9 JULY 2020 THAILAND / UTILITIES - RENEWABLE

## **ENERGY ABSOLUTE EA TB**





TARGET PRICE	THB55.00
CLOSE	THB45.50
UP/DOWNSIDE	+20.9%
PRIOR TP	THB55.00
CHANGE IN TP	+0.0%
TP vs CONSENSUS	+4.9%

# UNCHANGED

### EV success is around the corner

### New growth phase from EV business in 2020-22

We believe EA is now entering a new growth phase and project strong net profit growth to come mainly from the new businesses in its electric vehicle (EV) value chain. In 2020, we project that the main earnings drivers will come from 1) phase change material (PCM) sales, which we estimate to earn THB0.4b net profit in 2020; and 2) the sale of 180 EV cars in 4Q20 – net profit from EV cars should rise to THB0.9b in 2021 when EA plans to deliver 4,820 EV cars to its buyers.

### Product deliveries are key catalysts

Starting 2Q20 onward, we project EA to launch and deliver its new Scurve products, including 1) Aug-20: launch its E-ferry venture to serve passengers on the Chaophraya River passenger route; 2) 2Q20E: to deliver PCM to its Japanese clients at a total capacity of 65 tonnes per day (tpd); 3) 4Q20: to start delivering 180 EV cars, with the remaining 4,820 EV cars to be delivered within 2021; and 4) 1H21E: launch its E-buses via its 40% stake in a JV with Nex Point (NEX TB, not rated), acquired in Jul-20.

### E-bus venture is an emerging EV growth engine

On Friday, 16 May-20, EA announced the THB1.5b acquisition of a 40% stake in NEX. NEX is a producer of high precision automotive, electronics, and camera parts, and recently diversified into EV buses with an assembly plant. According to management, the NEX acquisition is to allow EA to integrate the EV bus venture into part of its EV enterprise, including EV boats, charging stations, battery plants, and an EV car production plant. EA has already completed its THB1.2b assembly plant with a 20,000 EV capacity, including a backlog of 4,000 EV cars that EA intends to produce, market, and deliver starting in 4Q20.

### Time to reload EV growth

We maintain our positive view on EA's net profit growth outlook in 2020-22 and believe its net profit trajectory is now at a turning point, driven upward by its multiple new S-curve projects. We believe EA's proven track record of success in the power business during 2015-20 is now shifting to the potential successes of its new ventures in the EV and crude palm oil (CPO) value chains, which will likely take off in 2021 to drive its net profit growth up by 2-3x by 2024.

### **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 (%)	-	7.9	7.6	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
Chg, In EPS est. (%)	-	-	-	-
EPS growth (%)	55.8	12.6	19.0	34.7
Core P/E (x)	27.9	24.8	20.8	15.5
Dividend yield (%)	1.3	1.8	2.2	3.3
EV/EBITDA (x)	20.9	18.3	14.5	11.7
Price/book (x)	7.3	6.1	5.1	4.2
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 (%)	4.0	24.7	(16.9)
Relative to country (%)	9.8	10.3	5.6
Mkt cap (USD m)			5,431
3m avg daily turnover (USD m)			13.9
Free float (%)			40
Major shareholder	Mr. So	mphote Ah	unai (23%)
12m high/low (THB)		5	5.75/27.50
Issued shares (m)			3,730.00

Sources: Bloomberg consensus; FSSIA estimates

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### Investment thesis

EA is Thailand's largest green energy player, operating through its three business segments of solar, wind and biodiesel; all touted to be the key pillars of Thailand's energy growth over the next 10 years. A biodiesel producer since 2012 with an 800k litre-per-day (lpd) capacity, EA later ventured into the solar and wind businesses. We believe EA's solar farms will be key earnings growth drivers, as they stand to gain from: 1) a high-margin THB6.5/kWh adder; and 2) a 40% decline in the cost of solar panels since 2010.

EA has evolved from being a pure biodiesel player to emerge as one of Thailand's key players in renewable energy. While its biodiesel segment has been struggling at a mere 50% utilisation rate due to the country's oversupply, EA's solar and wind farm businesses have benefited from high-margin electricity tariffs and the declining cost of solar panels.

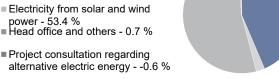
### Company profile

Energy Absolute (EA) is a leading green energy company in Thailand with business interests in biodiesel, solar and wind energy. EA has expanded into the battery storage and electricity vehicle (EV) businesses, which will be key earnings growth drivers post 2019E.

www.energyabsolute.co.th

### Principal activities (revenue, 2019)

- Methyl ester Biodiesel products -44.1 %
- Pure glycerine products 2.4 %
- Electricity from solar and wind
- Project consultation regarding alternative electric energy - -0.6 %



Source: Energy Absolute

### Major shareholders

- Mr. Somphote Ahunai 23.4 %
- Others 76.6 %

Source: Energy Absolute

### Catalyst

Higher utilisation rates of power plants and rising demand for electricity in Thailand are key growth drivers.

### Risk to our call

Downside risks to our SoTP-based TP include: 1) lower-thanexpected demand for electricity in Thailand; 2) lower crude price; and 3) lower-than-expected demand for batteries.

### Event calendar

Date	Event
Aug 2020	2Q20 results announcement

### Key assumptions

	2020E	2021E	2022E
Dispatched power (GWh)	9,715	9,715	9,715
Capacity factor - wind farms (%)	26	26	26
Battery sales volume (GWh)	0.2	2.7	4.6
EV car sales (cars)	1,000	5,000	5,500
EV boat sales (boats)	25	50	50
EV charging stations (stations)	320	1,000	1,000
Green diesel & PCM (tpd)	26	124	124

Source: FSSIA estimates

### Earnings sensitivity

- For every 1% increase in utilisation rate, we estimate earnings would rise by 1.3%, and vice versa, all else being equal.
- For every 1% increase in interest rate, we estimate earnings would decline by 1.3%, and vice versa, all else being equal.

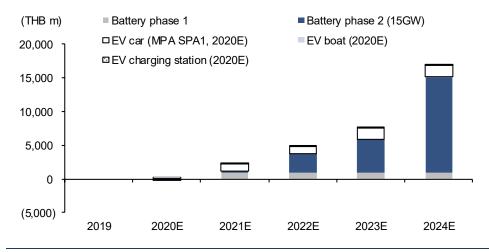
Source: FSSIA estimates

### EV success is around the corner

We believe EA is now entering a new growth phase, and project strong net profit growth to come mainly from the new businesses in its EV value chain. In 2020, we project that the main earnings drivers will come from 1) PCM sales, which we estimate to earn THB0.4b net profit in 2020; and 2) the sale of 180 EV cars in 4Q20 – net profit from EV cars should rise to THB0.9b in 2021 when EA plans to deliver 4,820 EV cars to its buyers.

Starting 2Q20 onward, we project EA to launch and deliver its new S-curve products, including 1) Aug-20: launch its E-ferry venture to serve passengers on the Chaophraya River passenger route; 2) 2Q20E: to deliver PCM to its Japanese clients at a total capacity of 65tpd; 3) 4Q20: to start delivering 180 EV cars, with the remaining 4,820 EV cars to be delivered within 2021; and 4) 1H21E: launch its E-buses via its 40% stake in a JV with Nex Point (NEX TB, not rated), acquired in Jul-20.

Exhibit 1: Net profit projections for EA's EV businesses



Sources: EA; FSSIA estimates

In 2021, we expect the key earnings growth drivers to come from 1) the 4,820 EV cars to be delivered, generating THB0.9b net profit; 2) the 1GWh battery phase 1 plant, scheduled to start its commercial operating date (COD) in 4Q20 and deliver up to 1GWh battery capacity to clients – we project the battery phase 1 plant to generate THB1b net profit in 2021; and 3) THB0.8b net profit from PCM.

Exhibit 2: Est. battery usage for EA's EV cars, E-buses, and E-ferries in 2020-21

	Battery capacity	Estimated sales volume	Est. battery demand
	(kWh)	(unit)	(GWh)
SPA1	35	5,000	0.18
E-ferry	800	42	0.03
E-bus	300	1,000	0.3
Total		6,042	0.51

Sources: EA, FSSIA estimates

Limited demand risk for EA's battery phase 1 plant: We believe the demand risk for EA's battery phase 1 plant is low, as we estimate that EA will consume up to 0.51GWh out of 1GWh battery production for its three EV businesses, including 1) its SPA1 model EV cars, using a total of 0.18GWh battery demand, based on the 35kWh battery needed for each SPA1 car and the estimated 5,000 EV car sales; 2) E-ferries are estimated to use 0.03GWh battery demand, based on the 800kWh battery needed for each E-ferry and the 42 estimated E-ferry sales in 2020-21; and 3) E-buses are estimated to use 0.3GWh battery demand, based on the 300kWh battery needed for each E-bus, with a total of 1,000 estimated E-bus sales in 2021, based on our estimate.

**Low-risk, high performance battery.** In addition to the projected low demand risk for EA's battery phase 1 plant, we think that EA, via its acquisition of the 20-year-old, Taiwan-based AMITA, is likely to be successful in its EV venture. EA has successfully secured one of the proven battery technologies that should allow it to not only successfully deploy the technology, but also monetize the battery products for its multiple EV applications, including EV cars, E-buses, E-ferries, and E-trucks, based on the company's guidance.

According to management, there are three key battery technologies under AMITA – Lithium Phosphate (LFP), Lithium Titanate (LTO), and Lithium Nickel Manganese Oxide (NMC). However, EA aims to employ only LTO-based batteries as the key product to be used in its EV cars, E-ferries, E-buses, and E-trucks, thanks to LTO's high cycle life of over 3,000 cycles that allows the batteries to be recharged at a more frequent rate than other battery technologies.

In addition, EA intends to use its multiple circuit technology for its recharging stations, which should shorten the charging time for EA's batteries by 3-4x times to only 15 minutes, down from a normal 1-1.5 hours. Management believes that EA's proven battery technology will allow the company to reduce product costs, improve product efficiency, and create product differentiation. Those key factors should support EA's sales of its EV-chain products in 2020 onward.

Exhibit 3: Battery technology comparison

Chemistry	Lithium Cobalt Oxide (LCO)	Lithium Manganese Oxide (LMO)	Lithium Nickel Cobalt Aluminium Oxide (NCA)	Lithium Phosphate (LFP)	Lithium Titanate (LTO)	Lithium Nickel Manganese Oxide (NMC)
Cycle life (ideal)	500-1,000	300-700	500	1,000-2,000	3,000-10,000	1,000-2,000
History	1991 (Sony)	1996	1999	1996	2008	2008
Applications	Mobile phones, tablets, laptops, cameras	Power tools, medical devices, powertrains	Medical, industrial, EV (Tesla)	Stationary with high current and endurance	UPS, EV, solar street lighting	E-bikes, medical devices, EVs, industrial
Comments	High energy, limited power. Market share has stabilized.	High power, less capacity, safer than Li- cobalt, often mixed with NMC to improve performance.	Highest capacity with moderate power. Similar to Li-Cobalt.	Flat discharge voltage, high power low capacity, very safe, elevated self - discharge.	Long life, fast charge, wide temperature range and safe. Low capacity, expensive.	High capacity and high power. Market share is increasing. Also NCM, CMN, MNC, MCN
AMITA's products	NO	NO	NO	YES	YES	YES

Source: EA

**Moving into E-buses.** On 16 May-20, EA announced the THB1.5b acquisition of a 40% stake in NEX via private placement at THB2.2/share for a total of 670m shares. NEX, formerly known as Single Point Part (SPPT), is a listed company and a producer of high precision automotive, electronics, and camera parts, and recently diversified into EV buses with an assembly plant.

According to management, the NEX acquisition is to allow EA to integrate the EV bus venture into part of its EV enterprise, including EV boats, charging stations, battery plants, and an EV car production plant. EA has already completed its THB1.2b assembly plant with a 20,000 EV capacity, including a backlog of 4,000 EV cars that EA intends to produce, market, and deliver starting in 4Q20.

### Exhibit 4: EV bus by EA



Exhibit 5: EA's SPA1 model



Source: EA Source: EA

According to EA's management, the EV bus sector is a high growth market in Thailand. EA plans to further leverage the unused capacity of its 20,000-EV car plant to assemble up to 1,000 EV buses annually at its newly-completed manufacturing plant. According to Thailand's Power Development Plan 2018 Revision 1 (PDP 2018), the Thai government projects EV cars to grow at a phenomenal rate starting in 2020, driven by government promotions in the form of tax subsidies and waivers for new ventures related to the EV business. Under Thailand's Eastern Economic Corridor (EEC) investment campaign, EV ventures are one of 12 focused industries in the EEC and part of the long-term development plan for Thailand.

**Product quality confidence is key.** Along with EA's other products in its EV value chain (E-buses, E-ferries, E-trucks), we believe EA's EV cars will require a proven track record of product technology, reliability, and efficiency in order to gain consumers' and investors' confidence.

Exhibit 6: 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
Туре	MPV	L 7e	Mid-side SUV	Sedan	Compact car	SUV	Compact SUV	Compact SUV	MPV
Country	Thailand	Japan	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)		10	86.5	72.5	36	64	44.5	64	73
Range per single charge (km)	200	160	417	518	311	452	337	452	400
Electric range (km)			365	435	220	400	225	365	280
Efficiency (Wh/km)		68	237	167	164	160	198	175	261
0-100km/h (sec)			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 (hours/mins)	3h	6h	9h15m	7h45m	11h45m	7h	8h	10h30m	11h30m
Fast charge time (mins)	15m		25m	22m	40m	44m	37m	44m	90m
Import tax (%)									
Excise tax (%)									
Cost/km(THB/km)	0.7	0.3					0.5-1.09		
Battery warranty	5 years /180k km	Lifetime	8 years /160k km	4 years /120k km	8 years /160k km	Lifetime	8 years /180k km	5 years /150k km	5 years /500k km
Price tag - Domestic (THB m)					0.9	1.1	0.5	1.2	1.4
Price tag – Thailand (THB m)	1.2	0.7	5.1	1.5	2.0	2.3	1.2	2.4	1.9

Source: Companies

We believe EA's EV car venture is nearing success, considering that EA has already sold 5,000 EV cars into the market – of this, 3,500 will be a one-batch order for the taxi co-operative that is scheduled to be delivered within 4Q20-2021. Compared to other competitors' EV cars, we think EA's cars are at least on par in terms of quality, efficiency, and price.

Exhibit 7: 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
	Total	THB 24,000	THB220,000	THB120,000
Cost at 200,000 km	Fuel cost	THB 48,000	THB400,000	THB200,000
	Lube cost		THB40,000	THB40,000
	Total	THB 48,000	THB440,000	THB240,000
Cost at 300,000 km	Fuel cost	THB 72,000	THB600,000	THB300,000
	Lube cost		THB60,000	THB60,000
	Total	THB 72,000	THB660,000	THB360,000

Source: Companies

One EV pioneer in Thailand is the Japanese EV car producer under the brand FOMM, which stands for First One Mile Mobility, and is marketed as Thailand's first domestically produced EV car at the price of THB0.6m per car. Even with subpar performance, including a short mileage running distance and very compact size, FOMM has successfully sold up to 0.3-0.4m cars, based on our estimate. The main reason for FOMM's success is due to its cost competitiveness compared to the incumbent Eco Cars with both oil-based (gasoline) and gas-based (LPG, NGV) models

Hence, we think that with its lower cost per mileage, superior battery performance (higher cycle life and faster charge time), and longer running distance, EA's SPA1 model is likely to be successful in Thailand's EV car market once its first EV car is delivered in 4Q20 and runs reliably on the roads in 2021.

Exhibit 8: Projected forward P/E and EPS excludes earnings from batteries, EV cars, EV boats, EV charging stations, and GD & PCM

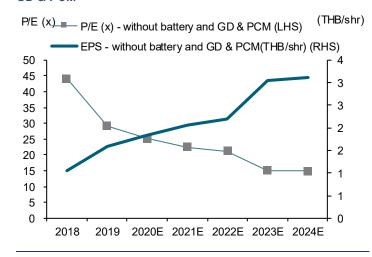
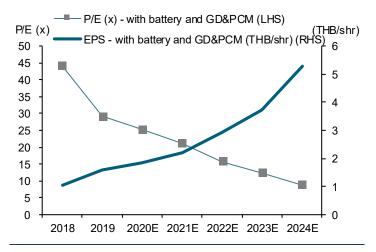


Exhibit 9: Projected forward P/E and EPS includes earnings from batteries, EV cars, EV boats, EV charging stations, and GD & PCM



Source: FSSIA estimates Source: FSSIA estimates

Investor confidence on product quality and reliability is a key catalyst for EA's share price in 2020. We think EA's share price upside could be stimulated in 2020 by the start-ups of its EV car and battery phase 1 plants, as well as the start of its EV boat operations. We think EA remains attractive, and estimate that its forward P/E will continue to decline, with or without the EPS from its battery and PCM & green diesel (GD) plants, toward 7x with EPS from its S-curve projects, and 13x without EPS from its S-curve projects.

**Exhibit 10: Peer comparison** 

	FY20E	FY20E ending	Share price	Net profit	Net profit growth	Net margin	ROE	P/E	P/BV	EV/EBITDA	Dividend yield
			(local currency)	(USD m)	(%)	(%)	(%)	(x)	(x)	(x)	(%)
Energy Absolute PCL*	EA TB Equity	12/31/2020	45.50	203.1	5.6	32.4	24.7	27.0	6.1	19.1	1.0
Tesla Inc	TSLA US Equity	12/31/2020	1,365.88	742.1	(18.8)	2.8	4.8	323.7	25.1	68.6	0.0
NIO Inc	NIO US Equity	12/31/2020	12.88	(960.6)	31.0	N/A	76.4	N/A	N/A	N/A	0.0
Nikola Corp	NKLA US Equity	12/31/2020	54.03	(216.3)	N/A	N/A	N/A	N/A	24.2	N/A	N/A
Workhorse Group Inc	WKHS US Equity	12/31/2020	16.66	(25.8)	74.7	N/A	N/A	N/A	N/A	N/A	N/A

Share prices as of 8 Jul 2020

Sources: Bloomberg consensus; \*FSSIA estimates

Share price performance of global EV plays. Since Jan-20, share prices of key global EV plays, including TESLA (TESLA US), NIO (NIO US), NIKOLA (NKLA US), and Workhorse (WKHS US), have all seen their share prices rise significantly. In particular, two key EV car producers, TESLA and NIO, and two key EV truck and bus producers, NKLA and WKHS, have seen their share prices rise YTD, reflecting investors' confidence and preference for EV car, bus and truck producers.

We believe that EA, as one of the key producers of EV cars, trucks, and buses, is likely to see its share price rerate in the next 12 months, driven by EA's net profit growth from its sales and deliveries of EV cars, E-buses, and E-ferries. YTD, EA's share price has risen only 5-10% vs 200-400% for those four key EV producers. We think that once EA launches its E-ferries in Aug-20E and delivers its EV cars and E-buses in 4Q20E onward, investor confidence should rise, driving EA's share price up.

Exhibit 11: Share prices since beginning of 2020

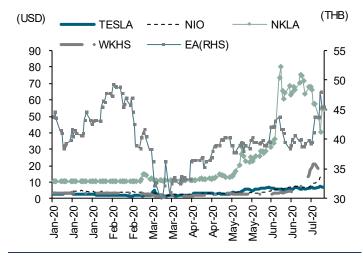
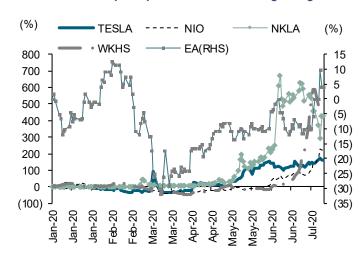


Exhibit 12: Share price performance since beginning of 2020



Source: Bloomberg Source: Bloomberg

### Exhibit 13: 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

Ellergy 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)
Gross profit	7,717	10,652	12,426	16,112	19,315
Other operating income	-	-	-	-	-
Operating costs	(805)	(946)	(1,236)	(2,258)	(2,719)
Operating EBITDA	6,912	9,706	11,190	13,854	16,596
Depreciation	(1,833)	(2,517)	(2,494)	(3,694)	(3,694)
Goodwill amortization	0	0	0	0	0
Operating EBIT	5,079	7,189	8,696	10,160	12,902
Net financing costs	(920)	(1,226)	(1,631)	(1,743)	(1,645)
Associates	(6)	(14)	0	0	C
Recurring non operating income	(140)	53	100	101	101
Non recurring items	1,072	0	0	0	C
Profit before tax	5,091	6,016	7,165	8,518	11,358
Тах	(29)	11	(6)	(46)	(48)
Profit after tax	5,061	6,027	7,159	8,472	11,310
Minority interests	(86)	55	(311)	(320)	(330)
Preferred dividends	0	0	0	0	(
Other items	-	-	-	-	
Reported net profit	4,975	6,082	6,848	8,152	10,981
Non recurring items & goodwill (net)	(1,072)	0	0	0	O
Recurring net profit	3,904	6,082	6,848	8,152	10,981
Per share (THB)					
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
Growth	/a.a.				
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
Operating performance					
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
nterest 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
wetryr ester blodieser products					
•	298	350	360	361	361
Pure glycerine products Electricity from solar and wind power	298 7,692	350 7,957	360 7,843	361 15,116	361 21,107

Sources: Energy Absolute; FSSIA estimates

### **Financial Statements**

Energy Absolute

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)
Cash flow from operations	13,722	(1,067)	8,362	10,627	12,593
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	Ô	Ó
Other investments (net)	(984)	(49)	0	0	0
Cash flow from investing	(14,263)	(6,418)	(7,400)	(3,888)	(3,888)
Dividends paid	(746)	(746)	(2,238)	(2,984)	(3,730)
Equity finance	0	0	0	0	0
Debt finance Other financing cash flows	1,525 734	12,725 56	(180) 311	5,946 709	(10,990) 718
Cash flow from Financing	1, <b>513</b>	12,035	(2,107)	3,671	(14,002)
Non recurring cash flows		-	(2,107)	-	(14,002)
Other adjustments	0	0	0	0	0
Net other adjustments	0	0	0	0	0
Movement in cash	972	4,550	(1,145)	10,410	(5,298)
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)
Tangible fixed assets (Net)	47,587	51,371	56,277	56,083	55,888
Intangible fixed assets (Net)	937	3,683	3,683	3,683	3,683
Long-term financial assets	<u>-</u>	-	-	-	-
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
Current assets Other assets	<b>8,150</b> 2,501	<b>14,033</b> 1,033	<b>14,123</b> 1,033	<b>28,462</b> 1,033	<b>26,099</b> 1,033
Total assets	59,208	<b>70,220</b>	75,215	89,360	86,803
Common equity	18,139	23,365	27,975	33,142	40,393
Minorities etc	1,379	1,502	1,813	2,133	2,463
Total Shareholders' equity	19,518	24,866	29,788	35,276	42,856
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
Long-term liabilities	27,187	39,283	39,103	45,049	34,059
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  Current liabilities	8,810 <b>12,503</b>	81 <b>6,070</b>	96 <b>6,324</b>	176 <b>9,035</b>	211 <b>9,888</b>
Total liabilities and shareholders' equity	59,208	70,220	75,215	89,360	86,803
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 be	eing 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	7.01	0.20	0.01	7.00	0.04
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
Recurring P/E (x) *	43.5	27.9	24.8	20.8	15.5
Recurring P/E @ target price (x) *	52.6	33.7	30.0	25.2	18.7
Reported P/E (x)	34.1	27.9	24.8	20.8	15.5
Dividend yield (%)	0.9	1.3	1.8	2.2	3.3
Price/book (x)	9.4	7.3	6.1	5.1	4.2
Price/tangible book (x)	9.9	8.6	7.0	5.8	4.6
EV/EBITDA (x) **	28.2	20.9	18.3	14.5	11.7
EV/EBITDA @ target price (x) **	33.3	24.6	21.4	17.0	13.9
EV/invested capital (x)	4.4	3.4	3.1	3.0	2.9
* Pre exceptional & pre-goodwill are fully diluted **	EBITDA includes associat	te income and recu	ırrıng non operating	ıncome	

Sources: Energy Absolute; FSSIA estimates

### **Corporate Governance report of Thai listed companies 2019**

الأنتناء	NT 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	СНО	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	ОТО	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	SEAOIL	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 GOO										
VERT GOC 28	ABM	ADB	AF	AGE	AH	AHC	AIT	ALLA	ALT	AMANAH
AMARIN	APCO	APCS	AQUA	ARIP	ASAP	ASIA	ASIAN	ASIMAR	ASK	ASN
	APCO ATP30	AUCT	AYUD	B B	BA	ASIA BBL	BDMS	BEC	ASK BEM	ASN BFIT
ASP										
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
NET	INSURE	IRC	IRCP	IT	ITD***	ITEL	J	JAS*	JCK	JCKH
MART	JMT	JWD	KBS	KCAR	KGI	KIAT	KOOL	KWC	KWM	L&E
_ALIN	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	SMPC	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
NIIK	XO	YUASA	ZEN	ZMICO						
GOOD LEV										
			,							
	ABICO	ACAP***	AEC	AEONTS	AJ	ALUCON	AMC	APURE	AS	ASEFA
AU	B52	BCH	BEAUTY	BGT	ВН	BIG	BLAND	ВМ	BR	BROCK
AU BSBM	B52 BSM	BCH BTNC	BEAUTY CCET	BGT CCP	BH CGD	BIG CHARAN		BM CITY	BR CMAN	BROCK CMC
AU BSBM	B52	BCH	BEAUTY	BGT	ВН	BIG	BLAND	ВМ	BR	BROCK
AU BSBM CMO	B52 BSM	BCH BTNC	BEAUTY CCET	BGT CCP	BH CGD	BIG CHARAN	BLAND	BM CITY	BR CMAN	BROCK CMC
AU BSBM CMO EPCO	B52 BSM CMR	BCH BTNC CPL	BEAUTY CCET CPT	BGT CCP CSR	BH CGD CTW	BIG CHARAN CWT	BLAND CHAYO D	BM CITY DIMET	BR CMAN EKH	BROCK CMC EMC
AU BSBM CMO EPCO HTECH	B52 BSM CMR ESSO HUMAN	BCH BTNC CPL FE	BEAUTY CCET CPT FTE	BGT CCP CSR GIFT INOX	BH CGD CTW GLAND	BIG CHARAN CWT GLOCON	BLAND CHAYO D GPI KASET	BM CITY DIMET GREEN	BR CMAN EKH GTB	BROCK CMC EMC GYT
AU BSBM CMO EPCO HTECH KYE	B52 BSM CMR ESSO HUMAN LEE	BCH BTNC CPL FE IHL LPH	BEAUTY CCET CPT FTE INGRS MATCH	BGT CCP CSR GIFT INOX MATI	BH CGD CTW GLAND JTS M-CHAI	BIG CHARAN CWT GLOCON JUBILE MCS	BLAND CHAYO D GPI KASET MDX	BM CITY DIMET GREEN KCM META	BR CMAN EKH GTB KKC	BROCK CMC EMC GYT KWG MJD
AU BSBM CMO EPCO HTECH KYE	B52 BSM CMR ESSO HUMAN LEE MVP	BCH BTNC CPL FE IHL LPH NC	BEAUTY CCET CPT FTE INGRS MATCH NDR	BGT CCP CSR GIFT INOX MATI NER	BH CGD CTW GLAND JTS M-CHAI NNCL	BIG CHARAN CWT GLOCON JUBILE MCS NPK	BLAND CHAYO D GPI KASET MDX NUSA	BM CITY DIMET GREEN KCM META OCEAN	BR CMAN EKH GTB KKC MGT PAF	BROCK CMC EMC GYT KWG MJD PF
AU BSBM CMO EPCO HTECH KYE MM	B52 BSM CMR ESSO HUMAN LEE MVP PIMO	BCH BTNC CPL FE IHL LPH NC PK	BEAUTY CCET CPT FTE INGRS MATCH NDR PLE	BGT CCP CSR GIFT INOX MATI NER PMTA	BH CGD CTW GLAND JTS M-CHAI NNCL POST	BIG CHARAN CWT GLOCON JUBILE MCS NPK PPM	BLAND CHAYO D GPI KASET MDX NUSA PROUD	BM CITY DIMET GREEN KCM META OCEAN PTL	BR CMAN EKH GTB KKC MGT PAF RCI	BROCK CMC EMC GYT KWG MJD PF RJH
A AU ASBM CMO EPCO HTECH KYE MM PICO ROJNA SO	B52 BSM CMR ESSO HUMAN LEE MVP PIMO RPC	BCH BTNC CPL FE IHL LPH NC PK RPH	BEAUTY CCET CPT FTE INGRS MATCH NDR PLE SF	BGT CCP CSR GIFT INOX MATI NER PMTA SGF	BH CGD CTW GLAND JTS M-CHAI NNCL POST SGP	BIG CHARAN CWT GLOCON JUBILE MCS NPK PPM SKN	BLAND CHAYO D GPI KASET MDX NUSA PROUD SLP	BM CITY DIMET GREEN KCM META OCEAN PTL SMART	BR CMAN EKH GTB KKC MGT PAF RCI SOLAR	BROCK CMC EMC GYT KWG MJD PF RJH SPG
AU 3SBM CMO EPCO HTECH KYE MM PICO ROJNA SQ	B52 BSM CMR ESSO HUMAN LEE MVP PIMO RPC SSP	BCH BTNC CPL FE IHL LPH NC PK RPH STI	BEAUTY CCET CPT FTE INGRS MATCH NDR PLE SF SUPER	BGT CCP CSR GIFT INOX MATI NER PMTA SGF SVOA	BH CGD CTW GLAND JTS M-CHAI NNCL POST SGP TCCC	BIG CHARAN CWT GLOCON JUBILE MCS NPK PPM SKN THE	BLAND CHAYO D GPI KASET MDX NUSA PROUD SLP THMUI	BM CITY DIMET GREEN KCM META OCEAN PTL SMART TIC	BR CMAN EKH GTB KKC MGT PAF RCI SOLAR TIGER	BROCK CMC EMC GYT KWG MJD PF RJH SPG TNH
AU 3SBM CMO EPCO HTECH KYE MM PICO ROJNA SQ TOPP	B52 BSM CMR ESSO HUMAN LEE MVP PIMO RPC SSP TPCH	BCH BTNC CPL FE IHL LPH NC PK RPH STI TPIPP	BEAUTY CCET CPT FTE INGRS MATCH NDR PLE SF SUPER TPLAS	BGT CCP CSR GIFT INOX MATI NER PMTA SGF SVOA TQM	BH CGD CTW GLAND JTS M-CHAI NNCL POST SGP	BIG CHARAN CWT GLOCON JUBILE MCS NPK PPM SKN	BLAND CHAYO D GPI KASET MDX NUSA PROUD SLP	BM CITY DIMET GREEN KCM META OCEAN PTL SMART	BR CMAN EKH GTB KKC MGT PAF RCI SOLAR	BROCK CMC EMC GYT KWG MJD PF RJH SPG
AU BSBM CMO EPCO HTECH KYE MM PICO ROJNA GQ	B52 BSM CMR ESSO HUMAN LEE MVP PIMO RPC SSP TPCH WORK	BCH BTNC CPL FE IHL LPH NC PK RPH STI TPIPP WP	BEAUTY CCET CPT FTE INGRS MATCH NDR PLE SF SUPER	BGT CCP CSR GIFT INOX MATI NER PMTA SGF SVOA TQM ZIGA	BH CGD CTW GLAND JTS M-CHAI NNCL POST SGP TCCC TTI	BIG CHARAN CWT GLOCON JUBILE MCS NPK PPM SKN THE TYCN	BLAND CHAYO D GPI KASET MDX NUSA PROUD SLP THMUI	BM CITY DIMET GREEN KCM META OCEAN PTL SMART TIC VCOM	BR CMAN EKH GTB KKC MGT PAF RCI SOLAR TIGER VIBHA	BROCK CMC EMC GYT KWG MJD PF RJH SPG TNH
AU SSBM CMO EPCO HTECH CYE MM PICO ROJNA GQ FOPP	B52 BSM CMR ESSO HUMAN LEE MVP PIMO RPC SSP TPCH	BCH BTNC CPL FE IHL LPH NC PK RPH STI TPIPP WP	BEAUTY CCET CPT FTE INGRS MATCH NDR PLE SF SUPER TPLAS	BGT CCP CSR GIFT INOX MATI NER PMTA SGF SVOA TQM ZIGA	BH CGD CTW GLAND JTS M-CHAI NNCL POST SGP TCCC	BIG CHARAN CWT GLOCON JUBILE MCS NPK PPM SKN THE TYCN	BLAND CHAYO D GPI KASET MDX NUSA PROUD SLP THMUI	BM CITY DIMET GREEN KCM META OCEAN PTL SMART TIC VCOM	BR CMAN EKH GTB KKC MGT PAF RCI SOLAR TIGER	BROCK CMC EMC GYT KWG MJD PF RJH SPG TNH
AU SSBM CMO EPCO HTECH CYE MM PICO ROJNA GQ FOPP	B52 BSM CMR ESSO HUMAN LEE MVP PIMO RPC SSP TPCH WORK	BCH BTNC CPL FE IHL LPH NC PK RPH STI TPIPP WP	BEAUTY CCET CPT FTE INGRS MATCH NDR PLE SF SUPER TPLAS	BGT CCP CSR GIFT INOX MATI NER PMTA SGF SVOA TQM ZIGA	BH CGD CTW GLAND JTS M-CHAI NNCL POST SGP TCCC TTI	BIG CHARAN CWT GLOCON JUBILE MCS NPK PPM SKN THE TYCN	BLAND CHAYO D GPI KASET MDX NUSA PROUD SLP THMUI	BM CITY DIMET GREEN KCM META OCEAN PTL SMART TIC VCOM	BR CMAN EKH GTB KKC MGT PAF RCI SOLAR TIGER VIBHA	BROCK CMC EMC GYT KWG MJD PF RJH SPG TNH
AU BSBM CMO EPCO HTECH KYE MM PICO ROJNA GQ FOPP	B52 BSM CMR ESSO HUMAN LEE MVP PIMO RPC SSP TPCH WORK  Score F	BCH BTNC CPL FE IHL LPH NC PK RPH STI TPIPP WP  Range	BEAUTY CCET CPT FTE INGRS MATCH NDR PLE SF SUPER TPLAS	BGT CCP CSR GIFT INOX MATI NER PMTA SGF SVOA TQM ZIGA	BH CGD CTW GLAND JTS M-CHAI NNCL POST SGP TCCC TTI	BIG CHARAN CWT GLOCON JUBILE MCS NPK PPM SKN THE TYCN	BLAND CHAYO D GPI KASET MDX NUSA PROUD SLP THMUI	BM CITY DIMET GREEN KCM META OCEAN PTL SMART TIC VCOM	BR CMAN EKH GTB KKC MGT PAF RCI SOLAR TIGER VIBHA  Description Excellent	BROCK CMC EMC GYT KWG MJD PF RJH SPG TNH
AU BSBM CMO EPCO HTECH KYE MM PICO ROJNA GQ FOPP	B52 BSM CMR ESSO HUMAN LEE MVP PIMO RPC SSP TPCH WORK Score F	BCH BTNC CPL FE IHL LPH NC PK RPH STI TPIPP WP  Range 00	BEAUTY CCET CPT FTE INGRS MATCH NDR PLE SF SUPER TPLAS	BGT CCP CSR GIFT INOX MATI NER PMTA SGF SVOA TQM ZIGA	BH CGD CTW GLAND JTS M-CHAI NNCL POST SGP TCCC TTI	BIG CHARAN CWT GLOCON JUBILE MCS NPK PPM SKN THE TYCN	BLAND CHAYO D GPI KASET MDX NUSA PROUD SLP THMUI	BM CITY DIMET GREEN KCM META OCEAN PTL SMART TIC VCOM	BR CMAN EKH GTB KKC MGT PAF RCI SOLAR TIGER VIBHA  Description  Excellent  Very Good	BROCK CMC EMC GYT KWG MJD PF RJH SPG TNH
AU BSBM CMO EPCO HTECH KYE MM PICO ROJNA GQ FOPP	B52 BSM CMR ESSO HUMAN LEE MVP PIMO RPC SSP TPCH WORK Score F 90-1 80-8	BCH BTNC CPL FE IHL LPH NC PK RPH STI TPIPP WP  Range 00	BEAUTY CCET CPT FTE INGRS MATCH NDR PLE SF SUPER TPLAS	BGT CCP CSR GIFT INOX MATI NER PMTA SGF SVOA TQM ZIGA	BH CGD CTW GLAND JTS M-CHAI NNCL POST SGP TCCC TTI  Number of Lc	BIG CHARAN CWT GLOCON JUBILE MCS NPK PPM SKN THE TYCN	BLAND CHAYO D GPI KASET MDX NUSA PROUD SLP THMUI	BM CITY DIMET GREEN KCM META OCEAN PTL SMART TIC VCOM	BR CMAN EKH GTB KKC MGT PAF RCI SOLAR TIGER VIBHA  Description  Excellent  Very Good Good	BROCK CMC EMC GYT KWG MJD PF RJH SPG TNH
U SBM MO PCO ITECH YE MM IICO IOJNA Q OPP	B52 BSM CMR ESSO HUMAN LEE MVP PIMO RPC SSP TPCH WORK Score F	BCH BTNC CPL FE IHL LPH NC PK RPH STI TPIPP WP  Range 00 89 79	BEAUTY CCET CPT FTE INGRS MATCH NDR PLE SF SUPER TPLAS	BGT CCP CSR GIFT INOX MATI NER PMTA SGF SVOA TQM ZIGA	BH CGD CTW GLAND JTS M-CHAI NNCL POST SGP TCCC TTI	BIG CHARAN CWT GLOCON JUBILE MCS NPK PPM SKN THE TYCN	BLAND CHAYO D GPI KASET MDX NUSA PROUD SLP THMUI	BM CITY DIMET GREEN KCM META OCEAN PTL SMART TIC VCOM	BR CMAN EKH GTB KKC MGT PAF RCI SOLAR TIGER VIBHA  Description  Excellent  Very Good	BROCK CMC EMC GYT KWG MJD PF RJH SPG TNH

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.

The survey result is as of the date appearing in the Corporate Governance Report of Thai Listed Companies. As a result, the survey results may be changed after that date.

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

FSS International Investment Advisory Company Limited does not confirm nor certify the accuracy of such survey results.

\* 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

### **Anti-corruption Progress Indicator**

CERTIFIED		ALCE	*****	4.5	4000	4.0114	4 DD 014:	4016	400	42/1/5
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	М	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	Al	AIRA	ALT	AMA	AMARIN	AMATA	ANAN	В
ВМ	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	SEAOIL	SHANG
SKR	SPALI	STANLY	SYNEX	TAE	TAKUNI	TMC	TOPP	TPP	TRITN	TVO
UV	UWC	WHAUP	хо	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



Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
15-Nov-2018 26-Apr-2019	BUY BUY	56.00 66.00	17-Oct-2019 16-Apr-2020	BUY BUY	60.00 62.00	20-May-2020	BUY	55.00

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

Price and TP are in local currency

Sources: FSSIA estimates

Company	Ticker	Price	Rating	Valuation & Risks
Energy Absolute	ЕА ТВ	THB 45.50	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.

Sources: 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 08 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.