

BUY (Unchanged)

Change in Numbers

TP: Bt 8.00 (From: Bt 9.00)

Upside : 50.9%

15 JULY 2025

Bangkok Exp. & Metro (BEM TB)

Bt20 fare a catalyst

Despite our 5% p.a. earnings cuts over 2025-27F to reflect weak ridership and traffic volume, we maintain our BUY call on BEM. We expect an earnings turnaround next year with potential upside from the government's Bt20 fare program. We value BEM at Bt8.0/share.



SAKSID PHADTHANARAK

662-779-9119

saksid.pha@thanachartsec.co.th

Cutting our TP to Bt8; maintaining BUY

Weaker-than-expected ridership and traffic volume cause us to cut our earnings estimates for BEM by 5% p.a. in 2025-27F (see Exhibit 3) and our DCF-derived SOTP-based 12-month TP (2025F base year) to Bt8.0 from Bt9.0. However, we maintain our BUY call on BEM. **First**, despite a 3% earnings contraction this year, we estimate a turnaround of 6% p.a. in 2026-27F. We also see potential upside to our numbers if the government successfully implements its Bt20 fare cap as planned in October this year. **Second**, BEM is a fundamentally strong company, in our view, with good infrastructure assets and long concession periods of 10 years for expressways and 25 years for mass-transit lines. **Third**, it now trades at the lowest PE multiples of 20-22x in 2025-27F since its listing on the SET in 2016.

Earnings turnaround next year with upside

BEM's expressway business is mature with traffic volume growth of 1-2% p.a., while its mass-transit business is still seeing ridership growth of 5-6% p.a. However, the impact of the recent earthquake, the economic downturn, and weak tourist arrivals caused its traffic volume to fall by 1.4% y-y in 1H25 and ridership to grow by only 1.5% y-y. With our view of a gradual economic recovery next year, we estimate BEM's traffic volume growth at -2/1/1% in 2025-27F and ridership growth of 0/5/5%, causing its earnings to fall by 3% y-y this year before recovering by 6% y-y p.a. in 2026-27F. We leave the implementation of the government's Bt20 fare cap plan as potential upside.

Bt20 fare cap plan

The cabinet has approved a plan to cap the fare on all mass-transit lines at Bt20 starting on 1 October 2025. BEM's Blue Line fares vary by distance at Bt17-45/trip. The government is negotiating with BEM on the fare subsidy structure, and BEM plans to ask for **1)** a 100% fare difference subsidy for its normal ridership level and **2)** a subsidy for additional operating expenses to serve additional ridership from the plan. We have yet to factor in this plan, but our earnings sensitivity indicates 10-30% ridership increases would lift earnings by 6-17% (see Exhibit 8).

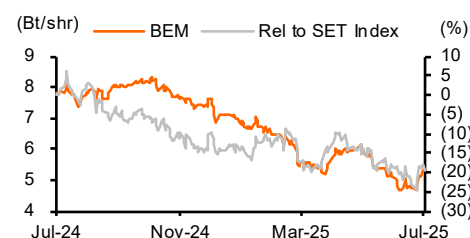
The double-deck expressway

The double-deck expressway project is still waiting for cabinet approval, and BEM expects to secure this project by next year. The investment cost is estimated at Bt35bn with a four-year construction period. In return, BEM would be awarded the concession extension for its first and second stage expressways for 22 years and five months, ending in 2058. It would also unlock its capacity constraints given the 20% additional road surface.

COMPANY VALUATION

Y/E Dec (Bt m)	2024A	2025F	2026F	2027F
Sales	17,004	17,047	17,621	18,238
Net profit	3,768	3,668	3,889	4,127
Consensus NP	—	3,956	4,216	4,403
Diff frm cons (%)	—	(7.3)	(7.7)	(6.3)
Norm profit	3,768	3,668	3,889	4,127
Prev. Norm profit	—	3,871	4,078	4,331
Chg frm prev (%)	—	(5.2)	(4.6)	(4.7)
Norm EPS (Bt)	0.2	0.2	0.3	0.3
Norm EPS grw (%)	8.3	(2.7)	6.0	6.1
Norm PE (x)	21.5	22.1	20.8	19.6
EV/EBITDA (x)	19.9	19.8	18.8	18.4
P/BV (x)	2.2	2.1	2.0	2.0
Div yield (%)	2.8	2.7	2.9	3.1
ROE (%)	10.2	9.8	10.0	10.2
Net D/E (%)	232.3	223.3	203.5	200.8

PRICE PERFORMANCE



COMPANY INFORMATION

Price as of 15-Jul-25 (Bt)	5.30
Market Cap (US\$ m)	2,500.5
Listed Shares (m shares)	15,285.0
Free Float (%)	45.5
Avg Daily Turnover (US\$ m)	7.9
12M Price H/L (Bt)	8.30/4.66
Sector	Transportation
Major Shareholder	CK Pcl 37.9%

Sources: Bloomberg, Company data, Thanachart estimates

Cutting our TP to Bt8

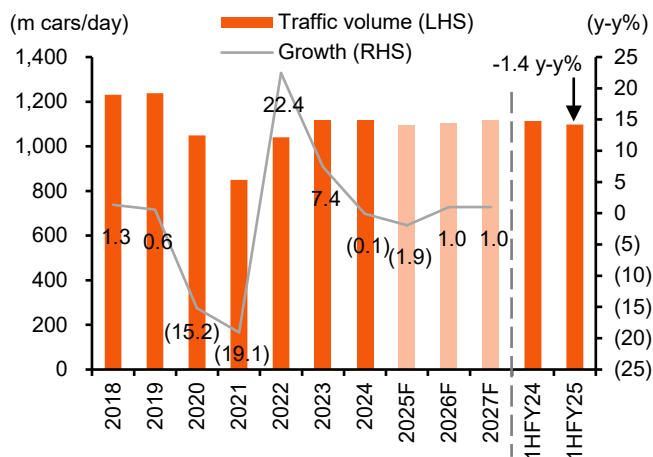
We cut BEM's earnings by 5% p.a. in 2025-27F to reflect...

Bangkok Expressway & Metro Pcl (BEM) holds concessions granted by the government to operate expressway and mass-transit businesses in Thailand. While its expressway business is reaching full capacity, its traffic volume is growing at an organic rate of 1-2% p.a. In contrast, its mass-transit business is in a growth stage with its ridership growth at 5-6% p.a. However, given the economic downturn, weak tourist arrivals, the temporary closure of some expressway entrances and exits due to the earthquake in late-March, and traffic jams due to construction near the expressways, BEM's traffic volume fell by 1.4% y-y in 1H25, and ridership grew by only 1.4% y-y. Therefore, we cut our earnings estimates by 5% p.a. in 2025-27F after making changes to our key assumptions as follows:

...weaker-than-expected traffic volume and ridership growth, and...

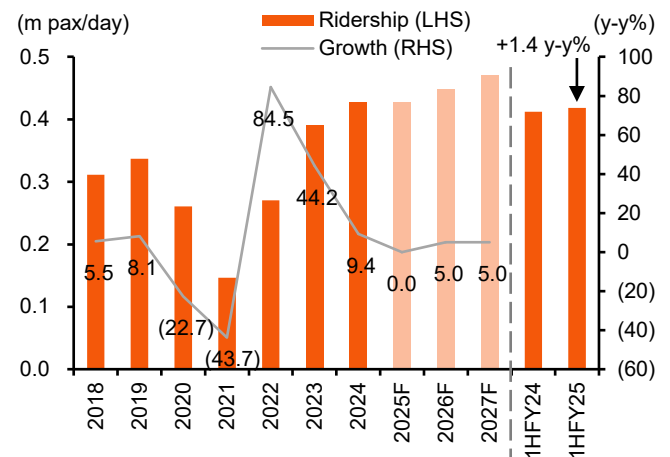
First, given the above hiccups, we cut our traffic volume growth forecast to negative 2% y-y this year and ridership growth to flat y-y. However, given our expectation of a gradual economic recovery next year, we assume growth of 1% y-y p.a. in 2026-27F for its traffic volume and 5% y-y p.a. for its ridership.

Ex 1: BEM's Traffic Volume



Sources: Company data, Thanachart estimates

Ex 2: BEM's Ridership



Sources: Company data, Thanachart estimates

...lower gross margin

Second, this causes our revenue estimates to fall by 2-3% in 2025-27F with our gross margin assumptions at 44-45%.

Our TP falls to Bt8

As a result, our DCF-derived SOTP-based 12-month TP (2025F base year) falls to Bt8.0, from Bt9.0 previously.

Ex 3: Key Assumption Changes

	2022	2023	2024	2025F	2026F	2027F
Traffic volume (000 cars/day)						
New	1,039.6	1,116.8	1,115.9	1,094.4	1,105.4	1,116.4
Old				1,104.8	1,115.8	1,127.0
Change (%)				0.9	0.9	0.9
Ridership (000 trips/day)						
New	270.6	390.3	426.9	426.9	448.2	470.7
Old				444.0	470.6	494.1
Change (%)				(3.9)	(4.8)	(4.7)
Revenue (Bt m)						
New	14,029	16,375	17,004	17,047	17,621	18,238
Old				17,463	18,092	18,738
Change (%)				(2.4)	(2.6)	(2.7)
Gross margin (%)						
New	39.8	43.1	44.1	44.2	44.2	44.5
Old				44.5	44.2	44.2
Change (ppt)				(0.3)	0.0	0.3
Normalized profit (Bt m)						
New	2,436	3,479	3,768	3,668	3,889	4,127
Old				3,871	4,078	4,279
Change (%)				(5.2)	(4.6)	(4.7)

Sources: Company data, Thanachart estimates

Ex 4: Our DCF-derived SOTP-based TP For BEM

BBG code	% holding	Our TP (Bt)	Fair value (Bt m)	15% discount (Bt m)	Share price (Bt/share)	Market value (Bt m)
TTW TB	18.5%	9.0	6,633	5,638	8.9	6,522
CKP TB	16.8%	5.0	6,837	5,811	2.5	3,473
Orange Line				7,808		
Total				19,257		9,995
Per BEM share (Bt)				1.3		0.7
Mass-transit business value (Bt)				6.6		
Our TP (Bt)				8.0		

Sources: Company data, Thanachart estimates

Maintaining our BUY call

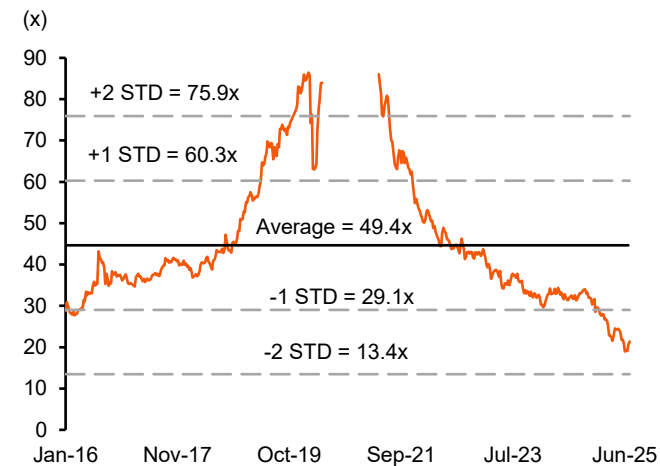
But we maintain BUY as...

Despite that, we maintain our BUY call on BEM as:

*...the bad news looks
priced in...*

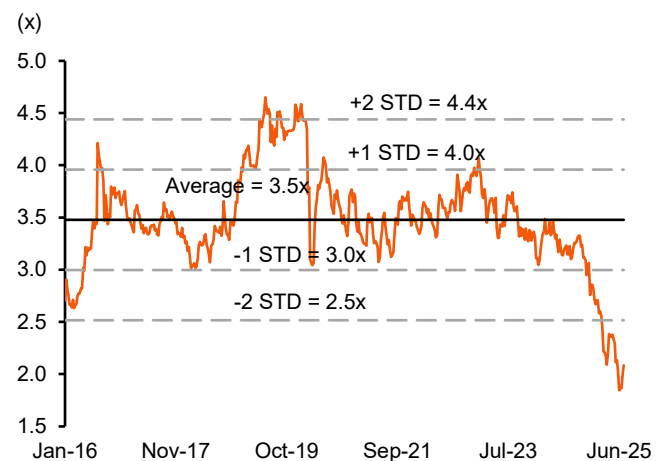
First, the 25% correction in its share price from its peak this year looks overdone to us. The shares now trade at PE multiples of 20-22x in 2025-27F and P/BV ratios of 2-2.1x, which are the lowest levels since it listed on the SET in 2016.

Ex 5: BEM's PE Standard Deviation



Sources: Bloomberg, Thanachart estimates

Ex 6: BEM's P/BV Standard Deviation

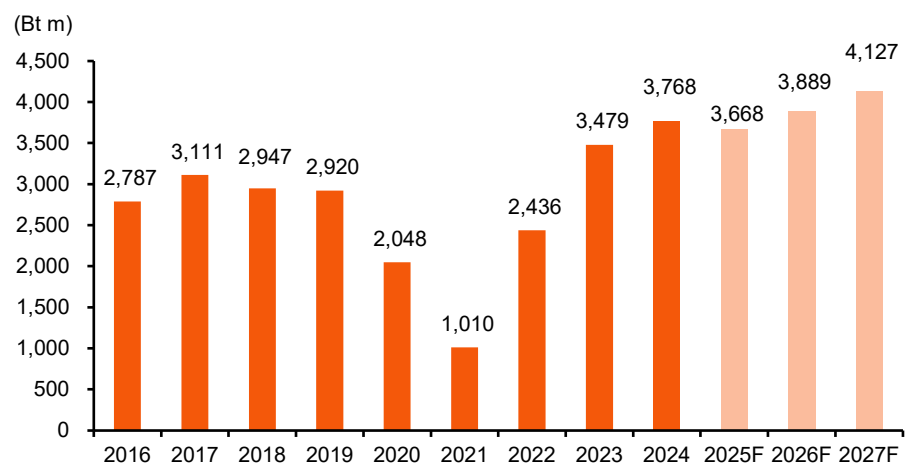


Sources: Bloomberg, Thanachart estimates

*...we expect an earnings
recovery next year...*

Second, we expect the hiccups in traffic volume and ridership this year to cause its earnings to fall by 3% y-y. However, we expect a gradual economic and tourist arrival recovery to turn around its earnings to achieve growth of 6% y-y p.a. in 2026-27F.

Ex 7: BEM's Normalized Earnings



Sources: Company data, Thanachart estimates

...we see potential earnings upside from the Bt20 fare cap implementation...

Third, we foresee potential earnings upside from the government's implementation of the Bt20 fare cap plan. Last week, the cabinet approved a cap on fares for BEM's Blue and Purple lines, BTS's Green, Gold, Yellow, and Pink lines, and the State Railway of Thailand's Airport Rail Link and Red Line at a maximum price of Bt20/trip, starting from 1 October 2025. BEM's Blue Line fares vary by distance from Bt17-45/trip. Therefore, the government is negotiating with it on the fare subsidy structure, and BEM plans to ask for **1)** a 100% fare difference subsidy for its normal ridership level and **2)** a subsidy for additional operating expenses to serve additional ridership from the plan.

We have yet to factor this plan into our model. However, if we assume **1)** the government subsidizes a 100% fare difference for BEM's normal ridership (our base case) and **2)** for additional ridership above the normal level, a fare of Bt20/trip will be shared 50:50 between BEM and the government, our earnings sensitivity indicates that 10-30% increases in ridership would lift BEM's earnings by 6-17%. Note that when the government offered free rides on buses and electric trains to combat air pollution between 25-31 January 2025, the Blue Line's ridership jumped by 34% w-w.

Ex 8: Sensitivity Analysis Of Our Earnings to Changes In Ridership

	Ridership ('000 trips/day)			Normalized profit (Bt m)			TP (Bt/share)
	2025F	2026F	2027F	2025F	2026F	2027F	
Our base case	427	448	471	3,668	3,889	4,127	8.0
BEM's guidance*	444	466	489	3,692	3,994	4,237	8.2
10% additional ridership @ Bt10 from Oct 25 onward	470	493	518	3,723	4,125	4,409	8.4
20% additional ridership @ Bt10 from Oct 25 onward	512	538	565	3,754	4,255	4,512	8.7
30% additional ridership @ Bt10 from Oct 25 onward	555	583	612	3,785	4,517	4,821	9.3

Source: Thanachart estimates

Note: * BEM expects its ridership to be 450,000-500,000 trips/day this year.

...we expect it to get the double-deck expressway project next year...

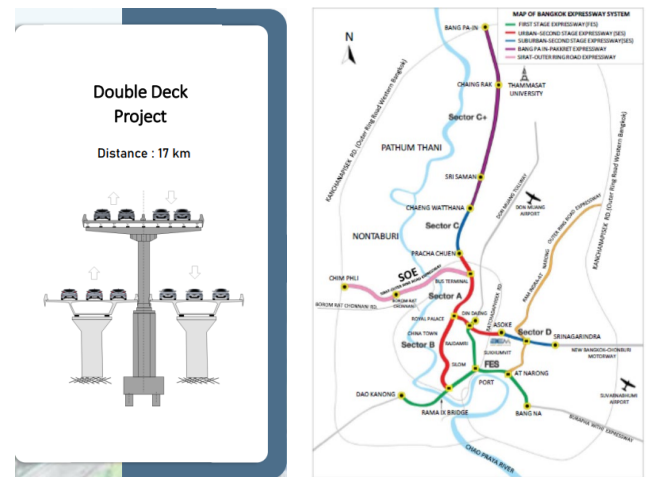
Fourth, BEM's Bt35bn double-deck expressway project is still waiting for cabinet approval. Despite lengthy delays, BEM expects to sign the contract for this project by next year. We have already factored this project into our model with assumptions of Bt35bn in capex, construction scheduled for 2026-29, and 1.5% y-y traffic volume growth from 2030F onwards (vs. its organic growth of 1% p.a.) and, most importantly, extension of the expressway's concession for 22 years and five months.

Ex 9: Bottleneck On Current Expressways



Source: Company data

Ex 10: Double-deck Expressway Project



Source: Company data

...and its fundamentals remain solid with good infrastructure assets and long concession periods

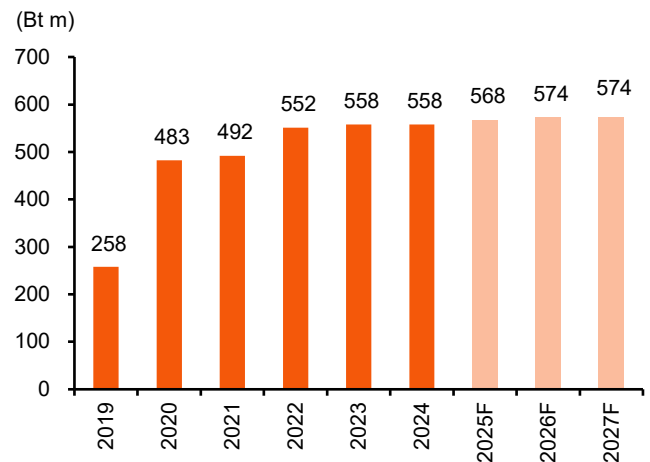
Finally, we believe BEM's fundamentals remain solid given 1) its good infrastructure assets with long concession periods of 10 years for expressways and 25 years for mass-transit lines, generating high and stable cash flow growth with EBITDA margins of over 45%, and 2) its investment portfolio with a value of Bt19bn offers dividend income of more than Bt550m a year.

Ex 11: BEM's Concession Periods

	Ending concession year	Right to renewal
Expressway: SES Sector A B C	October 2035	4 years 4 months
Expressway: SES Sector D	October 2035	10 years 11 month
Expressway: SES Sector C+	October 2035	11 years 6 months
Expressway: SOE	October 2042	—
Mass transit: Blue Line	March 2050	—
Mass transit: Purple Line	August 2043	—

Sources: Company data, Thanachart estimates

Ex 12: BEM's Dividend Income



Sources: Company data, Thanachart estimates

Valuation Comparison

Ex 13: Valuation Comparison With Regional Peers

Name	BBG Code	Country	EPS growth		— PE —		— P/BV —		EV/EBITDA		— Div Yield —	
			25F (%)	26F (%)	25F (x)	26F (x)	25F (x)	26F (x)	25F (x)	26F (x)	25F (%)	26F (%)
Guangshen Railway	601333 CH	China	(5.0)	0.5	20.9	20.9	0.8	0.7	5.8	5.7	2.3	1.7
Central Japan Railway	9022 JP	Japan	(1.2)	(0.1)	7.2	7.2	0.6	0.6	7.4	7.3	1.0	1.0
Keisei Electric Railway	9009 JP	Japan	(33.6)	7.4	13.1	12.2	1.1	1.0	14.1	13.4	1.7	2.0
MTR Corp Ltd	66 HK	Hong Kong	(1.5)	2.1	9.9	9.7	0.9	0.8	10.6	9.9	4.8	4.8
Jungfraubahn Holding	JFN SW	Switzerland	0.5	(0.5)	15.1	15.2	1.5	1.5	8.8	8.9	3.7	3.7
Jiangsu Expressway	177 HK	China	3.4	5.1	9.1	8.7	1.1	1.1	12.8	12.1	5.3	5.3
Zhejiang Expressway	576 HK	China	1.9	3.5	7.4	7.1	0.8	0.8	6.7	6.5	5.6	5.6
Anhui Expressway	995 HK	China	8.1	4.4	10.4	9.9	1.3	1.3	9.4	9.1	5.9	6.3
Jasa Marga Persero	JSMR IJ	Indonesia	(16.2)	11.4	6.9	6.2	0.7	0.6	8.2	7.5	2.8	3.0
Bangkok Express & Metro	BEM TB*	Thailand	(2.7)	6.0	22.1	20.8	2.1	2.0	19.8	18.8	2.7	2.9
BTS Group Holdings	BTS TB**	Thailand	na	51.6	66.6	43.9	0.9	0.9	55.6	44.6	0.9	1.4
Average			(4.6)	8.3	17.2	14.7	1.1	1.0	14.5	13.1	3.3	3.4

Source: Bloomberg

Note: * Thanachart estimates , using Thanachart normalized EPS

** BTS's financial year ends in March.

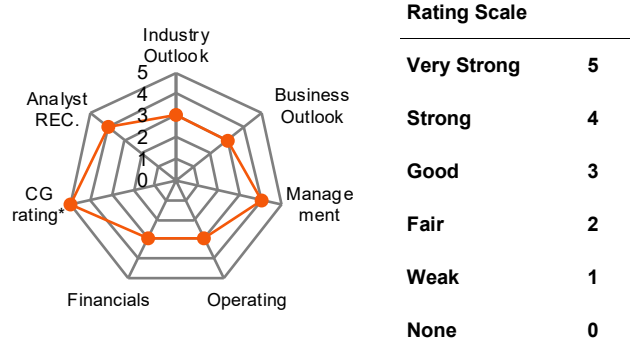
Based on 15 July 2025 closing prices

COMPANY DESCRIPTION

Bangkok Expressway and Metro Pcl is the amalgamated company between Bangkok Expressway (BECL) and Bangkok Metro (BMCL). It operates expressway and mass-transit projects in Thailand under build-transfer-operate concession contracts from the Expressway Authority of Thailand and the State Railway of Thailand.

Source: Thanachart

COMPANY RATING



Source: Thanachart; *CG Awards

THANACHART'S SWOT ANALYSIS

S — Strength

- BEM's expressways and subway go through the center of Bangkok, with secure traffic volume and ridership growth.

Its businesses generate secure and stable cash flows.

O — Opportunity

- The extensions of BEM's networks would help to feed passengers and cars into its systems.
- The government's infrastructure investments will likely create opportunities for BEM to grow.
- There are only two private companies operating mass-transit projects in Thailand at present.

W — Weakness

- BEM's revenue-generating market is limited to Bangkok.
- Its businesses are under concession contracts, thereby leading to continuity risk.

T — Threat

- The government has intervened in the past in BEM's toll and fare rate revisions even though there's a concession contract.
- Delays to the government's infrastructure investments.

CONSENSUS COMPARISON

	Consensus	Thanachart	Diff
Target price (Bt)	9.37	8.00	-15%
Norm profit 25F (Bt m)	3,956	3,668	-7%
Norm profit 26F (Bt m)	4,216	3,889	-8%
Consensus REC	BUY: 19	HOLD: 0	SELL: 0

HOW ARE WE DIFFERENT FROM THE STREET?

- Our 2025-26F earnings are 7-8% below the Bloomberg consensus numbers, which we attribute to us having more conservative traffic volume and ridership assumptions.
- Our TP is also 15% lower than the consensus number, following our lower earnings forecast.

Sources: Bloomberg consensus, Thanachart forecasts

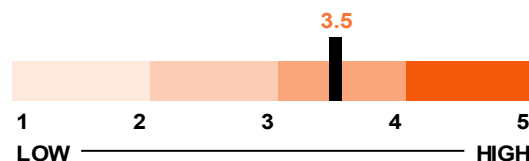
RISKS TO OUR INVESTMENT CASE

- A weaker-than-expected economy and tourist arrivals could put BEM's traffic volume and ridership under more pressure, and represents the key downside risk to our earnings forecasts.
- Government intervention in its toll and fare rate hikes could pose another downside risk to our earnings estimates.
- Higher-than-expected electricity costs present another risk to our earnings forecasts.

Source: Thanachart

BEM holds concessions granted by the government to operate the Sirat and Udon Ratthaya expressways and the Blue and Purple line mass-transit networks. It was awarded the highest “AAA” rating in the SET’s ESG ratings for 2024. Our ESG score for BEM is also good at 3.45.

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)
BEM	YES	AAA	-	BBB	58.97	42.66	52.00	-	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” in the following back page.

Factors

Our Comments

ENVIRONMENT

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

- We assign a good Environment score of 3.8 to BEM. While its expressways do not create high levels of greenhouse gases (GHG) by themselves, its mass-transit projects are electric lines. BEM also assigns importance to other ESG issues with achievement targets.
- BEM aims to achieve carbon neutrality by 2050 and net-zero GHG emissions by 2065 through various energy-saving projects such as installing solar rooftops, replacing combustion engine cars with EVs, etc. In 2024, its GHG emissions fell by 1.6% to 141,552 tCO₂e. Even though it aimed to reduce energy consumption by 4%, its electricity consumption increased by 3% in 2024 due to a higher number of passengers.
- BEM has implemented an automatic toll collection system, which results in expressway users saving travel time and fuel, while reducing traffic congestion and air pollution. It also monitors ambient air quality and noise levels around its expressway and mass-transit areas to make sure that they do not exceed the standard.
- It prioritizes pollution management in accordance with ISO14001 standards and Environmental Impact Assessment (EIA). It received the National Green Office Award at the “Excellent Level” granted by the Department of Climate Change And Environment.

SOCIAL

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

- Our Social score for BEM is also good at 3.8. BEM strictly complies with laws and human rights principles and treats employees with fairness and ensures a safe working environment.
- In 2024, its employee engagement and happiness score reached 81% with an average of 41 training hours/person/year. Given its prevention and safety control measures, its lost-time injury frequency rate for employees was 0.62 cases per 1 million hours worked, while the rate of high-consequence work-related injuries for passengers was 0 cases per 1 million passengers. Community satisfaction with community relations promotion activities was also high at 96%.
- It is certified under ISO 9001, ISO 45001, ISO 14001, and ISO 27001 standards for its service quality management.

GOVERNANCE &
SUSTAINABILITY

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

- However, we assign a Governance score of 3 to BEM to reflect its non-ideal board structure.
- The board chair is not independent. Only six of the 17-member board of directors (BOD) are independent, which is below the 2/3 ideal ratio. There are six female members.
- On the positive side, BEM has audit, nomination & remuneration, corporate governance, risk management, and sustainable development committees with independent chairs.
- BEM has decent business sustainability given its good infrastructure assets with long concession periods.

Sources: Company data, Thanachart

INCOME STATEMENT

FY ending Dec (Bt m)	2023A	2024A	2025F	2026F	2027F
Sales	16,375	17,004	17,047	17,621	18,238
Cost of sales	9,311	9,497	9,509	9,825	10,117
Gross profit	7,064	7,507	7,537	7,796	8,120
% gross margin	43.1%	44.1%	44.2%	44.2%	44.5%
Selling & administration expenses	1,241	1,261	1,278	1,322	1,368
Operating profit	5,823	6,246	6,259	6,474	6,753
% operating margin	35.6%	36.7%	36.7%	36.7%	37.0%
Depreciation & amortization	1,968	2,099	2,098	2,116	2,181
EBITDA	7,790	8,345	8,357	8,590	8,934
% EBITDA margin	47.6%	49.1%	49.0%	48.8%	49.0%
Non-operating income	764	762	810	815	799
Non-operating expenses	0	0	0	0	0
Interest expense	(2,371)	(2,427)	(2,484)	(2,428)	(2,393)
Pre-tax profit	4,216	4,581	4,585	4,861	5,159
Income tax	737	813	917	972	1,032
After-tax profit	3,479	3,768	3,668	3,889	4,127
% net margin	21.2%	22.2%	21.5%	22.1%	22.6%
Shares in affiliates' Earnings	0	0	0	0	0
Minority interests	(0)	(0)	(0)	(0)	(0)
Extraordinary items	0	0	0	0	0
NET PROFIT	3,479	3,768	3,668	3,889	4,127
Normalized profit	3,479	3,768	3,668	3,889	4,127
EPS (Bt)	0.2	0.2	0.2	0.3	0.3
Normalized EPS (Bt)	0.2	0.2	0.2	0.3	0.3

We expect BEM's earnings to recover to a record-high next year

BALANCE SHEET

FY ending Dec (Bt m)	2023A	2024A	2025F	2026F	2027F
ASSETS:					
Current assets:	5,247	5,187	5,022	5,125	5,236
Cash & cash equivalent	2,070	2,136	1,963	1,963	1,963
Account receivables	897	908	910	941	974
Inventories	0	0	0	0	0
Others	2,280	2,143	2,149	2,221	2,299
Investments & loans	11,802	11,601	11,601	11,601	11,601
Net fixed assets	76,323	82,560	81,762	80,946	86,765
Other assets	19,123	33,425	36,197	34,747	33,297
Total assets	112,496	132,773	134,582	132,419	136,898
LIABILITIES:					
Current liabilities:	15,566	19,119	19,474	18,940	19,485
Account payables	1,615	3,420	3,424	3,538	3,643
Bank overdraft & ST loans	1,000	2,600	2,590	2,465	2,537
Current LT debt	12,246	12,184	12,625	12,013	12,362
Others current liabilities	705	915	834	924	944
Total LT debt	55,057	72,294	71,543	68,074	70,053
Others LT liabilities	4,208	4,800	5,583	5,802	6,034
Total liabilities	74,832	96,212	96,601	92,816	95,572
Minority interest	2	2	2	2	2
Preferreds shares	0	0	0	0	0
Paid-up capital	15,285	15,285	15,285	15,285	15,285
Share premium	5,817	5,817	5,817	5,817	5,817
Warrants	0	0	0	0	0
Surplus	(3,241)	(5,981)	(5,981)	(5,981)	(5,981)
Retained earnings	19,801	21,438	22,859	24,481	26,203
Shareholders' equity	37,663	36,559	37,980	39,602	41,324
Liabilities & equity	112,496	132,773	134,582	132,419	136,898

Sources: Company data, Thanachart estimates

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2023A	2024A	2025F	2026F	2027F
Earnings before tax	4,216	4,581	4,585	4,861	5,159
Tax paid	(740)	(657)	(995)	(929)	(1,048)
Depreciation & amortization	1,968	2,099	2,098	2,116	2,181
Chg In working capital	(397)	1,794	2	83	72
Chg In other CA & CL / minorities	(44)	190	(8)	(25)	(42)
Cash flow from operations	5,002	8,007	5,682	6,106	6,322
Capex	(1,185)	(8,336)	(1,300)	(1,300)	(8,000)
Right of use	54	(30)	(50)	(50)	(50)
ST loans & investments	0	0	0	0	0
LT loans & investments	1,737	202	0	0	0
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	(1,056)	(13,681)	(1,939)	1,718	1,732
Cash flow from investments	(450)	(21,844)	(3,289)	368	(6,318)
Debt financing	(2,138)	18,775	(319)	(4,208)	2,400
Capital increase	0	0	0	0	0
Dividends paid	(1,834)	(2,137)	(2,247)	(2,267)	(2,405)
Warrants & other surplus	(1,244)	(2,735)	0	0	0
Cash flow from financing	(5,216)	13,903	(2,565)	(6,475)	(4)
Free cash flow	3,817	(328)	4,382	4,806	(1,678)

Capex spike in 2027F is because we assume BEM starts to invest in the double-deck expressway

VALUATION

FY ending Dec	2023A	2024A	2025F	2026F	2027F
Normalized PE (x)	23.3	21.5	22.1	20.8	19.6
Normalized PE - at target price (x)	35.1	32.5	33.3	31.4	29.6
PE (x)	23.3	21.5	22.1	20.8	19.6
PE - at target price (x)	35.1	32.5	33.3	31.4	29.6
EV/EBITDA (x)	18.9	19.9	19.8	18.8	18.4
EV/EBITDA - at target price (x)	24.2	24.8	24.8	23.6	23.0
P/BV (x)	2.2	2.2	2.1	2.0	2.0
P/BV - at target price (x)	3.2	3.3	3.2	3.1	3.0
P/CFO (x)	16.2	10.1	14.3	13.3	12.8
Price/sales (x)	4.9	4.8	4.8	4.6	4.4
Dividend yield (%)	2.6	2.8	2.7	2.9	3.1
FCF Yield (%)	4.7	(0.4)	5.4	5.9	(2.1)
(Bt)					
Normalized EPS	0.2	0.2	0.2	0.3	0.3
EPS	0.2	0.2	0.2	0.3	0.3
DPS	0.1	0.2	0.1	0.2	0.2
BV/share	2.5	2.4	2.5	2.6	2.7
CFO/share	0.3	0.5	0.4	0.4	0.4
FCF/share	0.2	(0.0)	0.3	0.3	(0.1)

Sources: Company data, Thanachart estimates

BEM's valuation looks attractive to us with PEs of 20-22x in 2025-27F

FINANCIAL RATIOS

FY ending Dec	2023A	2024A	2025F	2026F	2027F
Growth Rate					
Sales (%)	16.7	3.8	0.3	3.4	3.5
Net profit (%)	42.8	8.3	(2.7)	6.0	6.1
EPS (%)	42.8	8.3	(2.7)	6.0	6.1
Normalized profit (%)	42.8	8.3	(2.7)	6.0	6.1
Normalized EPS (%)	42.8	8.3	(2.7)	6.0	6.1
Dividend payout ratio (%)	61.5	60.9	60.0	60.0	60.0
Operating performance					
Gross margin (%)	43.1	44.1	44.2	44.2	44.5
Operating margin (%)	35.6	36.7	36.7	36.7	37.0
EBITDA margin (%)	47.6	49.1	49.0	48.8	49.0
Net margin (%)	21.2	22.2	21.5	22.1	22.6
D/E (incl. minor) (x)	1.8	2.4	2.3	2.1	2.1
Net D/E (incl. minor) (x)	1.8	2.3	2.2	2.0	2.0
Interest coverage - EBIT (x)	2.5	2.6	2.5	2.7	2.8
Interest coverage - EBITDA (x)	3.3	3.4	3.4	3.5	3.7
ROA - using norm profit (%)	3.1	3.1	2.7	2.9	3.1
ROE - using norm profit (%)	9.3	10.2	9.8	10.0	10.2
DuPont					
ROE - using after tax profit (%)	9.3	10.2	9.8	10.0	10.2
- asset turnover (x)	0.1	0.1	0.1	0.1	0.1
- operating margin (%)	40.2	41.2	41.5	41.4	41.4
- leverage (x)	3.0	3.3	3.6	3.4	3.3
- interest burden (%)	64.0	65.4	64.9	66.7	68.3
- tax burden (%)	82.5	82.2	80.0	80.0	80.0
WACC (%)	6.5	6.5	6.5	6.5	6.5
ROIC (%)	4.6	4.9	4.1	4.2	4.5
NOPAT (Bt m)	4,805	5,137	5,007	5,179	5,402
invested capital (Bt m)	103,896	121,501	122,775	120,190	124,312

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	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.

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 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.

Note: TMBThanachart Bank Public Company Limited (TTB) and Thanachart Capital Public Company Limited (TCAP) are related companies to Thanachart Securities Public Company Limited (TNS). Thanachart Securities Pcl is a subsidiary of TMBThanachart Bank Public Company Limited (TTB) which is owned more than 24% by Thanachart Capital Public Company Limited (TCAP).

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:

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

Pimpaka Nichgaroon, CFA

Head of Research, Strategy
pimpaka.nic@thanachartsec.co.th

Nuttapop Prasitsuksant

Telecom, Utilities
nuttapop.pra@thanachartsec.co.th

Rata Limsuthiwanpoom

Auto, Industrial Estate, Media, Prop. Fund
rata.lim@thanachartsec.co.th

Siriporn Arunothai

Small Cap, Healthcare, Hotel
siriporn.aru@thanachartsec.co.th

Sittichet Rungrassameephat

Analyst, Retail Market Strategy
sittichet.run@thanachartsec.co.th

Adisak Phupiphathirungul, CFA

Retail Market Strategy
adisak.phu@thanachartsec.co.th

Pattadol Bunnak

Electronics, Food & Beverage, Shipping
pattadol.bun@thanachartsec.co.th

Saksid Phadthananarak

Construction, Transportation
saksid.pha@thanachartsec.co.th

Yupapan Polpornprasert

Energy, Petrochemical
yupapan.pol@thanachartsec.co.th

Thaloengsak Kucharoenpaisan

Analyst, Retail Market Strategy
thaloengsak.kuc@thanachartsec.co.th

Pattarawan Wangmingmat

Senior Technical Analyst
pattarawan.wan@thanachartsec.co.th

Phannarai Tiypittayarut

Property, Retail
phannarai.von@thanachartsec.co.th

Sarachada Sornsong

Bank, Finance
sarachada.sor@thanachartsec.co.th

Witchanan Tambamroong

Technical Analyst
witchanan.tam@thanachartsec.co.th

Nariporn Klangpremchitt, CISA

Analyst, Retail Market Strategy
nariporn.kla@thanachartsec.co.th