

SELL (Unchanged)

Change in Numbers

TP: Bt 40.00 (From: Bt 47.00)

Downside : 18.8% **26 SEPTEMBER 2022**

Small Cap Research

KCE Electronics Pcl (KCE TB)

Weak outlook continues

We cut our earnings estimates for KCE further by 5/7/6% in 2022-24F as momentum is weakening. Despite the very weak baht, we expect slower sales and soft margin from high-cost inventory to hit its 2H22F earnings. Reaffirm SELL.



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Soft earnings to continue into 2H22F

We expect KCE's earnings to continue to disappoint the market. Despite the low base in 1H22 from hiccups in the production process of new machinery, we believe hopes of some turnaround in 2H22F are now dashed. We estimate KCE's 3Q22F earnings at Bt570m, down 5% y-y and q-q, despite the much weaker baht. Although we expect KCE's US\$ sales to grow 18% in 3Q22F from the low base last year and on additional capacity this year, we estimate a 3% q-q sales drop from some delayed orders as a result of soft global auto sales. Despite the very weak baht, we estimate the gross margin to increase slightly to 23.0% from the low base of 22.4% in 2Q22 and it should fall from 27.2% in 3Q21. Though some raw material prices have started to fall, KCE still has two months of expensive inventory in 3Q22F.

New industry headwind

Auto sales in KCE's key markets in Europe and the US (56% of its sales in 1H22) remain sluggish. Besides high inflation hitting demand, there has been a jump in electricity prices and power shortages in Europe resulting from sanctions on Russian gas exports, in turn leading to car and car parts production halts. The stoppages aren't at a critical level currently, but there is a risk of them becoming more severe during the upcoming winter.

Cutting our earnings

We still believe the electronics industry's upcycle has peaked and is headed toward a downcycle. Please see **Thai electronics sector – Peaked Out, dated 31 August 2022**. And we lower our earnings estimates for KCE further in this report by 5/7/6% in 2022-24F to reflect the developments mentioned above. After the cuts, we project KCE's earnings growth at only 5% this year despite the average capacity of 17%. We estimate only 9/8% growth in 2023-24F on the dynamic of falling raw material prices and the full-year effect of additional capacity in 1H22 amid the global slowdown.

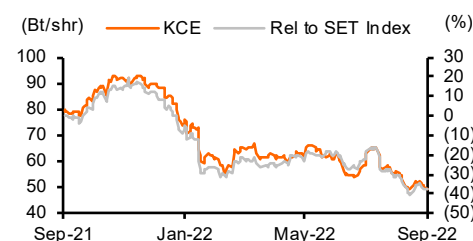
Greater risk of a de-rating

KCE looks expensive to us, trading on a 22x 2023F PE multiple against only 9/8% EPS growth in 2023-24F. KCE's 10-year historical PE range is 11-43x, and the peak point was the boom year in 2021. We see downside risk to KCE's current PE when the industry shifts into a downturn. Following our earnings cuts, our DCF-based 12-month TP, using a 2023F base year, falls to Bt40/share (from Bt47).

COMPANY VALUATION

Y/E Dec (Bt m)	2021A	2022F	2023F	2024F
Sales	14,938	18,775	19,450	19,478
Net profit	2,426	2,358	2,570	2,780
Consensus NP	—	2,524	2,966	3,536
Diff frm cons (%)	—	(6.6)	(13.3)	(21.4)
Norm profit	2,237	2,358	2,570	2,780
Prev. Norm profit	—	2,472	2,753	2,965
Chg frm prev (%)	—	(4.6)	(6.6)	(6.2)
Norm EPS (Bt)	1.9	2.0	2.2	2.4
Norm EPS grw (%)	119.7	5.4	9.0	8.1
Norm PE (x)	26.0	24.6	22.6	20.9
EV/EBITDA (x)	17.7	15.7	14.4	13.2
P/BV (x)	4.3	4.0	3.8	3.6
Div yield (%)	1.2	2.8	3.1	3.3
ROE (%)	17.6	16.9	17.2	17.5
Net D/E (%)	8.7	7.4	5.7	1.9

PRICE PERFORMANCE



COMPANY INFORMATION

Price: (Bt) as of 26-Sep-22	49.25
Market Cap (US\$ m)	1,536.3
Listed Shares (m shares)	1,181.9
Free Float (%)	59.0
Avg. Daily Turnover (US\$ m)	18.1
12M Price H/L (Bt)	93.00/49.25
Sector	Electronics
Major Shareholder	Ongkosit Family 25.4%

Sources: Bloomberg, Company data, Thanachart estimates

ESG Summary Report P7

Rough earnings path

Earnings began softening from 4Q21

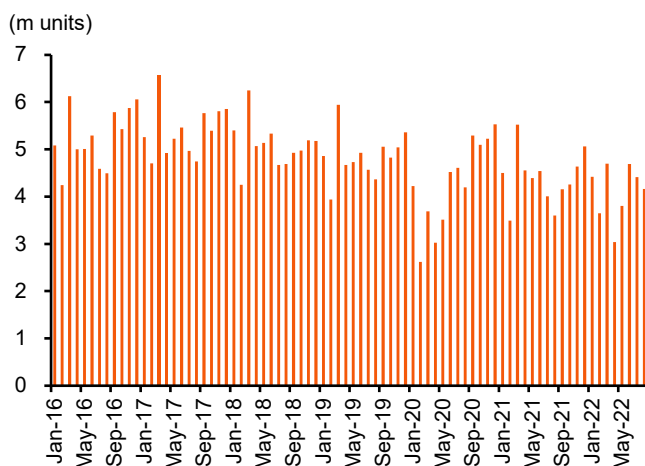
KCE Electronics Pcl's (KCE) earnings trajectory began softening from 4Q21 because of the production hiccup caused by problems with its newly installed machinery at its existing plants. The company had decided to change the specs of the machinery to a more automated model requiring less labor. That said, the new machinery disappointed with various hiccups, e.g., the plating machines supplied power to empty copper plates (they should only provide power when the copper plates are hung with a hanger). This caused the machinery to put empty hangers into the chemical puddle (used to coat the plate), resulting in wasted chemicals, diluted chemical quality, and therefore wasted production time.

In 2Q22, despite KCE's machinery issues mostly being solved, its earnings remained soft. This was because some of KCE's clients delayed their orders amid the inflation-induced decline in car sales in KCE's main EU and US markets, while KCE's raw material prices also spiked.

Further earnings weakness in 3Q22F

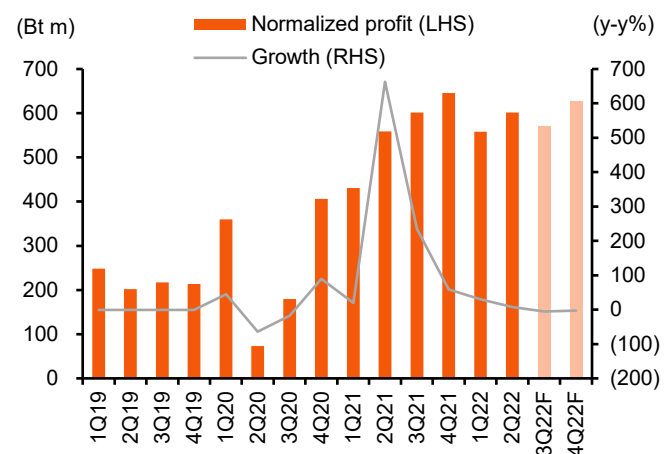
Looking to 3Q22F, we estimate KCE's normalized earnings to come in at only Bt570m, down 5% y-y and q-q. Clients have continued to reduce orders amid continued weakening car sales, especially in KCE's main EU and US markets, while the company still has two months of expensive inventory left over from the previous quarter.

Ex 1: Monthly Global Car Sales



Source: Bloomberg

Ex 2: Quarterly Earnings



Sources: Company data; Thanachart estimates

Cutting our earnings

We cut our earnings estimates by 5/7/6% from 2022-24F. Aside from the likely softer-than-expected 3Q22F, we see a new risk to European car sales from sanctions on Russian gas exports causing car and car parts production stoppages because of electricity shortages.

Ex 3: Our Assumptions

	2020	2021	2022F	2023F	2024F
Year-end capacity (million sq ft per month)	2.7	3.0	3.3	4.0	4.0
Year-end capacity growth (%)	-	11.1	10.0	21.2	-
Effective capacity growth (million sq ft per month)	2.7	2.8	3.2	3.5	3.7
Effective capacity growth (%)	-	1.9	17.3	7.8	6.7
Global car sales growth (%)	(15.0)	3.0	4.0	5.0	3.0
US\$ sales growth (%)	(5.3)	25.9	15.1	5.7	6.4
Baht/US\$ assumption	31.3	31.9	34.8	34.1	32.1
Baht sales growth (%)	(4.7)	29.6	25.7	3.6	0.1
HDI proportion (%)	16.0	20.0	26.0	32.0	35.0
Gross margin (%)	21.8	26.6	23.4	24.3	25.5
SG&A to sales (%)	12.6	11.1	9.7	9.8	9.9

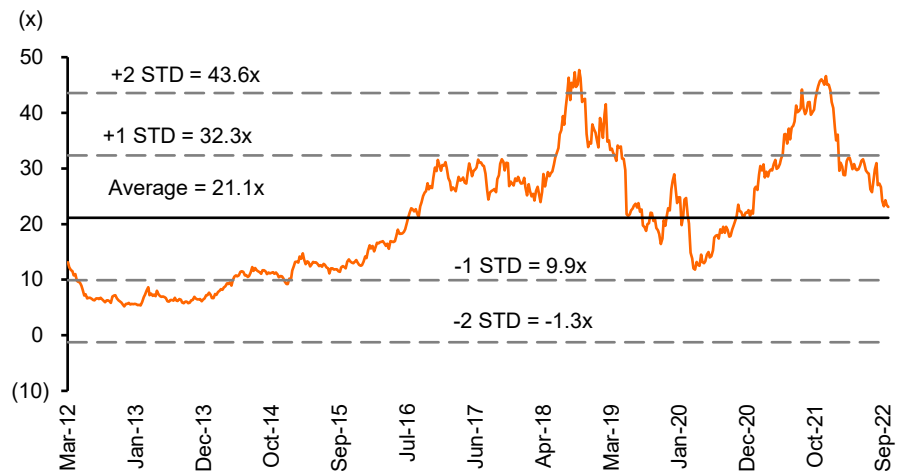
Sources: Company data, Thanachart estimates

Ex 4: Earnings Revisions

	2020	2021	2022F	2023F	2024F
Sales (US\$ m)					
New	372	469	539	570	607
Old			546	579	616
Change (%)			(1.3)	(1.5)	(1.5)
Bt/US\$					
New	31.3	32.0	34.8	34.1	32.1
Old			34.8	34.1	32.1
Sales (Bt m)					
New	11,527	14,938	18,775	19,450	19,478
Old			19,017	19,738	19,766
Change (%)			(1.3)	(1.5)	(1.5)
Gross margin (%)					
New	21.8	26.6	23.4	24.3	25.5
Old			23.8	25.0	26.2
Change (pp)			(0.4)	(0.7)	(0.7)
SG&A/sales (%)					
New	12.6	11.1	9.7	9.8	9.9
Old			9.6	9.7	9.8
Change (pp)			0.1	0.1	0.1
Normalized profit (Bt m)					
New	1,018	2,237	2,358	2,570	2,780
Old			2,472	2,753	2,965
Change (%)			(4.6)	(6.6)	(6.2)

Sources: Company data, Thanachart estimates

Ex 5: Historical PE



Sources: Bloomberg, Thanachart estimates

Ex 6: 12-month DCF-based TP Calculation Using A Base Year of 2023F

(Bt m)	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F	2033F	Terminal value
EBITDA	4,094	4,433	4,954	5,593	6,182	6,585	6,833	7,055	7,274	7,489	7,722	—
Free cash flow	1,959	2,497	3,574	4,247	4,835	5,334	5,628	5,828	6,028	6,224	5,738	65,843
PV of free cash flow	1,954	2,067	2,656	2,859	2,949	2,946	2,816	2,641	2,474	2,314	1,840	21,110
Risk-free rate (%)	2.5											
Market risk premium (%)	8.0											
Beta	1.1											
WACC (%)	9.9											
Terminal growth (%)	2.0											
Enterprise value - add investments	48,625											
Net debt (2022F)	1,082											
Minority interest	67											
Equity value	47,476											
# of shares (m)	1,180											
Target price/share (Bt)	40											

Sources: Company data, Thanachart estimates

Note: * We assume full dilution impact from outstanding ESOP shares

Valuation Comparison

Ex 7: Valuation Comparison With Regional Peers

Name	BBG code	Country	EPS growth		— PE —		— P/BV —		EV/EBITDA		— Div. yield —	
			22F (%)	23F (%)	22F (x)	23F (x)	22F (x)	23F (x)	22F (%)	23F (%)	22F (%)	23F (%)
TTM Technologies Inc	TTMI US	USA	27.2	7.9	8.3	7.7	0.9	0.9	6.2	5.9	na	na
Chin-Poon Industrial	2355 TT	Taiwan	38.6	39.6	23.2	16.6	0.7	0.7	6.5	4.7	2.2	3.0
Tripod Technology Corp	3044 TT	Taiwan	5.0	10.5	8.3	7.5	1.2	1.2	4.0	3.8	7.5	7.9
CMK Corp	6958 JP	Japan	(4.9)	37.8	9.9	7.2	0.5	0.5	5.9	4.5	2.9	4.3
Meiko Electronics	6787 JP	Japan	16.5	7.0	5.3	4.9	1.1	0.9	5.7	4.9	1.8	2.0
Delta Electronics	DELTA TB	Thailand	92.0	8.5	62.4	57.4	15.6	13.4	50.0	44.7	0.7	0.8
SVI Pcl	SVI TB	Thailand	(19.4)	14.1	16.3	14.3	3.1	2.7	14.1	12.5	2.3	3.8
Hana Microelectronics	HANA TB*	Thailand	0.8	3.9	13.8	13.3	1.3	1.3	7.9	7.3	4.9	4.9
KCE Electronics	KCE TB*	Thailand	5.4	9.0	24.6	22.6	4.0	3.8	15.7	14.4	2.8	3.1
Average			17.9	15.4	19.1	16.8	3.2	2.8	12.9	11.4	3.1	3.7

Source: Bloomberg

Note: *Thanachart estimates, using Thanachart normalized EPS

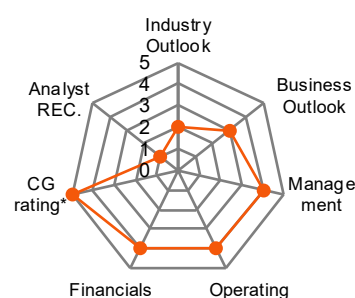
Based on 26-Sep-2022 closing prices

COMPANY DESCRIPTION

KCE Electronics Public Company Limited (KCE) and its subsidiaries manufacture and export double-sided and multi-layer printed circuit boards (PCBs) under the KCE trademark. The company has five manufacturing bases: three PCB factories, one laminate factory and one chemical factory in four locations in Thailand. KCE is one of the leading global suppliers of PCBs to the automotive sector, and these account for more than 70% of its total sales.

Source: Thanachart

COMPANY RATING



Rating Scale

Excellent	5
Good	4
Fair	3
Weak	2
Very Weak	1
None	0

Source: Thanachart; *CG Rating

THANACHART'S SWOT ANALYSIS

S — Strength

- Sustainable earnings from the automotive sector.
- Completed upstream to downstream business integration.
- Lowest-cost automotive PCB manufacturer.

O — Opportunity

- Potential penetration of the Japanese market.
- Positive growth outlook in the automotive electronics industry.
- Expanding into other industries such as industrial and high-end consumer products.

W — Weakness

- Capital-intensive business, particularly for machinery.
- Revenue is still concentrated with a few large customers.

T — Threat

- Unexpected external events (i.e. floods, political turmoil) could disrupt KCE's operations.
- Delay in construction of factories could significantly affect the time frames for the qualification process by customers.

CONSENSUS COMPARISON

	Consensus	Thanachart	Diff
Target price (Bt)	63.02	40.00	-37%
Net profit 22F (Bt m)	2,524	2,358	-7%
Net profit 23F (Bt m)	2,966	2,570	-13%
Consensus REC	BUY: 5	HOLD: 8	SELL: 2

HOW ARE WE DIFFERENT FROM THE STREET?

- Our TP is lower than the Bloomberg consensus number, which we attribute to us having a more conservative assumption for growth in global car sales.

Sources: Bloomberg consensus, Thanachart estimates

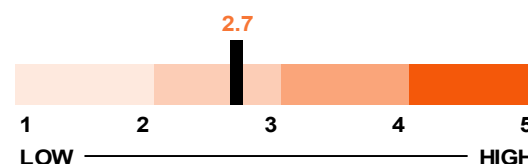
RISKS TO OUR INVESTMENT CASE

- A faster-than-expected turnaround in the global automotive market presents the key upside risk to our projections and TP.
- A significant fall in copper-related prices presents a secondary upside risk to our estimates.
- Drastic currency fluctuations with a weak Thai baht relative to the US\$ present another upside risk to our numbers.

Source: Thanachart

KCE is among the world's top-ten largest manufacturers of printed circuit boards (PCB). Its factories release some greenhouse gases and it implements measures to reduce emissions. However, our ESG score for KCE is 2.7 which is moderate as its overall ESG targets and plans aren't yet clear.

Thanachart ESG Rating



	SETTHSI Index	THSI Index	DJSI Index	MSCI (CCC-AAA)	Arabesque S-Ray (0-100)	Refinitiv (0-100)	S&P Global (0-100)	Moody's (0-100)	CG Rating (0-5)
KCE	-	-	-	-	53.90	56.8	13.58	-	5.0

Sources: SETTRADE, SETTHSI Index, Thailand Sustainability Investment (THSI), The Dow Jones Industrial Average (DJSI), MSCI ESG Research LLC, Arabesque S-Ray®, Refinitiv ESG Information, S&P Global Market Intelligence, Moody's ESG Solutions, Thai IOD (CG rating)

Note: Please see third party on "term of use" in the following back page.

Factors

Our Comments

ENVIRONMENT

- Environmental Policies & Guidelines
- Energy Management
- Carbon Management
- Water Management
- Waste Management

- KCE is a global manufacturer of printed circuit boards (PCB) with two factories in operation in Thailand. Its factories release certain amounts of greenhouse gases (GHG) and other pollutants. KCE says it has been implementing various measures to reduce emissions. However, the company has yet to provide clear targets and plans to achieve those goals.
- KCE uses logistics management software to calculate the most fuel-efficient routes for transportation to reduce air pollution.
- KCE is changing many office-related products, e.g., copy paper, toner, LED tubes and refrigerators, to be more environmentally friendly.
- KCE has discontinued the use of foam in its product packaging and switched toward recycled paper to reduce hazardous waste.

SOCIAL

- Human Rights
- Staff Management
- Health & Safety
- Product Safety & Quality
- Social Responsibility

- KCE has a policy to discontinue relationships with suppliers that violate labor rights, e.g., using child workers.
- The company provides health and accident insurance for employees and health insurance for their families.
- KCE has been active in providing aid, such as food and drinking water to those in need, e.g., flooding and COVID victims.

GOVERNANCE &
SUSTAINABILITY

- Board
- Ethics & Transparency
- Business Sustainability
- Risk Management
- Innovation

- KCE has a nine-member board of directors (BOD) which we consider an appropriate size for the size and scope of its business. Of the nine members, three are independent directors. There are three female board members. Eight members, including the chairman, have a stake in KCE.
- KCE has diversified its products from just PCBs for the auto sector, which now account for around 70% of total revenues. The rest is from the consumer, industrial and medical sectors.
- KCE has been active in developing automation to reduce the size of its workforce, although the process has been gradual.

Source: Thanachart

INCOME STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Sales	11,527	14,938	18,775	19,450	19,478
Cost of sales	9,015	10,965	14,390	14,728	14,508
Gross profit	2,512	3,973	4,385	4,722	4,970
% gross margin	21.8%	26.6%	23.4%	24.3%	25.5%
Selling & administration expenses	1,449	1,656	1,818	1,910	1,921
Operating profit	1,063	2,317	2,567	2,812	3,048
% operating margin	9.2%	15.5%	13.7%	14.5%	15.6%
Depreciation & amortization	1,049	1,024	1,206	1,282	1,384
EBITDA	2,112	3,341	3,774	4,094	4,433
% EBITDA margin	18.3%	22.4%	20.1%	21.0%	22.8%
Non-operating income	106	202	105	107	110
Non-operating expenses	0	0	0	0	0
Interest expense	(57)	(44)	(98)	(111)	(120)
Pre-tax profit	1,111	2,475	2,575	2,808	3,038
Income tax	87	221	230	251	272
After-tax profit	1,024	2,254	2,344	2,557	2,766
% net margin	8.9%	15.1%	12.5%	13.1%	14.2%
Shares in affiliates' Earnings	10	17	18	19	20
Minority interests	(16)	(35)	(5)	(6)	(7)
Extraordinary items	109	190	0	0	0
NET PROFIT	1,127	2,426	2,358	2,570	2,780
Normalized profit	1,018	2,237	2,358	2,570	2,780
EPS (Bt)	1.0	2.1	2.0	2.2	2.4
Normalized EPS (Bt)	0.9	1.9	2.0	2.2	2.4

We expect earnings
growth to slow down

BALANCE SHEET

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
ASSETS:					
Current assets:	8,185	11,794	14,473	15,324	15,435
Cash & cash equivalent	2,347	2,482	2,500	3,000	3,200
Account receivables	3,174	4,394	5,523	5,722	5,730
Inventories	2,594	4,841	6,354	6,503	6,406
Others	69	76	96	99	99
Investments & loans	187	195	195	195	195
Net fixed assets	8,107	8,979	8,617	9,047	9,378
Other assets	898	983	1,250	1,314	1,335
Total assets	17,377	21,951	24,534	25,880	26,343
LIABILITIES:					
Current liabilities:	4,216	6,948	8,243	8,612	8,264
Account payables	2,458	4,246	5,572	5,703	5,618
Bank overdraft & ST loans	1,283	1,798	1,762	1,910	1,724
Current LT debt	387	740	725	786	710
Others current liabilities	88	164	183	212	212
Total LT debt	676	1,117	1,095	1,187	1,071
Others LT liabilities	423	444	572	605	618
Total liabilities	5,315	8,509	9,910	10,403	9,953
Minority interest	52	62	67	73	80
Preferreds shares	0	0	0	0	0
Paid-up capital	589	591	590	590	590
Share premium	2,050	2,146	2,146	2,146	2,146
Warrants	0	(0)	(0)	(0)	(0)
Surplus	(64)	(37)	(37)	(37)	(37)
Retained earnings	9,434	10,680	11,858	12,704	13,611
Shareholders' equity	12,010	13,380	14,558	15,404	16,311
Liabilities & equity	17,377	21,951	24,534	25,880	26,343

Sources: Company data, Thanachart estimates

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Earnings before tax	1,111	2,475	2,575	2,808	3,038
Tax paid	(32)	(149)	(220)	(230)	(279)
Depreciation & amortization	1,049	1,024	1,206	1,282	1,384
Chg In working capital	70	(1,679)	(1,315)	(217)	4
Chg In other CA & CL / minorities	0	(41)	7	24	27
Cash flow from operations	2,199	1,631	2,254	3,668	4,174
Capex	(278)	(1,854)	(800)	(1,667)	(1,667)
Right of use	(13)	(7)	(20)	(20)	(20)
ST loans & investments	0	0	0	0	0
LT loans & investments	12	(8)	0	0	0
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	(105)	(69)	(163)	(57)	(37)
Cash flow from investments	(385)	(1,938)	(983)	(1,744)	(1,723)
Debt financing	405	1,498	(72)	301	(378)
Capital increase	146	98	(1)	0	0
Dividends paid	(952)	(1,206)	(1,179)	(1,725)	(1,872)
Warrants & other surplus	(24)	52	0	0	0
Cash flow from financing	(424)	442	(1,252)	(1,424)	(2,251)
Free cash flow	1,921	(223)	1,454	2,001	2,507

KCE doesn't look cheap to us on 22x PE against 9/8% EPS growth in 2023-24F

VALUATION

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Normalized PE (x)	57.1	26.0	24.6	22.6	20.9
Normalized PE - at target price (x)	46.4	21.1	20.0	18.4	17.0
PE (x)	51.6	24.0	24.6	22.6	20.9
PE - at target price (x)	41.9	19.5	20.0	18.4	17.0
EV/EBITDA (x)	27.5	17.7	15.7	14.4	13.2
EV/EBITDA - at target price (x)	22.3	14.5	12.8	11.7	10.7
P/BV (x)	4.8	4.3	4.0	3.8	3.6
P/BV - at target price (x)	3.9	3.5	3.2	3.1	2.9
P/CFO (x)	26.4	35.6	25.8	15.8	13.9
Price/sales (x)	5.0	3.9	3.1	3.0	3.0
Dividend yield (%)	1.6	1.2	2.8	3.1	3.3
FCF Yield (%)	3.3	(0.4)	2.5	3.4	4.3
(Bt)					
Normalized EPS	0.9	1.9	2.0	2.2	2.4
EPS	1.0	2.1	2.0	2.2	2.4
DPS	0.8	0.6	1.4	1.5	1.6
BV/share	10.2	11.3	12.3	13.1	13.8
CFO/share	1.9	1.4	1.9	3.1	3.5
FCF/share	1.6	(0.2)	1.2	1.7	2.1

Sources: Company data, Thanachart estimates

FINANCIAL RATIOS

Profitability is strong as it is the lowest-cost producer in the industry

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Growth Rate					
Sales (%)	(4.7)	29.6	25.7	3.6	0.1
Net profit (%)	20.6	115.3	(2.8)	9.0	8.1
EPS (%)	20.6	115.3	(2.8)	9.0	8.1
Normalized profit (%)	15.6	119.7	5.4	9.0	8.1
Normalized EPS (%)	15.6	119.7	5.4	9.0	8.1
Dividend payout ratio (%)	83.8	29.2	70.0	70.0	70.0
Operating performance					
Gross margin (%)	21.8	26.6	23.4	24.3	25.5
Operating margin (%)	9.2	15.5	13.7	14.5	15.6
EBITDA margin (%)	18.3	22.4	20.1	21.0	22.8
Net margin (%)	8.9	15.1	12.5	13.1	14.2
D/E (incl. minor) (x)	0.2	0.3	0.2	0.3	0.2
Net D/E (incl. minor) (x)	(0.0)	0.1	0.1	0.1	0.0
Interest coverage - EBIT (x)	18.5	53.0	26.3	25.4	25.5
Interest coverage - EBITDA (x)	36.7	76.4	38.7	37.0	37.1
ROA - using norm profit (%)	6.0	11.4	10.1	10.2	10.6
ROE - using norm profit (%)	8.6	17.6	16.9	17.2	17.5
DuPont					
ROE - using after tax profit (%)	8.6	17.8	16.8	17.1	17.4
- asset turnover (x)	0.7	0.8	0.8	0.8	0.7
- operating margin (%)	10.1	16.9	14.2	15.0	16.2
- leverage (x)	1.4	1.5	1.7	1.7	1.6
- interest burden (%)	95.1	98.3	96.3	96.2	96.2
- tax burden (%)	92.2	91.1	91.1	91.1	91.1
WACC (%)	9.9	9.9	9.9	9.9	9.9
ROIC (%)	7.7	17.6	16.1	16.4	17.0
NOPAT (Bt m)	980	2,110	2,337	2,560	2,776
invested capital (Bt m)	12,009	14,553	15,640	16,287	16,615

Sources: Company data, Thanachart estimates

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SET has created a Thailand Sustainability Investment (THSI) list since 2015 for using as an alternative investment in the high performance ESG stocks for investors while, supporting the sustainable Thai companies. SET defines the sustainable companies as the companies that embrace risk management, supply chain management and innovations together with responsibility for environmental, social and governance aspects

As a result, SET has created the SETTHSI for the purpose of indicating the price of these sustainable companies that pass the market capital size and liquidity criteria.

Arabesque S-Ray®

The S-Ray data here is published with a 3 month delay. For the latest data, please contact sray@arabesque.com

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Score range	Description
CCC - B	LAGGARD: A company lagging its industry based on its high exposure and failure to manage significant ESG risks
BB - BBB - A	AVERAGE : A company with a mixed or unexceptional track record of managing the most significant ESG risks and opportunities relative to industry peers
AA - AAA	LEADER: A company leading its industry in managing the most significant ESG risks and opportunities

The Dow Jones Sustainability Indices (DJSI)

The Dow Jones Sustainability Indices (DJSI) are a family of best-in-class benchmarks for investors who have recognized that sustainable business practices are critical to generating long-term shareholder value and who wish to reflect their sustainability convictions in their investment portfolios. The family was launched in 1999 as the first global sustainability benchmark and tracks the stock performance of the world's leading companies in terms of economic, environmental and social criteria. Created jointly by S&P Dow Jones Indices and SAM, the DJSI combine the experience of an established index provider with the expertise of a specialist in Sustainable Investing to select the most sustainable companies from across 61 industries. The indices serve as benchmarks for investors who integrate sustainability considerations into their portfolios, and provide an effective engagement platform for investors who wish to encourage companies to improve their corporate sustainability practices.

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ESG risk combines the concepts of management and exposure to arrive at an absolute assessment of ESG risk. We identify five categories of ESG risk severity that could impact a company's enterprise value

Moody's ESG Solutions

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