

ENERGY ABSOLUTE EA TB

THAILAND / UTILITIES - RENEWABLES

BUY

UNCHANGED

Fast growth on fast-charging EVs

- We project EA's net profit to grow by 98% y-y in 2022, driven by the growth from its new S-curve ventures.
- We project EA's 1GWh plant to gradually increase its utilisation rate from 60% in 4Q21 to over 90% by end-2022.
- Maintain BUY but cut our SoTP-TP from THB122 to THB101.

TARGET PRICE	THB101.00
CLOSE	THB87.50
UP/DOWNSIDE	+15.4%
PRIOR TP	THB122.00
CHANGE IN TP	-17.2%
TP vs CONSENSUS	+7.0%

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 (%)	-	43.4	22.2	17.9
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. (%)	-	11.5	(12.6)	(15.2)
EPS growth (%)	16.1	98.4	(0.3)	7.3
Core P/E (x)	54.5	27.5	27.6	25.7
Dividend yield (%)	0.5	0.8	1.1	1.4
EV/EBITDA (x)	38.7	23.9	22.8	20.4
Price/book (x)	10.0	7.6	6.3	5.4
Net debt/Equity (%)	108.4	61.5	35.2	17.1
ROE (%)	19.8	31.5	25.0	22.5

Strong earnings growth on S-curve ventures

We project EA's net profit to grow by 98% y-y in 2022, driven by the growth from its new S-curve ventures. These include the EV value chain ventures and palm-based products of green diesel and phase change material that we project to rise from 2% of total earnings in 2020-21 to 50% by 2024. The major drivers should come from the earnings growth from EA's battery plant, the EV manufacturing plant, and sales of commercial EVs.

4x battery capacity growth expected in 2022-24

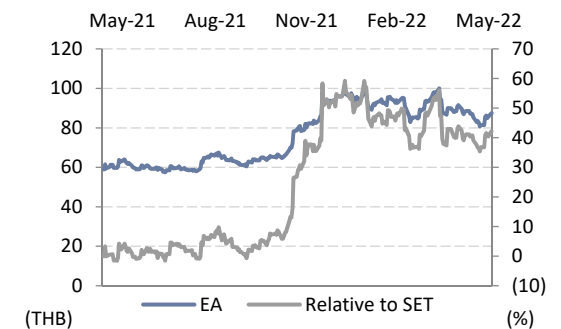
Using the solid-electrolyte interphase method for its NMC lithium-ion batteries (LIB), EA via Amita's technology has been able to gain an advantage over its competitors with 15-minute fast-charging high-energy-density LIB, allowing it to penetrate Thailand's commercial EV market since 2021. We project that EA's 1GWh plant – which produces LIB based on Amita's technology – will gradually increase its utilisation rate from 60% in 4Q21 to over 90% by end-2022. The captive demand for LIB for e-buses in 2022 and e-trucks in 2023 onward should be adequately filled by EA's battery plant.

Large secured commercial EV orders to translate to earnings

With a solid set of potential e-bus orders from Thai Smile Bus (TSB) and Thai Smart Bus (SMB) in 2022-23, we believe EA is likely to achieve our earnings and sales volume assumptions for e-trucks and e-buses on the high pent-up demand for commercial EVs (buses and trucks) and passenger EVs. Based on EA's management, we estimate that the total number of e-buses potentially to be sold to TSB and SMB would be 2,355 and 800, bringing the total potential EV orders for Absolute Assembly (AAB) to 3,155 e-buses; all likely to be delivered within 2023-24.

Top pick on EV boom

We maintain BUY but cut our SoTP-based target price from THB122 to THB101 to reflect our lower DCF-based values for phase one and two of the battery plant and the lower values for EA's e-bus and e-truck ventures for both the manufacturing plant (AAB) and marketer (NEX). We revise our EPS forecasts for 2022-24 by +12%/-13%/-15% to reflect our revised sales volumes for e-buses, e-trucks and batteries to incorporate the recent delays in the production and delivery of e-buses in 1H22.



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	(4.4)	(6.9)	50.2
Relative to country (%)	(1.1)	(5.4)	42.6
Mkt cap (USD m)	9,552		
3m avg. daily turnover (USD m)	53.7		
Free float (%)	40		
Major shareholder	Mr. Somphote Ahunai (23%)		
12m high/low (THB)	105.50/57.00		
Issued shares (m)	3,730.00		

Sources: Bloomberg consensus; FSSIA estimates



Suwat Sinsadok, CFA, FRM, ERP
 suwat.sin@fssia.com
 +66 2611 3558

Siriluck Pinthusoonthorn
 siriluck.pin@fssia.com
 +66 2611 3562

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. 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.

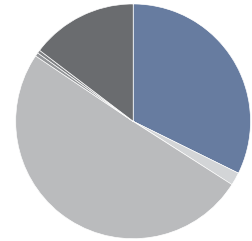
Company profile

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 electric vehicle (EV) businesses, which we expect to be key earnings growth drivers post 2019.

www.energyabsolute.co.th

Principal activities (revenue, 2021)

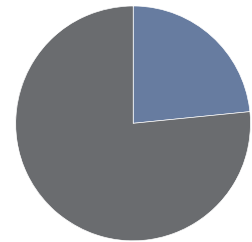
- Methyl ester Biodiesel products - 32.6 %
- Pure glycerine products - 1.8 %
- Electricity from solar and wind power - 50.8 %
- Head office and others - 0.5 %
- Project consultation regarding alternative electric energy - -0.4 %



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
Aug 2022	2Q22 results announcement

Key assumptions

	2022E	2023E	2024E
Dispatched power (GWh)	9,715	9,715	9,715
Capacity factor - wind farms (%)	26	27	28
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.

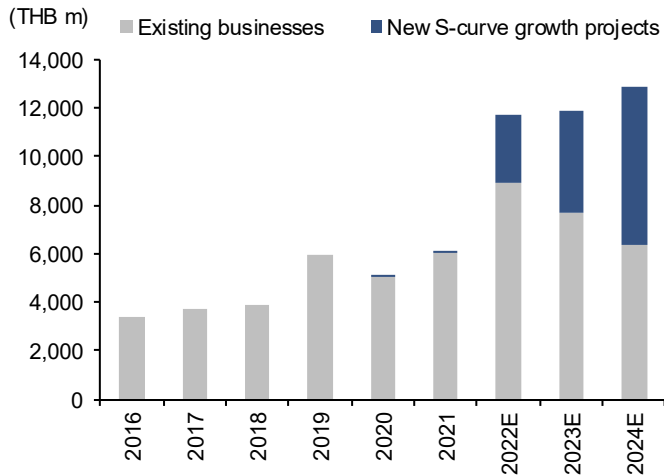
Source: FSSIA estimates

Fast growth on fast-charging EVs

In the past six months EA has witnessed unexpected events that led to delays in the production and delivery of e-buses to its customers in 4Q21-1Q22, resulting in lower-than-expected net profits in 4Q21 and 1Q22.

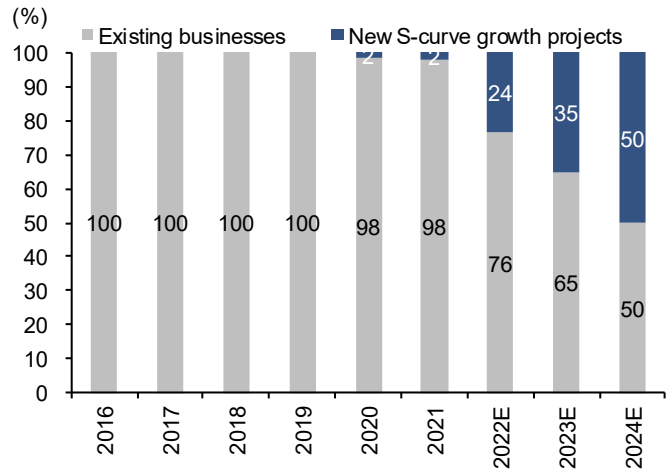
However, after a disappointing production and delivery of only 30 e-buses in 1Q22, EA's management indicated that the problems are now largely resolved and the company anticipates to produce 200 e-buses in 2Q22, 600-700 in 3Q22, and over 800 in 4Q22, with a target to deliver over 2,000 e-buses in 2022. In 2023-24, management guided that it expects to sell over 3,000 EVs in 2023 and over 4,000 in 2024, based on the current potential orders under negotiation.

Exhibit 1: Net profit breakdown by existing and new businesses



Sources: EA; FSSIA estimates

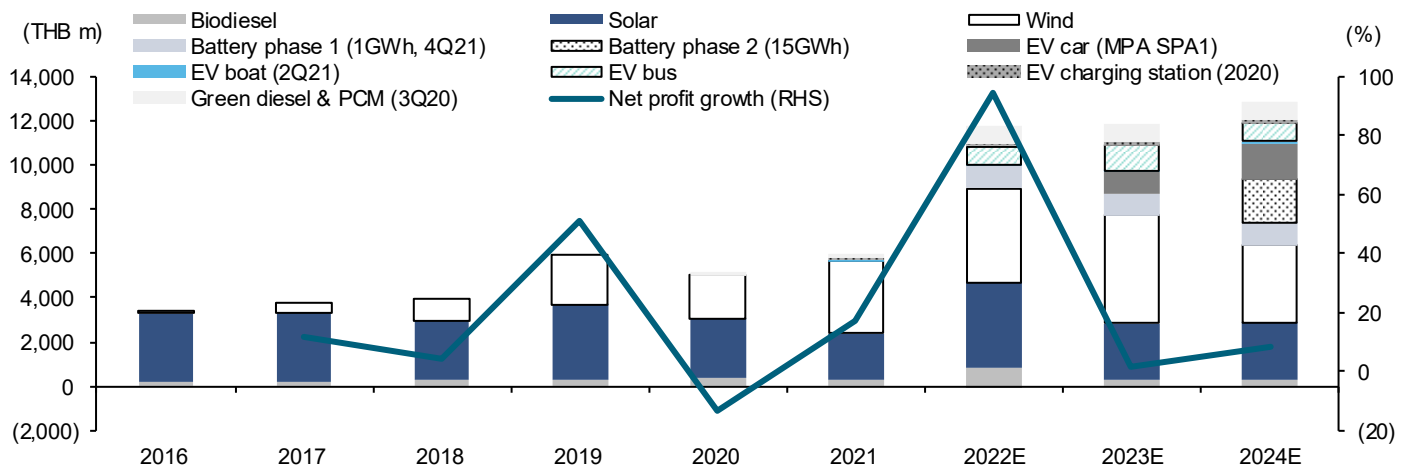
Exhibit 2: Net profit breakdown by existing and new businesses (%)



Sources: EA; FSSIA estimates

Hence, we project that EA's earnings from its new S-curve ventures, which include the EV value chain ventures and palm-based products of green diesel and phase change material, will rise from a mere 2% of total earnings in 2020-21 to 50% by 2024. The major drivers should come from the earnings growth from EA's battery plant, the EV manufacturing plant, and sales of commercial EVs.

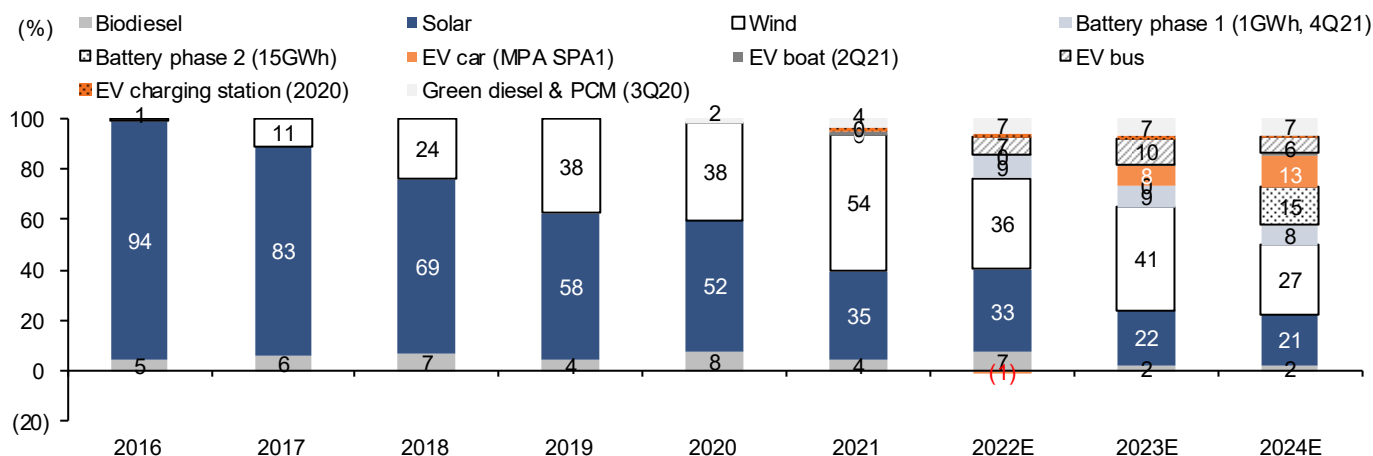
Exhibit 3: Net profit breakdown by business



Sources: EA; FSSIA estimates

While we lower our sales volume estimates for batteries and EVs in 2022-23 due to the impact of the skilled workforce shortage, we think that by 2024 EA's net profit growth from batteries and EVs will start to accelerate, given the low demand risk for the expanded 4GWh battery plant from its captive demand for up to 12,000 EV sales by 2024-25. This still represents less than 15% of Thailand's commercial vehicle market size of around 90,000-120,000 annually, based on our estimate.

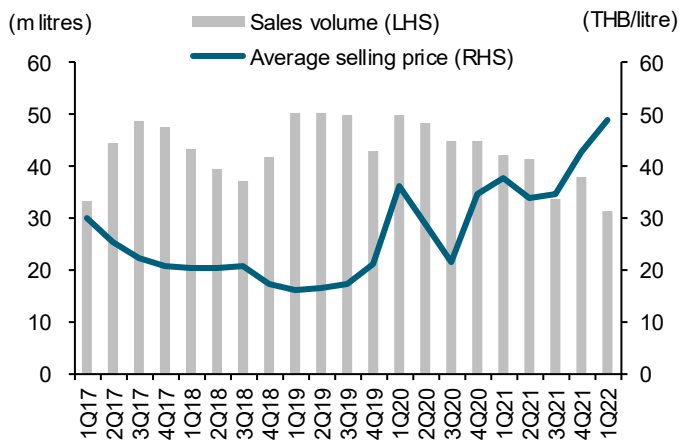
Exhibit 4: Net profit breakdown by business (%)



Sources: EA; FSSIA estimates

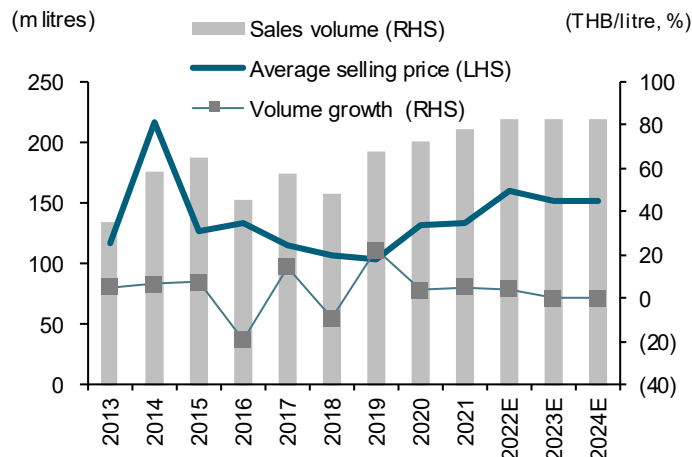
One of the key earnings drivers for EA in 2022-24 will likely come from its large-scale biodiesel production plant with over a 1m litre per day (mlpd) capacity – ranked among the top five largest producers of biodiesel or methyl ester in Thailand. We project that in 2022-24 EA will sell over 200m litres of biodiesel, driven by a demand recovery on the back of the economic reopening.

Exhibit 5: Biodiesel quarterly sales volume and average selling price



Source: EA

Exhibit 6: Biodiesel annual sales volume and average selling price



Sources: EA; FSSIA estimates

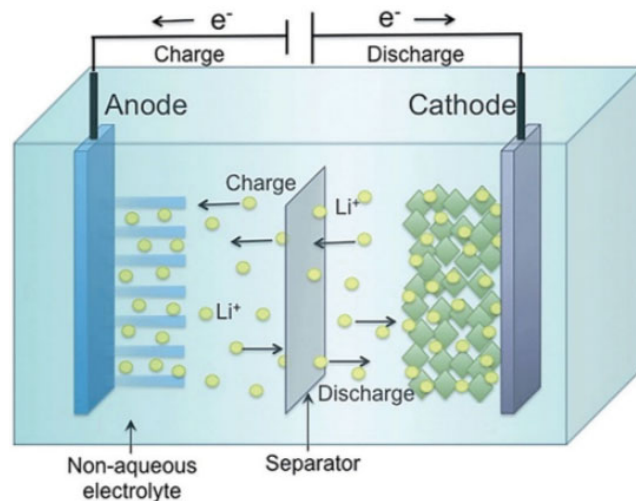
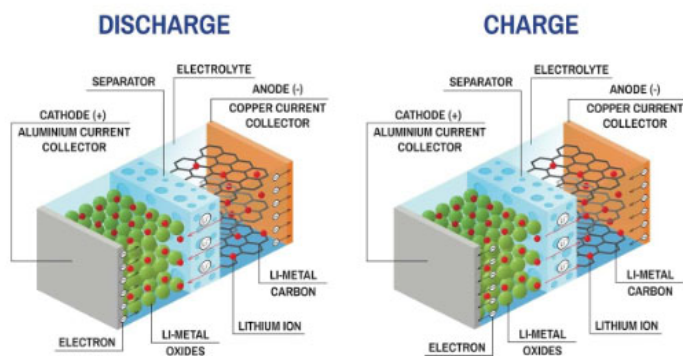
EA's battery growth roadmap

Since 4Q21, EA has already commenced its first phase 1GWh battery production plant and is now ramping up to a 70% utilisation rate. Using the battery technology from its subsidiary Amita (Taiwan), EA's battery plant produces lithium-ion-based batteries of a nickel-manganese-cobalt (NMC) type with a formula ranging from 6/2/2 to 8/1/1 (percent of NMC content at cathode). These batteries have a high cycle life in the range of 1,000 to 10,000 cycles, based on management's guidance.

Lithium-ion batteries (LIB) have become a vital part of the way to store and use electrical energy to prolong the electricity consumption period, replace less efficient storage, and enhance the reliability of solar and wind energy.

Exhibit 7: Lithium-ion battery charge and discharge diagrams

Exhibit 8: Lithium-ion battery working process



Source: [Borregaard](#)

Source: [MDPI](#)

In simple format, LIB will have four key components: 1) the cathode is a source of lithium ions; 2) the anode is an electrode to store and release lithium ions from the cathode; 3) an electrolyte medium allows the movement of ions; and 4) a separator prevents contact between the cathode and anode.

Two electrodes are for the charge and discharge of electrons (negatively charged ions) via an electrolyte (a medium in the form of liquid, semi-solid or gel, and solid state) between the cathode (positive or oxidizing electrode) and anode (negative electrode).

The cathode, which will acquire electrons from an external circuit and is reduced during the electrochemical reaction, will be coated with aluminium and various types of materials, such as NMC, lithium titanate, or lithium phosphate, to optimise for energy density, charging rate, and cycle life. The anode (negative electrode) is normally coated with graphite to maximise the chemical precipitation for electrons.

Exhibit 9: Summary of lithium-based batteries

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	1,000-10,000
History	1991 (Sony)	1996	1999	1996	2008	2008
Applications	Mobiles 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 stabilised	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 product	NO	NO	NO	YES	YES	YES

Source: EA

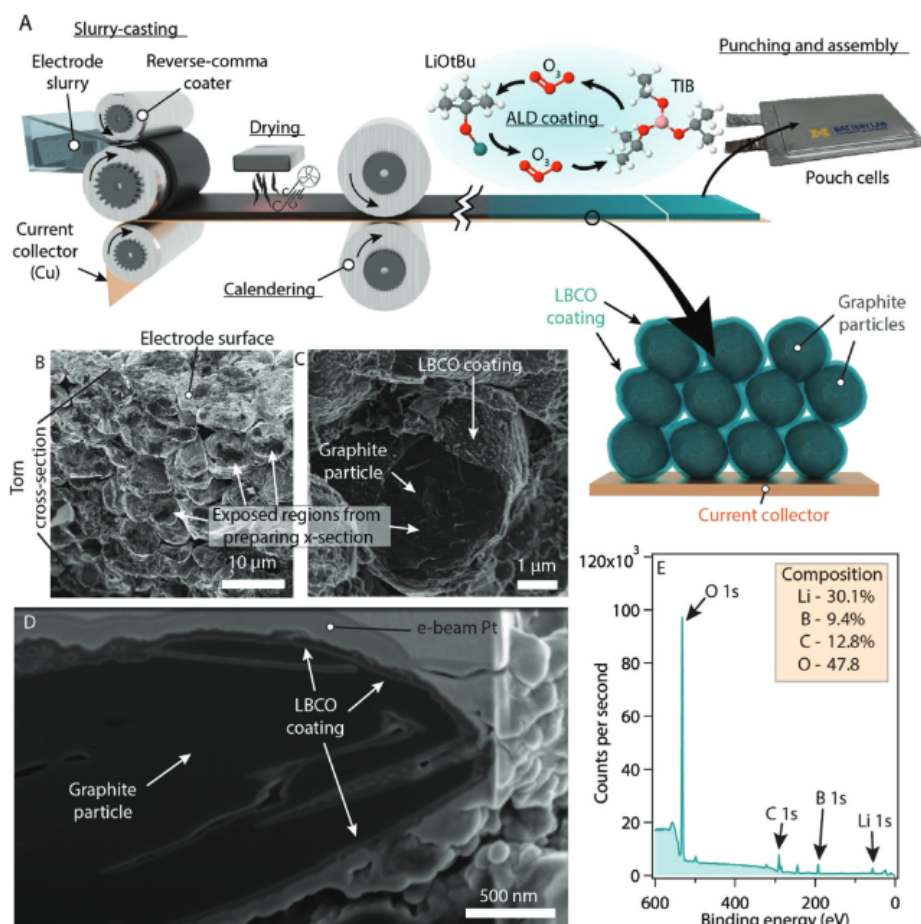
Challenges for fast-charging high-energy-density LIB. Despite significant advances over the past many years, further improvements in three key characteristics – energy density, charging rate, and cycle life (ECC) – remain key challenges, as to achieve all of these characteristics simultaneously remains elusive.

According to the white paper “[Enabling 4C Fast Charging of Lithium-Ion Batteries by Coating Graphite with a Solid-State Electrolyte](#)” (E4C) by Eric Kazyak, Kuan-Hung Chen, Yuxin Chen, Tae H. Cho, and Neil P. Dasgupta, there are trade-offs between ECC when thicker (higher areal capacity) electrodes are used, which has been largely attributed to mass-transport limitations in the electrolyte within the electrode structure due to the erosion or “plate out” on the graphite anode surface under the fast-charging condition in high-energy-density cells; the process called “Li plating” in battery technology.

The Li plating process could lead to a permanent loss of Li from the accessible battery reservoir and capacity fade, which in turn is the key challenge that limits the fast-charging of LIB. However, EA has overcome this obstacle using Amita’s technology to allow the fast-charging of high-energy-density NMC batteries for the commercial EV market in Thailand, mainly for e-buses and e-trucks.

According to E4C, there are several strategies to prevent or mitigate the impact of Li plating on graphite and hence improve the efficiency of fast-charging high-energy-density NMC LIB, including 1) alternative anode materials such as lithium titanate or hybrid mixtures of hard carbon with graphite; 2) modifying the electrode architecture to facilitate enhanced mass transport; 3) asymmetric temperature modulation; 4) surface coating to modify interface behaviour; and 5) electrolyte modifications to increase ionic conductivity.

Exhibit 10: Graphite electrode coating process



Source: White paper “[Enabling 4C Fast Charging of Lithium-Ion Batteries by Coating Graphite with a Solid-State Electrolyte](#)”

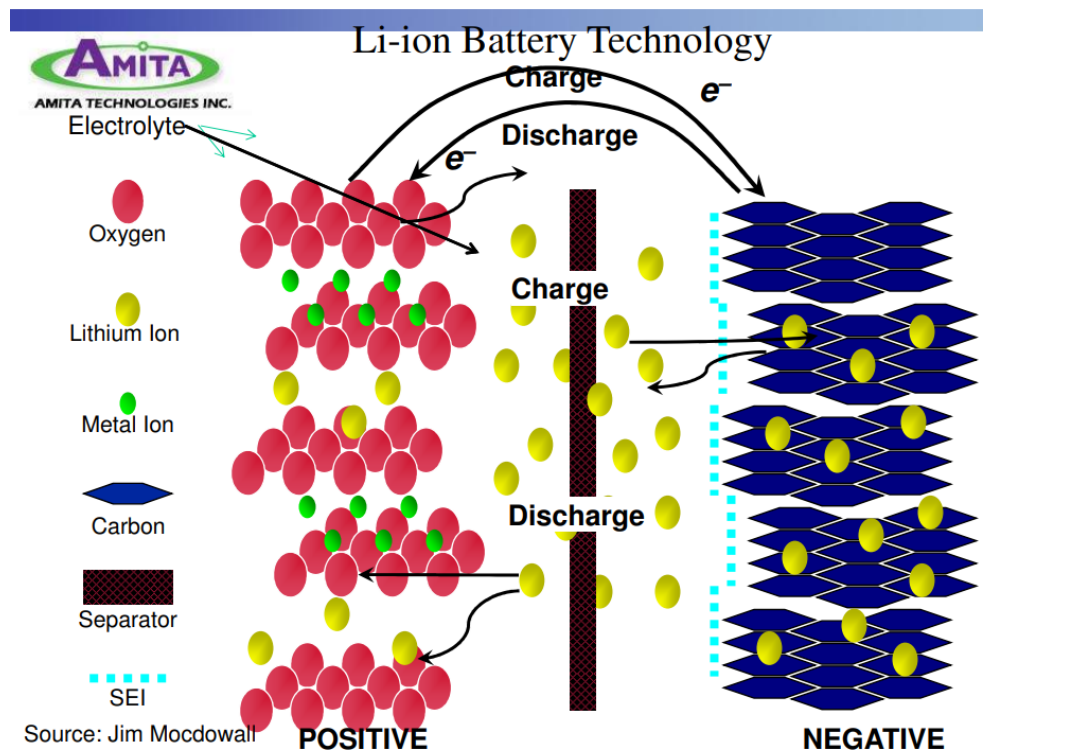
One of the proven successful methodologies to improve the 4C fast charge is the solid-electrolyte interphase (SEI) under the “electrolyte” modification method. SEI has proven to be a key enabler for high Coulombic efficiency (the speed and quantity of charged ions transferred in one second by a steady current of one ampere) and the long cycle-life of current LIB.

Amita’s SEI 4C fast-charging technology. Using the SEI method for its NMC LIB, EA via Amita’s technology has been able to gain an advantage over its competitors with fast-charging high-energy-density LIB, allowing it to penetrate Thailand’s commercial EV market since 2021.

EA’s LIB has enabled its customers to achieve 15-minute fast charges for their 4C NMC batteries, which in turn allows clients to generate a higher turnover for their EVs at a much lower energy cost of THB1/km compared to THB3-5/km for conventional diesel-based buses and trucks.

We project that EA’s 1GWh plant – which produces LIB based on Amita’s technology – will gradually increase its utilisation rate from 60% in 4Q21 to over 90% by end-2022. The captive demand for LIB for e-buses in 2022 and e-trucks in 2023 onward should be adequately filled by EA’s battery plant.

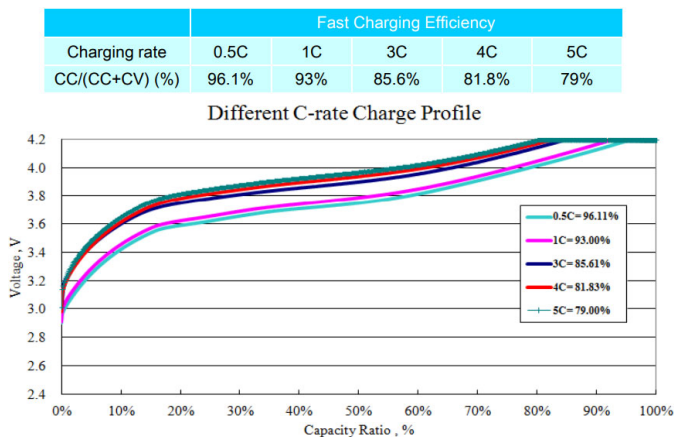
Exhibit 11: Amita’s Li-ion battery technology



Source: Amita Technologies

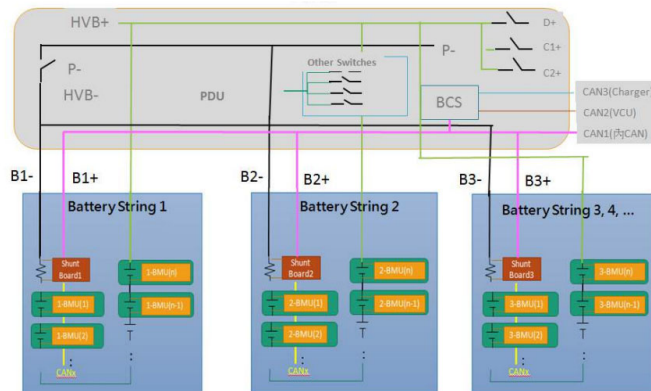
According to Amita, its LIB is able to achieve a 4C fast charge within only 15 minutes for EVs with LIB sizes ranging from 150kWh for small e-buses to 800kWh for e-ferris. While other EV producers may be able to produce fast-charging LIB for their EVs, the challenge in designing and producing for the entire value chain of EVs, including batteries, chargers, and connectors, are key hindrances for other companies to compete with EA at a comparable cost structure and performance; we estimate for at least the next 2-3 years.

Exhibit 12: Amita's battery temperature test



Source: [Amita Technologies](#)

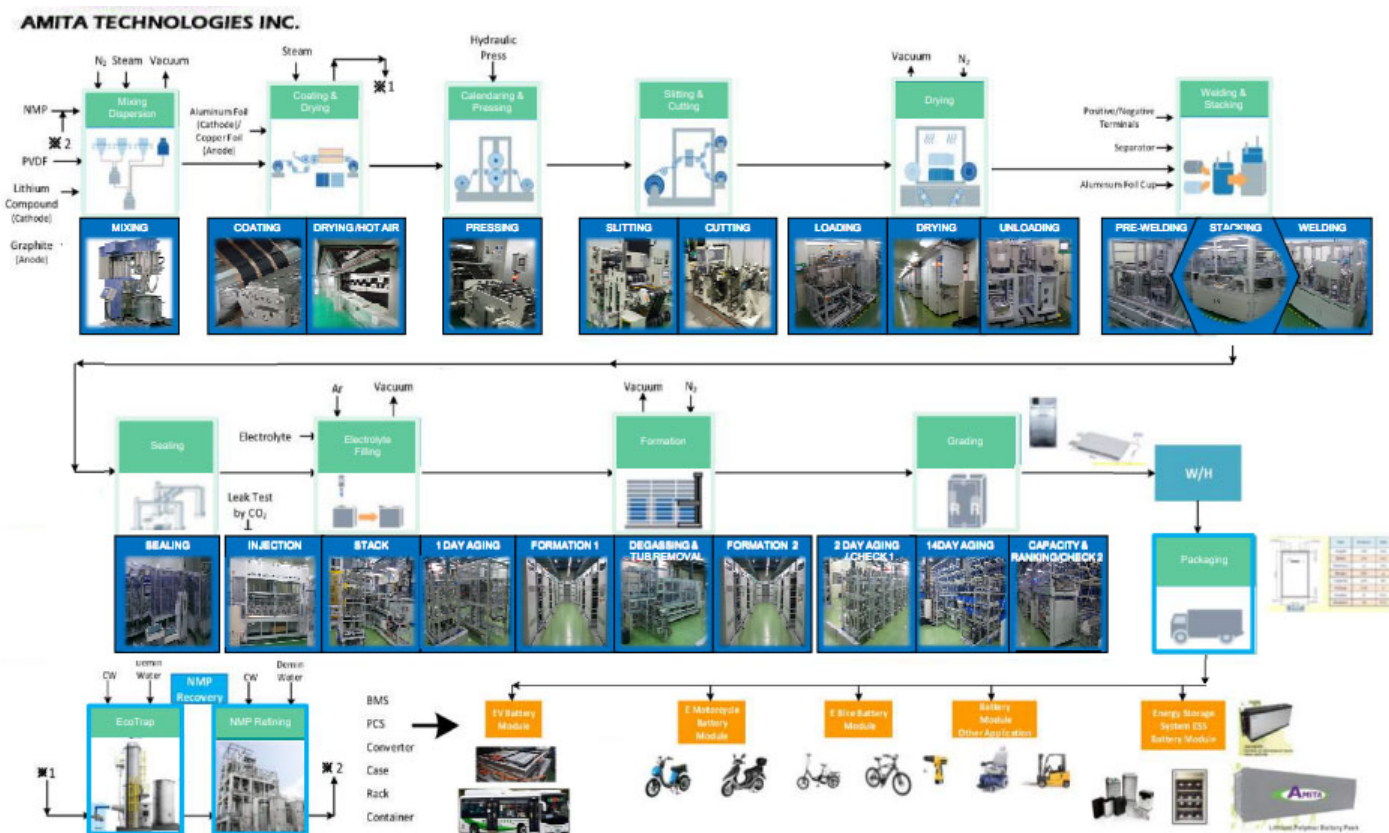
Exhibit 13: Amita's fast-charging battery system architecture



Source: [Amita Technologies](#)

Hence, we believe that in 2022-24, EA and its associate Nex Point (NEX TB, BUY, TP THB21.6) should be able to penetrate and command a high market share in Thailand's commercial EV market, particularly for e-buses and e-trucks for which EA and NEX have already secured over 3,000 orders to be delivered in 2022-24, according to management.

Exhibit 14: Amita's battery production process

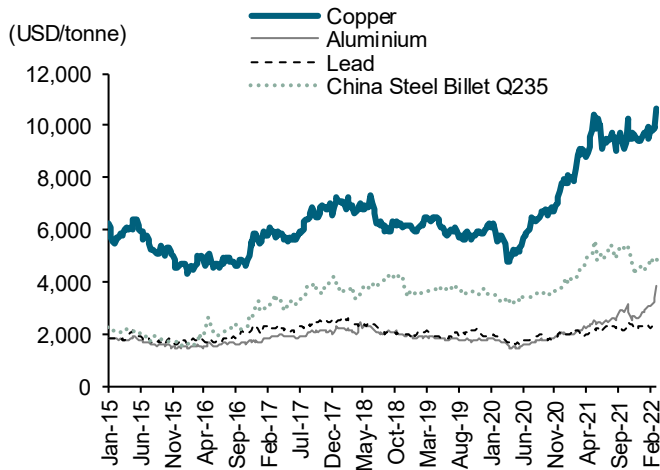


Source: [Amita Technologies](#)

EA's battery price competitiveness. Based on [BloombergNEF](#)'s latest survey in 2021, the global battery price declines slowed down in 2021, a wake-up call for the battery industry. This indicates that the price of batteries may not fall precipitately every year, thanks to the higher prices of materials including lithium, nickel, manganese, and cobalt.

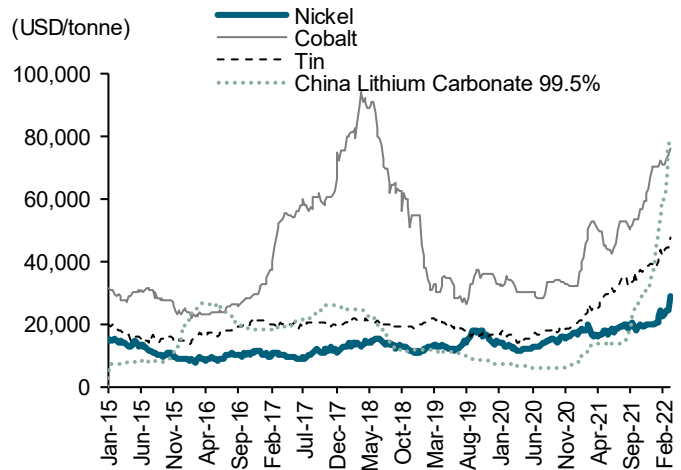
Even before Russia's invasion of Ukraine in Feb-22, the cost of raw materials used in the cathode – lithium, cobalt and nickel – and other key components including the electrolyte, had risen in 2021. The increase in prices of raw materials have been more prominent in 2H21 into 1H22, and even led to Chinese battery manufacturer BYD announcing a 20% battery price increase in Nov-21.

Exhibit 15: Copper, aluminium, lead and steel prices



Source: Bloomberg

Exhibit 16: Nickel, cobalt, tin and lithium prices

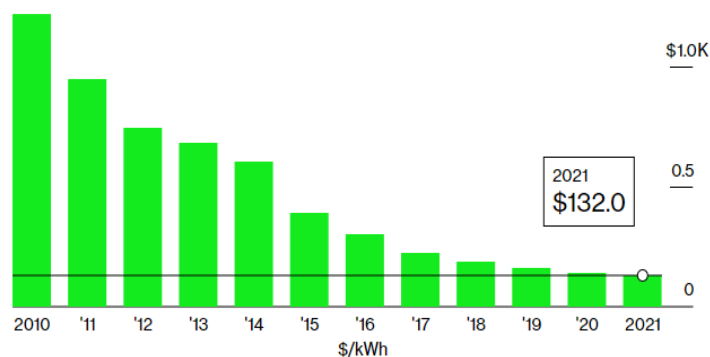


Source: Bloomberg

In our projection, we assume that the price of EA's battery will decline gradually from USD195/kWh for the battery pack in 2022 down to USD185/kWh in 2029, given the suboptimal production scale of only 1GWh in 2022. However, according to EA's management, the company expects to cut its selling price for the battery pack to USD130/kWh when its 4GWh capacity expansion is on stream in 2024, potentially leading to an earnings upside to our projection for EA's battery business.

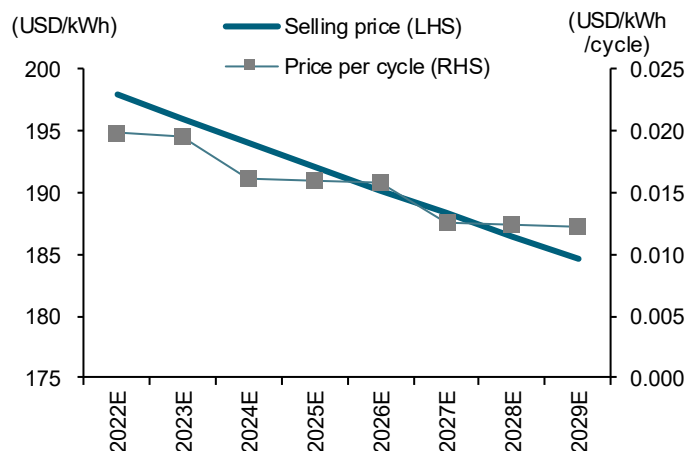
As EA is planning to increase its capacity from 1GWh in 2022 to 4GWh in 2024, coupled with the captive demand for the batteries produced at the expanded battery plant, we project EA's earnings growth from batteries to accelerate in 2022-24, rising from THB1b in 2022 to THB3b in 2024.

Exhibit 17: Global battery pack prices



Source: [BloombergNEF](#)

Exhibit 18: EA's projected battery selling price and price per cycle life



Sources: EA; FSSIA estimates

Secured orders of over 2,000 e-buses in 2022-23

After commencing operations at its 1GWh battery phase 1 plant on 12 Dec-21, delivering 122 e-buses in 4Q21, and securing over 2,000 e-bus orders for delivery in 2022, we are now more confident about EA’s sales volume outlook for its EVs in 2022-24.

With a solid set of potential e-bus orders from TSB and SMB in 2022-23, we believe EA is likely to achieve our earnings and sales volume assumptions for e-trucks and e-buses on the high pent-up demand for commercial EVs (buses and trucks) and passenger EVs, based on the official announcement of the government’s incentive package in early 2022.

Based on BYD’s and EA’s management, we estimate that the total number of e-buses potentially to be sold to TSB and SMB would be 2,355 and 800, bringing the total potential EV orders for AAB to 3,155 e-buses; all likely to be delivered within 2023-24

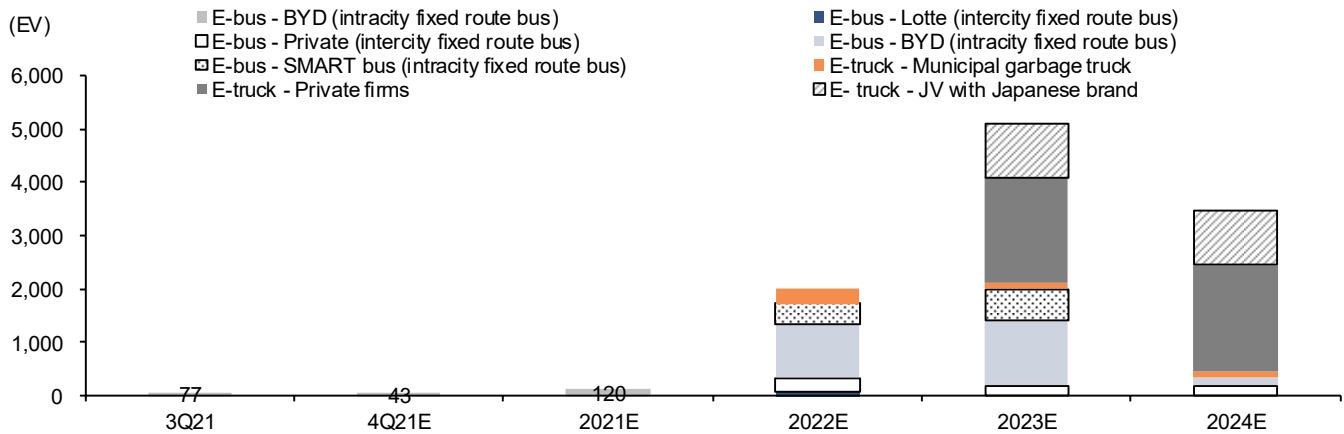
Thai Smart Bus (SMB): An inorganic growth engine for e-buses. EA acquired a 100% stake worth THB3.28b in SMB, an operator and owner of licenses to operate blue buses. SMB started operating on 30 Jun-19 using “Sunlong” brand buses imported from China, initially running two lines – 104 Pakred-Morchit Mai and 150 Pakred-Bangkapi in 2019.

Thai Smile Bus (TSB): A growth driver in 2022-24. On 2 Apr-22, TSB, a subsidiary of BYD, a listed broker company, announced that it won 71 licenses to operate 71 bus lines from the Department of Land Transport (DLT). BYD is required to begin operating up to 800 buses within 180 days until the beginning of Oct-22.

Based on the recently won 71 licenses for 71 bus lines, the minimum number of e-buses that TSB needs to deliver and operate within 180 days, or Oct-22, is 758 e-buses. However, BYD’s management indicated that the company aims to fill up to the maximum number of e-buses allowed by the DLT – up to 2,130 e-buses for the 71 bus lines.

Together with the remaining 255 e-buses eligible to be filled for the 11 bus lines, TSB could see its total e-buses in operation number 2,507 e-buses (2,130 from 71 new lines and 377 from 11 existing lines) by end-2023.

Exhibit 19: E-bus order projection breakdown by client



Sources: EA; NEX; FSSIA estimates

EPS and target price revisions

We revise our EPS forecasts for 2022-24 by +12%/-13%/-15% to reflect our revised sales volumes for e-buses, e-trucks and batteries to incorporate the recent delays in the production and delivery of e-buses in 1H22 due to the lack of a skilled workforce.

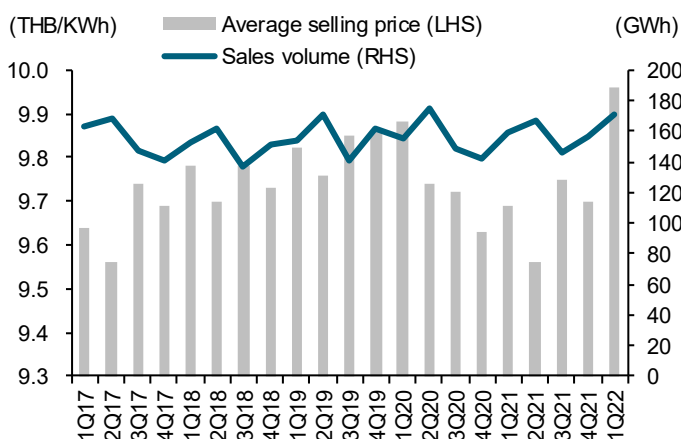
Exhibit 20: Key change in assumptions

	Current			Previous			Change		
	2022E (THB m)	2023E (THB m)	2024E (THB m)	2022E (THB m)	2023E (THB m)	2024E (THB m)	2022E (%)	2023E (%)	2024E (%)
Revenue	23,291	31,763	47,418	33,947	49,993	65,576	(31)	(36)	(28)
Gross profit	16,569	17,244	20,007	17,561	21,954	24,682	(6)	(21)	(19)
Operating profit	12,445	12,039	13,147	10,691	13,654	14,791	16	(12)	(11)
Net profit	11,873	11,834	12,693	10,650	13,543	14,963	11	(13)	(15)
EPS (THB/shr)	3.2	3.2	3.4	2.8	4	4.0	12	(13)	(15)
Key assumptions									
Dispatched power (GWh)	9,715	9,715	9,715	9,715	9,715	9,715	0	0	0
Capacity factor - wind farms (pts)	26	27	28	26	27	28	0	0	0
Battery sales volume (GWh)	0.9	0.9	3.9	4.7	8.4	13.4	(81)	(89)	(71)
EV car sales (cars)	0	5,000	8,500	5,500	8,500	8,500	(100)	(41)	0
EV boat sale (boats)	50	50	50	50	50	50	0	0	0
EV bus sales (buses)	2,010	3,000	2,100	3,900	3,600	4,200	(48)	(17)	(50)
EV charging station (stations)	1,000	1,000	1,000	1,000	1,000	1,000	0	0	0
Green diesel & PCM (tpd)	124	124	124	124	124	124	0	0	0

Sources: EA; FSSIA estimates

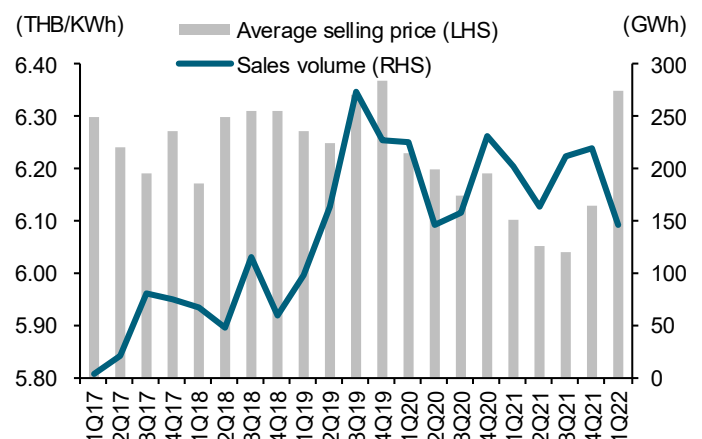
While we lower our sales volumes for e-buses, e-trucks, and batteries in 2022-24, we increase our earnings estimates for solar and wind farms as EA has enhanced its solar farms via changes in solar panels, while wind farms should have better performance on higher capacity factors based on the higher-than-expected wind speed and capacity factors for wind farms in Jan-Apr 2022, according to management's guidance.

Exhibit 21: Average selling price and sales volume of solar farms (278MW)



Source: EA

Exhibit 22: Average selling price and sales volume of wind farms (368MW)



Source: EA

We cut our SoTP-based target price from THB122 to THB101 to reflect our lower DCF-based values for phase one and two of the battery plant and the lower values for EA's e-bus and e-truck ventures for both the manufacturing plant (AAB) and marketer (NEX).

Exhibit 23: 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					
Lop buri	1,367	0.4	DCF with WACC 3.7%, Risk free rate 2.3%, Risk premium 8.5%		
Nakornsawun	12,548	3.4	DCF with WACC 3.7%, Risk free rate 2.3%, Risk premium 8.5%		
Lumpang	19,370	5.2	DCF with WACC 3.7%, Risk free rate 2.3%, Risk premium 8.5%		
Pisanuloak	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)	1,174	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)	48,240	12.9	FY22E P/E at 24x		
Total EV and battery	208,175	68.7			
Green diesel & PCM	12,654	3.4	FY22E P/E at 15x		
Net debt	(28,112)	(7.5)			
Minorities	2,907	0.8			
Residual ordinary equity	321,951	101.0			

Sources: 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	0.40	0.70	1.00	1.25
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	24.9	22.0	31.5	36.7
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	31.5	25.0	22.5
ROA (%)	8.5	6.8	13.4	12.2	11.8
* 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)	(1,492)	(2,611)	(3,730)
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	(7,099)	(6,741)	(7,056)
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)	5,682	6,623	6,386
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)	2020	2021	2022E	2023E	2024E
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	8,609	15,233	21,619
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	17,722	27,422	39,131
Other assets	12,371	12,339	12,339	12,339	12,339
Total assets	78,484	85,476	92,555	102,454	114,124
Common equity	27,812	32,501	42,832	52,006	60,918
Minorities etc.	1,815	2,601	2,907	3,212	3,527
Total shareholders' equity	29,627	35,102	45,739	55,218	64,445
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	92,555	102,454	114,124
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)	2020	2021	2022E	2023E	2024E
Book value per share	7.46	8.71	11.48	13.94	16.33
Tangible book value per share	7.10	8.32	11.09	13.55	15.94

Financial strength	2020	2021	2022E	2023E	2024E
Net debt/equity (%)	121.9	108.4	61.5	35.2	17.1
Net debt/total assets (%)	46.0	44.5	30.4	19.0	9.7
Current ratio (x)	0.5	0.9	1.3	1.7	1.9
CF interest cover (x)	(0.1)	3.5	7.6	9.4	10.6

Valuation	2020	2021	2022E	2023E	2024E
Recurring P/E (x) *	63.3	54.5	27.5	27.6	25.7
Recurring P/E @ target price (x) *	73.1	63.0	31.7	31.8	29.7
Reported P/E (x)	62.7	53.5	27.5	27.6	25.7
Dividend yield (%)	0.3	0.5	0.8	1.1	1.4
Price/book (x)	11.7	10.0	7.6	6.3	5.4
Price/tangible book (x)	12.3	10.5	7.9	6.5	5.5
EV/EBITDA (x) **	39.6	38.7	23.9	22.8	20.4
EV/EBITDA @ target price (x) **	45.0	44.0	27.3	26.0	23.4
EV/invested capital (x)	5.2	4.8	4.6	4.4	4.3

* 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 2020

EXCELLENT LEVEL										
AAV	ADVANC	AF	AIRA	AKP	AKR	ALT	AMA	AMATA	AMATAV	ANAN
AOT	AP	ARIP	ARROW	ASP	BAFS	BANPU	BAY	BCP	BCPG	BDMS
BEC	BEM	BGRIM	BIZ	BKI	BLA	BOL	BPP	BRR	BTS	BWG
CENTEL	CFRESH	CHEWA	CHO	CIMBT	CK	CKP	CM	CNT	COL	COMAN
COTTO	CPALL	CPF	CPI	CPN	CSS	DELTA	DEMCO	DRT	DTAC	DTC
DV8	EA	EASTW	ECF	ECL	EGCO	EPG	ETE	FNS	FPI	FPT
FSMART	GBX	GC	GCAP	GEL	GFPT	GGC	GPSC	GRAMMY	GUNKUL	HANA
HARN	HMPRO	ICC	ICI	III	ILINK	INTUCH	IRPC	IVL	JKN	JSP
JWD	K	KBANK	KCE	KKP	KSL	KTB	KTC	LANNA	LH	LHFG
LIT	LPN	MAKRO	MALEE	MBK	MBKET	MC	MCOT	METCO	MFEC	MINT
MONO	MOONG	MSC	MTC	NCH	NCL	NEP	NKI	NOBLE	NSI	NVD
NYT	OISHI	ORI	OTO	PAP	PCSGH	PDJ	PG	PHOL	PLANB	PLANET
PLAT	PORT	PPS	PR9	PREB	PRG	PRM	PSH	PSL	PTG	PTT
PTTEP	PTTGC	PYLON	Q-CON	QH	QTC	RATCH	RS	S	S & J	SAAM
SABINA	SAMART	SAMTEL	SAT	SC	SCB	SCC	SCCC	SCG	SCN	SDC
SEAFCO	SEAOIL	SE-ED	SELIC	SENA	SIRI	SIS	SITHAI	SMK	SMPC	SNC
SONIC	SORKON	SPALI	SPI	SPRC	SPVI	SSSC	SST	STA	SUSCO	SUTHA
SVI	SYMC	SYNTEC	TACC	TASCO	TCAP	TFMAMA	THANA	THANI	THCOM	THG
THIP	THRE	THREL	TIP	TIPCO	TISCO	TK	TKT	TTB	TMILL	TNDT
TNL	TOA	TOP	TPBI	TQM	TRC	TRC	TSC	TSR	TSTE	TSTH
TTCL	TTW	TU	TVD	TVI	TVO	TWPC	U	UAC	UBIS	UV
VGI	VIH	WACOAL	WAVE	WHA	WHAUP	WICE	WINNER	TRUE		

VERY GOOD LEVEL										
2S	ABM	ACE	ACG	ADB	AEC	AEONTS	AGE	AH	AHC	AIT
ALLA	AMANAHA	AMARIN	APCO	APCS	APURE	AQUA	ASAP	ASEFA	ASIA	ASIAN
ASIMAR	ASK	ASN	ATP30	AUCT	AWC	AYUD	B	BA	BAM	BBL
BFIT	BGC	BJC	BJCHI	BROOK	BTW	CBG	CEN	CGH	CHARAN	CHAYO
CHG	CHOTI	CHOW	CI	CIG	CMC	COLOR	COM7	CPL	CRC	CRD
CSC	CSP	CWT	DCC	DCON	DDD	DOD	DOHOME	EASON	EE	ERW
ESTAR	FE	FLOYD	FN	FORTH	FSS	FTE	FVC	GENCO	GJS	GL
GLAND	GLOBAL	GLOCON	GPI	GULF	GYT	HPT	HTC	ICN	IFS	ILM
IMH	INET	INSURE	IRC	IRCP	IT	ITD	ITEL	J	JAS	JCK
JCKH	JMART	JMT	KBS	KCAR	KGI	KIAT	KOOL	KTIS	KWC	KWM
L&E	LALIN	LDC	LHK	LOXLEY	LPH	LRH	LST	M	MACO	MAJOR
MBAX	MEGA	META	MFC	MGT	MILL	MITSIB	MK	MODERN	MTI	MVP
NETBAY	NEX	NINE	NTV	NWR	OCC	OGC	OSP	PATO	PB	PDG
PDI	PICO	PIMO	PJW	PL	PM	PPP	PRIN	PRINC	PSTC	PT
QLT	RCL	RICHY	RML	RPC	RWI	S11	SALEE	SAMCO	SANKO	SAPPE
SAWAD	SCI	SCP	SE	SEG	SFP	SGF	SHR	SIAM	SINGER	SKE
SKR	SKY	SMIT	SMT	SNP	SPA	SPC	SPCG	SR	SRICHA	SSC
SSF	STANLY	STI	STPI	SUC	SUN	SYNEX	T	TAE	TAKUNI	TBSP
TCC	TCMC	TEAM	TEAMG	TFG	TIGER	TITLE	TKN	TKS	TM	TMC
TMD	TMI	TMT	TNITY	TNP	TNR	TOG	TPA	TPAC	TPCORP	TPOLY
TPS	TRITN	TRT	TRU	TSE	TVT	TWP	UEC	UMI	UOBKH	UP
UPF	UPOIC	UT	UTP	UWC	VL	VNT	VPO	WIJK	WP	XO
YUASA	ZEN	ZIGA	ZMICO							

GOOD LEVEL										
7UP	A	ABICO	AJ	ALL	ALUCON	AMC	APP	ARIN	AS	AU
B52	BC	BCH	BEAUTY	BGT	BH	BIG	BKD	BLAND	BM	BR
BROCK	BSBM	BSM	BTNC	CAZ	CCP	CGD	CITY	CMAN	CMO	CMR
CPT	CPW	CRANE	CSR	D	EKH	EP	ESSO	FMT	GIFT	GREEN
GSC	GTB	HTECH	HUMAN	IHL	INOX	INSET	IP	JTS	JUBILE	KASET
KCM	KKC	KUMWEL	KUN	KWG	KYE	LEE	MATCH	MATI	M-CHAI	MCS
MDX	MJD	MM	MORE	NC	NDR	NER	NFC	NNCL	NPK	NUSA
OCEAN	PAF	PF	PK	PLE	PMTA	POST	PPM	PRAKIT	PRECHA	PRIME
PROUD	PTL	RBF	RCI	RJH	ROJNA	RP	RPH	RSP	SF	SFLEX
SGP	SISB	SKN	SLP	SMART	SOLAR	SPG	SQ	SSP	STARK	STC
SUPER	SVOA	TC	TCCC	THMUI	TIW	TNH	TOPP	TPCH	TIPIP	TPLAS
TTI	TYCN	UKEM	UMS	VCOM	VRANDA	WIN	WORK	WPH		

Description

Score Range

Excellent

90-100

Very Good

80-89

Good

70-79

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; ** delisted

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

Anti-corruption Progress Indicator 2020

CERTIFIED										
2S	ADVANC	AI	AIE	AIRA	AKP	AMA	AMANAHA	AP	AQUA	ARROW
ASK	ASP	AYUD	B	BAFS	BANPU	BAY	BBL	BCH	BCP	BCPG
BGC	BGRIM	BJCHI	BKI	BLA	BPP	BROOK	BRR	BSBM	BTS	BWG
CEN	CENTEL	CFRESH	CGH	CHEWA	CHOTI	CHOW	CIG	CIMBT	CM	CMC
COL	COM7	CPALL	CPF	CPI	CPN	CSC	DCC	DELTA	DEMCO	DIMET
DRT	DTAC	DTC	EASTW	ECL	EGCO	FE	FNS	FPI	FPT	FSS
FTE	GBX	GC	GCAP	GEL	GFPT	GGC	GJS	GPSC	GSTEEL	GUNKUL
HANA	HARN	HMPRO	HTC	ICC	ICHI	IFS	INET	INSURE	INTUCH	IRPC
ITEL	IVL	K	KASET	KBANK	KBS	KCAR	KCE	KGI	KKP	KSL
KTB	KTC	KWC	L&E	LANNA	LHFG	LHK	LPN	LRH	M	MAKRO
MALEE	MBAX	MBK	MBKET	MC	MCOT	MFC	MFEC	MINT	MONO	MOONG
MPG	MSC	MTC	MTI	NBC	NEP	NINE	NKI	NMG	NNCL	NSI
NWR	OCC	OCEAN	OGC	ORI	PAP	PATO	PB	PCSGH	PDG	PDI
PDJ	PE	PG	PHOL	PL	PLANB	PLANET	PLAT	PM	PPP	PPPM
PPS	PREB	PRG	PRINC	PRM	PSH	PSL	PSTC	PT	PTG	PTT
PTTEP	PTTGC	PYLON	Q-CON	QH	QLT	QTC	RATCH	RML	RWI	S & J
SABINA	SAT	SC	SCB	SCC	SCCC	SCG	SCN	SEAOIL	SE-ED	SELIC
SENA	SGP	SIRI	SITHAI	SMIT	SMK	SMPC	SNC	SNP	SORKON	SPACK
SPC	SPI	SPRC	SRICHA	SSF	SSSC	SST	STA	SUSCO	SVI	SYNTEC
TAE	TAKUNI	TASCO	TBSP	TCAP	TCMC	TFG	TFI	TFMAMA	THANI	THCOM
THIP	THRE	THREL	TIP	TIPCO	TISCO	TKT	TTB	TMD	TMILL	TMT
TNITY	TNL	TNP	TNR	TOG	TOP	TPA	TPCORP	TPP	TRU	TSC
TSTH	TTCL	TU	TVD	TVI	TVO	TWPC	U	UBIS	UEC	UKEM
UOBKH	UWC	VGI	VIH	VNT	WACOAL	WHA	WHAUP	WICE	WIJK	XO
ZEN	TRUE									
DECLARED										
7UP	ABICO	AF	ALT	AMARIN	AMATA	AMATAV	ANAN	APURE	B52	BKD
BM	BROCK	BUI	CHO	CI	COTTO	DDD	EA	EFORL	EP	ERW
ESTAR	ETE	EVER	FSMART	GPI	ILINK	IRC	J	JKN	JMART	JMT
JSP	JTS	KWG	LDC	MAJOR	META	NCL	NOBLE	NOK	PK	PLE
ROJNA	SAAM	SAPPE	SCI	SE	SHANG	SINGER	SKR	SPALI	SSP	STANLY
SUPER	SYNEX	THAI	TKS	TOPP	TRITN	TTA	UPF	UV	WIN	ZIGA

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, CFA, FRM, ERP FSS International Investment Advisory Securities Co., Ltd

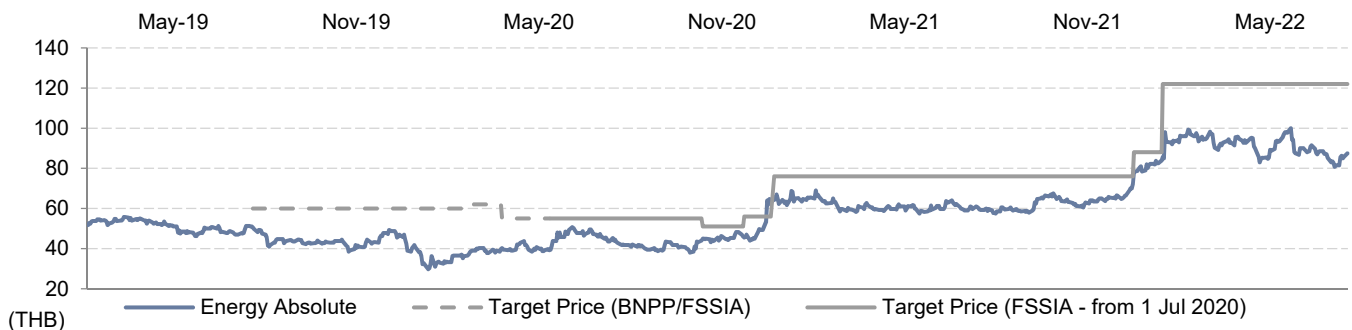
The individual(s) identified above certify(ies) that (i) all views expressed in this report accurately reflect the personal view of the analyst(s) with regard to any and all of the subject securities, companies or issuers mentioned in this report; and (ii) no part of the compensation of the analyst(s)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

This report has been prepared by FSS International Investment Advisory Company Limited (FSSIA). The information herein has been obtained from sources believed to be reliable and accurate; however FSS makes no representation as to the accuracy and completeness of such information. Information and opinions expressed herein are subject to change without notice. FSS has no intention to solicit investors to buy or sell any security in this report. In addition, FSS does not guarantee returns nor price of the securities described in the report nor accept any liability for any loss or damage of any kind arising out of the use of such information or opinions in this report. Investors should study this report carefully in making investment decisions. All rights are reserved.

This report may not be reproduced, distributed or published by any person in any manner for any purpose without permission of FSSIA. Investment in securities has risks. Investors are advised to consider carefully before making investment decisions.

History of change in investment rating and/or target price

Energy Absolute (EA TB)



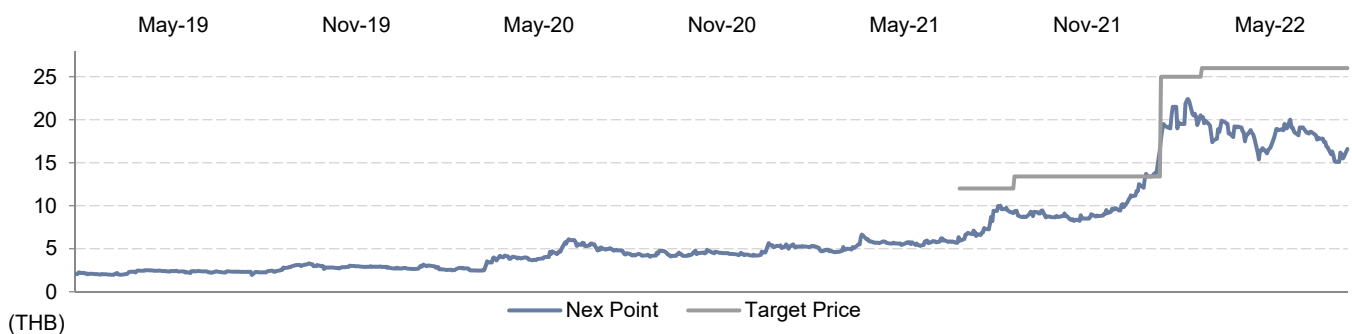
Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
17-Oct-2019	BUY	60.00	09-Nov-2020	BUY	51.00	18-Nov-2021	BUY	88.00
16-Apr-2020	BUY	62.00	15-Dec-2020	BUY	56.00	13-Dec-2021	BUY	122.00
20-May-2020	BUY	55.00	08-Jan-2021	BUY	76.00			

Suwat Sinsadok, CFA, FRM, ERP started covering this stock from 09-Jul-2020

Price and TP are in local currency

Source: FSSIA estimates

Nex Point (NEX TB)



Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
23-Jun-2021	BUY	12.00	13-Dec-2021	BUY	25.00	23-May-2022	BUY	21.60
09-Aug-2021	BUY	13.40	17-Jan-2022	BUY	26.00			

Suwat Sinsadok, CFA, FRM, ERP started covering this stock from 23-Jun-2021

Price and TP are in local currency

Source: FSSIA estimates

Company	Ticker	Price	Rating	Valuation & Risks
Energy Absolute	EA TB	THB 87.50	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.
Nex Point	NEX TB	THB 18.60	BUY	Downside risks to our SoTP-based TP include: 1) a lower-than-expected bus sales volume; 2) delays in bus deliveries; and 3) risk from regulatory changes.

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 Finasia 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 Finasia Syrus Securities Public Company Limited, which is the parent company of FSSIA.

All share prices are as at market close on 24-May-2022 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

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.