

17 JULY 2020

THAILAND / UTILITIES - RENEWABLES

## ENERGY ABSOLUTE EA TB

BUY

UNCHANGED

TARGET PRICE THB55.00  
CLOSE THB49.25  
UP/DOWNSIDE +11.7%  
TP vs CONSENSUS +5.0%

## EV success is key

## EV and PCM success is still underestimated

We believe the market still underestimates EA's potential success with its new S-curve growth projects – the crude palm oil (CPO)-based phase change materials (PCM) and electric vehicle (EV) value chain (EV cars, E-ferries, E-buses, charging stations, and battery production plant), which we project to be EA's key net profit growth drivers post 2020. We expect EA to see significant growth from its multiple S-curve projects that are now projected to start up (PCM, E-ferries, charging stations, and battery plant) by mid-2021 and be delivered within 2021 (EV cars).

## How competitive and attractive are the EV cars produced by EA?

During yesterday's conference call, despite the THB0.3m high selling price of EA's SPA1 model EV car compared to Toyota's competing eco car Altis model, management indicated that EA's EV cars are more attractive to consumers in the "fleet" vehicle markets, mainly the taxi, E-bus, and E-truck markets, given 1) the energy cost saving per mileage between 50-90% for EV cars compared to gasoline and diesel-based (NGV and LPG) vehicles; and 2) lower maintenance expenses by up to THB0.1-0.2m, annually. In addition, compared to the imported Chinese-produced MG brand EV car, EA's SPA1 is currently the only EV car to have earned a taxi qualification in Thailand.

## E-bus growth is coming soon in 2021

According to management, EA plans to start producing E-buses in 1Q21 and deliver them within 2021, with a 500-1,000 sales target that year. EA, via its 40%-owned JV with Nex Point (NEX TB, not rated), plans to construct a new THB1.3b manufacturing plant to produce E-buses with a 6,000 bus capacity, sharing the same location with EA's existing THB1.2b EV car plant with a 20,000 EV capacity in Chachoengsao province. We estimate that EA will generate net profits of THB0.6b from EV cars (5,000 EV car sales) and THB0.5b from E-buses (1,000 E-buses) in 2021.

## Charging stations – a long-term growth engine

We believe EA's charging stations for EVs is its hidden growth engine in the long term, given 1) the low number of four charges per day (cpd) for the THB0.2m normal charging head and 8cpd for the THB0.8m fast head; 2) the estimated charging rate of THB4-5/kWh; and 3) the subsidized electricity cost of THB2.64/kWh at a flat rate for EVs, recently announced by the regulator. We maintain BUY and our SoTP TP of THB55.

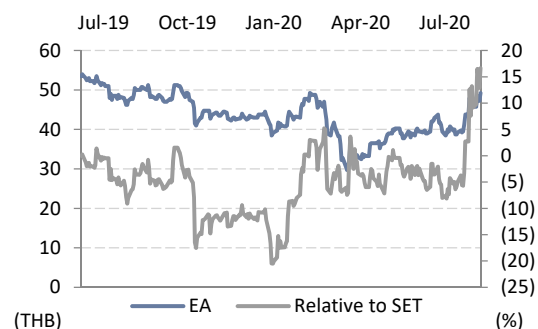


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## KEY STOCK DATA

YE Dec (THB m)	2019	2020E	2021E	2022E
Revenue	14,887	17,652	32,253	38,844
Net Profit	6,082	6,848	8,152	10,981
EPS (THB)	1.63	1.84	2.19	2.94
vs Consensus (%)	-	7.4	9.0	6.1
EBITDA	9,706	11,190	13,854	16,596
Core net profit	6,082	6,848	8,152	10,981
Core EPS (THB)	1.63	1.84	2.19	2.94
EPS growth (%)	55.8	12.6	19.0	34.7
Core P/E (x)	30.2	26.8	22.5	16.7
Dividend yield (%)	1.2	1.6	2.0	3.0
EV/EBITDA (x)	22.4	19.5	15.5	12.6
Price/book (x)	7.9	6.6	5.5	4.5
Net debt/Equity (%)	128.4	110.4	80.6	53.0
ROE (%)	29.3	26.7	26.7	29.9



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	23.1	35.9	(6.2)
Relative to country (%)	24.6	23.8	18.6
Mkt cap (USD m)	5,790		
3m avg daily turnover (USD m)	17.7		
Free float (%)	40		
Major shareholder	Mr. Somphote Ahunai (23%)		
12m high/low (THB)	54.25/27.50		
Issued shares (m)	3,730.00		

Sources: Bloomberg consensus; FSSIA estimates

The President of Finansia Syrus Securities PCL is also EA's Independent Director and on EA's Audit Committee.

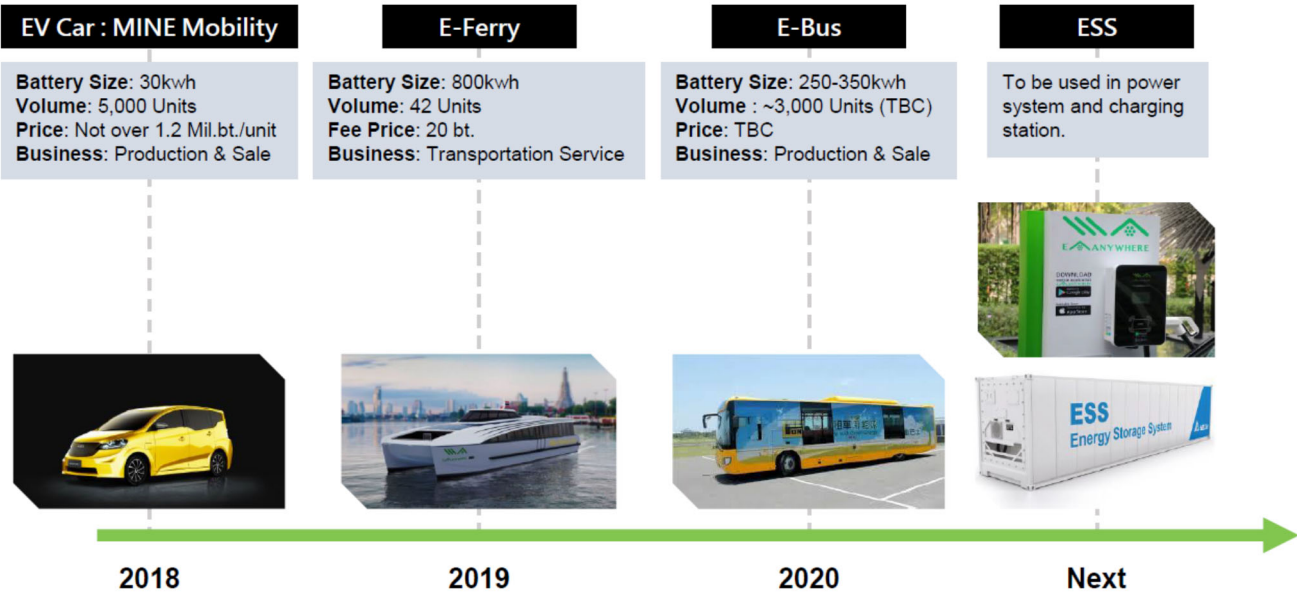
### Three key questions to underscore investor confidence

During yesterday’s conference call, management addressed three key questions that have plagued investors over the past 12 months, including:

- Q1: How competitive will EA’s EV cars be compared to internal combustion engine (ICE) cars or other imported EV cars?
- Q2: Will EA’s EV venture incur significant losses during the first few years, similar to the pioneer companies in the EV business, including Tesla and Nio?
- Q3: How likely is it that EA’s charging station venture will be successful and profitable?

According to EA, the company is now close to completing and launching the operations and delivery of its EV-related products within the next 12 months, including its EV cars, E-ferries, E-buses, and Energy Storage System (ESS), which includes its battery plant and charging stations.

Exhibit 1: EA’s product developments in the EV chain



Source: EA

## Q1: How competitive will EA's EV cars be compared to internal combustion engine (ICE) cars or other imported EV cars?

Despite the THB0.3m high selling price of EA's SPA1 model EV car compared to Toyota's competing eco car Altis model, management indicated that EA's EV cars are more attractive to consumers in the "fleet" vehicle markets, mainly the taxi, E-bus, and E-truck markets, given the cost savings (EV vs ICE), lower maintenance expenses (EV vs ICE), and cheaper selling price (EA's EVs vs other competitors' EVs).

### Exhibit 2: EA's SPA1 compared to other major EV brands

Brand	MINE	FOMM	Audi	Tesla	Nissan	Hyundai	MG	Kia	BYD
Model	SPA1	FOMM ONE	e-tron 55 Quattro	Model 3 Long Range Performance	LEAF	KONA SEL	ZS	e-Soul	e6
Socket type	AC Type 2 & CCS2	AC Type 2	AC Type 2 & CCS 2	AC Type 2 (non-US) & CCS 2	AC type2 & CHRdeMO	AC Type 2 & CCS 2	AC Type 2 & CCS 2	AC Type 2 & CCS 2	AC Type 2
Type	MPV	L 7e	Mid-side SUV	Sedan	Compact car	SUV	Compact SUV	Compact SUV	MPV
Country of origin	Thailand	Thailand	Germany	United States	Japan	Korea	China	Korea	China
Battery capacity (kWh)	30	11.8	95	75	40	67.5	44.5	67.1	75
Battery usable (kWh)	NA	10	86.5	72.5	36	64	44.5	64	73
Range per single charge (km)	220	160	417	518	311	452	337	452	400
Electric range (km)	NA	NA	365	435	220	400	225	365	280
Efficiency (Wh/km)	NA	68	237	167	164	160	198	175	261
0-100km/h (sec)	NA		5.7	3.4	7.9	7.9	8.2	7.9	12
Max speed (km/hr)	140	80	200	233	144	167	140	167	149
Horsepower (HP)	127	13	360	283	150	201	150	204	134
Normal charge time (hour/mins)	3h	6h	9h15m	7h45m	11h45m	7h	8h	10h30m	11h30m
Fast charge time (mins)	15m	NA	25m	22m	40m	44m	37m	44m	90m
Import tax (%)	0	0	NA	NA	20	40	0	40	0
Excise tax (%)	2	2	NA	NA	8	8	8	8	8
Cost/km(THB/km)	0.7	0.3	NA	NA	NA	NA	0.5-1.09	NA	NA
Battery warranty	5 years /180k km	Lifetime	8 years /160k km	4 years /120k km	8 years /160k km	Lifetime	8 years /180k km	5years /150k km	5years /500k km
Price tag - Domestic (THB m)	1.2	0.7	NA	NA	0.9	1.1	0.5	1.2	1.4
Price tag – Thailand (THB m)	1.2	0.7	5.1	1.5	1.49	2.259	1192	2.387	1.4

Sources: Companies; EV database

### EV cars have lower energy cost savings per kilometre of between 50-90%

compared to gasoline and diesel-based (natural gas for vehicles (NGV) and liquefied petroleum gas (LPG)) vehicles. This is the key incentive for fleet drivers, particularly taxi drivers, to save daily expenses for energy by up to 50-90%, and hence is likely to incentivize taxi drivers to adopt EV cars as their taxis to replace the higher-cost ICE or oil-based vehicles. This is particularly so, considering that taxi drivers normally drive long daily distances of up to 500-600km.

According to management, a study by the Thai regulator indicates that EV cars will consume 3-6x less energy than both ICE (diesel and gasoline) and NGV cars, consuming only THB0.4-0.6 per running km distance vs THB1.5-3.0/km for ICE and NGV cars.

**Exhibit 3: Comparison of energy cost per kilometre for EV cars vs ICE and NGV**

Car type	Unit
ICE car (diesel and gasoline)	2-3 THB per kilometre
EV car	0.4-0.6 THB per kilometre
NGV car	1.5-1.6 THB per kilometre

Source: EA

**Exhibit 4: EA's SPA1 model**

Source: EA

**Lower maintenance expenses by up to THB0.1-0.2m annually.** In addition, compared to the imported Chinese-produced MG brand EV car, EA's SPA1 is currently the only EV car brand to be domestically produced and to have earned a taxi qualification in Thailand. In Thailand, for any car model to be qualified for taxi work, certain qualifications, including vehicle length and width, must be met in order for a public taxi qualification to be granted.

For imported EV cars that aim to compete in the taxi fleet market in Thailand, we think the entry barriers will not only include the car qualification, but also the differential in import and excise taxes. To promote the EV car value chain under Thailand's investment campaign in the Eastern Economic Corridor (EEC), the Thai government has lowered the excise tax for EV cars produced domestically with certain domestic raw material content to 2% vs 8% for other imported EV cars.

**Exhibit 5: EV models in Thailand 2020**

	MINE SPA1	FOMM One	BMW I3s	MINI Cooper SE	Nissan LEAF	BYDe6	BYD M3, T3	MG ZS EV	Hyundai KONA Electric	Hyundai IONIQ Electric	KIA All-new Soul EV
EV Range (km)	220	160	280	217	311	400	300	337	312(SE) 482(SEL)	280	452
Battery size (kWh)	30	11.8	33	32.6	40	80	50.3	44.5	39.2(SE) 64(SEL)	28	64
Country of origin	Thailand	Thailand	Germany	UK	Japan	China	China	China	Korea	Korea	Korea
Import tax (%)	0	0	80	80	20	0	0	0	40	40	40
Excise tax (%)	2	2	8	8	8	8	8	8	8	8	8
Price tag – Thailand (THB m)	1.2	0.664	3.73	2.29	1.49	1.4	1.89(M3) 1.059(T3)	1.19	1.849(SE) 2.259(SEL)	1.749	2.387

Source: EA

Only one other domestically-produced EV car FOMM, which stands for First One Mile Mobility, a Japanese parent company producing a compact EV car since 2019, will enjoy the same tax benefit as EA's EV cars. Even other competing EV car models imported from China remain uncompetitive compared to EA's EV SPA1 car, with the selling price premium between zero for MG's ZS EV model to THB0.3m for the Nissan LEAF, and THB0.7m for BYD's M3 model.

**Exhibit 6: EA's EV competitors: FOMM's performance compared to Eco Cars' performance**

		FOMM ONE	Eco Car (oil)	Eco Car (LPG,NGV)
Average cost	Fuel cost	THB0.24/km	THB2/km	THB1/km
	Lube cost	-	THB2,000/10,000km	THB2,000/10,000km
Cost at 100,000 km	Fuel cost	THB 24,000	THB200,000	THB100,000
	Lube cost	-	THB20,000	THB20,000
	<b>Total</b>	<b>THB 24,000</b>	<b>THB220,000</b>	<b>THB120,000</b>
Cost at 200,000 km	Fuel cost	THB 48,000	THB400,000	THB200,000
	Lube cost		THB40,000	THB40,000
	<b>Total</b>	<b>THB 48,000</b>	<b>THB440,000</b>	<b>THB240,000</b>
Cost at 300,000 km	Fuel cost	THB 72,000	THB600,000	THB300,000
	Lube cost		THB60,000	THB60,000
	<b>Total</b>	<b>THB 72,000</b>	<b>THB660,000</b>	<b>THB360,000</b>

Source: Companies

**Q2: Will EA's EV venture incur significant losses during the first few years, similar to the pioneer companies in the EV business, including Tesla and Nio?**

Unlike Tesla and Nio – two leading global EV producers that posted significant net losses during the first few years of their operations – we believe EA's manufacturing EV venture is unlikely to suffer a net loss, but will likely post a net profit on its first full year of operation in 2021E. We project that EA's EV car, of which 5,000 EV cars are set to be sold and delivered during 4Q20-2021, will generate net profits of THB111m in 2020 and THB927m in 2021, based on our assumptions of THB0.2m net profit per EV car and a THB1.2m selling price per unit.

**Exhibit 7: EA's net profit in 2019-2024E**

Net profit	Stake	EIRR	2019	2020E	2021E	2022E	2023E	2024E	Investment
	(%)	(%)	(THB m)	(THB m)	(THB m)	(THB m)	(THB m)	(THB m)	(THB b)
Committed growth									
Battery phase 1	100	27	0	27	959	956	953	950	5.0
Battery phase 2 (15GW)	50	31	0	0	264	2,793	4,930	14,193	15.0
EV car (MPA SPA1, 2020E)	100	4	0	111	927	1,030	1,646	1,651	1.2
EV boat (2020E)	100	16	0	10	78	78	81	84	1.4
EV charging station (2020E)	100	19	0	(4)	112	112	115	118	1.0
Green diesel & PCM (Aug 2020E)	100	32	0	408	844	844	844	844	0.9
<b>Total</b>			<b>0</b>	<b>553</b>	<b>3,183</b>	<b>5,813</b>	<b>8,569</b>	<b>17,840</b>	<b>24.5</b>

Sources: EA, FSSIA estimates

According to management, EA differs from its two global peers in three ways. First, unlike Tesla and Nio, with significant initial multi-billion USD investment costs for the large-scale, fully-automated manufacturing plants to achieve the fast track benefits from economies of scale, EA will choose a different investment path of a small initial investment of only THB1.2b for its semi-automated 20,000-capacity manufacturing plant. We estimate that EA will incur a small investment cost of only THB30m in depreciation expenses and low operating expenses.

Second, EA has a fully-integrated value chain with two plants for both battery and EV car production, with a proven track record of battery technology via its acquisition of Taiwan-based Amita Technologies (AMITA). Tesla and Nio both employ battery technology from third parties with proven technology, but unproven production capabilities for large-scale manufacturing plants, according to management.

Third, the initial large pre-order backlog of EV cars backfired both Tesla and Nio, leading to their high operating losses. Tesla has faced a daunting task in ramping up production of its Model 3 due to the production difficulties in ramping up scale at a fast enough rate to deliver the pent-up backlog of its popular Model 3. It was only until Tesla successfully achieved the fast and large-scale production of its Model 3 that the company turned around financially and began generating net profit since 2019, driving up Tesla's share price by 5x within one year to over USD1,500 in Jul-20.

### Exhibit 8: Peer comparisons

Company	BBG code	Rec	Share price (Local curr)	Target price (Local curr)	Upside (%)	Market Cap (USD m)	3Y EPS CAGR (%)	PE		ROE		PBV		EV/EBITDA	
								20E	21E	20E	21E	20E	21E	20E	21E
								(x)	(x)	(%)	(%)	(x)	(x)	(x)	(x)
<b>THAILAND</b>															
Energy Absolute	EA TB	BUY	49.25	55.00	12	5,876	10.3	26.8	22.5	26.7	26.7	6.6	5.5	19.5	15.5
<b>Thailand avg</b>						<b>5,876</b>	<b>10.3</b>	<b>26.8</b>	<b>22.5</b>	<b>26.7</b>	<b>26.7</b>	<b>6.6</b>	<b>5.5</b>	<b>19.5</b>	<b>15.5</b>
<b>US</b>															
Tesla Inc	TSLA US	NR	1,500.64	NA	NA	278,385	(249.3)	313.4	125.1	4.8	19.2	27.2	20.0	74.1	49.1
Nio Inc - Adr	NIO US	NR	12.94	NA	NA	15,467	(27.0)	NA	NA	148.8	28.4	NA	NA	NA	NA
Nikola Corp	NKLA US	NR	52.53	NA	NA	18,958	(300.2)	NA	NA	(45.3)	(35.6)	24.5	24.2	NA	NA
Workhorse	WKHS US	NR	15.83	NA	NA	1,443	(20.6)	NA	NA	NA	NA	NA	NA	NA	NA
<b>US avg</b>						<b>314,253</b>	<b>(247.8)</b>	<b>277.6</b>	<b>110.8</b>	<b>8.8</b>	<b>16.3</b>	<b>25.6</b>	<b>19.2</b>	<b>65.7</b>	<b>43.5</b>
Alternative energy under coverage						5,876	10.3	26.8	22.5	26.7	26.7	6.6	5.5	19.5	15.5
Average (all)						320,129	(243.1)	273.0	109.2	9.2	16.5	25.2	19.0	64.8	43.0

Share price as of 17 July 2020

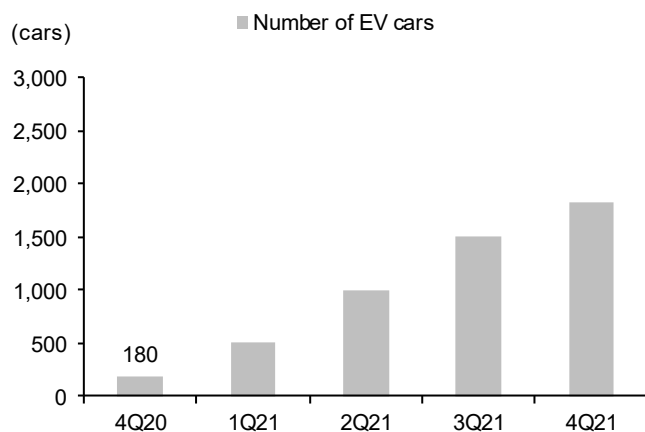
Sources: Bloomberg; FSSIA estimates

Management guided that EA will gradually ramp up its production of EV cars from a few hundred in 4Q20 to over 1,000 EV cars a quarter by 2Q21, aiming to deliver their total goal of 5,000 EV cars within 17 months.

Similarly, EA plans to ramp up its innovative E-ferry business in Aug, gradually increasing the number of operating E-ferries from two in 2Q20 to 18 new E-ferries in 1Q21, for a total of 42 operating E-ferries by 1Q21E.

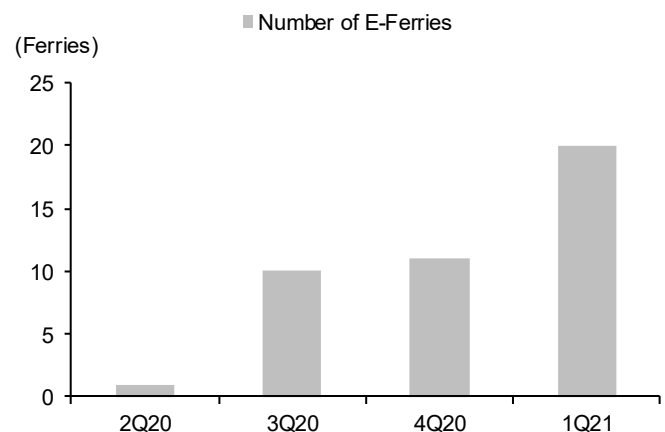
We believe the piecemeal production ramp-ups of both EV cars and E-ferries reflect EA's prudent business execution with a sound risk management strategy to match demand with supply.

### Exhibit 9: Total of 5,000 EV cars by 4Q21



Source: EA

### Exhibit 10: Total of 42 E-ferries by 1Q21



Source: EA



For E-buses, via its 40% stake in NEX, EA plans to construct a THB1.3b manufacturing plant with a total capacity of 6,000 E-buses annually. Management indicated that EA will complete and start-up its E-bus plant by 1Q21, and should start to deliver E-bus products by 2Q21.

While we still exclude the E-bus venture from EA's net profit, we think that EA's E-bus strategy is prudent and sound, considering that 1) the JV with NEX should significantly lower the production and market risks for E-buses since NEX is one of Thailand's leading producers of ICE buses and has a strong marketing network for the bus business in Thailand; and 2) EA's proven battery technology should allow it to employ its batteries for its E-buses.

### Q3: How likely is it that EA's charging station venture will be successful and profitable?

EA has already established 376 charging stations in Thailand, located across the country, in preparation for the upcoming growth of the EV business. As of 31 Jan 2020, there were a total of 527 charging stations and 817 chargers in Thailand. Of this, 376 stations and 813 chargers belonged to EA, indicating that EA is a leading charging station service provider in Thailand.

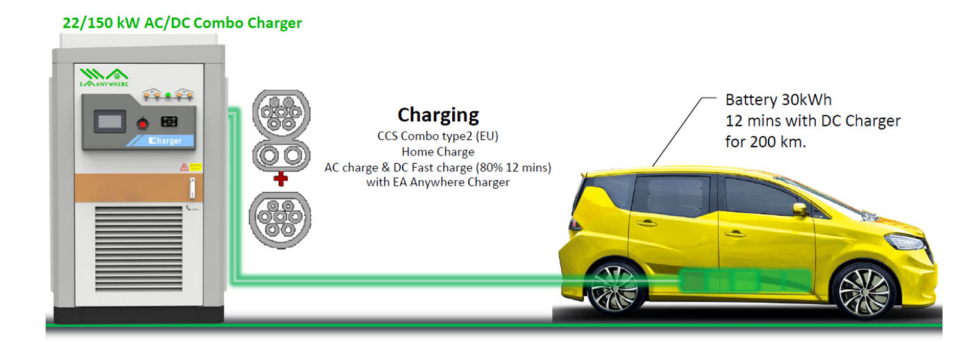
#### Exhibit 11: Charging stations in Thailand

	EA ANYWHERE	CHARGEPOINT	PTT EV	ChargeNow	MEA EV	CUPEA	EGAT EV	Even	EVOLT	PUMPCHARGE	Total
Number of locations	376	68	17	16	13	11	10	7	6	3	527
AC (normal charge)	573	48	25	38	7	13	15	12	10	7	748
DC (fast charge)	240	32	0	1	9	13	12	0	2	0	69
Total chargers	573	80	25	39	16	26	27	12	12	7	817

Source: EA

Management also indicated that EA's charging stations possess key strengths over competitors in two ways. First, EA's chargers provide a faster charging service at 1-2 hours for normal chargers and only 12-15 minutes for its fast chargers. Second, the estimated charging cost of THB4-5/kWh is estimated to be 20-40% lower than the charging rate of competitors thanks to EA benefitting from the economies of scale and the lower cost of its chargers.

#### Exhibit 12: EA Anywhere charging station for EV cars



Source: EA

Based on the average investment cost of THB70k for a normal charger and THB1m for a fast charger, we estimate that EA will reach its breakeven cost at four daily charges for the normal charger and 8-10 daily charges for the fast charger in a period of five years.

**Exhibit 13: EA charging stations in Thailand (operating and non-operating)**

EA charging station		Unit
Number of stations	400	station
Range for each station	5-10	kilometres
Number of normal head chargers (AC)	1,367	head charger
Number of fast head chargers (DC)	750	head charger
Average head charger per station	AC 3-6, DC 3	head charger per station
Charging time for normal charge (from 0% to 80% battery as of 30kWh battery)	1	hour
Charging time for fast charge (from 0% to 80% battery as of 30kWh battery)	12-15	minutes
Cost per 1 normal charge socket outlet (1 normal head charger)	70,000	THB
Cost per 1 fast charge socket outlet (3 fast head charger)	1,000,000	THB
Breakeven for normal charge	3-4	charge per day
Breakeven for fast charge	5-10	charge per day
EV charge rate (electricity based tariff)	2.6369	THB per kWh
Cost per kilometre	0.4-0.6	THB per kilometre

Source: EA

**2Q20 preview**

We project EA to post a net profit of THB1.2b in 2Q20, down 15.6% q-q and 15% y-y. Core net profit is projected to decline 13.6% y-y to THB1.2b. Key drivers are:

- Lower production volume of electricity from wind farms (386MW capacity) to 145GWh, down from 226GWh in 1Q20 due to the seasonally lower wind speed;
- Higher production volume of electricity from solar farms (278MW) to 175GWh, up from 155 GWh in 1Q20 due to improving utilization thanks to increased sunlight in 2Q20;
- Lower net profit contribution by 25% q-q from the biodiesel business due to the weaker q-q sales volume to 44m litres, down from 50m litres in 1Q20 caused by the lower demand for diesel in Thailand from the nation's lockdown;
- An additional THB40m higher SG&A expense due to higher q-q bonus payments;
- THB38m net loss contribution from AMITA.

**Exhibit 14: 2Q20E earnings preview**

	2Q19	1Q20	2Q20E		6M19	6M20E	chg.	2020E	Comments
	(THB m)	(THB m)	(THB m)	(q-q %)	(y-y %)	(THB m)	(THB m)	(y-y %)	(THB m)
<b>Revenue</b>	<b>3,614</b>	<b>4,732</b>	<b>4,306</b>	<b>(9.0)</b>	<b>19.2</b>	<b>6,700</b>	<b>9,038</b>	<b>34.9</b>	<b>17,652</b>
Operating costs	(1,344)	(2,377)	(2,485)	4.5	84.9	(2,538)	(4,862)	91.6	(5,226)
<b>EBITDA</b>	<b>2,270</b>	<b>2,355</b>	<b>2,140</b>	<b>(9.1)</b>	<b>(5.7)</b>	<b>4,163</b>	<b>4,495</b>	<b>8.0</b>	<b>11,190</b>
EBITDA margin (%)	62.8	49.8	49.7	nm	nm	62.1	49.7	(19.9)	63.4
Depn & amort.	(626)	(580)	(598)	3.1	(4.5)	(1,133)	(1,178)	4.0	(2,494)
EBIT	1,644	1,775	1,542	(13.1)	(6.2)	3,029	3,317	9.5	8,696
Interest expense	(341)	(433)	(432)	(0.2)	26.9	(604)	(865)	43.3	(1,631)
Interest & invt inc	-	-	-	nm	nm	-	-	nm	-
Other income	26	29	27	(7.6)	3.9	28	56	nm	100
Associates' contrib	5	(14)	10	(172.1)	118.3	(6)	(4)	(39.8)	(5)
Exceptionals	99	60	65	8.6	(34.4)	176	125	nm	-
<b>Pretax profit</b>	<b>1,433</b>	<b>1,417</b>	<b>1,212</b>	<b>(14.5)</b>	<b>(15.4)</b>	<b>2,623</b>	<b>2,629</b>	<b>0.2</b>	<b>7,165</b>
Tax	(3)	(1)	(1)	(5.4)	(69.9)	5	(2)	(141.0)	(18)
Tax rate (%)	0.2	0.1	0.1	nm	nm	(0.5)	(0.1)	(73.1)	0.3
Minority interests	13	36	15	(58.0)	19.4	25	56	125.7	(311)
<b>Net profit</b>	<b>1,442</b>	<b>1,452</b>	<b>1,226</b>	<b>(15.6)</b>	<b>(15.0)</b>	<b>2,653</b>	<b>2,678</b>	<b>0.9</b>	<b>6,848</b>
<b>Core net profit</b>	<b>1,344</b>	<b>1,382</b>	<b>1,161</b>	<b>(16.0)</b>	<b>(13.6)</b>	<b>2,477</b>	<b>2,543</b>	<b>2.7</b>	<b>6,848</b>
EPS (THB)	0.39	0.39	0.33	(15.6)	(15.0)	0.71	0.72	0.9	1.84
Core EPS (THB)	0.36	0.37	0.31	(16.0)	(13.6)	0.66	0.68	2.7	1.84

Sources: EA; FSSIA estimates



## Valuation

We believe EA remains an attractive investment in the Thai power sector, given 1) its strong net profit growth momentum in 2020-22E driven by the net profits from its EV ventures and its CPO-based PCM unit; and 2) the potential upsides from the higher-than-expected sales volumes of EV cars and E-buses, and the net profit upsides from its charging station venture – which we think investors still underestimate – reflected in our net profit forecasts that still largely exclude the potential net profits from EA's EV ventures and PCM.

### Exhibit 15: EA's SOTP, DCF-based valuation

Cost of equity assumptions		(%)	Cost of debt assumptions		(%)
Risk-free rate		2.3	Pre-tax cost of debt		4.6
Market risk premium		8.5	Marginal tax rate		20
Stock beta		0.4			
DCF assumptions					
Cost of equity, Ke		5.7	Net cost of debt, Kd		3.4
Weight applied		25	Weight applied		75
WACC		4			
SOTP valuation estimate		(THB m)	(THB/share)	Valuation methodology	
Biodiesel		3,891	1	DCF with WACC 4.0%, Risk free rate 2.3%, Risk premium 8.5%	
Solar					
Lopburi		1,331	0.4	DCF with WACC 4.0%, Risk free rate 2.3%, Risk premium 8.5%	
Nakornsawun		12,119	3.2	DCF with WACC 4.0%, Risk free rate 2.3%, Risk premium 8.5%	
Lumpang		20,085	6.1	DCF with WACC 4.0%, Risk free rate 2.3%, Risk premium 8.5%	
Pitsanulok		22,035	5.9	DCF with WACC 4.0%, Risk free rate 2.3%, Risk premium 8.5%	
Total solar		55,570	15.6		
Wind					
- Southern (COD 2017)					
Had Gunghun 1		4,175	1.1	DCF with WACC 4.0%, Risk free rate 2.3%, Risk premium 8.5%	
Had Gunghun 2		5,087	1.4	DCF with WACC 4.0%, Risk free rate 2.3%, Risk premium 8.5%	
Had Gunghun 3		5,103	1.4	DCF with WACC 4.0%, Risk free rate 2.3%, Risk premium 8.5%	
Had Gunghun 4		6,301	1.7	DCF with WACC 4.0%, Risk free rate 2.3%, Risk premium 8.5%	
Total wind farms - Southern		14,365	5.5		
- Northeastern (COD 2018-19)					
Hanuman 1		8,207	2.2	DCF with WACC 4.0%, Risk free rate 2.3%, Risk premium 8.5%	
Hanuman 5		8,732	2.3	DCF with WACC 4.0%, Risk free rate 2.3%, Risk premium 8.5%	
Hanuman 8		8,186	2.2	DCF with WACC 4.0%, Risk free rate 2.3%, Risk premium 8.5%	
Hanuman 9		7,641	2	DCF with WACC 4.0%, Risk free rate 2.3%, Risk premium 8.5%	
Hanuman 10		14,591	3.9	DCF with WACC 4.0%, Risk free rate 2.3%, Risk premium 8.5%	
Total wind farms - Northeastern		47,358	12.7		
Battery phase 1 (1GWh)		8,640	2.3	DCF with WACC 7%, Risk free rate 5.3%, Risk premium 8.5%	
Battery phase 2 (15GWh)		76,850	20.6	DCF with WACC 7%, Risk free rate 5.3%, Risk premium 8.5%	
EV cars (MPA SPA1, 2020E)		1,332	0.7	2020E P/E at 12x	
EV boats (2020E)		99	0	2020E P/E at 12x	
EV charging stations (2020E)		1,135	0.3	DCF with WACC 4.0%, Risk free rate 2.3%, Risk premium 8.5%	
Total EV and battery		88,056	23.9		
Green diesel & PCM (Jan 2020E)		6,127	1.6	2020E P/E at 15x	
Net debt		-32,881	-10.5		
Minorities		15,498	5.1		
Residual ordinary equity		197,984	55		

Source: FSSIA estimates

## Financial Statements

### Energy Absolute

Profit and Loss (THB m) Year Ending Dec	2018	2019	2020E	2021E	2022E
Revenue	11,552	14,887	17,652	32,253	38,844
Cost of goods sold	(3,835)	(4,235)	(5,226)	(16,141)	(19,528)
<b>Gross profit</b>	<b>7,717</b>	<b>10,652</b>	<b>12,426</b>	<b>16,112</b>	<b>19,315</b>
Other operating income	-	-	-	-	-
Operating costs	(805)	(946)	(1,236)	(2,258)	(2,719)
<b>Operating EBITDA</b>	<b>6,912</b>	<b>9,706</b>	<b>11,190</b>	<b>13,854</b>	<b>16,596</b>
Depreciation	(1,833)	(2,517)	(2,494)	(3,694)	(3,694)
Goodwill amortization	0	0	0	0	0
<b>Operating EBIT</b>	<b>5,079</b>	<b>7,189</b>	<b>8,696</b>	<b>10,160</b>	<b>12,902</b>
Net financing costs	(920)	(1,226)	(1,631)	(1,743)	(1,645)
Associates	(6)	(14)	0	0	0
Recurring non operating income	(140)	53	100	101	101
Non recurring items	1,072	0	0	0	0
<b>Profit before tax</b>	<b>5,091</b>	<b>6,016</b>	<b>7,165</b>	<b>8,518</b>	<b>11,358</b>
Tax	(29)	11	(6)	(46)	(48)
<b>Profit after tax</b>	<b>5,061</b>	<b>6,027</b>	<b>7,159</b>	<b>8,472</b>	<b>11,310</b>
Minority interests	(86)	55	(311)	(320)	(330)
Preferred dividends	0	0	0	0	0
Other items	-	-	-	-	-
<b>Reported net profit</b>	<b>4,975</b>	<b>6,082</b>	<b>6,848</b>	<b>8,152</b>	<b>10,981</b>
<b>Non recurring items &amp; goodwill (net)</b>	<b>(1,072)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Recurring net profit</b>	<b>3,904</b>	<b>6,082</b>	<b>6,848</b>	<b>8,152</b>	<b>10,981</b>
<b>Per share (THB)</b>					
Recurring EPS *	1.05	1.63	1.84	2.19	2.94
Reported EPS	1.33	1.63	1.84	2.19	2.94
DPS	0.40	0.60	0.80	1.00	1.50
Diluted shares (used to calculate per share data)	3,730	3,730	3,730	3,730	3,730
<b>Growth</b>					
Revenue (%)	(0.2)	28.9	18.6	82.7	20.4
Operating EBITDA (%)	8.1	40.4	15.3	23.8	19.8
Operating EBIT (%)	4.4	41.5	21.0	16.8	27.0
Recurring EPS (%)	2.3	55.8	12.6	19.0	34.7
Reported EPS (%)	30.3	22.2	12.6	19.0	34.7
<b>Operating performance</b>					
Gross margin inc depreciation (%)	50.9	54.6	56.3	38.5	40.2
Gross margin of key business (%)	-	-	-	-	-
Operating EBITDA margin (%)	59.8	65.2	63.4	43.0	42.7
Operating EBIT margin (%)	44.0	48.3	49.3	31.5	33.2
Net margin (%)	33.8	40.9	38.8	25.3	28.3
Effective tax rate (%)	0.6	-0.2	0.1	0.5	0.4
Dividend payout on recurring profit (%)	38.2	36.8	43.6	45.8	51.0
Interest cover (X)	5.4	5.9	5.4	5.9	7.9
Inventory days	21.8	46.9	59.1	43.2	59.6
Debtor days	74.0	67.1	76.4	58.5	68.4
Creditor days	56.8	70.3	79.7	58.2	80.4
Operating ROIC (%)	10.5	12.1	12.2	(3.3)	(4.2)
ROIC (%)	9.5	11.2	11.3	(3.1)	(3.9)
ROE (%)	23.8	29.3	26.7	26.7	29.9
ROA (%)	9.1	10.8	11.6	9.9	12.5

\* Pre exceptional, pre-goodwill and fully diluted

Revenue By Division (THB m)	2018	2019	2020E	2021E	2022E
Methyl ester Biodiesel products	3,213	6,570	6,570	6,570	6,570
Pure glycerine products	298	350	360	361	361
Electricity from solar and wind power	7,692	7,957	7,843	15,116	21,107
Head office and others	341	100	100	101	101

Sources: Energy Absolute; FSSIA estimates

## Financial Statements

### Energy Absolute

Cash Flow (THB m) Year Ending Dec	2018	2019	2020E	2021E	2022E
Recurring net profit	3,904	6,082	6,848	8,152	10,981
Depreciation	1,833	2,517	2,494	3,694	3,694
Associates & minorities	(6)	(14)	0	0	0
Other non-cash items	-	-	-	-	-
Change in working capital	7,992	(9,651)	(980)	(1,219)	(2,082)
<b>Cash flow from operations</b>	<b>13,722</b>	<b>(1,067)</b>	<b>8,362</b>	<b>10,627</b>	<b>12,593</b>
Capex - maintenance	(1,833)	(2,517)	(2,494)	(3,694)	(3,694)
Capex - new investment	(12,368)	(3,784)	(4,906)	(194)	(194)
Net acquisitions & disposals	922	(68)	0	0	0
Other investments (net)	(984)	(49)	0	0	0
<b>Cash flow from investing</b>	<b>(14,263)</b>	<b>(6,418)</b>	<b>(7,400)</b>	<b>(3,888)</b>	<b>(3,888)</b>
Dividends paid	(746)	(746)	(2,238)	(2,984)	(3,730)
Equity finance	0	0	0	0	0
Debt finance	1,525	12,725	(180)	5,946	(10,990)
Other financing cash flows	734	56	311	709	718
<b>Cash flow from Financing</b>	<b>1,513</b>	<b>12,035</b>	<b>(2,107)</b>	<b>3,671</b>	<b>(14,002)</b>
Non recurring cash flows	-	-	-	-	-
Other adjustments	0	0	0	0	0
<b>Net other adjustments</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Movement in cash</b>	<b>972</b>	<b>4,550</b>	<b>(1,145)</b>	<b>10,410</b>	<b>(5,298)</b>
Free cash flow to firm (FCFF)	545.96	(6,098.64)	2,592.58	8,481.86	10,349.30
Free cash flow to equity (FCFE)	1,718.50	5,296.19	1,093.25	13,393.73	(1,567.87)

#### Per share (THB)

FCFF per share	0.15	(1.64)	0.70	2.27	2.77
FCFE per share	0.46	1.42	0.29	3.59	(0.42)
Recurring cash flow per share	1.54	2.30	2.50	3.18	3.93

Balance Sheet (THB m) Year Ending Dec	2018	2019	2020E	2021E	2022E
Tangible fixed asset (gross)	53,646	59,819	67,219	70,719	74,219
Less: Accumulated depreciation	(6,059)	(8,448)	(10,942)	(14,637)	(18,331)
<b>Tangible fixed assets (Net)</b>	<b>47,587</b>	<b>51,371</b>	<b>56,277</b>	<b>56,083</b>	<b>55,888</b>
<b>Intangible fixed assets (Net)</b>	<b>937</b>	<b>3,683</b>	<b>3,683</b>	<b>3,683</b>	<b>3,683</b>
Long-term financial assets	-	-	-	-	-
Invest. In associates & subsidiaries	33	100	100	100	100
Cash & equivalents	5,479	10,029	8,884	19,294	13,996
A/C receivable	2,295	3,175	4,219	6,126	8,424
Inventories	330	758	935	2,888	3,494
Other current assets	47	71	84	154	185
<b>Current assets</b>	<b>8,150</b>	<b>14,033</b>	<b>14,123</b>	<b>28,462</b>	<b>26,099</b>
Other assets	2,501	1,033	1,033	1,033	1,033
<b>Total assets</b>	<b>59,208</b>	<b>70,220</b>	<b>75,215</b>	<b>89,360</b>	<b>86,803</b>
Common equity	18,139	23,365	27,975	33,142	40,393
Minorities etc	1,379	1,502	1,813	2,133	2,463
<b>Total Shareholders' equity</b>	<b>19,518</b>	<b>24,866</b>	<b>29,788</b>	<b>35,276</b>	<b>42,856</b>
Long term debt	26,139	36,977	36,798	42,744	31,753
Other long-term liabilities	1,049	2,306	2,306	2,306	2,306
<b>Long-term liabilities</b>	<b>27,187</b>	<b>39,283</b>	<b>39,103</b>	<b>45,049</b>	<b>34,059</b>
A/C payable	611	1,021	1,260	3,892	4,708
Short term debt	3,081	4,968	4,968	4,968	4,968
Other current liabilities	8,810	81	96	176	211
<b>Current liabilities</b>	<b>12,503</b>	<b>6,070</b>	<b>6,324</b>	<b>9,035</b>	<b>9,888</b>
<b>Total liabilities and shareholders' equity</b>	<b>59,208</b>	<b>70,220</b>	<b>75,215</b>	<b>89,360</b>	<b>86,803</b>
Net working capital	(6,750)	2,902	3,882	5,101	7,183
Invested capital	44,308	59,089	64,975	65,999	67,887

\* Includes convertibles and preferred stock which is being treated as debt

#### Per share (THB)

Book value per share	4.86	6.26	7.50	8.89	10.83
Tangible book value per share	4.61	5.28	6.51	7.90	9.84

#### Financial strength

Net debt/Equity (%)	121.6	128.4	110.4	80.6	53.0
Net debt/total assets (%)	40.1	45.5	43.7	31.8	26.2
Current ratio (x)	0.7	2.3	2.2	3.2	2.6
CF interest cover (x)	16.3	8.4	4.7	8.8	0.2

Valuation	2018	2019	2020E	2021E	2022E
<b>Recurring P/E (x) *</b>	<b>47.1</b>	<b>30.2</b>	<b>26.8</b>	<b>22.5</b>	<b>16.7</b>
<b>Recurring P/E @ target price (x) *</b>	<b>52.6</b>	<b>33.7</b>	<b>30.0</b>	<b>25.2</b>	<b>18.7</b>
Reported P/E (x)	36.9	30.2	26.8	22.5	16.7
Dividend yield (%)	0.8	1.2	1.6	2.0	3.0
Price/book (x)	10.1	7.9	6.6	5.5	4.5
Price/tangible book (x)	10.7	9.3	7.6	6.2	5.0
EV/EBITDA (x) **	30.2	22.4	19.5	15.5	12.6
EV/EBITDA @ target price (x) **	33.3	24.6	21.4	17.0	13.9
EV/invested capital (x)	4.7	3.7	3.4	3.2	3.1

\* Pre exceptional & pre-goodwill are fully diluted \*\* EBITDA includes associate income and recurring non operating income

Sources: Energy Absolute; FSSIA estimates

## Corporate Governance report of Thai listed companies 2019

EXCELLENT LEVEL										
AAV	ADVANC	AIRA	AKP	AKR	AMA	AMATA	AMATAV	ANAN	AOT	AP
ARROW	BAFS	BANPU	BAY	BCP	BCPG	BOL	BRR	BTS	BTW	BWG
CFRESH	CHEWA	CHO	CK	CKP	CM	CNT	COL	COMAN	CPALL	CPF
CPI	CPN	CSS	DELTA	DEMCO	DRT	DTAC	DTC	EA	EASTW	ECF
EGCO	GBX	GC	GCAP	GEL	GFPT	GGC	GOLD	GPSC	GRAMMY	GUNKUL
HANA	HARN	HMPRO	ICC	ICHI	III	ILINK	INTUCH	IRPC	IVL	JKN
JSP	K	KBANK	KCE	KKP	KSL	KTB	KTC	KTIS	LH	LHFG
LIT	LPN	MAKRO	MALEE	MBK	MBKET	MC	MCOT	MFEC	MINT	MONO*
MTC	NCH	NCL	NKI	NSI	NVD	NYT	OISHI	OTO	PAP	PCSGH
PDJ	PG	PHOL	PJW	PLANB	PLANET	PORT	PPS	PR9	PREB	PRG
PRM	PSH	PSL	PTG	PTT	PTTEP	PTTGC	PYLON	Q-CON	QH	QTC
RATCH	ROBINS**	RS	S	S & J	SABINA	SAMART	SAMTEL	SAT	SC	SCB
SCC	SCCC	SCN	SDC	SEAFCO	SEAOL	SE-ED	SELIC	SENA	SIS	SITHAI
SNC	SORKON	SPALI	SPI	SPRC	SSSC	STA	STEC	SVI	SYNTEC	TASCO
TCAP	THAI	THANA	THANI	THCOM	THIP	THREL	TIP	TISCO	TK	TKT
TMB	TMILL	TNDT	TOA	TOP	TRC	TRU	TRUE	TSC	TSR	TSTH
TTA	TTCL	TTW	TU	TVD	TVO	U	UAC	UV	VGI	VIH
WACOAL	WAVE	WHA	WHAUP	WICE	WINNER					
VERY GOOD LEVEL										
2S	ABM	ADB	AF	AGE	AH	AHC	AIT	ALLA	ALT	AMANAH
AMARIN	APCO	APCS	AQUA	ARIP	ASAP	ASIA	ASIAN	ASIMAR	ASK	ASN
ASP	ATP30	AUCT	AYUD	B	BA	BBL	BDMS	BEC	BEM	BFIT
BGC	BGRIM	BIZ	BJC	BJCHI	BLA	BPP	BROOK	CBG	CEN	CENTEL
CGH	CHG	CHOTI	CHOW	CI	CIMBT	CNS	COLOR	COM7	COTTO	CRD
CSC	CSP	DCC	DCON	DDD	DOD	EASON	ECL	EE	EPG	ERW
ESTAR	ETE	FLOYD	FN	FNS	FORTH	FPI	FPT	FSMART	FSS	FVC
GENCO	GJS	GL	GLOBAL	GLOW**	GULF	HPT	HTC	HYDRO	ICN	IFS
INET	INSURE	IRC	IRCP	IT	ITD***	ITEL	J	JAS*	JCK	JCKH
JMART	JMT	JWD	KBS	KCAR	KGI	KIAT	KOOL	KWC	KWM	L&E
LALIN	LANNA	LDC	LHK	LOXLEY	LRH	LST	M	MACO	MAJOR	MBAX
MEGA	METCO	MFC	MK	MODERN	MOONG	MPG	MSC	MTI	NEP	NETBAY
NEX	NINE	NOBLE	NOK	NTV	NWR	OCC	OGC	ORI	OSP	PATO
PB	PDG	PDI	PL	PLAT	PM	PPP	PRECHA	PRIN	PRINC	PSTC
PT	QLT	RCL	RICHY	RML	RWI	S11	SAAM	SALEE	SAMCO	SANKO
SAPPE	SAWAD	SCG	SCI	SCP	SE	SFP	SIAM	SINGER	SIRI	SKE
SKR	SKY	SMIT	SMK	SMP	SMT	SNP	SONIC	SPA	SPC	SPCG
SPVI	SR	SRICHA	SSC	SSF	SST	STANLY	STPI	SUC	SUN	SUSCO
SUTHA	SWC	SYMC	SYNEX	T	TACC	TAE	TAKUNI	TBSP	TCC	TCMC
TEAM	TEAMG	TFG	TFMAMA	THG	THRE	TIPCO	TITLE	TIW	TKN	TKS
TM	TMC	TMD	TMI	TMT	TNITY	TNL	TNP	TNR	TOG	TPA
TPAC	TPBI	TPCORP	TPOLY	TRITN	TRT	TSE	TSTE	TVI	TVT	TWP
TWPC	UBIS	UEC	UMI	UOBKH	UP	UPF	UPOIC	UT	UWC	VNT
WIIK	XO	YUASA	ZEN	ZMICO						
GOOD LEVEL										
A	ABICO	ACAP***	AEC	AEONTS	AJ	ALUCON	AMC	APURE	AS	ASEFA
AU	B52	BCH	BEAUTY	BGT	BH	BIG	BLAND	BM	BR	BROCK
BSBM	BSM	BTNC	CCET	CCP	CGD	CHARAN	CHAYO	CITY	CMAN	CMC
CMO	CMR	CPL	CPT	CSR	CTW	CWT	D	DIMET	EKH	EMC
EPCO	ESSO	FE	FTE	GIFT	GLAND	GLOCON	GPI	GREEN	GTB	GYT
HTECH	HUMAN	IHL	INGRS	INOX	JTS	JUBILE	KASET	KCM	KKC	KWG
KYE	LEE	LPH	MATCH	MATI	M-CHAI	MCS	MDX	META	MGT	MJD
MM	MVP	NC	NDR	NER	NNCL	NPK	NUSA	OCEAN	PAF	PF
PICO	PIMO	PK	PLE	PMTA	POST	PPM	PROUD	PTL	RCI	RJH
ROJNA	RPC	RPH	SF	SGF	SGP	SKN	SLP	SMART	SOLAR	SPG
SQ	SSP	STI	SUPER	SVOA	TCCC	THE	THMUI	TIC	TIGER	TNH
TOPP	TPCH	TIPIP	TPLAS	TQM	TTI	TYCN	UTP	VCOM	VIBHA	VPO
WIN	WORK	WP	WPH	ZIGA						
Score Range		Number of Logo					Description			
90-100							Excellent			
80-89							Very Good			
70-79							Good			
60-69							Satisfactory			
50-59							Pass			
Less than 50		No logo given					-			

**Disclaimer:**

The disclosure of the survey results of the Thai Institute of Directors Association ("IOD") regarding corporate governance is made pursuant to the policy of the Office of the Securities and Exchange Commission. The survey of the IOD is based on the information of a company listed on the Stock Exchange of Thailand and the Market for Alternative Investment disclosed to the public and able to be accessed by a general public investor. The result, therefore, is from the perspective of a third party. It is not an evaluation of operation and is not based on inside information.

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\* CGR scoring should be considered with news regarding wrong doing of the company or director or executive of the company such unfair practice on securities trading, fraud, and corruption SEC imposed a civil sanction against insider trading of director and executive; \*\* delisted

Source: Thai Institute of Directors Association (IOD); FSSIA's compilation

## Anti-corruption Progress Indicator

CERTIFIED										
ADVANC	AIE	AKP	AMANAH	AP	APCS	AQUA	ARROW	ASK	ASP	AYUD
BAFS	BANPU	BAY	BBL	BCH	BCP	BCPG	BGRIM	BJCHI	BKI	BLA
BROOK	BRR	BSBM	BTS	BWG	CEN	CENTEL	CFRESH	CGH	CHEWA	CIG
CIMBT	CM	COM7	CPALL	CPF	CPI	CPN	CSC	DCC	DEMCO	DIMET
DRT	DTAC	DTC	EASTW	ECL	EGCO	FE	FNS	FSS	GBX	GC
GCAP	GEL	GFPT	GGC	GJS	GOLD	GPSC	GSTEEL	GUNKUL	HANA	HARN
HMPRO	HTC	ICC	IFS	INET	INSURE	INTUCH	IRPC	IVL	K	KASET
KBANK	KBS	KCAR	KCE	KGI	KKP	KSL	KTB	KTC	KWC	L&E
LANNA	LHK	LPN	LRH	M	MAKRO	MALEE	MBAX	MBK	MBKET	MC
MCOT	MFC	MINT	MONO	MOONG	MSC	MTI	NBC	NINE	NKI	NMG
NNCL	NSI	OCC	OCEAN	OGC	PAP	PATO	PB	PCSGH	PDG	PDI
PDJ	PE	PG	PHOL	PL	PLANB	PLANET	PLAT	PM	PPP	PPS
PREB	PRG	PRINC	PSH	PSTC	PT	PTG	PTT	PTTEP	PTTGC	PYLON
Q-CON	QH	QLT	QTC	RATCH	RML	S & J	SABINA	SAT	SC	SCB
SCC	SCCC	SCG	SCN	SE-ED	SELIC	SENA	SGP	SIRI	SIS	SITHAI
SMIT	SMK	SMPC	SNC	SNP	SORKON	SPACK	SPC	SPI	SPRC	SRICHA
SSF	SSI	SSSC	SST	STA	SUSCO	SVI	SYNTEC	TASCO	TCAP	TFG
TFI	TFMAMA	THANI	THCOM	THIP	THRE	THREL	TIP	TIPCO	TISCO	TKT
TMB	TMD	TMILL	TMT	TNITY	TNL	TNP	TNR	TOG	TOP	TPA
TPCORP	TRU	TRUE	TSC	TSTH	TTCL	TU	TVD	TVI	TWPC	U
UBIS	UEC	UKEM	UOBKH	VGI	VIH	VNT	WACOAL	WHA	WICE	WIIK
DECLARED										
2S	ABICO	AF	AI	AIRA	ALT	AMA	AMARIN	AMATA	ANAN	B
BM	BPP	BUI	CHG	CHO	CHOTI	CHOW	CI	CMC	COL	DDD
DELTA	EFORL	EPCO	ESTAR	ETE	FPI	FTE	ICHI	INOX	IRC	ITEL
JAS	JSP	JTS	KWG	LDC	LIT	META	MFEC	MPG	NEP	NOK
NWR	ORI	PRM	PSL	ROJNA	RWI	SAAM	SAPPE	SCI	SEAOL	SHANG
SKR	SPALI	STANLY	SYNEX	TAE	TAKUNI	TMC	TOPP	TPP	TRITN	TVO
UV	UWC	WHAUP	XO	YUASA	ZEN					

Level	
Certified	This level indicates practical participation with thoroughly examination in relation to the recommended procedures from the audit committee or the SEC's certified auditor, being a certified member of Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) or already passed examination to ensure independence from external parties.
Declared	This level indicates determination to participate in the Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC)

**Disclaimer:**

The disclosure of the Anti-Corruption Progress Indicators of a listed company on the Stock Exchange of Thailand, which is assessed by ThaiPat Institute, is made in order to comply with the policy and sustainable development plan for the listed companies of the Office of the Securities and Exchange Commission. ThaiPat Institute made this assessment based on the information received from the listed company, as stipulated in the form for the assessment of Anti-corruption which refers to the Annual Registration Statement (Form 56-1), Annual Report (Form 56-2), or other relevant documents or reports of such listed company. The assessment result is therefore made from the perspective of ThaiPat Institute that is a third party. It is not an assessment of operation and is not based on any inside information. Since this assessment is only the assessment result as of the date appearing in the assessment result, it may be changed after that date or when there is any change to the relevant information. Nevertheless, FSS International Investment Advisory Company Limited does not confirm, verify, or certify the accuracy and completeness of the assessment results.

Note: Companies participating in Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) under Thai Institute of Directors (as of June 24, 2019) are categorised into: 1) companies that have declared their intention to join CAC, and; 2) companies certified by CAC.

Source: The Securities and Exchange Commission, Thailand; \* FSSIA's compilation

## GENERAL DISCLAIMER

### ANALYST(S) CERTIFICATION

Suwat Sinsadok FSS International Investment Advisory Securities Co., Ltd

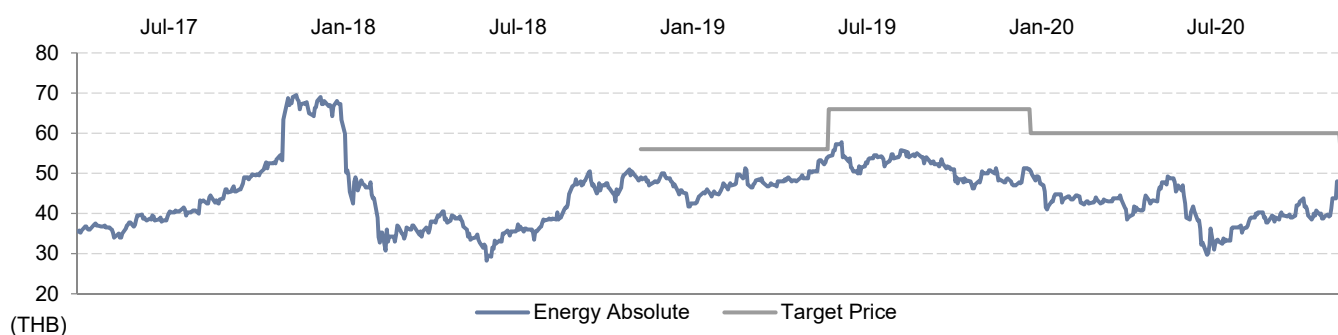
The individual(s) identified above certify(ies) that (i) all views expressed in this report accurately reflect the personal view of the analyst(s) with regard to any and all of the subject securities, companies or issuers mentioned in this report; and (ii) no part of the compensation of the analyst(s) was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed herein.

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### History of change in investment rating and/or target price

#### Energy Absolute (EA TB)



Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
15-Nov-2018	BUY	56.00	17-Oct-2019	BUY	60.00	-	-	-
26-Apr-2019	BUY	66.00	09-Jul-2020	BUY	55.00			

Suwat Sinsadok Started covering this stock from 15-Nov-2018

Price and TP are in local currency

Source: FSSIA estimates

Company	Ticker	Price	Rating	Valuation & Risks
Energy Absolute	EA TB	THB 49.25	BUY	Downside risks to our SoTP-based TP include: 1) lower-than-expected demand for electricity in Thailand; 2) lower crude price; and 3) lower-than-expected demand for batteries.

Source: FSSIA estimates

### Additional Disclosures

Target price history, stock price charts, valuation and risk details, and equity rating histories applicable to each company rated in this report is available in our most recently published reports. You can contact the analyst named on the front of this note or your representative at Finansia Syrus Securities Public Company Limited

All share prices are as at market close on 17 July 2020 unless otherwise stated.

## RECOMMENDATION STRUCTURE

### Stock ratings

Stock ratings are based on absolute upside or downside, which we define as (target price\* - current price) / current price.

BUY (B). The upside is 10% or more.

HOLD (H). The upside or downside is less than 10%.

REDUCE (R). The downside is 10% or more.

Unless otherwise specified, these recommendations are set with a 12-month horizon. Thus, it is possible that future price volatility may cause a temporary mismatch between upside/downside for a stock based on market price and the formal recommendation.

\* In most cases, the target price will equal the analyst's assessment of the current fair value of the stock. However, if the analyst doesn't think the market will reassess the stock over the specified time horizon due to a lack of events or catalysts, then the target price may differ from fair value. In most cases, therefore, our recommendation is an assessment of the mismatch between current market price and our assessment of current fair value.



## Industry Recommendations

**Improving.** The analyst expects the fundamental conditions of the sector to be positive over the next 12 months.

**Stable.** The analyst expects the fundamental conditions of the sector to be maintained over the next 12 months.

**Deteriorating.** The analyst expects the fundamental conditions of the sector to be negative over the next 12 months.

## Country (Strategy) Recommendations

**Overweight (O).** Over the next 12 months, the analyst expects the market to score positively on two or more of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.

**Neutral (N).** Over the next 12 months, the analyst expects the market to score positively on one of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.

**Underweight (U).** Over the next 12 months, the analyst does not expect the market to score positively on any of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.