

**BUY** (Unchanged)  
Change in Numbers

**TP: Bt 56.00** (From: Bt 55.00)  
**Upside : 16.7%**

**27 AUGUST 2025**

# Gulf Energy Dev. Pcl (GULF TB)

## Three cylinders firing

We reaffirm our **BUY** call on GULF for its secured earnings growth over the next 10 years, backed by a long power generation capacity expansion pipeline and steady telecom business growth, with rising contributions from new businesses of LNG imports and data centers.



**NUTTAPOP PRASITSUKSANT**  
662-779-9119  
nuttapop.pra@thanachartsec.co.th

### Growing resiliently

We reaffirm our **BUY** call on GULF as we estimate its earnings growth to remain stable at 21/21/15% in 2025-27F. *First*, GULF has secured PPAs to grow power generation capacity over the next decade, providing a resilient growth driver for the firm. *Second*, we expect its new major telecom business pillar to continue to grow, backed by more service offerings and improved profitability. *Third*, GULF's emerging businesses of natural gas infrastructure and data centers are commercializing in 2025-28F. *Lastly*, we still see GULF as a major contender in the future bids for both renewable and conventional PPAs under the upcoming power development plan (PDP). We value GULF at Bt56/share after rolling over our DCF valuation to a 2026F base year.

### Secured power capacity expansion

We project GULF's operating capacity to grow 4% p.a. over the next decade, reaching 13.2GW in 2035F from 8.7GW in 2025F. This is backed by its committed projects of 1) 2.3GW of domestic renewable projects (solar, wind, and waste-to-energy) scheduled for COD over 2025-30, 2) 1.4GW from three hydropower plants due in 2030-33, and 3) a 375MW offshore wind project in the UK expected in 2031. With scale advantages, we believe GULF will win a meaningful share of up to 30GW of renewable and 5GW of conventional PPAs to be unlocked by the new PDP, likely to be released by 2027, extending its growth trajectory further. GULF is also more active in M&A activities, which we leave as upside.

### Undeterred growth from telecom business

Given its higher stake of 40% (from 18%) after the amalgamation in April, equity income from Advanced Info Service Pcl (ADVANC TB, BUY, Bt298) comprises 51% of GULF's earnings in 2025F. We estimate the profit to grow 12/7/3% in 2026-28F, driven by rising ARPUs for mobile and fixed broadband due to operators offering more add-on services to the packages to improve pricing, structurally lower spectrum costs, slower network expansion, and better profitability from easing competition. ADVANC is also a huge cash cow, paying GULF annual dividends of Bt16bn-20bn.

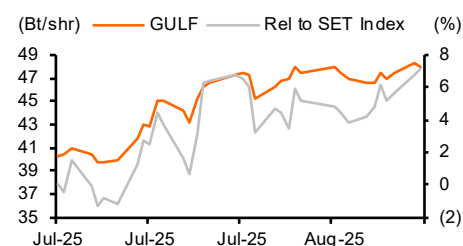
### Emerging new growth engines

Two new businesses look set to add incremental growth to GULF. GULF has begun importing 5.0m tonnes of LNG into Thailand's gas pool this year, with a plan to scale up to its full 7.3m-tonne quota in 2028F, translating to a stable Bt1.5bn p.a. in profit from a fixed supply charge. GULF's first 25MW data center (40%-owned) has started operations and is ramping up occupancy, with a target to expand total capacity to 200MW across four projects in Thailand. GULF also intends to layer higher-margin cloud solutions services on this platform to enhance long-term returns from this business unit.

### COMPANY VALUATION

Y/E Dec (Bt m)	2024A	2025F	2026F	2027F
Sales	120,888	155,500	158,135	160,551
Net profit	21,383	26,594	32,231	36,894
Consensus NP	—	60,030	29,246	32,191
Diff frm cons (%)	—	(55.7)	10.2	14.6
Norm profit	22,058	26,594	32,231	36,894
Prev. Norm profit	—	25,856	30,996	35,961
Chg frm prev (%)	—	2.9	4.0	2.6
Norm EPS (Bt)	1.5	1.8	2.2	2.5
Norm EPS grw (%)	39.3	20.6	21.2	14.5
Norm PE (x)	32.5	27.0	22.2	19.4
EV/EBITDA (x)	51.1	40.4	34.9	31.1
P/BV (x)	2.2	2.0	2.0	1.9
Div yield (%)	0.0	2.2	2.7	3.1
ROE (%)	6.7	7.8	9.0	9.9
Net D/E (%)	77.7	72.3	71.4	73.2

### PRICE PERFORMANCE



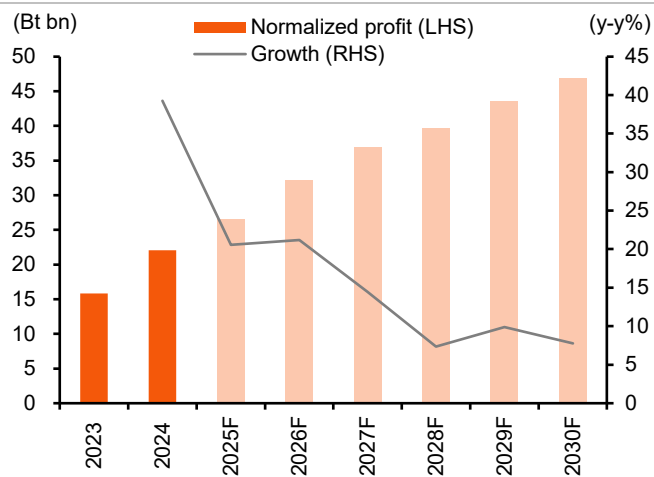
### COMPANY INFORMATION

Price as of 26-Aug-25 (Bt)	48.00
Market Cap (US\$ m)	22,075.2
Listed Shares (m shares)	14,939.8
Free Float (%)	32.4
Avg Daily Turnover (US\$ m)	na
12M Price H/L (Bt)	50.25/38.75
Sector	Utilities
Major Shareholder	Mr. Sarath Rattanawadi 29.19%

Sources: Bloomberg, Company data, Thanachart estimates

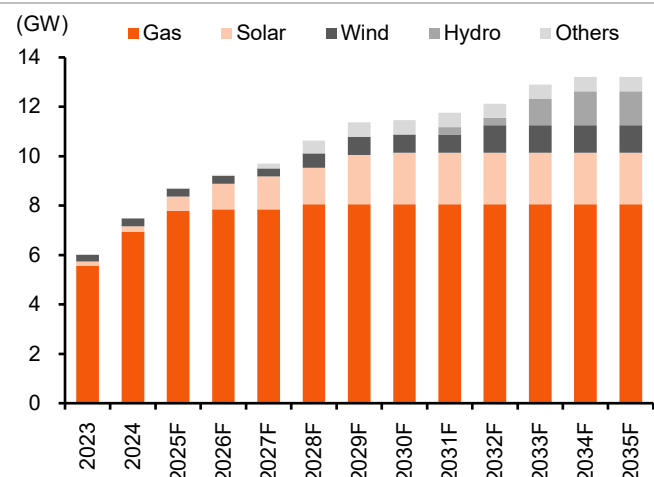
ESG Summary Report ..... P33

Ex 1: Resilient Earnings Growth Outlook ...



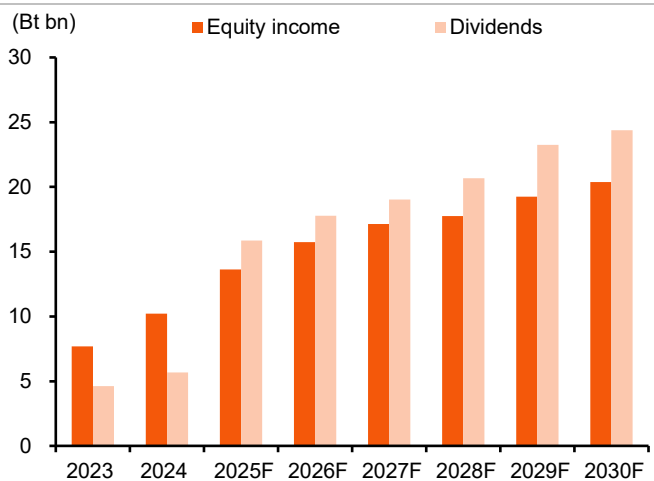
Sources: Company data, Thanachart estimates

Ex 2: ... Mainly From Growing Power Generation Capacity



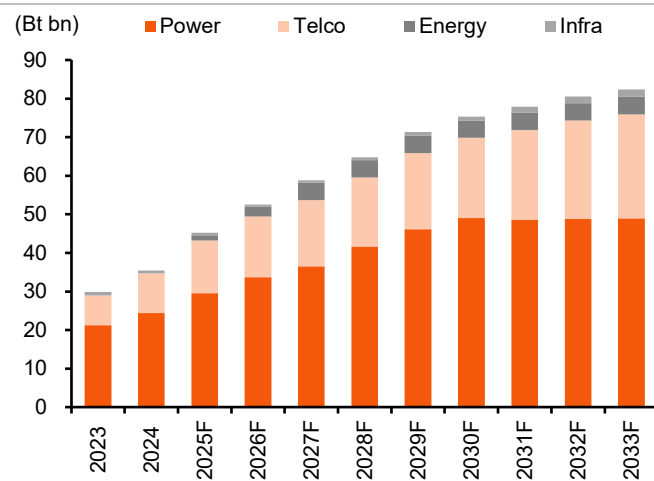
Sources: Company data, Thanachart estimates

Ex 3: Increasing Contributions From ADVANC



Sources: Company data, Thanachart estimates

Ex 4: EBITDA Breakdown



Sources: Company data, Thanachart estimates

## Ex 5: Sum-of-the-Parts Valuation

SOTP Valuation	Equity value (Bt m)	Valuation method	WACC	Value (Bt/share)
<b>1. Power generation business</b>	<b>362,384</b>			<b>24.3</b>
<b>1.1 IPP power plants</b>				<b>10.4</b>
- GRSC	56,676	DCF	5.2%	3.8
- GPD	61,133	DCF	4.9%	4.1
- GJP (IPP)	12,398	DCF	5.2%	0.8
- HKP	20,111	DCF	4.8%	1.3
- BPP	5,579	DCF	6.0%	0.4
<b>1.2 SPP power plants</b>				<b>3.6</b>
- GMP	45,502	DCF	7.2%	3.0
- GJP (SPP)	8,783	DCF	9.3%	0.6
<b>1.3 Domestic renewable projects</b>				<b>7.8</b>
- Gulf Gunkul	9,835	DCF	6.3%	0.7
- RE big lot 2023	69,606	DCF	5.2%	4.7
- GULF 1	13,764	DCF	6.4%	0.9
- Hydropower	17,566	DCF	7.5%	1.2
- Others	6,160	DCF	8.0%	0.4
<b>1.4 Overseas power plants</b>				<b>2.4</b>
- Duqm	3,994	DCF	8.0%	0.3
- Jackson	17,640	DCF	8.0%	1.2
- Borkum	6,969	DCF	8.0%	0.5
- Vietnam renewables	1,044	DCF	7.5%	0.1
- UK offshore wind	5,623	DCF	8.0%	0.4
<b>2. Digital business</b>	<b>446,906</b>			<b>29.9</b>
- ADVANC	432,976	DCF	7.8%	29.0
- THCOM	5,654	DCF	11.5%	0.4
- GSA Datacenter	8,276	DCF	4.9%	0.6
<b>3. Infrastructure business</b>	<b>95,654</b>			<b>6.4</b>
- Natural gas trading and distribution	12,727	DCF	7.0%	0.9
- LNG terminal & trading	56,938	DCF	8.0%	3.8
- Industrial deep sea port	17,236	DCF	8.0%	1.2
- Intercity motorway	8,753	DCF	7.0%	0.6
<b>4. Other investments</b>	<b>18,414</b>			<b>1.2</b>
- KBANK	18,414	DDM	10.5%	1.2
<b>5. Potential projects and investments</b>	<b>62,550</b>			<b>4.2</b>
- Renewable PPAs from the new PDP (10GW capacity)	37,800	DCF	8.0%	2.5
- Potential IPP replacement projects (5GW capacity)	24,750	DCF	8.0%	1.7
<b>6. Net debt &amp; HQ</b>	<b>(149,006)</b>			<b>(10.0)</b>
<b>Grand total</b>	<b>836,901</b>			<b>56.0</b>

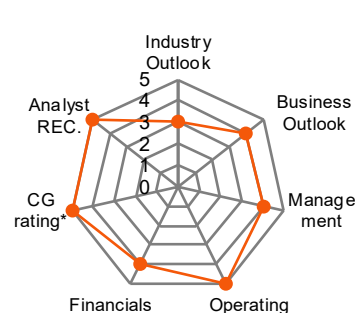
Source: Thanachart estimates

## COMPANY DESCRIPTION

Gulf Development Pcl (GULF) was formed via the amalgamation of Gulf Energy Development Pcl and Intouch Holdings Pcl in April 2025. The firm runs four core businesses: 1) power generation with 12.0GW of committed capacity in Thailand and overseas, of which 8.7GW was already in operation as of 1Q25, 2) digital business comprising telecom services under Advanced Info Service Pcl (ADVANC), along with emerging ventures of data centers and cloud services, 3) an energy business focusing on natural gas trading and upstream infrastructure (i.e., LNG terminals and logistics), and 4) public infrastructure of motorways and a deep-sea container port.

Source: Thanachart

## COMPANY RATING



### Rating Scale

<b>Excellent</b>	<b>5</b>
<b>Good</b>	<b>4</b>
<b>Fair</b>	<b>3</b>
<b>Weak</b>	<b>2</b>
<b>Very Weak</b>	<b>1</b>
<b>None</b>	<b>0</b>

Source: Thanachart; \*CG Rating

## THANACHART'S SWOT ANALYSIS

### S — Strength

- Core businesses have reached critical scale in industries that are foundational to Thailand's infrastructure.
- Key operations are supported by long-term contracts with government-backed entities.

### O — Opportunity

- More power purchase agreements, both conventional and renewable coming with the new Power Development Plan.
- GULF is an early mover into emerging data center and cloud service businesses in Thailand.

### W — Weakness

- High balance sheet gearing, though by design as the company continues to raise debts, both bank loans and domestic debentures, to support its capex cycle.
- Still relies on global partners to ramp up new businesses.

### T — Threat

- High business concentration to regulated industries in Thailand, and are thus subject to risks in regulatory changes.
- Penetration of global leading players in digital businesses in Thailand would deteriorate GULF's competitiveness.

## CONSENSUS COMPARISON

	Consensus	Thanachart	Diff
<b>Target price (Bt)</b>	61.65	56.00	-9%
<b>Net profit 25F (Bt m)</b>	60,030	26,594	-56%
<b>Net profit 26F (Bt m)</b>	29,246	32,231	10%
<b>Consensus REC</b>	<b>BUY: 20</b>	<b>HOLD: 1</b>	<b>SELL: 0</b>

## HOW ARE WE DIFFERENT FROM THE STREET?

- We expect 10% higher earnings for GULF in 2026F than the Bloomberg consensus estimate, likely because we project a higher profit contribution from ADVANC.
- However, our TP is 9% lower, likely as we take a more conservative view on GULF's long-term growth potential.

## RISKS TO OUR INVESTMENT CASE

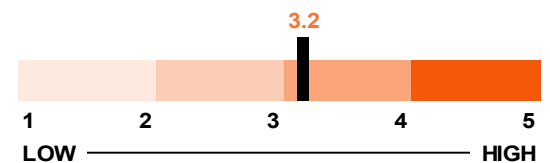
- A stronger-than-expected impact from policy risks on SPP margins is a downside risk to GULF's near-term earnings.
- A longer-than-expected development period or lower-than-expected profitability from new projects would be a downside risk to our longer-term earnings forecasts and valuations.
- Aggressive action by the Thai government in revoking or amending power purchase contracts would be a significant tail-end risk to our bullish view on GULF.
- Lower-than-expected profitability of its emerging businesses, i.e., data centers, cloud services, and natural gas infrastructure is a secondary downside risk to our valuations.

Sources: Bloomberg consensus, Thanachart estimates

Source: Thanachart

GULF's four core businesses are power generation, telecom and digital services, gas trading and infrastructure, and other infrastructure projects. We assign GULF a decent ESG score of 3.2, which reflects its large fossil-based power plant portfolio, outstanding social dimension via a strong operational performance and community services, and industry-average governance practice.

Thanachart ESG Rating



	SET ESG Index	SET ESG (BBB-AAA)	DJSI Index	MSCI (CCC-AAA)	ESG Book (0-100)	Refinitiv (0-100)	S&P Global (0-100)	Moody's (0-100)	CG Rating (0-5)
GULF	YES	AAA	-	-	-	-	66.00	-	5.0

Sources: SETTRADE, SET ESG Index, SET ESG Rating, The Dow Jones Industrial Average (DJSI), MSCI ESG Research LLC, ESG Book, Refinitiv ESG Information, S&P Global Market Intelligence, Moody's ESG Solutions, Thai IOD (CG rating)

Note: Please see third party on "terms of use" toward the back of this report.

## Factors

## Our Comments

## ENVIRONMENT

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

- We assign a moderate E score for GULF of 3.1. GULF is on a clear path to adjusting its power portfolio toward green energy, but its current fossil-fuel exposure remains large.
- GULF targets net-zero GHG emissions by 2050, ahead of the country's target of 2065. But its target of a 40% renewable power portfolio mix by 2035 is slightly behind the country's target of over 50% by 2037.
- GULF's renewable mix was 7% in 2024, but with secured PPAs to raise the portion to 33% by 2035. The majority of GULF's existing power plants are gas-fired.
- GULF is a significant water consumer, especially for its gas-fired and biomass plants. The company recycles water extensively within its processes, reclaims wastewater as steam for nearby industrial users, and shares treated water with local communities.

## SOCIAL

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

- We assign GULF a good S score of 3.7, reflecting its strong operational reliability and deep community engagement.
- GULF has demonstrated a consistent performance through 1) timely delivery of 7.5GW of gas-fired and renewable power projects, often ahead of schedule, and 2) zero unplanned plant shutdowns and zero workplace accidents reported over the past five years.
- GULF runs the Gulf SPARK program to support local communities, which includes 1) infrastructure and public utilities improvements for communities, 2) free medical services, 3) agricultural knowledge sharing initiatives, and 4) educational support and scholarships.
- GULF sizably expanded its workforce in recent years to support rapid business growth. Age and gender diversity are considered in its hiring process. GULF invests in its employees through skills development and ongoing support for health and well-being.

GOVERNANCE &  
SUSTAINABILITY

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

- We assign GULF a moderate G score of 3.1, reflecting a sound board structure with some areas for improvement.
- Its board chair is an independent member, but only six out of 12 members are independent directors, which is below the ideal 2/3 ratio.
- The skills on its board are very strong, with broad experience contributed by veterans from various industries in Thailand, although this causes some shortfall in the aging mix.
- We view GULF's business diversification into global megatrends as a strength to enhance both its business sustainability and long-term growth potential.
- We see GULF's early move in emerging sectors such as cryptocurrency, data centers, and cloud services, positioning the company to adapt well to fast-evolving industry dynamics.

Sources: Thanachart, Company data

## INCOME STATEMENT

FY ending Dec (Bt m)	2023A	2024A	2025F	2026F	2027F
Sales	114,054	120,888	155,500	158,135	160,551
Cost of sales	92,022	97,143	131,577	130,582	129,019
<b>Gross profit</b>	<b>22,033</b>	<b>23,746</b>	<b>23,923</b>	<b>27,553</b>	<b>31,532</b>
% gross margin	19.3%	19.6%	15.4%	17.4%	19.6%
Selling & administration expenses	4,096	4,207	4,712	4,806	4,878
<b>Operating profit</b>	<b>17,937</b>	<b>19,539</b>	<b>19,211</b>	<b>22,747</b>	<b>26,654</b>
% operating margin	15.7%	16.2%	12.4%	14.4%	16.6%
Depreciation & amortization	0	0	5,465	6,125	6,508
<b>EBITDA</b>	<b>17,937</b>	<b>19,539</b>	<b>24,676</b>	<b>28,872</b>	<b>33,162</b>
% EBITDA margin	15.7%	16.2%	15.9%	18.3%	20.7%
Non-operating income	2,929	3,733	6,473	6,251	6,304
Non-operating expenses	0	0	0	0	0
Interest expense	(9,819)	(11,213)	(13,049)	(13,102)	(13,354)
<b>Pre-tax profit</b>	<b>11,046</b>	<b>12,059</b>	<b>12,635</b>	<b>15,896</b>	<b>19,603</b>
Income tax	658	682	1,516	1,908	2,548
<b>After-tax profit</b>	<b>10,388</b>	<b>11,377</b>	<b>11,118</b>	<b>13,989</b>	<b>17,055</b>
% net margin	9.1%	9.4%	7.2%	8.8%	10.6%
Shares in affiliates' Earnings	11,972	15,891	20,530	23,666	25,642
Minority interests	(6,519)	(5,210)	(5,054)	(5,424)	(5,802)
Extraordinary items	2,082	(676)	0	0	0
<b>NET PROFIT</b>	<b>17,923</b>	<b>21,383</b>	<b>26,594</b>	<b>32,231</b>	<b>36,894</b>
<b>Normalized profit</b>	<b>15,841</b>	<b>22,058</b>	<b>26,594</b>	<b>32,231</b>	<b>36,894</b>
EPS (Bt)	1.2	1.4	1.8	2.2	2.5
Normalized EPS (Bt)	1.1	1.5	1.8	2.2	2.5

*Strong and sustainable  
earnings growth outlook*

## BALANCE SHEET

FY ending Dec (Bt m)	2023A	2024A	2025F	2026F	2027F
<b>ASSETS:</b>					
Current assets:	67,646	65,178	97,258	87,809	78,293
Cash & cash equivalent	36,932	33,937	56,109	46,109	36,109
Account receivables	21,165	18,778	25,562	25,995	26,392
Inventories	2,958	3,180	4,326	4,293	4,242
Others	6,592	9,284	11,261	11,412	11,550
Investments & loans	396,772	398,368	417,371	420,265	425,537
Net fixed assets	90,235	90,658	95,824	120,118	158,637
Other assets	116,475	150,066	151,541	153,030	154,534
<b>Total assets</b>	<b>671,127</b>	<b>704,271</b>	<b>761,994</b>	<b>781,222</b>	<b>817,001</b>
<b>LIABILITIES:</b>					
Current liabilities:	65,663	71,781	83,253	81,564	84,259
Account payables	9,391	6,072	10,815	10,733	10,604
Bank overdraft & ST loans	4,789	11,392	6,698	6,713	6,975
Current LT debt	37,636	44,482	49,228	49,343	51,264
Others current liabilities	13,847	9,836	16,513	14,774	15,417
<b>Total LT debt</b>	<b>240,590</b>	<b>259,230</b>	<b>278,958</b>	<b>279,611</b>	<b>290,495</b>
Others LT liabilities	9,254	11,577	14,430	14,687	14,927
<b>Total liabilities</b>	<b>315,506</b>	<b>342,587</b>	<b>376,641</b>	<b>375,862</b>	<b>389,681</b>
Minority interest	28,118	29,689	34,743	40,167	45,969
Preferreds shares	0	0	0	0	0
Paid-up capital	14,940	14,940	14,940	14,940	14,940
Share premium	185,620	185,620	185,620	185,620	185,620
Warrants	0	0	0	0	0
Surplus	1,990	1,918	1,918	1,918	1,918
<b>Retained earnings</b>	<b>124,952</b>	<b>129,516</b>	<b>148,132</b>	<b>162,715</b>	<b>178,872</b>
Shareholders' equity	327,503	331,995	350,610	365,194	381,351
<b>Liabilities &amp; equity</b>	<b>671,127</b>	<b>704,271</b>	<b>761,994</b>	<b>781,222</b>	<b>817,001</b>

*Still more debt headroom  
to support its capex cycle*

Sources: Company data, Thanachart estimates

## CASH FLOW STATEMENT

FY ending Dec (Bt m)	2023A	2024A	2025F	2026F	2027F
Earnings before tax	11,046	12,059	12,635	15,896	19,603
Tax paid	(674)	(671)	(1,506)	(1,903)	(2,549)
Depreciation & amortization	0	0	5,465	6,125	6,508
Chg In working capital	(1,656)	(1,154)	(3,187)	(482)	(474)
Chg In other CA & CL / minorities	3,628	6,241	25,219	21,773	26,146
<b>Cash flow from operations</b>	<b>12,344</b>	<b>16,476</b>	<b>38,626</b>	<b>41,408</b>	<b>49,234</b>
Capex	9,337	(423)	(10,631)	(30,418)	(45,027)
Right of use	429	(20)	(50)	(50)	(50)
ST loans & investments	(638)	(701)	0	0	0
LT loans & investments	(16,444)	(1,597)	(19,003)	(2,894)	(5,272)
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	(28,112)	(31,252)	1,428	(1,182)	(1,214)
<b>Cash flow from investments</b>	<b>(35,428)</b>	<b>(33,992)</b>	<b>(28,256)</b>	<b>(34,544)</b>	<b>(51,563)</b>
Debt financing	33,797	31,413	19,780	784	13,066
Capital increase	0	0	(0)	0	0
Dividends paid	0	0	(7,978)	(17,647)	(20,738)
Warrants & other surplus	(12,108)	(16,891)	0	0	0
<b>Cash flow from financing</b>	<b>21,689</b>	<b>14,522</b>	<b>11,802</b>	<b>(16,864)</b>	<b>(7,672)</b>
<b>Free cash flow</b>	<b>21,681</b>	<b>16,053</b>	<b>27,995</b>	<b>10,990</b>	<b>4,208</b>

*Hefty cash flow from core businesses comfortably funds new investments*

## VALUATION

FY ending Dec	2023A	2024A	2025F	2026F	2027F
Normalized PE (x)	45.3	32.5	27.0	22.2	19.4
Normalized PE - at target price (x)	52.8	37.9	31.5	26.0	22.7
PE (x)	40.0	33.5	27.0	22.2	19.4
PE - at target price (x)	46.7	39.1	31.5	26.0	22.7
EV/EBITDA (x)	53.7	51.1	40.4	34.9	31.1
EV/EBITDA - at target price (x)	60.4	57.2	45.2	39.0	34.7
P/BV (x)	2.2	2.2	2.0	2.0	1.9
P/BV - at target price (x)	2.6	2.5	2.4	2.3	2.2
P/CFO (x)	58.1	43.5	18.6	17.3	14.6
Price/sales (x)	6.3	5.9	4.6	4.5	4.5
Dividend yield (%)	0.0	0.0	2.2	2.7	3.1
FCF Yield (%)	3.0	2.2	3.9	1.5	0.6
<b>(Bt)</b>					
Normalized EPS	1.1	1.5	1.8	2.2	2.5
EPS	1.2	1.4	1.8	2.2	2.5
DPS	0.0	0.0	1.1	1.3	1.5
BV/share	21.9	22.2	23.5	24.4	25.5
CFO/share	0.8	1.1	2.6	2.8	3.3
FCF/share	1.5	1.1	1.9	0.7	0.3

S

Sources: Company data, Thanachart estimates

## FINANCIAL RATIOS

FY ending Dec	2023A	2024A	2025F	2026F	2027F
<b>Growth Rate</b>					
Sales (%)	na	6.0	28.6	1.7	1.5
Net profit (%)	na	19.3	24.4	21.2	14.5
EPS (%)	na	19.3	24.4	21.2	14.5
Normalized profit (%)	na	39.3	20.6	21.2	14.5
Normalized EPS (%)	na	39.3	20.6	21.2	14.5
Dividend payout ratio (%)	0.0	0.0	60.0	60.0	60.0
<b>Operating performance</b>					
Gross margin (%)	19.3	19.6	15.4	17.4	19.6
Operating margin (%)	15.7	16.2	12.4	14.4	16.6
EBITDA margin (%)	15.7	16.2	15.9	18.3	20.7
Net margin (%)	9.1	9.4	7.2	8.8	10.6
D/E (incl. minor) (x)	0.8	0.9	0.9	0.8	0.8
Net D/E (incl. minor) (x)	0.7	0.8	0.7	0.7	0.7
Interest coverage - EBIT (x)	1.8	1.7	1.5	1.7	2.0
Interest coverage - EBITDA (x)	1.8	1.7	1.9	2.2	2.5
ROA - using norm profit (%)	2.4	3.2	3.6	4.2	4.6
ROE - using norm profit (%)	4.9	6.7	7.8	9.0	9.9
<b>DuPont</b>					
ROE - using after tax profit (%)	3.2	3.5	3.3	3.9	4.6
- asset turnover (x)	0.2	0.2	0.2	0.2	0.2
- operating margin (%)	18.3	19.3	16.5	18.3	20.5
- leverage (x)	2.0	2.1	2.1	2.2	2.1
- interest burden (%)	52.9	51.8	49.2	54.8	59.5
- tax burden (%)	94.0	94.3	88.0	88.0	87.0
WACC (%)	10.1	10.1	10.1	10.1	10.1
ROIC (%)	3.2	3.2	2.8	3.2	3.5
NOPAT (Bt m)	16,868	18,433	16,906	20,018	23,189
invested capital (Bt m)	573,586	613,161	629,385	654,752	693,975

Sources: Company data, Thanachart estimates



## ESG Information - Third Party Terms

www.Settrade.com

**SETTRADE:** You acknowledge that the use of data, information or service displayed and/or contained in this website may require third party's data, content or software which is subject to the terms of third party provider. By accessing and/or using of such certain data, you acknowledge and agree to comply with and be bound by the applicable third party terms specified below.

ESG Scores by Third Party data from www.SETTRADE.com

1. MSCI (CCC- AAA)
2. ESG Book (0-100)
3. Refinitiv (0-100)
4. S&P Global (0-100)
5. Moody's ESG Solutions (0-100)
6. SET ESG Rating (BBB-AAA)

### SETESG Index (SETESG)

The SETESG Index reflects the price movement of stock of companies that have sustainable business practices which consider environmental, social and governance (ESG) aspect.

SET Index, SET50 Index, SET100 Index and all indices calculated by the Stock Exchange of Thailand ( "SET" ) (collectively called "SET Index Series" ) are the registered trademarks/service marks solely owned by, and proprietary to SET. Any unauthorized use of SET Index Series is strictly prohibited. All information provided is for information purposes only and no warranty is made as to its fitness for purpose, satisfactory quality or otherwise. Every effort has been made to ensure that all information given is accurate, but no responsibility or liability (including in negligence) can be accepted by SET for errors or omissions or for any losses arising from the use of this information.

### SET ESG Index (SET ESG)

Currently, long-term investment guidelines abroad are beginning to focus on investing in companies that have sustainable business practices. which considers environmental, social and governance factors (Environmental, Social and Governance or ESG) of the company in making investment decisions along with analyzing the company's financial data.

Stock Exchange Has prepared the results of evaluating sustainable stocks which are stocks of listed companies (SETESG Rating) as an alternative for investors who want to invest in stocks of listed companies that are outstanding in ESG, including to support listed companies with operations. sustainable business Taking into account all stakeholders in both social and environmental aspects. There is a management process to create sustainability for the organization, such as risk management. Supply chain management and innovation development. Therefore, the SETESG index was created to be an index that reflects the price movement of a group of securities. of companies with sustainable business operations that meet the required size and liquidity criteria

### ESG Book's Disclaimer

Arabesque S-Ray GmbH, also trading as "ESG Book", is a limited liability company (Gesellschaft mit beschränkter Haftung) incorporated in Frankfurt am Main and organised under the laws of Germany with registered number HRB 113087 in the commercial register of the local court with its seat and business address at Zeppelinallee 15, 60325 Frankfurt am Main, Germany (hereinafter "ESG Book"). ESG Book, with its UK branch and local subsidiaries, is a provider of sustainability data and advisory services and operates the sustainability data platform ESG Book. ESG Book does not offer any regulated financial services nor products. This document is provided on a confidential basis by ESG Book and is for information purposes only; accordingly, it is not a solicitation or an offer to buy any security or instrument or to participate in any trading activities nor should it be construed as a recommendation or advice on the merits of investing in any financial product. THIRD PARTY INFORMATION. Certain information contained in this document has been obtained from sources outside ESG Book. While such information is believed to be reliable for the purposes used herein, no representations are made as to the accuracy or completeness thereof and neither ESG Book nor its affiliates take any responsibility for such information. To the extent this document contains any links to third party websites, such links are provided as a convenience and for informational purposes only; they do not constitute an endorsement or an approval by ESG Book of any of the products, services or opinions of the corporations or organization or individual operating such third party websites. ESG Book bears no responsibility for the accuracy, legality or content of the external site or for that of subsequent links. RELIANCE – ESG Book makes no representation or warranty, express or implied, as to the accuracy or completeness of the information contained herein, and accepts no liability for any loss, of whatever kind, howsoever arising, in relation thereto, and nothing contained herein should be relied upon. CONFIDENTIALITY. This document contains highly confidential information regarding ESG Book's strategy and organization. Your acceptance of this document constitutes your agreement to keep confidential all the information contained in this document, as well as any information derived by you from the information contained in this document and not disclose any such information to any other person. This document may not be copied, reproduced, in any way used or disclosed or transmitted, in whole or in part, to any other person.

### MSCI ESG Research LLC

"Certain information @2021 MSCI ESG Research LLC. Reproduced by permission"

"Although [User ENTITY NAME's] information providers, including without limitation, MSCI ESG Research LLC and its affiliates (the "ESG Parties"), obtain information (the "Information") from sources they consider reliable, none of the ESG Parties warrants or guarantees the originality, accuracy and/or completeness, of any data herein and expressly disclaim all express or implied warranties, including those of merchantability and fitness for a particular purpose. The Information may only be used for your internal use, may not be reproduced or redisseminated in any form and may not be used as a basis for, or a component of, any financial instruments or products or indices. Further, none of the Information can in and of itself be used to determine which securities to buy or sell or when to buy or sell them. None of the ESG Parties shall have any liability for any errors or omissions in connection with any data herein, or any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages."

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

### S&P Global Market Intelligence

Copyright © 2021, S&P Global Market Intelligence (and its affiliates as applicable). Reproduction of any information, opinions, views, data or material, including ratings ("Content") in any form is prohibited except with the prior written permission of the relevant party. Such party, its affiliates and suppliers ("Content Providers") do not guarantee the accuracy, adequacy, completeness, timeliness or availability of any Content and are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, or for the results obtained from the use of such Content. In no event shall Content Providers be liable for any damages, costs, expenses, legal fees, or losses (including lost income or lost profit and opportunity costs) in connection with any use of the Content. A reference to a particular investment or security, a rating or any observation concerning an investment that is part of the Content is not a recommendation to buy, sell or hold such investment or security, does not address the suitability of an investment or security and should not be relied on as investment advice. Credit ratings are statements of opinions and are not statements of fact.

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

© 2022 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS,

ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES ITS PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing its Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$5,000,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at [www.moody.com](http://www.moody.com) under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

Additional terms for Hong Kong only: Any Second Party Opinion or other opinion that falls within the definition of "advising on securities" under the Hong Kong Securities and Futures Ordinance ("SFO") is issued by Vigeo Eiris Hong Kong Limited, a company licensed by the Hong Kong Securities and Futures Commission to carry out the regulated activity of advising on securities in Hong Kong. This Second Party Opinion or other opinion that falls within the definition of "advising on securities" under the SFO is intended for distribution only to "professional investors" as defined in the SFO and the Hong Kong Securities and Futures (Professional Investors) Rules. This Second Party Opinion or other opinion must not be distributed to or used by persons who are not professional investors.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY125,000 to approximately JPY550,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

Refinitiv ESG

These Terms of Use govern your access or use of the ESG information and materials on the Refinitiv website and any AI powered voice assistance software ("Refinitiv ESG Information"). 2020© Refinitiv. All rights reserved. Refinitiv ESG Information is proprietary to Refinitiv Limited and/or its affiliates ("Refinitiv").

The Refinitiv ESG Information is for general informational and non-commercial purposes only. Reproduction, redistribution or any other form of copying or transmission of the Refinitiv ESG Information is prohibited without Refinitiv's prior written consent.

All warranties, conditions and other terms implied by statute or common law including, without limitation, warranties or other terms as to suitability, merchantability, satisfactory quality and fitness for a particular purpose, are excluded to the maximum extent permitted by applicable laws. The Refinitiv ESG Information is provided "as is" and Refinitiv makes no express or implied warranties, representations or guarantees concerning the accuracy, completeness or currency of the information in this service or the underlying Third Party Sources (as defined below). You assume sole responsibility and entire risk as to the suitability and results obtained from your use of the Refinitiv ESG Information.

The Refinitiv ESG Information does not amount to financial, legal or other professional advice, nor does it constitute: (a) an offer to purchase shares in the funds referred to; or (b) a recommendation relating to the sale and purchase of instruments; or (c) a recommendation to take any particular legal, compliance and/or risk management decision. Investors should remember that past performance is not a guarantee of future results.

The Refinitiv ESG Information will not be used to construct or calculate and index or a benchmark, used to create any derivative works or used for commercial purposes. Refinitiv's disclaimer in respect of Benchmark Regulations applies to the Refinitiv ESG Information.

No responsibility or liability is accepted by Refinitiv its affiliates, officers, employees or agents (whether for negligence or otherwise) in respect of the Refinitiv ESG Information, or for any inaccuracies, omissions, mistakes, delays or errors in the computation and compilation of the Refinitiv ESG Information (and Refinitiv shall not be obliged to advise any person of any error therein). For the avoidance of doubt, in no event will Refinitiv have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) relating to any use of the Refinitiv ESG Information.

You agree to indemnify, defend and hold harmless Refinitiv from and against any claims, losses, damages, liabilities, costs and expenses, including, without limitation, reasonable legal and experts' fees and costs, as incurred, arising in any manner out of your use of, or inability to use, any Information contained on the Refinitiv web site or obtained via any AI powered voice assistance software.

You represent to us that you are lawfully able to enter into these Terms of Use. If you are accepting these Terms of Use for and on behalf of an entity such as the company you work for, you represent to us that you have legal authority to bind that entity.

By accepting these Terms of Use you are also expressly agreeing to the following Refinitiv's website Terms of Use.

Refinitiv ESG scores are derived from third party publicly available sources ("Third Party Sources") and are formulated on the basis of Refinitiv own transparent and objectively applied methodology. Refinitiv's ESG Information methodology can be accessed here.

Score range	Description	
0 to 25	First Quartile	Scores within this range indicates poor relative ESG performance and insufficient degree of transparency in reporting material ESG data publicly.
> 25 to 50	Second Quartile	Scores within this range indicates satisfactory relative ESG performance and moderate degree of transparency in reporting material ESG data publicly.
> 50 to 75	Third Quartile	Scores within this range indicates good relative ESG performance and above average degree of transparency in reporting material ESG data publicly.
> 75 to 100	Fourth Quartile	Score within this range indicates excellent relative ESG performance and high degree of transparency in reporting material ESG data publicly.

**CG Report** : by Thai Institute of Directors Association (Thai IOD), Established in December 1999, the Thai IOD is a membership organization that strives to promote professionalism in directorship. The Thai IOD offers directors certification and professional development courses, provides a variety of seminars, forums and networking events, and conducts research on board governance issues and practices. Membership comprises board members from companies ranging from large publicly listed companies to small private firms.



**General Disclaimers And Disclosures:**

This report is prepared and issued by Thanachart Securities Public Company Limited (TNS) which is owned 99.97% by TMBThanachart Bank Public Company Limited (TTB) as a resource only for clients of TNS, TMBThanachart Bank Public Company Limited (TTB) and its group companies. Copyright © Thanachart Securities Public Company Limited. All rights reserved. The report may not be reproduced in whole or in part or delivered to other persons without our written consent.

This report is prepared by analysts who are employed by the research department of TNS. While the information is from sources believed to be reliable, neither the information nor the forecasts shall be taken as a representation or warranty for which TNS or TTB or its group companies or any of their employees incur any responsibility. This report is provided to you for informational purposes only and it is not, and is not to be construed as, an offer or an invitation to make an offer to sell or buy any securities. Neither TNS, TTB nor its group companies accept any liability whatsoever for any direct or consequential loss arising from any use of this report or its contents.

The information and opinions contained herein have been compiled or arrived at from sources believed reliable. However, TNS, TTB and its group companies make no representation or warranty, express or implied, as to their accuracy or completeness. Expressions of opinion herein are subject to change without notice. The use of any information, forecasts and opinions contained in this report shall be at the sole discretion and risk of the user.

TNS, TTB and its group companies perform and seek to perform business with companies covered in this report. TNS, TTB, its group companies, their employees and directors may have positions and financial interest in securities mentioned in this report. TNS, TTB or its group companies may from time to time perform investment banking or other services for, or solicit investment banking or other business from, any entity mentioned in this report. Therefore, investors should be aware of conflict of interest that may affect the objectivity of this report.

**Disclosure of Interest of Thanachart Securities****Investment Banking Relationship**

Within the preceding 12 months, Thanachart Securities has lead-managed public offerings and/or secondary offerings (excluding straight bonds) of the securities of the following companies:

Note: Thanachart Securities Public Company Limited (TNS) acts as an underwriter of "Debentures of Srisawad Corporation Public Co. Ltd. No. 2/2025 (B.E. 2568) tranche 1-4 which its maturity at 2027-28, 2530, 2532 (B.E. 2570-71, 2573, 2575)", therefore investors need to be aware that there could be conflicts of interest in this research.

### Recommendation Structure:

Recommendations are based on absolute upside or downside, which is the difference between the target price and the current market price. If the upside is 10% or more, the recommendation is BUY. If the downside is 10% or more, the recommendation is SELL. For stocks where the upside or downside is less than 10%, the recommendation is HOLD. 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 the market price and the formal recommendation.

For sectors, an "Overweight" sector weighting is used when we have BUYs on majority of the stocks under our coverage by market cap. "Underweight" is used when we have SELLs on majority of the stocks we cover by market cap. "Neutral" is used when there are relatively equal weightings of BUYs and SELLs.

### Thanachart Securities Pcl.

Research Team

18 Floor, MBK Tower

444 Phayathai Road, Pathumwan Road, Bangkok 10330

Tel: 662 - 779-9119

Email: [thanachart.res@thanachartsec.co.th](mailto:thanachart.res@thanachartsec.co.th)

#### Pimpaka Nichgaroon, CFA

Head of Research, Strategy  
[pimpaka.nic@thanachartsec.co.th](mailto:pimpaka.nic@thanachartsec.co.th)

#### Nuttapop Prasitsuksant

Telecom, Utilities  
[nuttapop.pra@thanachartsec.co.th](mailto:nuttapop.pra@thanachartsec.co.th)

#### Rata Limsuthiwanpoom

Auto, Industrial Estate, Media, Prop. Fund  
[rata.lim@thanachartsec.co.th](mailto:rata.lim@thanachartsec.co.th)

#### Siriporn Arunothai

Small Cap, Healthcare, Hotel  
[siriporn.aru@thanachartsec.co.th](mailto:siriporn.aru@thanachartsec.co.th)

#### Sittichet Rungrassameephat

Analyst, Retail Market Strategy  
[sittichet.run@thanachartsec.co.th](mailto:sittichet.run@thanachartsec.co.th)

#### Adisak Phupiphathirungul, CFA

Retail Market Strategy  
[adisak.phu@thanachartsec.co.th](mailto:adisak.phu@thanachartsec.co.th)

#### Pattadol Bunnak

Electronics, Food & Beverage, Shipping  
[pattadol.bun@thanachartsec.co.th](mailto:pattadol.bun@thanachartsec.co.th)

#### Rawisara Suwanumphai

Bank, Finance  
[rawisara.suw@thanachartsec.co.th](mailto:rawisara.suw@thanachartsec.co.th)

#### Yupapan Polpornprasert

Energy, Petrochemical  
[yupapan.pol@thanachartsec.co.th](mailto:yupapan.pol@thanachartsec.co.th)

#### Thaloengsak Kucharoenpaisan

Analyst, Retail Market Strategy  
[thaloengsak.kuc@thanachartsec.co.th](mailto:thaloengsak.kuc@thanachartsec.co.th)

#### Pattarawan Wangmingmat

Senior Technical Analyst  
[pattarawan.wan@thanachartsec.co.th](mailto:pattarawan.wan@thanachartsec.co.th)

#### Phannarai Tiypittayarut

Property, Retail  
[phannarai.von@thanachartsec.co.th](mailto:phannarai.von@thanachartsec.co.th)

#### Saksid Phadthanarak

Construction, Transportation  
[saksid.pha@thanachartsec.co.th](mailto:saksid.pha@thanachartsec.co.th)

#### Witchanan Tambamroong

Technical Analyst  
[witchanan.tam@thanachartsec.co.th](mailto:witchanan.tam@thanachartsec.co.th)

#### Nariporn Klangpremchitt, CISA

Analyst, Retail Market Strategy  
[nariporn.kla@thanachartsec.co.th](mailto:nariporn.kla@thanachartsec.co.th)