to record and present the investment in AMITA as a subsidiary company, changing from associate company. Moreover, the company has to consider and compare fair value of investment in AMITA with net investment cost and appeared that, the fair value of investment in AMITA is higher than the net investment cost, so the company recognized gain on business combination.



### **Cost of sales and services**

For the three-month and six-month periods ended 30<sup>th</sup> June 2019, cost of sales were Baht 1,661.45 million and Baht 3,145.65 million, increased by Baht 282.11 million (or increased by 20.45%) and increased by Baht 311.31 million (or increased by 10.98%) respectively, as compared to the same period of last year which incurred the total cost of sales of Baht 1,379.34 million and Baht 2,834.34 million respectively. The reasons are summarized as follows:

1. **Manufacturing and distributing Biodiesel Products and pure glycerin:** For the three-month and six-month periods ended 30<sup>th</sup> June 2019, the cost of sales increased by Baht 41.83 million and Baht 18.63 million (or increased by 5.03% and 1.08%) respectively as compared to the same period of last year, which increased according to the increased sales volume of products.
2. **Generating and distributing Electricity:** For the three-month and six-month periods ended 30<sup>th</sup> June 2019, cost of sales increased by Baht 187.55 million and Baht 224.05 million (or increased by 40.21% and 24.33%), respectively. This is due a wind power plant (with an aggregate capacity of 260-MW) of the subsidiary were commenced commercial operation on 25<sup>th</sup> January, 22<sup>nd</sup> March, 30<sup>th</sup> March and 13<sup>rd</sup> April 2019, resulting cost of sales (i.e., depreciation, administrative and maintenance expenses) increased as compared to the same periods last year.

### **Selling expense**

Selling expenses, for the three-month period and six-month periods ended 30<sup>th</sup> June 2019, were Baht 23.62 million and Baht 43.76 million, increase by Baht 3.52 million and Baht 7.00 million (or increased by 17.51% and 19.04%) respectively, as compared to the same periods of last year which incurred the selling expenses of Baht 20.10 million and Baht 36.76 million. This is due to the increment of selling expense which mainly is a major cost of manufacturing and distributing Biodiesel, which was in line with increasing of sales volume of biodiesel.

### **Administrative expenses**

Administrative expenses, for the three-month and six-month periods ended 30<sup>th</sup> June 2019, were Baht 285.07 million and Baht 481.52 million, increased by Baht 22.91 million and Baht 48.83 million (or increased by 8.74% and 11.29%) respectively, as compared to the same periods of last year which incurred the administrative expenses of Baht 262.16 million and Baht 432.69 million. The main reasons of the incremental are given below.

- Personnel expense increased Baht 19.10 million in accordance with new hiring of employee and executive following to the business expansion plan
- Research & development expenses (R&D), including of PR & Advertising expense from subsidiaries increased Baht 38.04 million as compared to the same periods of last year.

This is due to several programs to promote new businesses, EV charging station and Electrical Vehicle, following to EA's strategic plan.

### **Finance cost**

Finance costs, for the three-month and six-month periods ended 30<sup>th</sup> June 2019, were Baht 340.50 million and Baht 603.59 million, increased by Baht 47.00 million and Baht 27.24 million (or increased by 18.38% and 4.73%) respectively, as compared to the same periods of last year which incurred the finance costs of Baht 287.64 million and Baht 576.35 million. This is mainly due to long term loan from financial institutions for payment of some part of supplier credits for Hanuman wind power plants project that was due.



## **Financial Status**

### **Total Asset**

EA and its subsidiaries' total asset as of 30<sup>th</sup> June 2019, were Baht 63,470 million, increased by Baht 4,262 million (or increased by 7.20%). This was mainly from the following determinants:

### **Account Receivable**

Account receivable net was Baht 2,424.75 million, increased by Baht 773.90 million from 31<sup>st</sup> December 2018 (or increased by 46.88%). This is mainly due to increasing of account receivable from the Hanuman wind power plant that started its commercial operation.

### **Investment in associate**

Investment in associate as of 30<sup>th</sup> June 2019, was Baht 49.19 million because of the subsidiary company invested in 2 companies in Taiwan, which related of design development and EV assembly.

### **Property, plant and equipment**

Property, plant, and equipment Property, plant, and equipment, as of 30<sup>th</sup> June 2019 and 31<sup>st</sup> December 2018, were Baht 51,178.54 million and Baht 47,587.21 million respectively, increased by Baht 3,591.33 million or increased by 7.55%. Mainly, due to the investment of wind power plants projects. i.e. the complete construction of Hanuman wind project

### **Intangible assets**

Intangible assets as of 30<sup>th</sup> June 2019 and 31<sup>st</sup> December 2018 were Baht 2,851.42 million and Baht 1,941.13 million, respectively which increase of Baht 910.29 million or 46.89%. The significant increase is from the recognition patents of power transmission system for Hanuman wind power plants projects.

### **Goodwill**

Goodwill as of as of 30<sup>th</sup> June 2019, were Baht 880.04 million, is recognised in accordance with the preparation of consolidated financial statements. The amount of goodwill is measured from fair value of AMITA's net assets as the result of the change in classification of the investment of AMITA from an associate to a subsidiary.

### **Total Liabilities**

EA and its subsidiaries' total liabilities as of 30<sup>th</sup> June 2019, were Baht 42,431 million, increased by Baht 2,741 million from 31<sup>st</sup> December 2018 (or increased by 6.91%). The increase was mainly in long term loan from financial institutions, which use to be settled construction payables for The Hanuman wind power plants projects that was due.

### **Total Equity**

EA and its subsidiaries' total shareholder' equity as of 30<sup>th</sup> June 2019, were Baht 21,039 million, which increased by Baht 1,521 million (or increased by 7.79%) from 31<sup>st</sup> December 2018. This resulted from total net profit for 6M/19, deducted by dividends paid and discount from changes in shareholding interest in subsidiaries.



## Progress in Major Investment Projects

### 1. Wind Power Plant in Chaiyaphum province or “Hanuman Project”

Construction of a wind power plant project in Chaiyaphum province with the total capacity at 260 MW has totally completed and the last sub project has already started commercial operation on 13<sup>th</sup> April 2019. Following to strong financial position and operating performance according to expectation, therefore Tris Rating has upgraded company rating to “A” with “Stable” outlook. This is benefit to lower financial cost in issuance of new debentures with total value at THB 3 billion on 11<sup>th</sup> July 2019. The new debentures are as follow.

- Tranche 1 worth THB 1 billion, with 3 years maturity, due in 2022 with a fixed interest rate of 2.61% per year
- Tranche 2, worth THB 2 billion, with 10 years maturity, due in 2029 with a fixed interest rate of 3.61% per year

Interest payment will be made every 6 months until maturity. Within 6 months from issuance date, the fund will be used to repay loan (Refinance) for investing in wind power plants, Hanuman Project in Chaiyaphum Province, such as equipment, construction expenses, etc.

### 2. Li-ion Battery Project

The company has an investment project in building a Li-ion Battery factory with the total production capacity of 50 GWh. The investment plan comprises of two phases. The construction of phase I is for the production capacity at 1 GWh and the phase II is for the production capacity at 49 GWh. At present, the factory has been started construction and will be completed by the end of 2019. After that, the machinery will be installed and started commissioning with a schedule to be completed within Q1/2020, in order to start commercial production for 1 GWh within Q2/2020.

### 3. EV Charging Station Project

The company is co-investing with many partners to install EV charging equipment on partners' property with high technology of chargers. There are 2 types of charger, both normal charge and quick charge to serve all type of EV including MINE Mobility, EV designed and developed by the company's team. This can be reserved and start the electricity to the engine via **EA Anywhere** application.

As of 8<sup>th</sup> July 2019, Energy Mahanakorn Co.,Ltd., a subsidiary of EA who provide electric charging service under the trademark "EA Anywhere", has announced a partnership operation with 4 major partners including Caltex, CPAll, Bridgestone ACT and Robinson to roll out charging stations throughout Thailand in order to spread out areas and supports all electric vehicles Including plug-in hybrid electric vehicles (PHEV) and battery-powered (BEV) models.





As of 17<sup>th</sup> July 2019, the company has already expanded charging stations covering 46 provinces with 787 sets of normal charge and quick charge. However, the company keeps steering its project together with several partners to prepare infrastructure for EV users.

#### 4. **Electric Vehicle (EV) : MINE Mobility**

Since 2017, the company has started designing and production of prototype the first Thai EV and introduced under brand “**MINE Mobility**”. There are 3 segments, City EV, MPV EV and Sport EV, shown in the Bangkok International Motor Show 2018. The success in stimulating EV market demand leads EA to pre-commercial launch MINE SPA 1, a 5-seats MPV, in the Bangkok International Motor Show 2019. MINE SPA 1 has maximum speed at 140 km/hour, powered by 30 kWh lithium-ion battery with STOBA technology, which is high safety. MINE’s drive range per one-time charge (15 mins.) is 200 km, using our charging network, EA Anywhere, which is expanding and ready to serve MINE (including other brands). Therefore, the company received good response from taxi union, Cooperative Credit Union Suvarnabhumi Pattana Limited, a group of car service providers (taxis) signed MOU to pre-order 3,500 EVs. Moreover, the interested public has registered for 1,062 EVs reserved.

Currently, the company has started building assembly facilities and preparing to import the machinery and equipment. The facilities are going to be ready by the end of 2019 and starting commercial operation in early of 2020.

#### 5. **Green Diesel and PCM**

The Company research and development product by using crude palm oil as the major raw material. To create margin and extend from biodiesel business until successful as follows:

- Green Diesel (or GD): For blending with the diesel oil, to increase efficiency and decrease carbon.
- Bio Phase Change Material (or Bio-PCM): Being the innovator, EA has researched and developed Bio-PCM which can absorb and control temperature. This product is being used to save energy such as for construction materials to control temperature in buildings, packaging, etc.

In 2018, the company started pilot plant of GD and Bio-PCM with total capacity of 1 ton per day to test quality and improve efficiency of the production process. Currently, the project is planned to have total feed capacity at 130 tons per day in the new location in Rayong province. The total investment is approximately THB 1.1 billion.





Progress of the project as of Q2/2019 could be summarized as follow.

1. Started construction of new factory in Rayong province and expected to be completed by the end of 2019.
2. Purchased equipment and machinery as planned.
3. Starting commercial operation will be in Q1/2020.

#### 6. Electric Ferry

In February 2019, the company announced its electric ferry project, using lithium-ion battery with STOBA technology of EA group which is a source of energy to drive the engine without pollution. This E-Ferry with air-conditioned is safe for all maximum 300 passengers, to serve along Chao Phraya River with total distance 20 kilometers, running from the Nonthaburi Pier to Wat Rajsingkorn Pier. The total investment budget is set at THB 1 billion. Currently, this project is under keel laying construction which is the main construction in order to build ev-ferry. The production of 2 electric pilot ferries has started and will be completed in the 3<sup>rd</sup> and 4<sup>th</sup> quarter of this year, while preparing for the production and assembly of 40 electric ferries, as follows:

- **Phases I:** Start construction of 20 electric ferries, to be completed by the end of 2019
- **Phases II:** Start construction of the rest 20 electric ferries, to be completed by early of 2020

Kindly be informed accordingly.

Yours faithfully,

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(Mr. Amorn Saphaweekul)  
Director and Deputy CEO