

ENERGY ABSOLUTE EA TB

THAILAND / UTILITIES - RENEWABLES

BUY

UNCHANGED

E-buses coming to streets near you

- EA's 3Q22 NP of THB2.97b was up 84% y-y and 1.7x q-q, due to higher-than-expected revenue from its new ventures.
- After delivering 251 e-buses in 3Q22, EA expects to deliver up to 2,000 EVs in 2022.
- We maintain BUY and lift our SoTP-based TP to THB110.

Solid 3Q22 earnings

EA's 3Q22 net profit (NP) of THB2.97b was up 84% y-y and 1.7x q-q, beating the Bloomberg consensus estimate by 28%, due to the higher-than-expected revenue of THB1.3b from EA's new battery and e-bus manufacturing venture (+14x q-q, 1.3x y-y). 3Q22 core NP came to THB2.95b, up 87% y-y and 1.8x q-q, on the estimated net profit contribution from Absolute Assembly, its EV manufacturing plant that made 251 e-bus deliveries in 3Q22. This was partly offset by the lower earnings from EA's wind and solar farms due to lower electricity production and despite the rise in electricity tariffs.

251 e-buses delivered in 3Q22

In 3Q22, EA generated revenue of THB1.3b from its battery and EV business, with 251 e-bus deliveries in the quarter. Management expects to deliver up to 300 e-buses and e-trucks in 4Q22 and over 2,000 EVs in 2022 as production ramps up. EA's 3Q22 power sales dipped on a lower electricity sales volume of 161GW (-24% y-y, -5% q-q) from wind farms, and 152GWh (+4% y-y, -14% q-q) from solar farms. Its average selling price for electricity from solar farms was THB10.3/kWh (+5% y-y), and THB6.8/kWh (+12% y-y) from wind farms. As for biodiesel, 3Q22 sales dropped 11% y-y to 30m litres due to the government's change in the biodiesel formula from B7 to B5 in Feb-22.

Faster EV growth ahead

We think EA's NP growth will accelerate starting in 3Q22 onward and boost its 2022-23 NP growth, driven by the delivery of 1,500-2,000 e-buses in 2022 and the capacity expansion of its 1GWh phase 1 battery plant to 2GWh by 4Q22 and 4GWh by end-2023.

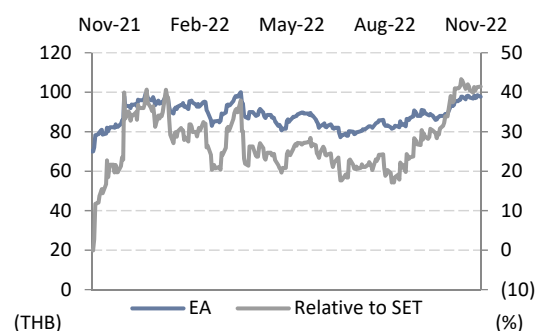
Maintain BUY and raise our SoTP-based TP to THB110

We maintain BUY and raise our SoTP-based TP to THB110 to reflect our valuation rollover to 2023. EA is our top pick in the Thai renewables sector based on the strong NP outlook for its new S-curve growth projects, which we think will start to accelerate in 2022 onward. We think EA's net profit growth should accelerate on the strength of its EV venture with a rising number of EVs to be delivered from 3Q22 onward. With this report, we transfer coverage of EA to Siriluck Pinthusoonthorn.

TARGET PRICE	THB110.00
CLOSE	THB97.75
UP/DOWNSIDE	+12.5%
PRIOR TP	THB101.00
CHANGE IN TP	+8.9%
TP vs CONSENSUS	+28.4%

KEY STOCK DATA

YE Dec (THB m)	2021	2022E	2023E	2024E
Revenue	20,174	23,291	31,763	47,418
Net profit	6,100	11,873	11,834	12,693
EPS (THB)	1.64	3.18	3.17	3.40
vs Consensus (%)	-	80.7	61.3	64.6
EBITDA	9,494	14,939	15,339	16,687
Core net profit	5,983	11,873	11,834	12,693
Core EPS (THB)	1.60	3.18	3.17	3.40
Chg. In EPS est. (%)	-	-	-	-
EPS growth (%)	16.1	98.4	(0.3)	7.3
Core P/E (x)	60.9	30.7	30.8	28.7
Dividend yield (%)	0.3	0.5	0.5	0.5
EV/EBITDA (x)	42.7	26.5	25.2	22.5
Price/book (x)	11.2	8.4	6.9	5.7
Net debt/Equity (%)	108.4	60.2	32.5	11.9
ROE (%)	19.8	31.4	24.6	21.7



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	9.8	14.0	47.0
Relative to country (%)	5.6	13.9	47.9
Mkt cap (USD m)	10,144		
3m avg. daily turnover (USD m)	30.7		
Free float (%)	40		
Major shareholder	Mr. Somphote Ahunai (23%)		
12m high/low (THB)	105.50/66.75		
Issued shares (m)	3,730.00		

Sources: Bloomberg consensus; FSSIA estimates


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

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. EA has now evolved to emerge as one of Thailand's key electric vehicle (EV) plays, with new S-curve ventures in the EV value chains, including the manufacturing and sales of commercial e-buses and e-trucks thanks to its first-mover advantage and its fully integrated battery-EV product portfolio. This should allow EA to fully benefit from the highly favourable regulations and incentive packages the government is implementing to transform Thailand's internal combustion engine (ICE) automotive industry into an EV industry by 2040 to ensure the sustainability of the country's key export industry.

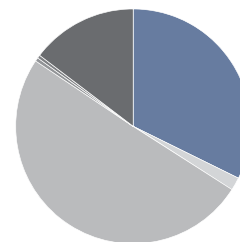
Company profile

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 we expect to be key earnings growth drivers post 2021.

www.energyabsolute.co.th

Principal activities (revenue, 2021)

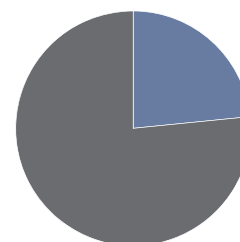
- Methyl ester Biodiesel products - 32.6 %
- Pure glycerine products - 1.8 %
- Electricity from solar and wind power - 50.8 %
- Head office and others - 0.5 %
- Project consultation regarding alternative electric energy - -0.4 %



Source: Energy Absolute

Major shareholders

- Mr. Somphote Ahunai - 23.4 %
- Others - 76.6 %



Source: Energy Absolute

Catalysts

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

Risks to our call

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

Event calendar

Date	Event
Feb 2023	4Q22/2022 results announcement

Key assumptions

	2022E	2023E	2024E
Dispatched power (GWh)	9,715	9,715	9,715
Battery sales volume (GWh)	0.9	0.9	3.9
EV car sales (cars)	0	5,000	8,500
EV boat sales (boats)	50	50	50
EV bus sales (buses)	2,010	3,000	2,100
EV charging stations (stations)	1,000	1,000	1,000
Green diesel & PCM (tpd)	124	124	124

Source: FSSIA estimates

Earnings sensitivity

- For every 1% increase in utilisation rate, we estimate 2022 earnings would rise by 1.3%, and vice versa, all else being equal.
- For every 1% increase in interest rate, we estimate 2022 earnings would decline by 1.3%, and vice versa, all else being equal.

Source: FSSIA estimates

Exhibit 1: Summary of 3Q22/9M22 operations

	3Q21	2Q22	3Q22			9M21	9M22	Change	2022E
	(THB m)	(THB m)	(THB m)	(q-q %)	(y-y %)	(THB m)	(THB m)	(y-y %)	(THB m)
Revenue	5,040	5,396	5,692	5.5	12.9	14,666	15,828	7.9	23,291
Operating costs	(2,572)	(3,164)	(3,266)	3.2	27.0	(7,496)	(8,888)	18.6	(6,721)
EBITDA	2,467	2,232	2,426	8.7	(1.7)	7,170	6,940	(3.2)	14,939
<i>EBITDA margin (%)</i>	49.0	41.4	42.6	nm	nm	48.9	43.8	(10.3)	64.1
Depn & amort.	(695)	(979)	(1,138)	16.2	63.7	(2,108)	(2,886)	36.9	(2,494)
EBIT	1,772	1,253	1,288	2.8	(27.3)	5,062	4,055	(19.9)	12,445
Interest expense	(323)	(362)	(359)	(0.7)	11.1	(1,093)	(1,031)	(5.6)	(1,282)
Interest & invt inc	-	-	-	nm	nm	-	-	nm	-
Other income	139	58	1,915	3,196.7	1,279.6	154	2,049	nm	250
Associates' contrib	6	7	69	839.5	994.8	(27)	78	(391.4)	(3)
Exceptionals	37	33	17	(49.2)	(53.8)	85	58	nm	50
Pretax profit	1,631	990	2,930	195.9	79.7	4,182	5,210	24.6	12,267
Tax	(9)	(42)	(68)	62.0	670.2	(59)	(105)	78.0	(16)
<i>Tax rate (%)</i>	0.5	4.2	2.3	nm	nm	0.5	(3.6)	(757.2)	0.1
Minority interests	(5)	147	108	(26.6)	(2,076.0)	96	327	241.7	(306)
Net profit	1,616	1,095	2,970	171.2	83.8	4,219	5,432	28.8	11,873
Non-recurring	37	32	17	(48.2)	(54.7)	84	56	(32.7)	-
Core net profit	1,580	1,064	2,954	177.7	87.0	4,135	5,376	30.0	11,873
EPS (THB)	0.43	0.29	0.80	171.2	83.7	1.13	1.46	28.7	3.18
Core EPS (THB)	0.42	0.29	0.79	177.7	86.9	1.11	1.44	30.0	3.18

Sources: EA; FSSIA estimates

Exhibit 2: 3Q22/9M22 key performance

	Unit	3Q21	2Q22	3Q22	Change		9M21	9M22	Change
					(q-q %)	(y-y %)			(y-y %)
Biodiesel									
- Revenue	THB m	1,167	1,098	1,024	(6.7)	(12.3)	4,155	3,650	(12.2)
- Sales volume	m litre	34	21	30	42.3	(10.5)	117	83	(29.6)
- Average selling price	THB/litre	34.6	51.7	33.9	(34.5)	(2.0)	35.4	44.2	24.8
Glycerin									
- Revenue	THB m	92	81	118	46.4	28.2	229	356	55.3
- Sales volume	m kg	3	2	3	69.3	(15.3)	9	7	(22.3)
- Average selling price	THB/kg	30.7	53.7	46.4	(13.6)	51.1	24.9	49.7	99.5
Crude palm oil									
- Revenue	THB m	417.31	925.53	332	(64.1)	(20.4)	1270.08	1501.04	18.2
- Sales volume	m kg	12.24	17.3	10.46	(39.5)	(14.5)	39.47	32.58	(17.5)
- Average selling price	THB/kg	34.1	53.51	31.74	(40.7)	(6.9)	31.93	46.09	44.3
PCM									
- Revenue	THB m	10.85	50.41	22.43	(55.5)	106.7	35.45	85.51	141.2
- Sales volume	m kg	0.09	0.48	0.18	(62.5)	100.0	0.345	0.764	121.4
- Average selling price	THB/kg	120.56	105.83	124.92	18.0	3.6	102.58	110.29	7.5
Battery and Electric Vehicle									
- Revenue	THB m	557.42	84.21	1257.51	1,393.3	125.6	657.22	1405.86	113.9
Solar power									
- Revenue	THB m	1,424	1,757	1,563	(11.0)	9.8	4,558	5,016	10.0
- Sales volume	GWh	146	177	152	(14.1)	4.1	472	499	5.9
- Average selling price	THB/kWh	9.8	9.9	10.3	3.5	5.4	9.6	10.0	4.2
- Availability factor*	%	24	29	25	(4.1)	1.0	77	82	4.5
Wind power									
- Revenue	THB m	1,277	1,100	1,090	(0.9)	(14.6)	3,498	3,113	(11.0)
- Sales volume	GWh	211	170	161	(5.0)	(23.7)	577	476	(17.4)
- Average selling price	THB/kWh	6.0	6.5	6.8	4.3	11.9	0.1	6.5	7,144.4
- Availability factor*	%	25	20	19	(1.0)	(5.9)	68	56	(11.9)
Biogas									
- Revenue	THB m	4.81	3.65	5.12	40.3	6.4	16.18	12.2	(24.6)
- Sales volume	GWh	1.89	0.95	1.32	38.9	(30.2)	5.43	3.1	(42.9)
- Average selling price	THB/kWh	2.54	3.83	3.88	1.3	52.8	3.2	3.93	22.8

*Note: Change is represented in ppt change

Sources: EA; FSSIA estimates

Exhibit 3: SoTP valuation

Cost of equity assumptions		(%)	Cost of debt assumptions		(%)
Risk free rate		2.3	Pretax cost of debt		4.1
Market risk premium		8.5	Marginal tax rate		20.0
Stock beta		0.40			
DCF assumptions					
Cost of equity, Ke		5.7	Net cost of debt, Kd		3.1
Weight applied		25.0	Weight applied		75.0
WACC (%)		3.7			
SOTP valuation estimate					
	(THB m)	(THB/share)	Valuation methodology		
Biodiesel	4,592	1.2	DCF with WACC 3.7%, Risk free rate 2.3%, Risk premium 8.5%		
Solar					
Lopburi	1,367	0.4	DCF with WACC 3.7%, Risk free rate 2.3%, Risk premium 8.5%		
Nakhon Sawan	12,548	3.4	DCF with WACC 3.7%, Risk free rate 2.3%, Risk premium 8.5%		
Lampang	19,370	5.2	DCF with WACC 3.7%, Risk free rate 2.3%, Risk premium 8.5%		
Phitsanulok	19,666	5.3	DCF with WACC 3.7%, Risk free rate 2.3%, Risk premium 8.5%		
Total solar	52,950	14.2			
Wind					
- Southern (COD 2017)					
Had Gunghun 1	4,320	1.2	DCF with WACC 3.7%, Risk free rate 2.3%, Risk premium 8.5%		
Had Gunghun 2	5,271	1.4	DCF with WACC 3.7%, Risk free rate 2.3%, Risk premium 8.5%		
Had Gunghun 3	5,284	1.4	DCF with WACC 3.7%, Risk free rate 2.3%, Risk premium 8.5%		
Had Gunghun 4	6,480	1.7	DCF with WACC 3.7%, Risk free rate 2.3%, Risk premium 8.5%		
Total wind farm Southern	14,875	5.7			
- Northeastern (COD 2018)					
Hanuman 1	8,407	2.3	DCF with WACC 3.7%, Risk free rate 2.3%, Risk premium 8.5%		
Hanuman 5	8,944	2.4	DCF with WACC 3.7%, Risk free rate 2.3%, Risk premium 8.5%		
Hanuman 8	9,839	2.6	DCF with WACC 3.7%, Risk free rate 2.3%, Risk premium 8.5%		
Hanuman 9	9,183	2.5	DCF with WACC 3.7%, Risk free rate 2.3%, Risk premium 8.5%		
Hanuman 10	17,538	4.7	DCF with WACC 3.7%, Risk free rate 2.3%, Risk premium 8.5%		
Total wind farm Northeastern	53,910	14.5			
Battery phase 1 (1GWh)	16,130	4.3	DCF with WACC 2%, Risk free rate 5.3%, Risk premium 8.5%		
Battery phase 2 (15GWh)	175,719	47.1	DCF with WACC 2%, Risk free rate 5.3%, Risk premium 8.5%		
EV car (MPA SPA1, 4Q22E)	13,986	3.7	FY22E P/E at 15x		
EV boat (1Q21)	1,219	0.3	FY22E P/E at 15x		
EV charging station (2020)	1,166	0.3	DCF with WACC 3.7%, Risk free rate 2.3%, Risk premium 8.5%		
EV bus (3Q21)	70,515	18.9	FY22E P/E at 24x		
Total EV and battery	208,220	74.7			
Green diesel & PCM	12,654	3.4	FY22E P/E at 15x		
Net debt	(18,335)	(4.9)			
Minorities	3,212	0.9			
Residual ordinary equity	332,079	110.0			

Source: FSSIA estimates

Financial Statements

Energy Absolute

Profit and Loss (THB m) Year Ending Dec	2020	2021	2022E	2023E	2024E
Revenue	17,080	20,174	23,291	31,763	47,418
Cost of goods sold	(6,591)	(9,242)	(6,721)	(14,519)	(27,412)
Gross profit	10,489	10,931	16,569	17,244	20,007
Other operating income	-	-	-	-	-
Operating costs	(1,278)	(1,437)	(1,630)	(1,906)	(3,319)
Operating EBITDA	9,211	9,494	14,939	15,339	16,687
Depreciation	(2,730)	(2,768)	(2,494)	(3,300)	(3,540)
Goodwill amortisation	0	0	0	0	0
Operating EBIT	6,480	6,726	12,445	12,039	13,147
Net financing costs	(1,627)	(1,322)	(1,232)	(1,128)	(1,061)
Associates	(61)	14	804	1,175	818
Recurring non-operating income	126	411	1,054	1,425	1,068
Non-recurring items	50	117	0	0	0
Profit before tax	5,029	5,933	12,267	12,336	13,154
Tax	18	(3)	(87)	(196)	(147)
Profit after tax	5,047	5,929	12,180	12,139	13,007
Minority interests	157	171	(306)	(305)	(314)
Preferred dividends	0	0	0	0	0
Other items	-	-	-	-	-
Reported net profit	5,205	6,100	11,873	11,834	12,693
Non-recurring items & goodwill (net)	(50)	(117)	0	0	0
Recurring net profit	5,155	5,983	11,873	11,834	12,693
Per share (THB)					
Recurring EPS *	1.38	1.60	3.18	3.17	3.40
Reported EPS	1.40	1.64	3.18	3.17	3.40
DPS	0.30	0.30	0.50	0.50	0.50
Diluted shares (used to calculate per share data)	3,730	3,730	3,730	3,730	3,730
Growth					
Revenue (%)	14.7	18.1	15.4	36.4	49.3
Operating EBITDA (%)	(3.3)	3.1	57.3	2.7	8.8
Operating EBIT (%)	(7.6)	3.8	85.0	(3.3)	9.2
Recurring EPS (%)	(12.7)	16.1	98.4	(0.3)	7.3
Reported EPS (%)	(14.4)	17.2	94.6	(0.3)	7.3
Operating performance					
Gross margin inc. depreciation (%)	45.4	40.5	60.4	43.9	34.7
Gross margin of key business (%)	45.7	41.0	60.4	43.9	34.7
Operating EBITDA margin (%)	53.9	47.1	64.1	48.3	35.2
Operating EBIT margin (%)	37.9	33.3	53.4	37.9	27.7
Net margin (%)	30.2	29.7	51.0	37.3	26.8
Effective tax rate (%)	-0.4	0.1	0.8	1.8	1.2
Dividend payout on recurring profit (%)	21.7	18.7	15.7	15.8	14.7
Interest cover (X)	4.1	5.4	11.0	11.9	13.4
Inventory days	44.1	45.7	69.9	43.4	45.4
Debtor days	57.9	58.3	59.7	46.9	34.5
Creditor days	18.2	14.4	16.9	10.5	11.0
Operating ROIC (%)	9.5	(2.3)	(4.0)	(3.8)	(4.1)
ROIC (%)	8.2	(1.9)	(3.5)	(3.4)	(3.6)
ROE (%)	20.1	19.8	31.4	24.6	21.7
ROA (%)	8.5	6.8	13.4	12.1	11.6
* Pre-exceptional, pre-goodwill and fully diluted					
Revenue by Division (THB m)					
Methyl ester Biodiesel products	6,570	6,570	6,570	6,570	6,570
Pure glycerine products	360	361	2,387	3,469	3,469
Electricity from solar and wind power	9,784	10,247	10,128	5,249	14,196
Head office and others	100	101	101	101	101

Sources: Energy Absolute; FSSIA estimates

Financial Statements

Energy Absolute

Cash Flow (THB m) Year Ending Dec	2020	2021	2022E	2023E	2024E
Recurring net profit	5,155	5,983	11,873	11,834	12,693
Depreciation	2,730	2,768	2,494	3,300	3,540
Associates & minorities	(61)	14	804	1,175	818
Other non-cash items	-	-	-	-	-
Change in working capital	4,045	(4,390)	306	(620)	(846)
Cash flow from operations	11,869	4,375	15,477	15,689	16,204
Capex - maintenance	(2,730)	(2,768)	(2,494)	(3,300)	(3,540)
Capex - new investment	(4,486)	(2,564)	(1,006)	(200)	(40)
Net acquisitions & disposals	(1,429)	(84)	0	0	0
Other investments (net)	(7,546)	(711)	804	1,175	818
Cash flow from investing	(16,192)	(6,127)	(2,696)	(2,325)	(2,762)
Dividends paid	(746)	(746)	(1,119)	(1,865)	(1,865)
Equity finance	0	0	0	0	0
Debt finance	(2,873)	1,904	(4,255)	(2,035)	(2,035)
Other financing cash flows	863	570	(1,352)	(2,095)	(1,291)
Cash flow from financing	(2,756)	1,728	(6,726)	(5,995)	(5,191)
Non-recurring cash flows	-	-	-	-	-
Other adjustments	0	0	0	0	0
Net other adjustments	0	0	0	0	0
Movement in cash	(7,079)	(24)	6,055	7,369	8,251
Free cash flow to firm (FCFF)	(2,685.77)	(364.69)	14,063.35	14,542.80	14,553.11
Free cash flow to equity (FCFE)	(6,332.72)	721.90	7,174.50	9,234.46	10,116.48

Per share (THB)					
FCFF per share	(0.72)	(0.10)	3.77	3.90	3.90
FCFE per share	(1.70)	0.19	1.92	2.48	2.71
Recurring cash flow per share	2.10	2.35	4.07	4.37	4.57

Balance Sheet (THB m) Year Ending Dec	2020	2021	2022E	2023E	2024E
Tangible fixed assets (gross)	67,122	70,852	74,352	77,852	81,352
Less: Accumulated depreciation	(11,265)	(12,431)	(14,925)	(18,225)	(21,765)
Tangible fixed assets (net)	55,857	58,421	59,426	59,627	59,587
Intangible fixed assets (net)	1,337	1,453	1,453	1,453	1,453
Long-term financial assets	-	-	-	-	-
Invest. in associates & subsidiaries	1,529	1,614	1,614	1,614	1,614
Cash & equivalents	2,951	2,927	8,982	16,352	24,603
A/C receivable	2,750	3,690	3,923	4,241	4,715
Inventories	833	1,483	1,092	2,360	4,455
Other current assets	855	3,549	4,097	5,588	8,342
Current assets	7,389	11,650	18,095	28,541	42,115
Other assets	12,371	12,339	12,339	12,339	12,339
Total assets	78,484	85,476	92,928	103,573	117,108
Common equity	27,812	32,501	43,205	53,125	63,902
Minorities etc.	1,815	2,601	2,907	3,212	3,527
Total shareholders' equity	29,627	35,102	46,112	56,337	67,429
Long term debt	31,090	33,777	29,522	27,487	25,452
Other long-term liabilities	4,203	3,921	3,921	3,921	3,921
Long-term liabilities	35,292	37,699	33,443	31,409	29,374
A/C payable	373	358	264	570	1,076
Short term debt	7,983	7,200	7,200	7,200	7,200
Other current liabilities	5,209	5,118	5,909	8,058	12,030
Current liabilities	13,564	12,676	13,372	15,828	20,306
Total liabilities and shareholders' equity	78,484	85,476	92,928	103,573	117,108
Net working capital	(1,143)	3,246	2,941	3,560	4,406
Invested capital	69,951	77,073	77,773	78,593	79,399

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

Per share (THB)					
Book value per share	7.46	8.71	11.58	14.24	17.13
Tangible book value per share	7.10	8.32	11.19	13.85	16.74
Financial strength					
Net debt/equity (%)	121.9	108.4	60.2	32.5	11.9
Net debt/total assets (%)	46.0	44.5	29.9	17.7	6.9
Current ratio (x)	0.5	0.9	1.4	1.8	2.1
CF interest cover (x)	(0.1)	3.5	7.6	9.4	10.6

Valuation	2020	2021	2022E	2023E	2024E
Recurring P/E (x) *	70.7	60.9	30.7	30.8	28.7
Recurring P/E @ target price (x) *	79.6	68.6	34.6	34.7	32.3
Reported P/E (x)	70.1	59.8	30.7	30.8	28.7
Dividend yield (%)	0.3	0.3	0.5	0.5	0.5
Price/book (x)	13.1	11.2	8.4	6.9	5.7
Price/tangible book (x)	13.8	11.7	8.7	7.1	5.8
EV/EBITDA (x) **	43.7	42.7	26.5	25.2	22.5
EV/EBITDA @ target price (x) **	48.7	47.5	29.5	28.2	25.3
EV/invested capital (x)	5.8	5.3	5.1	4.9	4.7

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

Sources: Energy Absolute; FSSIA estimates

Corporate Governance report of Thai listed companies 2021

EXCELLENT LEVEL – Score range 90-100										
AAV	BCPG	CPALL	GCAP	K	MSC	PLANET	SAMART	SPI	THRE	TVD
ADVANC	BDMS	CPF	GFPT	KBANK	MST	PLAT	SAMTEL	SPRC	THREL	TVI
AF	BEM	CPI	GGC	KCE	MTC	PORT	SAT	SPVI	TIPCO	TVO
AH	BGC	CPN	GLAND	KKP	MVP	PPS	SC	SSSC	TISCO	TWPC
AIRA	BGRIM	CRC	GLOBAL	KSL	NCL	PR9	SCB	SST	TK	U
AKP	BIZ	CSS	GPI	KTB	NEP	PREB	SCC	STA	TKT	UAC
AKR	BKI	DDD	GPSC	KTC	NER	PRG	SCCC	STEC	TMT	UBIS
ALT	BOL	DELTA	GRAMMY	LALIN	NKI	PRM	SCG	STI	TNDT	UV
AMA	BPP	DEMCO	GULF	LANNA	NOBLE	PROUD	SCGP	SUN	TNITY	VGI
AMATA	BRR	DRT	GUNKUL	LH	NSI	DRSH	SCM	SUSCO	TOA	VIH
AMATAV	BTS	DTAC	HANA	LHFG	NVD	PSL	SDC	SUTHA	TOP	WACOAL
ANAN	BTW	DUSIT	HARN	LIT	NWR	PTG	SEAFCO	SVI	TPBI	WAVE
AOT	BWG	EA	HMPRO	LPN	NYT	PTT	SEAOIL	SYMC	TQM	WHA
AP	CENTEL	EASTW	ICC	MACO	OISHI	PTTEP	SE-ED	SYNTEC	TRC	WHAUP
ARIP	CFRESH	ECF	ICHI	MAJOR	OR	PTTGC	SELIC	TACC	TRU	WICE
ARROW	CHEWA	ECL	III	MAKRO	ORI	PYLON	SENA	TASCO	TRUE	WINNER
ASP	CHO	EE	ILINK	MALEE	OSP	Q-CON	SHR	TCAP	TSC	ZEN
AUCT	CIMBT	EGCO	ILM	MBK	OTO	QH	SIRI	TEAMG	TSR	
AWC	CK	EPG	INTUCH	MC	PAP	QTC	SIS	TFMAMA	TSTE	
AYUD	CKP	ETC	IP	MCOT	PCSGH	RATCH	SITHAI	TGH	TSTH	
BAFS	CM	FPI	IRPC	METCO	PDG	RS	SMK	THANA	TTA	
BANPU	CNT	FPT	ITEL	MFEC	PDJ	S	SMPC	THANI	TTB	
BAY	COM7	FSMART	IVL	MINT	PG	S & J	SNC	THCOM	TTCL	
BBL	COMAN	GBX	JSP	MONO	PHOL	SAAM	SONIC	THG	TTW	
BCP	COTTO	GC	JWD	MOONG	PLANB	SABINA	SPALI	THIP	TU	
VERY GOOD LEVEL – Score range 80-89										
2S	ASIMAR	CHOW	FLOYD	IT	LOXLEY	OCC	RPC	SKY	TCC	TVT
7UP	ASK	CI	FN	ITD	LRH	OGC	RT	SLP	TCMC	TWP
ABICO	ASN	CIG	FNS	J	LST	PATO	RWI	SMIT	TEAM	UEC
ABM	ATP30	CMC	FORTH	JAS	M	PB	S11	SMT	TFG	UMI
ACE	B	COLOR	FSS	JCK	MATCH	PICO	SA	SNP	TFI	UOBKH
ACG	BA	CPL	FTE	JCKH	MBAX	PIMO	SAK	SO	TIGER	UP
ADB	BAM	CPW	FVC	JMART	MEGA	PJW	SALEE	SORKON	TITLE	UPF
AEONTS	BC	CRD	GEL	JMT	META	PL	SAMCO	SPA	TKN	UPOIC
AGE	BCH	CSC	GENCO	KBS	MFC	PM	SANKO	SPC	TKS	UTP
AHC	BEC	CSP	GJS	KCAR	MGT	PMTA	SAPPE	SPCG	TM	VCOM
AIT	BEYOND	CWT	GYT	KEX	MICRO	PPP	SAWAD	SR	TMC	VL
ALL	BFIT	DCC	HEMP	KGI	MILL	PPP	SCI	SRICHA	TMD	VPO
ALLA	BJC	DCON	HPT	KIAT	MITSIB	PRIME	SCN	SSC	TMI	VRANDA
ALUCON	BJCHI	DHOUSE	HTC	KISS	MK	PRIN	SCP	SSF	TMILL	WGE
AMANAHA	BLA	DOD	HYDRO	KOOL	MODERN	PRINC	SE	STANLY	TNL	WIJK
AMARIN	BR	DOHOME	ICN	KTIS	MTI	PSG	SFLEX	STGT	TNP	WP
APCO	BROOK	DV8	IFS	KUMWEL	NBC	PSTC	SFP	STOWER	TOG	XO
APCS	CBG	EASON	IMH	KUN	NCAP	PT	SFT	STPI	TPA	XPG
APURE	CEN	EFORL	IND	KWC	NCH	QLT	SGF	SUC	TPAC	YUASA
AQUA	CGH	ERW	INET	KWM	NETBAY	RBF	SIAM	SWC	TPCS	
ASAP	CHARAN	ESSO	INSET	L&E	NEX	RCL	SINGER	SYNEX	TPS	
ASEFA	CHAYO	ESTAR	INSURE	LDC	NINE	RICHY	SKE	TAE	TRITN	
ASIA	CHG	ETE	IRC	LEO	NRF	RML	SKN	TAKUNI	TRT	
ASIAN	CHOTI	FE	IRCP	LHK	NTV	ROJNA	SKR	TBSP	TSE	
GOOD LEVEL – Score range 70-79										
A	BGT	CITY	GIFT	JTS	MDX	PK	SGP	SUPER	TQR	YGG
AI	BH	CMAN	GLOCON	JUBILE	MJD	PLE	SICT	SVOA	TTI	ZIGA
AIE	BIG	CMO	GREEN	KASET	MORE	PPM	SIMAT	TC	TYCN	
AJ	BLAND	CMR	GSC	KCM	MUD	PRAKIT	SISB	TCCC	UKEM	
ALPHAX	BM	CPT	GTB	KK	NC	PRAPAT	SK	THMUI	UMS	
AMC	BROCK	CRANE	HTECH	KKC	NDR	PRECHA	SMART	TNH	UNIQ	
APP	BSBM	CSR	HUMAN	KWI	NFC	PTL	SOLAR	TNR	UPA	
AQ	BSM	D	IHL	KYE	NNCL	RJH	SPACK	TOPP	UREKA	
ARIN	BTNC	EKH	IIG	LEE	NOVA	RP	SPG	TPCH	VIBHA	
AS	BYD	EMC	INGRS	LPH	NPK	RPH	SQ	TPIPL	W	
AU	CAZ	EP	INOX	MATI	NUSA	RSP	SSP	TIPIP	WIN	
B52	CCP	F&D	JAK	M-CHAI	PAF	SABUY	STARK	TPLAS	WORK	
BEAUTY	CGD	FMT	JR	MCS	PF	SF	STC	TPOLY	WPH	

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.

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. 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

Sources: Thai Institute of Directors Association (IOD); FSSIA's compilation; data as of 26 October 2021

Anti-corruption Progress Indicator

CERTIFIED										
2S	BCH	CPALL	GC	K	MFC	PE	QLT	SNP	THCOM	TU
7UP	BCP	CPF	GCAP	KASET	MFEC	PG	QTC	SORKON	THIP	TVD
ADVANC	BCPG	CPI	GEL	KBANK	MILL	PHOL	RATCH	SPACK	THRE	TVI
AF	BE8	CPN	GFPT	KBS	MINT	PK	RML	SPALI	THREL	TVO
AI	BEYOND	CSC	GGC	KCAR	MONO	PL	RWI	SPC	TIDLOR	TWPC
AIE	BGC	DCC	GJS	KCE	MOONG	PLANB	S & J	SPI	TIPCO	U
AIRA	BGRIM	DELTA	GPI	KGI	MSC	PLANET	SAAM	SPRC	TISCO	UBE
AKP	BJCHI	DEMCO	GPSC	KKP	MST	PLAT	SABINA	SRICHA	TKS	UBIS
ALPHAX	BKI	DIMET	GSTEEL	KSL	MTC	PM	SAPPE	SSF	TKT	UEC
AMA	BLA	DRT	GUNKUL	KTB	MTI	PPP	SAT	SSP	TMD	UKEM
AMANAHA	BPP	DTAC	HANA	KTC	NBC	PPPM	SC	SSSC	TMILL	UOBKH
AMATA	BROOK	DUSIT	HARN	KWC	NEP	PPS	SCB	SST	TMT	UPF
AMATAV	BRR	EA	HEMP	KWI	NINE	PR9	SCC	STA	TNITY	UV
AP	BSBM	EASTW	HENG	L&E	NKI	PREB	SCCC	STOWER	TNL	VGI
APCS	BTS	ECL	HMPRO	LANNA	NMG	PRG	SCG	SUSCO	TNP	VIH
AQUA	BWG	EGCO	HTC	LH	NNCL	PRINC	SCN	SVI	TNR	WACOAL
ARROW	CEN	EP	ICC	LHFG	NOBLE	PRM	SEAOIL	SYMC	TOG	WHA
AS	CENTEL	EPG	ICHI	LHK	NOK	PROS	SE-ED	SYNTEC	TOP	WHAUP
ASIAN	CFRESH	ERW	IFEC	LPN	NSI	PSH	SELIC	TAE	TOPP	WICE
ASK	CGH	ESTAR	IFS	LRH	NWR	PSL	SENA	TAKUNI	TPA	WIJK
ASP	CHEWA	ETE	ILINK	M	OCC	PSTC	SGP	TASCO	TPP	XO
AWC	CHOTI	FE	INET	MAKRO	OGC	PT	SINGER	TBSP	TRU	ZEN
AYUD	CHOW	FNS	INSURE	MALEE	ORI	PTG	SIRI	TCAP	TRUE	
B	CIG	FPI	INTUCH	MATCH	PAP	PTT	SITHAI	TCMC	TSC	
BAFS	CIMBT	FPT	IRC	MBAX	PATO	PTTEP	SKR	TFG	TSTE	
BAM	CM	FSMART	IRPC	MBK	PB	PTTGC	SMIT	TFI	TSTH	
BANPU	CMC	FSS	ITEL	MC	PCSGH	PYLON	SMK	TFMAMA	TTA	
BAY	COM7	FTE	IVL	MCOT	PDG	Q-CON	SMPC	TGH	TTB	
BBL	COTTO	GBX	JKN	META	PDJ	QH	SNC	THANI	TTCL	
DECLARED										
AJ	CHG	DDD	ETC	JR	MAJOR	NUSA	RS	SSS	TQM	YUASA
ALT	CPL	DHOUSE	FLOYD	JTS	NCAP	NYT	SAK	STECH	TSI	ZIGA
APCO	CPR	DOHOME	GULF	KEX	NCL	OR	SCGP	STGT	VARO	
B52	CPW	ECF	III	KUMWEL	NOVA	PIMO	SCM	TKN	VCOM	
BEC	CRC	EKH	INOX	LDC	NRF	PLE	SIS	TMI	VIBHA	

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 26 October 2021) are categorised into: 1) companies that have declared their intention to join CAC, and; 2) companies certified by CAC.

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

GENERAL DISCLAIMER

ANALYST(S) CERTIFICATION

Siriluck Pinthusoonthorn FSS International Investment Advisory Securities Co., Ltd

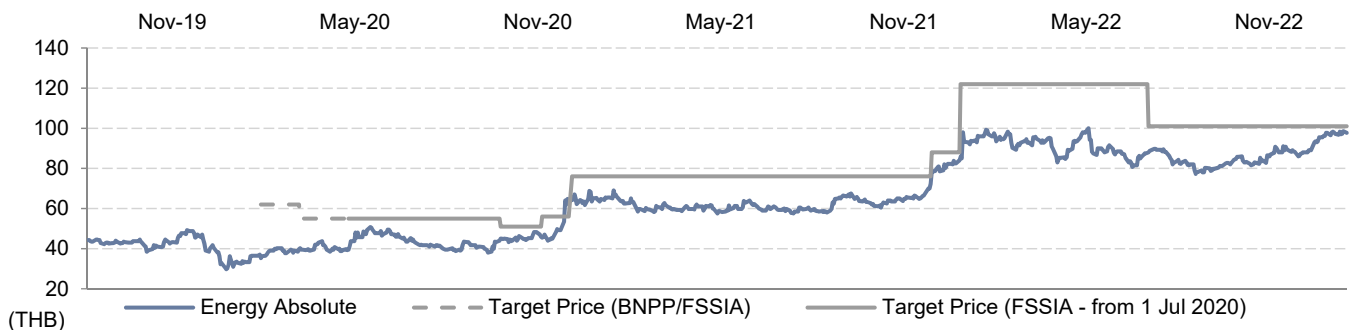
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History of change in investment rating and/or target price

Energy Absolute (EA TB)



Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
16-Apr-2020	BUY	62.00	15-Dec-2020	BUY	56.00	13-Dec-2021	BUY	122.00
20-May-2020	BUY	55.00	08-Jan-2021	BUY	76.00	25-May-2022	BUY	101.00
09-Nov-2020	BUY	51.00	18-Nov-2021	BUY	88.00			

Siriluck Pinthusoonthorn started covering this stock from 15-Nov-2022

Price and TP are in local currency

Source: FSSIA estimates

Company	Ticker	Price	Rating	Valuation & Risks
Energy Absolute	EA TB	THB 97.75	BUY	Downside risks to our SoTP-based TP include: 1) lower-than-expected demand for electricity in Thailand; 2) lower crude prices; 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

FSSIA may incorporate the recommendations and target prices of companies currently covered by FSS Research into equity research reports, denoted by an 'FSS' before the recommendation. FSS Research is part of Finansia Syrus Securities Public Company Limited, which is the parent company of FSSIA.

All share prices are as at market close on 14-Nov-2022 unless otherwise stated.

RECOMMENDATION STRUCTURE

Stock ratings

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

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

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

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

Underweight. 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.