# **Absolute Clean Energy ACE**

Absolute Clean Energy Public Company Limited Bloomberg ACE TB Reuters ACE.BK

## Appetite for green players remains low

Despite its progress in securing new renewable power projects and long-term power purchase agreements for VSPP biomass projects after a long delay, ACE is down 4% QTD to near record lows, still underperforming the SET (-2%) in 2Q24TD, likely reflecting dull appetite for utilities stocks amidst high interest rates, which look unlikely to come down soon. ACE's finance cost is expected to remain high as it is pegged at a slight discount to Thai MLR despite its high growth potential as one of Thailand's few renewable power plant operators as it strives to reach net zero. We expect confidence in ACE will rise if it can deliver earnings growth sustainably and resume dividends. We stay Neutral with DCFbased TP of Bt3.6.

**1Q24 results recap.** Net profit was Bt255mn, down 7.2% YoY but up 54.7% QoQ as FX loss of Bt110mn in 4Q23 turned to FX gain of Bt94mn in 1Q24. Normalized profit fell 37.9% YoY and 28.6% QoQ on the planned maintenance shutdown of biomass and MSW power plants. Profit from MSW power plants was also derailed by expiration of its adder. This plus the planned shutdown, slashed MSW gross margin to only 34% in 1Q24 from the 2023 average of 54%. Biomass power plant gross margin narrowed to 22.6% in 1Q24 from 26.6% in 4Q23, which led to a fall in overall gross margin to 23.8% in 1Q24 from 27.2% in 4Q23. High finance cost also ate into profit, rising 50.2% YoY and 26.1% QoQ on heavier loan drawdown to develop new projects and a higher interest rate.

**Expect better 2Q24 operating profit.** We expect core profit to improve QoQ in 2Q24 on a better gross margin for biomass and MSW power plants after they resumed normal operations. We expect MSW gross margin to recover to 50%+ in 2Q24, though remain below the average of 55% for the past three years due to the expiration of the adder for the plant in Khon Kaen (6MW). The first SPP Hybrid power plant (20MW), located in Kampangphet, started operations in April but profit contribution will remain marginal initially due to higher investment cost than expected because of the THB depreciation and higher material prices.

**More capacity to kick in during 2H24.** The first batch of solar farm projects (47.5MW contracted capacity for 21 projects) is scheduled to start operations by Dec 2024. The installed capacity of these projects will be 1.5-1.8x the contracted capacity, raising ACE's total installed capacity to >350MW by end-2024 (+35% YoY). We estimate this will generate EBITDA of ~Bt300mn p.a., fueling 2025 growth. ACE has already secured power purchase agreements for all remaining capacity (>280MW) except for the last batch of solar projects (>20MW), scheduled to start up by end-2027. The company will fund these projects with loans and internal cash given its low net interest-bearing D/E of only 0.3x (end-1Q24). However, this will curtail its ability to pay dividends in the near term.

**Key risks:** 1) Delays in biomass VSPP construction, deferring startups and cash flow, 2) higher feedstock cost for biomass plants, 3) higher investment costs, and 4) regulatory changes that could hurt operations and increase capital expenditure. Key ESG risk is the potential negative impact of its operations on surrounding communities, including land use and MSW management.

#### **Forecasts and valuation**

Year to 31 Dec	Unit	2022	2023	2024F	2025F	2026F
Revenue	(Btmn)	6,917	6,583	7,162	9,021	9,601
EBITDA	(Btmn)	2,181	2,123	2,637	3,949	4,722
Core profit	(Btmn)	1,227	1,109	1,434	2,418	2,535
Reported profit	(Btmn)	1,282	1,073	1,434	2,418	2,535
Core EPS	(Bt)	0.12	0.11	0.14	0.24	0.25
DPS	(Bt)	0.00	0.00	0.00	0.00	0.00
P/E, core	(x)	11.4	12.6	9.7	5.8	5.5
EPS growth, core	(%)	(8.3)	(9.6)	29.2	68.7	4.8
P/BV, core	(x)	1.0	0.9	0.8	0.7	0.6
ROE	(%)	8.9	7.6	9.0	13.6	12.5
Dividend yield	(%)	0.0	0.0	0.0	0.0	0.0
EV/EBITDA	(x)	8.5	8.7	7.0	4.8	3.7
-						

Source: InnovestX Research



## **Tactical: NEUTRAL**

## (3-month)

Stock data	
Last close (May 30) (Bt)	1.37
Target price (Bt)	3.60
Mkt cap (Btbn)	13.94
Mkt cap (US\$mn)	380
Beta	L
Mkt cap (%) SET	0.08
Sector % SET	20.16
Shares issued (mn)	10,176
Par value (Bt)	0.50
12-m high / low (Bt)	2.1 / 1.4
Avg. daily 6m (US\$mn)	0.21
Foreign limit / actual (%)	49 / 5
Free float (%)	22.6
Dividend policy (%)	≥ 30

1M	3M	12M
1.4) (	(5.5)	(31.2)
D.2) (	4.4)	(21.9)
		1.4) (5.5) 0.2) (4.4)

Source: SET, InnovestX Research

2023 Sustainability/2022 ESG S	core
SET ESG Ratings	AA

#### **ESG Bloomberg Rank in the sector**

ESG Score Rank	23/67
Environmental Score Rank	21/67
Social Score Rank	21/67
Governance Score Rank	23/67

#### **ESG** comment

ACE's 2022 ESG score slipped from 2021, mainly the governance aspect, though remains satisfactory. Environmental score was way below sector average, based on Bloomberg assessment, despite efforts to reduce GHG directly and indirectly via its biomass and MSW power plants.

Source: Bloomberg Finance L.P.

#### Analyst

#### **Chaipat Thanawattano**

Fundamental Investment Analyst on Securities (66-2) 949-1005 chaipat.thanawattano@scb.co.th



## Value proposition

ACE is a holding company for renewable power plants for the Songmetta family, one of Thailand's long-established exporters of wood chips. Via wholly owned subsidiaries, it operates 23 power projects with total capacity of 277.6MW; more than half is renewable power (biomass, municipal solid waste, or MSW, and solar) and the rest is gas-fired SPP cogeneration. The proportion of renewable power plants will go up over time as several projects in the pipeline come on stream. The key advantage is its in-house R&D to increase plant efficiency starting from plant design to feedstock selection and mixing formula. The strong ties with communities around the power plants underwrite feedstock (agricultural waste) reliability in the long term, leveraging the Songmetta Group's expertise.

#### **Business outlook**

The Provincial Electricity Authority (PEA) has finally returned eight PPAs, plus another one that will be acquired later from its partner, for its VSPP-biomass projects. This reflects the government's commitment to attaining 33% of new electricity capacity from renewable power plants by 2037. These plants are scheduled to commence operation within three years or by Dec 2026. ACE and EGAT mutually agreed to terminate the PPAs of two SPP hybrid power plants in Nakhon Sri Thammarat with combined capacity of 50MW due to force majeure. EGAT will return the performance guarantee in compliance with the PPA, which is a bank guarantee. ACE also won 50MW additional capacity in the Community Power Plant (CPP) pilot project whose 20-year PPAs with the Provincial Electricity Authority (PEA) were signed in March 2023. These power projects will gradually start up over 2024-26. In addition, more solar farm projects were awarded with PPAs to be signed. In all, the company's total installed capacity will increase to >602.29MW by end-2027 from 257.57MW currently.

Bullish views	Bearish views
<ol> <li>Efficiency improvement at existing power plants, including three acquired biomass power plants, will continue to support earnings growth.</li> </ol>	<ol> <li>Slower than expected execution of new power plants that were committed during the IPO, including more PPAs for VSPP-biomass and SPP hybrid power plants which are being negotiated with the electricity authorities.</li> </ol>
2. Capacity expansion over 2024-27 will be the earnings driver over the next five years.	2. Policy risks on renewable power plants could curb growth.

#### **Key catalysts**

Factor	Event	Impact	Comment
Capacity additions in the pipeline.	More signing of PPAs for SPP Hybrid and solar power projects are expected to take place in 2024. Other upside potential is solar and MSW projects in Thailand.	Positive	This should increase investor optimism about its ability to deliver earnings growth as expected during the IPO. This has been delayed for some time from initial plan.
Further improvement of feedstock cost	ACE targets reducing feedstock cost of biomass power plants.	Positive	ACE has continued to reduce feedstock cost over the past 3-5 years by changing the mix of feedstock to minimize the heat rate of its power plants.

#### **Sensitivity Analysis**

Factor	Earnings impact	TP impact
Gross margin (+1%)	+5%	+Bt0.06/share



## Our view on ESG

We view that ACE provides concrete targets on environmental and social issues with a committed timeline and actual performance relative to its targets. We view its management and governance as satisfactory, reflecting management's expertise and experience in the business, with a diverse board of directors and transparency with stakeholders.

## **ESG Disclosure Score**

Bloomberg ESG Score	45.01 (2022)		CG Rating	DJSI	SETESG	SET ESG Ratings		
Rank in Sector	23/67	ACE	5	No	Yes	AA		
		Source: Thai Institute of Directors (IOD), SET						

## Environmental Issue (E)

- ACE has set sustainability targets with plans to increase power capacity focused on clean energy plants to provide ACE with a total installed capacity of at least 1,000MW by 2024.
- ACE's renewable power business helped alleviate chronic environmental problems in Thailand. Its biomass power business helped in reducing open agricultural burning which lessened PM2.5 concentration in Thailand. The MSW power plants could solve the problem of waste management.
- The company is moving toward Carbon Neutral and to Net Zero emissions in the future. This includes the purchase of agricultural waste from farmers around its power plants. The company purchased 1.98mn tons of agricultural waste materials in 2022, up from 1.66mn tons in 2021. This is estimated to reduce CO<sub>2</sub> emissions by approximately 425ktCO<sub>2</sub>e.

## Governance Issue (G)

- ACE's board of directors consists of 10 directors, 5 nonexecutive directors (50% of the entire board), 5 independent directors (50% of the entire board), and 5 executive directors. This includes 3 female members (30% of the entire board).
- ACE has been rated "Excellent" (5 stars) by the Thai Institute of Directors in 2023.
- We view the company's social and governance practices as conforming to general industry standards.

## Social Issue (S)

- ACE provides eucalyptus seedlings from droughttolerant, disease-resistant, fast-growing cultivars to farmers in 15 areas surrounding the power plants for farmers to plant in the fields, ridge, boundary, canal, rai, end of the field, or unused wasteland. This helps generate additional income and improve the quality of life for the community and creates a sustainable circular economy.
- ACE continues to invest in projects that are beneficial to the economy, society and sustainable coexistence with the community. These include 18 biogas power projects which were selected by the Energy Regulatory Commission under the Community Power Plant scheme in 2021. This will generate more income for the community under a contract farming scheme.
- ACE maintains its good record in occupational health and safety with zero accidents and lost-time injuries.

## ESG Disclosure Score

	2021	2022
ESG Disclosure Score	47.10	45.01
Environment	30.44	30.44
Emissions Reduction Initiatives	Yes	Yes
Climate Change Policy	Yes	Yes
GHG Scope 1	_	_
Biodiversity Policy	Yes	Yes
Energy Efficiency Policy	Yes	Yes
Total Energy Consumption	44.66	40.48
Social	33.40	33.40
Human Rights Policy	Yes	Yes
Equal Opportunity Policy	Yes	Yes
Health and Safety Policy	Yes	Yes
Fatalities - Employees	-	-
Total Recordable Incident Rate - Employees	0.00	0.00
Employee Turnover Pct	20	31
Governance	77.33	71.07
Size of the Board	10	10
Number of Board Meetings for the Year	10	8
Board Meeting Attendance Pct	93	95
Number of Female Executives	2	2
Number of Independent Directors	5	5
Board Duration (Years)	_	
Source: Bloomberg Einance I. P.		

Source: Bloomberg Finance L.P.

#### Disclaimer

Bloomberg ESG Disclosure Scores rate companies on their level of disclosure of ESG data. Bloomberg offers four disclosure scores, for overall ESG, as well as Environmental, Social, and Governance. To review the fully transparent methodology, calculate disclosure scores for any company, and compare a company's scores vs its peers, see ESG Disclosure Score Model in Bloomberg.



## **Financial statement**

<b>Profit and Loss Statement</b>									
FY December 31	Unit	2019	2020	2021	2022	2023	2024F	2025F	2026F
Total revenue	(Btmn)	5,055	5,858	5,727	6,917	6,583	7,162	9,021	9,601
Cost of goods sold	(Btmn)	3,429	4,067	3,808	5,044	4,800	4,994	5,799	6,033
Gross profit	(Btmn)	1,626	1,791	1,919	1,873	1,782	2,168	3,221	3,568
SG&A	(Btmn)	330	322	350	438	445	454	463	467
Other income	(Btmn)	33	179	13	17	27	10	10	10
Interest expense	(Btmn)	413	106	141	132	195	257	280	370
Pre-tax profit (before extra)	(Btmn)	916	1,541	1,440	1,319	1,170	1,467	2,488	2,741
Corporate tax	(Btmn)	(3)	43	103	93	61	29	50	137
Equity a/c profits	(Btmn)	0	0	0	0	0	0	0	0
Minority interests	(Btmn)	0	0	0	1	0	(5)	(21)	(69)
Core profit	(Btmn)	919	1,499	1,338	1,227	1,109	1,434	2,418	2,535
Extra-ordinary items	(Btmn)	(104)	9	168	55	(37)	0	0	0
Net Profit	(Btmn)	815	1,508	1,506	1,282	1,073	1,434	2,418	2,535
EBITDA	(Btmn)	1,856	2,189	2,249	2,181	2,123	2,637	3,949	4,722
Core EPS	(Btmn)	0.10	0.15	0.13	0.12	0.11	0.14	0.24	0.25
Net EPS	(Bt)	0.09	0.15	0.15	0.13	0.11	0.14	0.24	0.25
DPS	(Bt)	0.00	0.05	0.02	0.00	0.00	0.00	0.00	0.00

FY December 31	Unit	2019	2020	2021	2022	2023	2024F	2025F	2026F
Total current assets	(Btmn)	1,435	1,841	2,672	3,032	3,666	3.071	4,141	5,591
Total fixed assets	(Btmn)	12,711	14,588	16,068	17,039	18,071	20,185	22,483	24,351
Total assets	(Btmn)	14,145	16,430	18,740	20,071	21,737	23,256	26,624	29,942
Total loans	(Btmn)	2,995	3,922	4,754	5,041	5,656	5,704	6,595	7,400
Total current liabilities	(Btmn)	1,373	1,213	1,327	1,769	1,682	1,075	1,221	1,300
Total long-term liabilities	(Btmn)	1,979	3,224	4,044	4,118	4,753	5,444	6,249	6,953
Total liabilities	(Btmn)	3,352	4,437	5,372	5,886	6,435	6,520	7,470	8,253
Paid-up capital	(Btmn)	5,088	5,088	5,088	5,088	5,088	5,088	5,088	5,088
Total equity	(Btmn)	10,793	11,993	13,315	14,125	15,197	16,631	19,049	21,584
BVPS	(Bt)	1.06	1.18	1.31	1.39	1.49	1.63	1.87	2.12

FY December 31	Unit	2019	2020	2021	2022	2023	2024F	2025F	2026F
					-				
Core Profit	(Btmn)	919	1,499	1,338	1,227	1,109	1,434	2,418	2,535
Depreciation and amortization	(Btmn)	527	541	667	730	759	912	1,181	1,611
Operating cash flow	(Btmn)	1,619	1,895	1,869	1,522	2,178	2,837	3,284	4,688
Investing cash flow	(Btmn)	(826)	(1,644)	(2,014)	(1,774)	(1,816)	(3,000)	(3,500)	(3,500)
Financing cash flow	(Btmn)	(825)	161	553	(210)	389	48	891	805
Net cash flow	(Btmn)	(33)	411	408	(462)	752	(115)	676	1,993

#### **Key Financial Ratios**

Key i mancial Katios									
FY December 31	Unit	2019	2020	2021	2022	2023	2024F	2025F	2026F
Gross margin	(%)	32.2	30.6	33.5	27.1	27.1	30.3	35.7	37.2
Operating margin	(%)	25.6	25.1	27.4	20.7	20.3	23.9	30.6	32.3
EBITDA margin	(%)	36.7	37.4	39.3	31.5	32.3	36.8	43.8	49.2
EBIT margin	(%)	26.3	28.1	27.6	21.0	20.7	24.1	30.7	32.4
Net profit margin	(%)	16.1	25.7	26.3	18.5	16.3	20.0	26.8	26.4
ROE	(%)	11.2	13.2	10.6	8.9	7.6	9.0	13.6	12.5
ROA	(%)	6.6	9.8	7.6	6.3	5.3	6.4	9.7	9.0
Net D/E	(x)	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2
Interest coverage	(x)	4.5	20.6	15.9	16.5	10.9	10.3	14.1	12.8
Debt service coverage	(x)	1.2	2.3	2.1	1.6	1.5	3.3	4.3	4.3
Payout Ratio	(%)	0.0	33.7	13.5	0.0	0.0	0.0	0.0	0.0

## Main Assumptions

main Assumptions									
FY December 31	Unit	2019	2020	2021	2022	2023	2024F	2025F	2026F
Installed capacity (period-end)	(MW)	212	246	258	258	258	334	392	550
Gross margin - Biomass	(%)	35.1	37.9	33.3	29.8	27.1	27.1	27.1	27.1
Gross margin – MSW	(%)	27.9	30.2	28.6	18.8	21.6	28.0	28.0	28.0
Gross margin - Solar	(%)	50.0	52.4	54.3	57.8	54.0	54.0	54.0	54.0
FiT (variable)	(Bt/KWh)	1.87	1.88	1.89	1.89	1.94	1.97	1.98	2.00
Effective interest rate	(%)	7.65	3.07	3.26	2.70	4.20	4.50	4.25	5.00



## **Financial statement**

<b>Profit and Loss Stateme</b>	ent								
FY December 31	Unit	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23	4Q23	1Q24
Total revenue	(Btmn)	1,638	1,815	1,844	1,741	1,613	1,627	1,601	1,471
Cost of goods sold	(Btmn)	1,174	1,351	1,370	1,274	1,192	1,169	1,166	1,121
Gross profit	(Btmn)	464	464	473	466	422	459	436	350
SG&A	(Btmn)	96	118	133	121	107	107	110	102
Other income	(Btmn)	8	2	4	5	14	3	5	9
Interest expense	(Btmn)	29	33	36	44	50	49	52	65
Pre-tax profit	(Btmn)	346	315	308	306	280	305	279	191
Corporate tax	(Btmn)	50	36	(16)	12	27	29	(7)	47
Equity a/c profits	(Btmn)	0	0	0	0	0	0	0	0
Minority interests	(Btmn)	0	0	0	0	0	0	0	(0)
Core profit	(Btmn)	296	279	324	294	253	276	286	144
Extra-ordinary items	(Btmn)	87	102	(130)	(19)	63	40	(121)	111
Net Profit	(Btmn)	384	381	194	275	316	317	165	255
EBITDA	(Btmn)	558	531	530	534	518	550	521	451
Core EPS	(Btmn)	0.03	0.03	0.03	0.03	0.02	0.03	0.03	0.01
Net EPS	(Bt)	0.04	0.04	0.02	0.03	0.03	0.03	0.02	0.03

#### **Balance Sheet**

Balanco encot									
FY December 31	Unit	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23	4Q23	1Q24
Total current assets	(Btmn)	3,057	3,145	3,032	2,815	2,779	2,704	3,666	3,613
Total fixed assets	(Btmn)	16,550	16,614	17,039	17,426	17,842	18,063	18,071	18,525
Total assets	(Btmn)	19,607	19,759	20,071	20,240	20,621	20,767	21,737	22,138
Total loans	(Btmn)	4,994	4,680	5,041	4,953	5,093	4,797	5,656	5,338
Total current liabilities	(Btmn)	1,373	1,300	1,769	1,849	1,620	1,690	1,682	2,041
Total long-term liabilities	(Btmn)	4,360	4,215	4,118	3,932	4,223	3,982	4,753	4,538
Total liabilities	(Btmn)	5,732	5,515	5,886	5,781	5,844	5,673	6,435	6,579
Paid-up capital	(Btmn)	5,088	5,088	5,088	5,088	5,088	5,088	5,088	5,088
Total equity	(Btmn)	13,818	14,187	14,125	14,400	14,716	15,033	15,197	15,453
BVPS	(Bt)	1.36	1.39	1.39	1.42	1.45	1.48	1.49	1.52

#### **Cash Flow Statement** FY December 31 Unit 2Q22 3Q22 4Q22 1Q23 2Q23 3Q23 4Q23 1Q24 Core Profit 296 279 324 294 253 276 286 144 (Btmn) Depreciation and amortization (Btmn) 183 183 186 184 189 195 191 194 419 495 625 553 Operating cash flow (Btmn) 376 266 633 426 Investing cash flow (Btmn) (352) (162) (817) (548) (592) (373) (304) (660) Financing cash flow (Btmn) 322 (355) 168 (231) 101 (345) 864 (392) Net cash flow (Btmn) 389 (142) (382) (146) 4 (93) 986 (499)

## **Key Financial Ratios**

FY December 31	Unit	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23	4Q23	1Q24
Gross margin	(%)	28.3	25.6	25.7	26.8	26.1	28.2	27.2	23.8
Operating margin	(%)	22.5	19.1	18.5	19.8	19.5	21.6	20.4	16.9
EBITDA margin	(%)	34.1	29.2	28.7	30.7	32.1	33.8	32.6	30.7
EBIT margin	(%)	22.9	19.2	18.7	20.1	20.4	21.8	20.7	17.5
Net profit margin	(%)	23.4	21.0	10.5	15.8	19.6	19.5	10.3	17.3
ROE	(%)	8.6	8.0	9.2	8.2	6.9	7.4	7.6	3.8
ROA	(%)	6.2	5.7	6.5	5.8	5.0	5.3	5.4	2.6
Net D/E	(x)	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Interest coverage	(x)	19.2	16.3	14.7	12.3	10.4	11.1	10.1	6.9
Debt service coverage	(x)	2.2	2.4	1.6	1.5	1.5	1.7	1.5	1.3

Key	Statistics
-----	------------

FY December 31	Unit	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23	4Q23	1Q24
Installed capacity (period-end)	(MW)	258	258	258	258	258	258	258	258
Gross profit margin - Biomass	(%)	30.4	29.0	28.1	27.8	25.4	28.3	26.6	22.6
Gross profit margin – MSW	(%)	58.8	55.4	59.6	57.8	54.7	49.2	53.4	34.1
Gross profit margin - Cogen	(%)	19.5	18.0	17.5	20.0	21.2	23.7	22.3	23.4
Effective interest rate	(%)	2.49	2.72	3.09	3.53	4.01	4.06	4.36	4.84



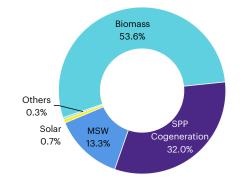
## Figure 1: ACE - 1Q24 earnings review

rigure i: ACE - 1424 cariiiigs review											
	1Q23	4Q23	1Q24	%YoY	%QoQ						
P&L (Bt, mn)											
Total revenue	1,741	1,601	1,471	(15.5)	(8.1)						
Gross profit	466	436	350	(24.9)	(19.7)						
EBITDA	534	521	451	(15.4)	(13.5)						
Profit before extra items	294	286	144	(51.0)	(49.6)						
Net Profit	275	165	255	(7.2)	54.7						
EPS (Bt)	0.03	0.02	0.03	(7.2)	54.7						
B/S (Bt, mn)											
Total assets	20,240	21,737	22,138	9.4	1.8						
Total liabilities	5,781	6,435	6,579	13.8	2.2						
Total equity	14,460	15,303	15,559	7.6	1.7						
BVPS (Bt)	1.42	1.49	1.52	7.3	1.7						
Financial ratio (%)											
Gross margin (%)	26.8	27.2	23.8	(3.0)	(3.4)						
EBITDA margin (%)	30.7	32.6	30.7	0.0	(1.9)						
Net profit margin (%)	15.8	10.3	17.3	1.5	7.0						
ROA (%)	5.8	5.4	2.6	(3.2)	(2.8)						
ROE (%)	8.2	7.6	3.8	(4.5)	(3.8)						
D/E (X)	0.4	0.4	0.4	2.3	0.2						

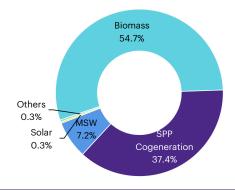
Source: ACE and InnovestX Research

## Appendix

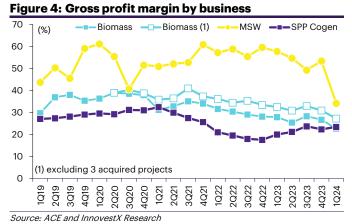
## Figure 2: Revenue breakdown (LTM to 1Q24)



## Figure 3: Gross profit breakdown (LTM to 1Q24)

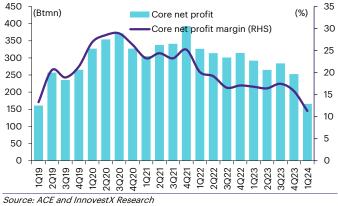


Source: ACE and InnovestX Research



Source: ACE and InnovestX Research





## Absolute Clean Energy PI C

# A Subsidiary of SCBX Group

#### Figure 6: Capacity growth 600 549.7 569.7 (MW) Biomass MSW 500 Cogen - Gas Biogas Solar 391.7 400 334.4 300 257.6 257.6 257.6 247.7 212.2 200 100 0 2023 2019 2020 2024F 2025F 2026F 2027F 2021 2022

#### Figure 7: Net interest-bearing debt to equity ratio



Source: ACE and InnovestX Research

Source: ACE and InnovestX Research

#### Disclaimer

The information in this report has been obtained from sources believed to be reliable. However, its accuracy or completeness is not guaranteed. Any opinions expressed herein reflect our judgment at this date and are subject to change without notice. This report is for information only. It is not to be construed as an offer, or solicitation of an offer to sell or buy any securities. We accept no liability for any loss arising from the use of this document. We or our associates may have an interest in the companies mentioned therein.

InnovestX Securities Company Limited ("INVX") is wholly owned by SCB X Public Company Limited ("SCBX") and The Siam Commercial Bank Public Company Limited ("SCB") is majority-owned by SCBX. Any information related to SCB is for sector comparison purpose.

This document is prepared by InnovestX Securities Company Limited ("INVX") which is wholly owned by SCB X Public Company Limited ("SCBX"). The Siam Commercial Bank Public Company Limited, which is majority-owned by SCBX, acts as financial advisor of the LH Hotel Leasehold Real Estate Investment Trust. Any opinions, news, research, analyses, prices, statements, forecasts, projections and/or other information contained in this document (the "Information") is provided as general information purposes only and shall not be construed as individualized recommendation of an offer to buy or sell or the solicitation of an offer to buy or sell any securities. INVX and/or its directors, officers and employees shall not be liable for any direct, indirect, incidental, special or consequential loss or damage, resulting from the use of or reliance on the Information, including without limitation to, damages for loss of profits. The investors shall use the Information in association with other information and opinion, including their own judgment in making investment decision. The Information is obtained from sources believed to be reliable, and INVX cannot guarantee the accuracy, completeness and/or correctness of the Information.

INVX reserves the right to modify the Information from time to time without notice and in its sole discretion. This document is delivered to intended recipient(s) only and is not permitted to reproduce, retransmit, disseminate, sell, distribute, republish, circulate or commercially exploit the Information in any manner without the prior written consent of INVX.

Futures and Options trading carry a high level of risk with the potential for substantial losses, and are not suitable for all persons. Before deciding to trade Futures and Options, you should carefully consider your financial position, investment objectives, level of experience, and risk appetite if Futures and Options trading are appropriate. The possibility exists that you could sustain a loss of some or all of your initial investment. You should be aware of all the risks associated with Futures and Options trading, and you are advised to rely on your own judgment while making investment decision and/or should seek advice from professional investment advisor if you have any doubts.

This document is delivered to intended recipient(s) only and is not permitted to reproduce, retransmit, disseminate, sell, distribute, republish, circulate or commercially exploit the Information in any manner without the prior written consent of INVX.

© Copyright 2022 InnovestX Securities Co., Ltd. All right reserved.



#### CG Rating 2023 Companies with CG Rating

#### Companies with Excellent CG Scoring

7UP, AAV, ABM, ACE, ACG, ADB, ADD, ADVANC, AEONTS, AF, AGE, AH, AHC, AIRA, AIT, AJ, AKP, AKR, ALLA, ALT, AMA, AMARIN, AMATA, AMATAV, ANAN, AOT, AP, APCO, APCS, ARIP, ARROW, ASEFA, ASK, ASP, ASW, ATP3O, AUCT, AWC, AYUD, B, BA, BAFS, BAM, BANPU, BAY, BBGI, BBIK, BBL, BC, BCH, BCP, BCPG, BDMS, BEC, BEM, BEYOND, BGC, BGRIM, BH, BIZ, BJC, BJCHI, BKI, BLA, BOL, BPP, BRI, BROOK, BRR, BTS, BTW, BWG, BYD, CBG, CENTEL, CFRESH, CHASE, CHEWA, CHG, CHOW, CIMBT, CIVIL, CK, CKP, CM, CNT, COLOR, COM7, COTTO, CPALL, CPAXT, CPF, CPI, CPL, CPN, CPW, CRC, CRD, CSC, CSS, CV, DCC, DDD, DELTA, DEMCO, DMT, DOHOME, DRT, DUSIT, EA, EASTW, ECF, ECL, EE, EGCO, EPG, ERW, ETC, ETE, FE, FLOYD, FN, FPI, FPT, FSX, FVC, GBX, GC, GCAP, GENCO, GFPT, GGC, GLAND, GLOBAL, GPSC, GRAMMY, GULF, GUNKUL, HANA, HARN, HENG, HMPRO, HPT, HTC, ICC, ICHI, ICN, III, ILINK, ILM, IMH, IND, INET, INTUCH, IP, IRC, IRPC, ITC, ITEL, IVL, JAS, JTS, KBANK, KCC, KCE, KEX, KKP, KSL, KTB, KTC, KTMS, KUMWEL, KUN, LALIN, LANNA, LH, LHFG, LIT, LOXLEY, LPN, LRH, LST, M, MAJOR, MALEE, MATCH, MBK, MC, M-CHAI, MCOT, MEGA, MFC, MFEC, MILL, MINT, MONO, MOONG, MSC, MST, MTC, MTI, NC, NCH, NCL, NDR, NER, NKI, NOBLE, NRF, NTV, NVD, NWR, NYT, OCC, OISHI', ONEE, OR, ORI, OSP, OTO, PAP, PATO, PB, PCSGH, PDG, PDJ, PG, PHOL, PIMO, PJW, PLANB, PLAT, PLUS, PM, POLY, PORT, PPP, PPS, PR9, PRG, PRINC, PRM, PRTR, PSH, PSL, PT, PTC, PTT, PTTEP, PTTGC, Q-CON, QH, QTC, RATCH, RBF, RPH, RS, RT, S, S&J, SA, SABINA, SAK, SAMART, SAMTEL, SAPPE, SAT, SBNEXT, SC, SCB, SCC, SCCG, SCGP, SCM, SDC, SEAFCO, SEAOIL, SECURE, SELIC, SENA, SENX, SFP2, SFT, SGC, SGF, SGP, SHR, SICT, SIRI, SIS, SITHAI, SJWD, SKR, SM, SMPC, SMT, SNC, SNNP, SNP, SO, SPALI, SPC, SPCG, SPI, SPRC, SR, SSC, SSF, SSSC, STA, STC, STEC, STGT, STI, SUC, SUN, SUSCO, SUTHA, SVI, SVT, SYMC, SYNEX, SYNTEC, TACC, TAE, TCAP, TCMC, TEAMG, TEGH, TFG, TFMAMA, TGE, TGH, THANA, THANI, THCOM, THIP, THRE, THREL, TIDLOR, TIPH, TISCO, TK, TKN, TKS, TKT, TLI, TM, TMC, TMD, TMT, TNDT, TNITY, TNL, TNR, TOA, TOG, TOP, TPBI, TPCS, TPIPL, TPIPP, TPS, TQM, TQR, TRT, TRUE, TRV, TSC, TSTE, TSTH, TTA, TTB, TTCL, TTW, TURTLE, TVDH, TVH, TVO, TVT, TWPC, UAC, UBE, UBIS, UKEM, UP, UPF, UPOIC, UV, VCOM, VGI, VIBHA, VIH, VL, WACOAL, WGE, WHA, WHAUP, WICE, WINMED, WINNER, XPG, YUASA, ZEN

#### **Companies with Very Good CG Scoring**

2S, A5, AAI, AIE, ALUCON, AMR, APURE, ARIN, AS, ASIA, ASIAN, ASIMAR, ASN, AURA, BR, BSBM, BTG, CEN, CGH, CH, CHIC, CI, CIG, CMC, COMAN, CSP, DOD, DPAINT, DV8, EFORL, EKH, ESSO, ESTAR, EVER, FORTH, FSMART, FTI, GEL, GPI, HEALTH, HUMAN, IFS, INSET, IT, J, JCKH, JDF, JKN, JMART, JUBILE, K, KCAR, KGI, KIAT, KISS, KK, KTIS, KWC, KWM, LDC, LEO, LHK, MACO, METCO, MICRO, MK, MVP, NCAP, NOVA, NTSC, PACO, PIN, PQS, PREB, PRI, PRIME, PROEN, PROS, PROUD, PSTC, PTECH, PYLON, RCL, SALEE, SANKO, SCI, SCN, SE, SE-ED, SFLEX, SINGER, SKN, SONIC, SORKON, SPVI, SSP, SST, STANLY, STP, SUPER, SVOA, SWC, TCC, TEKA, TFM, TMILL, TNP, TPLAS, TPOLY, TRC, TRU, TRUBB, TSE, VRANDA, WAVE, WFX, WIIK, WIN, WP, XO

#### **Companies with Good CG Scoring**

24CS, AMANAH, AMARC, AMC, APP, ASAP, BCT, BE8, BIG, BIOTEC, BLESS, BSM, BVG, CAZ, CCET, CHARAN, CHAYO, CHOTI, CITY, CMAN, CMR, CRANE, CWT, DHOUSE, DTCENT, EASON, FNS, FTE, GIFT, GJS, GTB, GTV, GYT, HL, HTECH, HYDRO, IIG, INGRS, INSURE, IRCP, ITD, ITNS, JCK, JMT, JR, JSP, KBS, KGEN, KJL, L&E, LEE, MASTER, MBAX, MEB, MENA, META, MGT, MITSIB, MJD, MOSHI, MUD, NATION, NNCL, NPK, NSL, NV, OGC, PAF, PCC, PEACE, PICO, PK, PL, PLANET, PLE, PMTA, PPM, PRAKIT, PRAPAT, PRECHA, PRIN, PSG, RABBIT, READY, RJH, RSP, RWI, S11, SAAM, SAF, SAMCO, SAWAD, SCAP, SCP, SIAM, SKE, SKY, SMART, SMD, SMIT, SOLAR, SPA, STECH, STPI, SVR, TC, TCCC3, TEAM, TFI, TIGER, TITLE, TKC, TMI, TNH, TPA, TPAC, TRITN, UBA, UMI, UMS, UTP, VARO, VPO, W, WARRIX, WORK, WPH, YONG, ZIGA

#### **Corporate Governance Report**

The material contained in this publication is for general information only and is not intended as advice on any of the matters discussed herein. Readers and others should perform their own independent analysis as to the accuracy or completeness or legality of such information. The Thai Institute of Directors, its officers, the authors and editor make no representation or warranty as to the accuracy, completeness or legality of any of the information contained herein. By accepting this document, each recipient agrees that the Thai Institute of Directors Association, its officers, the authors and editor shall not have any liability for any information contained in, or for any omission from, this publication. The survey result is as of the date appearing in the Corporate Governance Report of Thai Listed Companies. As a result, the survey result may be changed after that date. InnovestX Securities Company Limited does not conform nor certify the accuracy of such survey result.

To recognize well performers, the list of companies attaining "Good", "Very Good" and "Excellent" levels of recognition (Not including listed companies qualified in the "no

announcement of the results" clause from 1 January 2022 to 31 October 2023) is publicized. <sup>1</sup>OISHI was voluntarily delisted from the Stock Exchange of Thailand, effectively on September 6, 2023

<sup>2</sup>SFP was voluntarily delisted from the Stock Exchange of Thailand, effectively on July 19, 2023

<sup>3</sup>TCCC was voluntarily delisted from the Stock Exchange of Thailand effectively on August 25, 2023

#### Anti-corruption Progress Indicator

#### Certified (ໄດ້ຮັບກາຣຮັບຣອง)

25, 7UP, AAI, ADVANC, AF, AH, AI, AIE, AIRA, AJ, AKP, AMA, AMANAH, AMATA, AMATAV, AP, APCS, AS, ASIAN, ASK, ASP, AWC, AYUD, B, BAFS, BAM, BANPU, BAY, BBGI, BBL, BCH, BCP, BCPG, BE8, BEC, BEYOND, BGC, BGRIM, BKI, BLA, BPP, BROOK, BRR, BSBM, BTS, BWG, CEN, CENTEL, CFRESH, CGH, CHEWA, CHOTI, CHOW, CIG, CIMBT, CM, CMC, COM7, CPALL, CPAXT, CPF, CPI, CPL, CPN, CPW, CRC, CSC, DCC, DELTA, DEMCO, DIMET, DOHOME, DRT, DUSIT, EA, EASTW, ECF, EGCO, EP, EPG, ERW, ESTAR, ETC, ETE, FNS, FPI, FPT, FSMART, FTE, GBX, GC, GCAP, GEL, GFPT, GGC, GJS, GPI, GPSC, GSTEEL, GULF, GUNKUL, HANA, HARN, HENG, HMPRO, HTC, ICC, ICHI, IFS, III, ILINK, ILM, INET, INOX, INSURE, INTUCH, IRPC, ITEL, IVL, JAS, JKN, JR, JTS, KASET, KBANK, KBS, KCAR, KCCAMC, KCE, KGEN, KGI, KKP, KSL, KTB, KTC, L&E, LANNA, LHFG, LHK, LPN, LRH, M, MAJOR, MALEE, MATCH, MBAX, MBK, MC, MCOT, META, MFC, MFEC, MILL, MINT, MONO, MOONG, MSC, MST, MTC, MTI, NATION, NCAP, NEP, NKI, NOBLE, NRF, NWR, OCC, OGC, OR, ORI, PAP, PATO, PB, PCSGH, PDG, PDJ, PG, PHOL, PIMO, PK, PL, PLANB, PLANET, PLAT, PM, PPP, PPPM, PPS, PR9, PREB, PRG, PRINC, PRM, PROS, PSH, PSL, PSTC, PT, PTECH, PTG, PTT, PTTEP, PTTGC, PYLON, Q-CON, QH, QLT, QTC, RABBIT, RATCH, RML, RS, RWI, S&J, SAAM, SABINA, SAK, SAPPE, SAT, SC, SCC, SCCC, SCG, SCGP, SCM, SCN, SEAOIL, SE-ED, SELIC, SENA, SGC, SGP, SIRI, SITHAI, SKR, SMIT, SMK, SMPC, SNC, SNP, SORKON, SPACK, SPALI, SPC, SPI, SPRC, SRICHA, SSF, SSP, SSSC, SST, STA, STGT, STOWER, SUSCO, SVI, SYMC, SYNTEC, TAE, TAKUNI, TASCO, TCAP, TCMC, TFG, TFI, TFMAMA, TGE, TGH, THANI, THCOM, THIP, THRE, THREL, TIDLOR, TIPCO, TISCO, TKS, TKT, TMD, TMILL, TMT, TNITY, TNL, TNP, TNR, TOG, TOP, TOPP, TPA, TPCS, TRT, TRU, TSC, TSI, TSTE, TSTH, TTA, TTB, TTCL, TU, TVDH, TVO, TWPC, UBE, UBIS, UEC, UKEM, UOBKH, UV, VCOM, VGI, VIH, WACOAL, WHA, WHAUP, WICE, WIIK, XO, YUASA, ZEN, ZIGA

#### Declared (ประกาศเจตนารมณ์)

ACE, ADB, ALT, AMC, ASW, BLAND, BTG, BYD, CAZ, CBG, CV, DEXON, DMT, EKH, FSX, GLOBAL, GREEN, ICN, IHL, ITC, J, JMART, JMT, LEO, LH, MENA, MITSIB, MODERN, NER, NEX, OSP, PEER, PLUS, POLY, PQS, PRIME, PROEN, PRTR, RBF, RT, SA, SANKO, SCB, SENX, SFLEX, SIS, SKE, SM, SVOA, TBN, TEGH, TIPH, TKN, TPAC, TPLAS, TQM, TRUE, W, WPH, XPG N/A

24CS, 3K-BAT, A, A5, AAV, ABM, ACAP, ACC, ACG, ADD, ADVICE, AEONTS, AFC, AGE, AHC, AIT, AJA, AKR, AKS, ALL, ALLA, ALPHAX, ALUCON, AMARC, AMARIN, AMR, ANAN, ANI, AOT, APCO, APEX, APO, APD, APURE, AQUA, ARIN, ARIP, ARROW, ASAP, ASEFA, ASIA, ASIMAR, ASN, ATP30, AU, AUCT, AURA, B52, BA, BBIK, BC, BCT, BDMS, BEAUTY, BEM, BGT, BH, BIG, BIOTEC, BIS, BIZ, BJC, BJCHI, BKD, BKGI, BLC, BLESS, BLISS, BM, BOL, BPS, BR, BRI, BROCK, BSM, BSRC, BTNC, BTW, BUI, BVG, CCET, CCP, CCY, CGD, CH, CHARAN, CHASE, CHAYO, CHG, CHIC, CHO, CI, CITY, CIVIL, CK, CKP, CMAN, CMO, CMR, CNT, COCOCO, COLOR, COMAN, CPANEL, CPH, CPR, CPT, CRANE, CRD, CREDIT, CSP, CSR, CSS, CTW, CWT, D, DCON, DDD, DHOUSE, DITTO, DOD, DPAINT, DTCENT, DTCI, DV8, EASON, ECL, EE, EFORL, EMC, ETL, EURO, EVER, F&D, FANCY, FE, FLOYD, FMT, FN, FORTH, FTI, FVC, GABLE, GENCO, GFC, GIFT, GL, GLAND, GLOCON, GLORY, GRAMMY, GRAND, GSC, GTB, GTV, GYT, HEALTH, HFT, HL, HPT, HTECH, HUMAN, HYDRO, 12, IFEC, IIG, IMH, IND, INGRS, INSET, IP, IRC, IRCP, IT, ITD, ITNS, ITTHI, JAK, JCK, JCKH, JCT, JDF, JPARK, JSP, JUBILE, K, KAMART, KC, KCG, KCM, KDH, KEX, KIAT, KISS, KJL, KK, KKC, KLINIQ, KOOL, KTIS, KTMS, KUMWEL, KUN, KWC, KWI, KWM, KYE, LALIN, LDC, LEE, LIT, LOXLEY, LPH, LST, LTS, MANRIN, MASTER, MATI, MCA, M-CHAI, MCS, MDX, MEB, MEGA, METCO, MGC, MGI, MGT, MICRO, MIDA, MJD, MK, ML, MORE, MOSHI, MTW, MUD, MVP, NAM, NAT, NC, NCH, NCL, NDR, NEO, NETBAY, NEW, NEWS, NFC, NL, NNCL, NOK, NOVA, NPK, NSL, NTSC, NTV, NUSA, NV, NVD, NYT, OHTL, ONEE, ORN, PACE, PACO, PAF, PANEL, PCC, PEACE, PERM, PF, PHG, PICO, PIN, PJW, PLE, PLT, PMTA, POLAR, PORT, POST, PPM, PRAKIT, PRAPAT, PRECHA, PRI, PRIN, PRO, PROUD, PSG, PSP, PTC, PTL, QTCG, RAM, RCL, READY, RICHY, RJH, ROCK, ROCTEC, ROH, ROJNA, RP, RPC, RPH, RSP, S, S11, SABUY, SAF, SAFARI, SAFE, SALEE, SAM, SAMART, SAMCO, SAMTEL, SAUCE, SAV, SAWAD, SAWANG, SBNEXT, SCAP, SCGD, SCI, SCL, SCP, SDC, SE, SEAFCO, SECURE, SFT, SGF, SHANG, SHR, SIAM, SICT, SIMAT, SINGER, SINO, SISB, SJWD, SK, SKN, SKY, SLM, SLP, SMART, SMD, SMT, SNNP, SO, SOLAR, SONIC, SPA, SPCG, SPG, SPREME, SPVI, SQ, SR, SRS, SSC, STANLY, STARK, STC, STEC, STECH, STHAI, STI, STP, STPI, STX, SUC, SUN, SUPER, SUTHA, SVR, SVT, SWC, SYNEX, TACC, TAN, TAPAC, TC, TCC, TCJ, TCOAT, TEAM, TEAMG, TEKA, TERA, TFM, TGPRO, TH, THAI, THANA, THE, THG, THMUI, TIGER, TITLE, TK, TKC, TLI, TM, TMC, TMI, TMW, TNDT, TNH, TNPC, TOA, TPBI, TPCH, TPIPL, TPIPP, TPL, TPOLY, TPP, TPS, TQR, TR, TRC, TRITN, TRP, TRUBB, TRV, TSE, TTI, TTT, TTW, TURTLE, TVH, TVT, TWP, TWZ, TYCN, UAC, UBA, UMI, UMS, UNIQ, UP, UPF, UPOIC, UREKA, UTP, UVAN, VARO, VIBHA, VL, VNG, VPO, VRANDA, WARRIX, WAVE, WELL, WFX, WGE, WIN, WINDOW, WINMED, WINNER, WORK, WORLD, WP, YGG, YONG, ZAA

#### Explanations

Companies participating in Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) under Thai Institute of Directors (as of November 1, 2023) are categorised into: companies that have declared their intention to join CAC, and companies certified by CAC.