Change in Numbers

Bangkok Exp. & Metro (BEM TB)

The Orange Line is on

Most legal cases against the Orange Line bidding have been exhausted and we now factor a project value of Bt0.8/share into our BEM model. We raise our TP to Bt11.8 and reaffirm our BUY call on BEM for its 17% three-year earnings CAGR in 2023-25F.

Raising our TP to Bt11.8

BEM won the Bt139bn Orange Line project in September 2022 but cabinet approval for the contract signing was delayed due to court cases. BTS Group Pcl (BTS TB, Bt7.6, BUY), another Orange Line bidder, filed lawsuits (see Exhibit 1) against the regulator, the Mass Rapid Transit Authority of Thailand (MRTA), claiming the MRTA's bidding processes were unlawful and unfair. Most of the lawsuits have now been finalized in favor of the MRTA. BEM expects the contract signing by year-end. Under the 30-year Public-Private Partnership contract, BEM will 1) run the east part of the project from 2027, 2) construct the west part, and 3) run the west part from 2030. Out of the Bt139bn, Bt92bn will be subsidized by the MRTA while the rest will be funded by BEM via loans and cash flow. Factoring in the project with our 8% IRR assumption, we raise our SOTP-derived DCF-based 12-month TP (2023F based year) to Bt11.8/share (from Bt11.0) and we reaffirm our BUY call on shares of BEM.

17% three-year earnings CAGR

We forecast BEM's earnings growth at 34% y-y this year to reach a record high of Bt3.3bn (112% of the 2019 level), and grow further by 13/6% y-y in 2024-25F, driven by **1**) its traffic volume recovery to 95/100/101% of 2019's level in 2023-25F (vs. 90% in 1Q23 and 84% in 2022), **2**) ridership growth to 120/139/147% of the 2019 level (vs. 118% in 1Q23 and 80% in 2022), and **3**) operating leverage benefits. This is despite a fall in its dividend income to Bt343m-429m in 2023-25F (vs. Bt552m in 2022) given a drop in earnings of its 18%-owned TTW Pcl (TTW TB, Bt8.65, SELL) and 17%-owned CK Power Pcl (CKP TB, Bt4.0, BUY).

Two more high-potential projects

BEM also expects to operate two more high-potential projects, the Bt35bn double-deck expressway and Bt25bn operation & maintenance work for the South Purple Line Extension, as they are expansions of its existing projects. The double-deck expressway is now under EIA study, while civil construction for the South Purple Line is underway. We have already assumed BEM gets the double-deck expressway deal in 2025F, allowing it to extend its expressway concession for 15 more years while we have yet to factor in the Purple Line Extension.

High gearing is not a concern to us

We are not concerned about BEM's net D/E ratio of 1.6x this year (vs. its debt covenant ratio of 2.5x) since **1**) given the government's infrastructure projects, BEM should easily be able to find funding sources, **2**) some investments will be subsidized by the government, **3**) the investment period will be spread out over four to six years, and **4**) we expect BEM to generate EBITDA of Bt7bn-10bn a year.



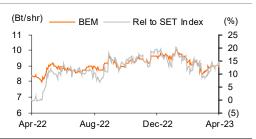
SAKSID PHADTHANANARAK

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COMPANY VALUATION

-				
Y/E Dec (Bt m)	2022A	2023F	2024F	2025F
Sales	14,029	16,551	17,795	18,448
Net profit	2,436	3,271	3,695	3,924
Norm profit	2,436	3,271	3,695	3,924
Consensus NP		3,735	4,368	4,287
Diff frm <i>cons (%)</i>		(12.4)	(15.4)	(8.5)
Prev. Norm profit	_	3,264	3,692	3,918
Chg frm prev (%)		0.2	0.1	0.1
Norm EPS (Bt)	0.2	0.2	0.2	0.3
Norm EPS grw (%)	141.2	34.3	12.9	6.2
Norm PE (x)	55.8	41.6	36.8	34.7
EV/EBITDA (x)	33.9	27.7	23.9	22.4
P/BV (x)	3.7	3.4	3.2	3.0
Div yield (%)	0.4	0.6	0.7	0.7
ROE (%)	6.5	8.5	9.0	8.9
Net D/E (%)	181.7	156.8	134.7	127.2

PRICE PERFORMANCE



COMPANY INFORMATION

Price as of 20-Apr-23 (Bt)	8.90
Market Cap (US\$ m)	3,956.3
Listed Shares (m shares)	15,285.0
Free Float (%)	53.7
Avg Daily Turnover (US\$ m)	14.1
12M Price H/L (Bt)	10.00/7.95
Sector	Transportation
Major Shareholder	CK Pcl 32.4%

Sources: Bloomberg, Company data, Thanachart estimates

ESG Summary Report P9

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Raising our TP to Bt11.8/share

Factoring in the Orange Line project, our TP is raised to Bt11.8 Even though the Mass Rapid Transit Authority of Thailand (MRTA) announced that Bangkok Expressway and Metro Pcl (BEM) was the lowest bidder for the West Orange Line project in September 2022, the contract signing was delayed because of lawsuits between BTS Group Pcl (BTS TB, Bt7.6, BUY) and the MRTA claiming unfair bidding competition (see Exhibit 1). However, as most of the lawsuits have been dismissed by the courts, we now assume BEM signs the contract by year-end. Factoring in the project with an 8% IRR, we lift our SOTP-derived DCF-based 12-month TP (2023F based year) to Bt11.8/share from Bt11.0 and reaffirm our BUY call on shares of BEM.

Ex 1: BTS's Major Lawsuits Against MRTA

	Lawsuits	Court's ruling
1)	(Black Case No. 2280/2563) BTS sued the MRTA and its bidding committee in the Central Administrative Court for unlawfully changing the terms of the first TOR and claimed compensation.	 The Supreme Court ruled in favor of the MRTA and its bidding committee, saying that that they were empowered by the PPP Act to change the TOR for the bidding.
2)	(Black Case No. 580/2564) BTS sued the MRTA and its bidding committee in the Central Administrative Court for unlawfully cancelling the first round of the bid.	 The Supreme Court ruled in favor of the MRTA and its bidding committee saying that they were empowered by the PPP Act to cancel the first round of the bid.
3)	(Black Case No. ୩୩.30/2564) BTS filed a lawsuit with the Central Criminal Court for Corruption and Misconduct Cases against the MRTA's bidding committee for illegally amending the terms of the first TOR and cancelling the first round of the bid.	 The Central Criminal Court ruled in favor of the MRTA's bidding committee, saying that that they were empowered by the PPP Act to change the TOR and cancel the bid. BTS is appealing the ruling.
4)	(Black Case No. 1646/2565) BTS sued the MRTA and its bidding committee in the Central Administrative Court for preventing BTS from participating in the second round of the bid.	- The case is now under court consideration.

Sources: Company data, BTS Group, Thanachart compilation

Out of Bt139bn investment cost, Bt92bn will be subsidized by the MRTA

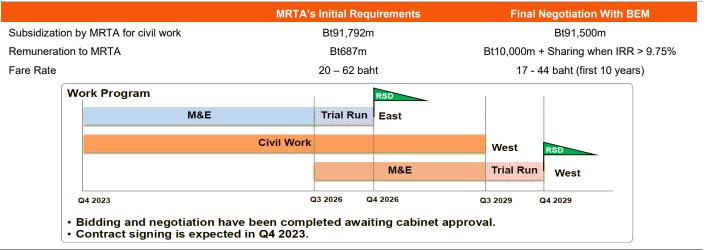
Under the 30-year Public-Private Partnership contract with MRTA, BEM has to **1**) install the mechanical and electrical (M&E) system for the east part of the Orange Line, **2**) construct the civil work and install the M&E system for the west part of the Orange Line, and **3**) operate the trains for the whole Orange Line network. The total investment cost is Bt139bn, out of which Bt92bn will be subsidized by MRTA for the civil work and the rest will be funded by BEM. In return, BEM has the exclusive right to collect passenger fares and earn income from commercial developments on the project.

Eas

Ex 2: Details of The Orange Line Project

	ORL (West)	ORL (East)		
	Bang Khun Non - Thailand Cultural Centre	Thailand Cultural Center - Suwinthawong		
Distance	13.4 km	22.5 km		
Stations	11 underground stations	10 underground and 7 elevated stations		
Concession type	PPP Net Cost 30 year	from RSD of ORL East		
Estimated ridership	120,000 - 450),000 trips/day		
Expected RSD	2029	2026		
Fare rate	20 - 62 baht (adjusted	with CPI every 2 years)		

Ex 3: Bidding Results of The Orange Line Project



Source: Company data

17% three-year earnings CAGR

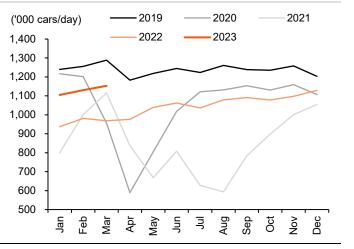
We estimate a 17% earnings CAGR in 2023-25F, driven by...

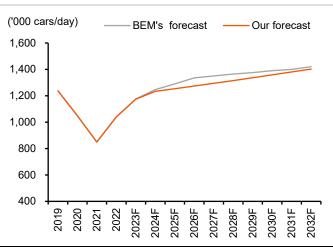
...a traffic volume

recovery ...

We estimate BEM's normalized earnings growth at 34/13/6% y-y in 2023-25F, driven by the following assumptions:

First, we assume its traffic volume recovers to 95/100/101% of the pre-COVID 2019 level in 2023-25F, compared to 90% in 1Q23 and 84% in 2022.





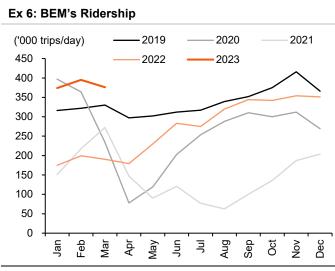
Ex 5: BEM's Traffic Volume Forecasts Vs. Our Forecasts

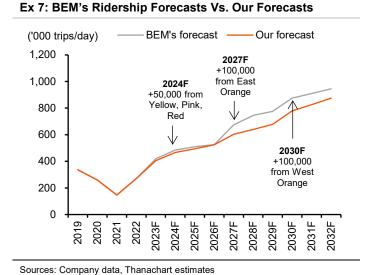
Source: Company data

Sources: Company data, Thanachart estimates

...strong ridership growth...

Second, we expect its ridership to reach 120/139/147% of the pre-COVID 2019 level in 2023-25F, compared with 118% in 1Q23 and 80% in 2022.





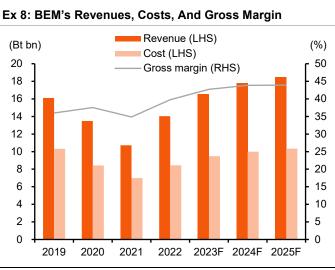
Ex 4: BEM's Traffic Volume

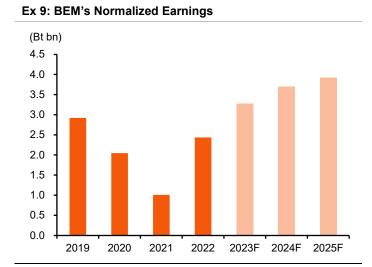
Source: Company data

...operating leverage benefits

Third, we estimate operating leverage benefits to drive its gross margin to 43-44% in 2023-25F, compared with 40% in 2022.

Finally, we project a fall in its dividend income to Bt343m-429m in 2023-25F from Bt552m in 2022 as we forecast a fall in its 18%-owned TTW Pcl's (TTW TB, Bt8.65, SELL) earnings due to the end of its concession at the Pathum Thani Water Co., Ltd. (PTW) plant and 17%-owned CK Power Pcl's (CKP TB, Bt4.0, BUY) earnings because of a drop in electricity output due to lower water flow.





Sources: Company data, Thanachart estimates

Sources: Company data, Thanachart estimates

Ex 10: Future Project: Double-deck Expressway

	Project des	cription	N Ngam Wong Wan	
Distance	15 km		Pracha Choun St	
Carriagew ay	- 4 lanes (2 la	anes in each direction)		
	- Connecting	to SES with 7 entrances and exit	ts	
Concession yype	PPP Net Cost		Proge Trail	
Construction period	4 Years		Double Dack Asola	Double Deck
Investment	Bt35,000m		Entrances	Existing Expressway Existing Express
Work Program		1		
EIA Study (EXA	(Τ)			
Negotiation &	PPP Process	Construct	lion	
Q4 2022	Q3 2023	Q2 2024	Q2 2028	

- Negotiation between EXAT and BEM is ongoing.
- PPP Process is expected to conclude in Q2 2024.

Source: Company data

Ex 11: Future Project: Purple Line Extension

			Table Rong Ya	
		<u>PL (North)</u> Tao Poon – Klong Bang Pai	<u>PL (South)</u> Tao Poon – Rat Burana	Tan Fran
Distance		23 km	23.6 km	Parlament House
Station		16 elevated stations	10 underground and 7 elevated stations	Vigio Physion Video Ubray
Concession		PPP Gross Cost	PPP Gross Cost	Barg Nhun Phrom
Expected RS	D	In operation	2027	
	Civil		101,112 MB	O Sam Kod
Project Investment M&E		Invested by MRTA	25,000 MB	2
	Total		126,112 MB	Mencrial Bidge
Vork Program	ı			Due Navery Charles Control UNI
		Civil Work under construction by MR	TA	Not huse the
PPP Process		M&E		Trial Run
4 2022		Q3 2024	Q3 20	027 Q4 2027

Source: Company data

Ex 12: Our SOTP-derived DCF-based Valuation Of BEM

Sum-of-the-parts	% holding	(Bt m)
Enterprise value		221,894
Orange Line project		6,294
Investment equity value		13,819
TTW	18.47%	6,264
СКР	16.82%	7,555
Total enterprise value		242,006
(Less) Net debt (as at end-2022)		(62,449)
(Less) Minority interest		(2)
Total equity value		179,555
# of shares (fully diluted) (m shares)		15,285
Sum-of-the-parts		11.8

Source: Thanachart estimates

Valuation Comparison

Ex 13: Valuation Comparison With Regional Peers

			EPS	growth	—— P	'E ——	— P	/BV —	EV/E	BITDA	— Div Y	ield —
Name	BBG Code	Country	23F	24F	23F	24F	23F	24F	23F	24F	23F	24F
			(%)	(%)	(x)	(x)	(x)	(x)	(x)	(x)	(%)	(%)
Guangshen Railway	601333 CH	China	na	237.4	na	31.3	0.7	0.7	9.0	7.2	0.9	1.8
Central Japan Railway	9022 JP	Japan	na	45.9	18.0	12.3	0.9	0.8	10.9	8.7	0.8	0.8
Keisei Electric Railway	9009 JP	Japan	na	21.2	29.6	24.4	2.0	1.9	29.4	22.6	0.4	0.4
MTR Corp Ltd	66 HK	Hong Kong	10.1	79.7	22.1	12.3	1.3	1.2	17.7	13.2	3.5	3.6
Jungfraubahn Holding	JFN SW	Switzerland	na	9.1	20.1	18.4	1.4	1.3	10.4	9.7	2.4	2.2
Jiangsu Expressway	177 HK	China	26.3	14.6	7.4	6.5	1.0	0.9	9.9	9.2	6.9	7.2
Shenzhen Expressway	548 HK	China	na	7.3	5.5	5.2	0.7	0.6	8.9	8.4	9.5	9.8
Zhejiang Expressway	576 HK	China	46.1	7.8	5.2	4.8	0.8	0.7	3.6	3.6	6.7	7.1
Anhui Expressway	995 HK	China	na	10.2	6.5	5.9	0.9	0.9	5.2	4.9	9.7	10.7
Jasa Marga Persero	JSMR IJ	Indonesia	na	28.0	11.1	8.6	0.9	0.9	7.4	6.5	2.4	1.9
Bangkok Express & Metro	BEM TB*	Thailand	34.3	12.9	41.6	36.8	3.4	3.2	27.7	23.9	0.6	0.7
BTS Group Holdings	BTS TB*	Thailand	(26.1)	(6.0)	49.2	52.3	1.6	1.6	58.5	33.8	1.2	1.1
Average			18.1	39.0	19.7	18.2	1.3	1.2	16.6	12.6	3.8	3.9

Source: Bloomberg

Note: * Thanachart estimates , using Thanachart normalized $\ensuremath{\mathsf{EPS}}$

** BTS's FY22 financial year ends in March 2022. Its first forecast year is FY23F.

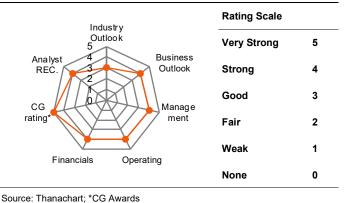
Based on 20-Apr-23 closing prices

BEM

COMPANY DESCRIPTION

Bangkok Expressway and Metro PcI is the amalgamated company between Bangkok Expressway (BECL TB) and Bangkok Metro (BMCL TB). 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.

COMPANY RATING



Source: Thanachart

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.

0 — 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.

CONSENSUS COMPARISON

	Consensus	Thanachart	Diff
Target price (Bt)	10.91	11.80	8%
Norm profit 23F (Bt m)	3,735	3,271	-12%
Norm profit 24F (Bt m)	4,368	3,695	-15%
Consensus REC	BUY: 16	HOLD: 3	SELL: 0

HOW ARE WE DIFFERENT FROM THE STREET?

- Our 2023-24F earnings are 12-15% below the Bloomberg consensus numbers, which we attribute to us being more conservative on BEM's traffic volume and ridership recovery.
- However, our TP is 8% higher than the consensus number, likely due to us factoring the Orange Line project into our model.

Sources: Bloomberg consensus, Thanachart forecasts

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.

RISKS TO OUR INVESTMENT CASE

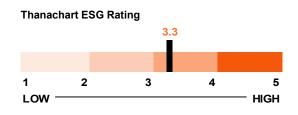
- A re-emergence of COVID-19 could again put BEM's traffic volume and ridership under pressure, leading to downside risk to our earnings forecasts.
- Continued higher electricity costs present another risk to our earnings forecasts.
- Government intervention in its toll and fare rate hikes could pose another downside risk to our earnings estimates.

Source: Thanachart

Sector: Services | Transportation & Logistics

Bangkok Expressway and Metro (BEM) holds concessions granted by the government to operate the Si Rat and Udon Ratthaya expressways and the Blue and Purple line masstransit networks. Our ESG score for BEM is relatively high at 3.3 given its eco-friendly public transport systems. It also assigns importance to ESG issues with measurements in many areas.





	SETTHSI Index	THSI Index	DJSI Index	MSCI (CCC-AAA)	Arabesque S-Ray (0-100)	Refinitiv (0-100)	S&P Global (0-100)	Moody's (0-100)	CG Rating (0-5)
BEM	YES	YES	-	В	51.25	42.82	14.01	-	5.0

Sources: SETTRADE, SETTHSI Index, Thailand Sustainability Investment (THSI), The Dow Jones Industrial Average (DJSI), MSCI ESG Research LLC, Arabesque S-Ray®, Refinitiv ESG Information, S&P Global Market Intelligence, Moody's ESG Solutions, Thai IOD (CG rating) Note: Please see third party on "term of use" in the following back page.

Factors	Our Comments
 ENVIRONMENT Environmental Policies & Guidelines Energy Management Carbon Management Water Management Waste Management 	 While BEM's expressways do not create high levels of greenhouse gases (GHG) by themselves, its two mass-transit projects are electric lines. BEM also assigns importance to other ESG issues with achievement targets. BEM has installed solar cells and replaced fluorescent bulbs with LED bulbs at its control centers, depots, and stations, resulting in around 15% lower electricity consumption in 2021. It uses automatic toll collection lanes which result in expressway users saving travel time and fuel, thereby reducing traffic concession and air pollution. It monitors ambient air quality and noise levels around its expressway and mass-transit areas to make sure that they do not exceed the standard under the National Environment Board's notifications. BEM has obtained certifications of the ISO 14001 Environmental Management System and the National Green Office Award at the "Good Level".
 SOCIAL Human Rights Staff Management Health & Safety Product Safety & Quality Social Responsibility 	 BEM believes it strictly complies with laws and human rights principles to treat all employees with fairness and ensure a safe working environment. In 2021, it provided training courses for its staff with an average of 37 hours per person per year, compared to its target of 30 hours. Given its prevention and safety control measures, it had just seven work-related accidents on its expressways without leading to the loss of life of any staff and only two work-related accidents for its metro service. It has obtained certifications of the ISO 9001 Quality Management System and ISO 45001 Occupational Wealth and Safety Management System. BEM's CSR activities have been organized via many activities such as the MRT Children's Day, Computer for Children, and the Healthy Journey with BEM projects.
GOVERNANCE & SUSTAINABILITY - Board - Ethics & Transparency - Business Sustainability - Risk Management - Innovation	 The board of directors (BOD) comprises 16 individuals which we consider an appropriate level for the size and scope of its business. Of the 16 members, six are independent directors and four are women. However, the chairman is not an independent director. BEM has nominated EY Company Limited as the auditor of the group. It was rated with the "Excellent CG Scoring" by the Thai Institute of Directors Association and selected as one of 146 listed companies on the Thailand Sustainability Investment 2021 by the SET. BEM has developed the Geographic Information System, Advanced Traffic Management System, and EMV Toll Payment System to keep expressway service standards at an appropriate level.

Sources: Company data, Thanachart

INCOME STATEMENT 2021A 2022A 2023F FY ending Dec (Btm) 2024F 2025F Sales 10,727 14,029 16,551 17,795 18,448 Cost of sales 9,478 10,345 6,990 8,447 9,991 8,103 **Gross profit** 3,737 5,582 7,073 7,804 42.7% 43.9% 43.9% % gross margin 34.8% 39.8% 1,476 Selling & administration expenses 1,160 1,160 1,324 1,424 **Operating profit** 2,577 4,423 5,749 6,380 6,627 % operating margin 24.0% 31.5% 34.7% 35.9% 35.9% Depreciation & amortization 1,706 2,050 1,129 1,589 1,408 EBITDA 3,706 6,012 7,157 8,086 8,677 % EBITDA margin 34.5% 42.9% 43.2% 45.4% 47.0% Non-operating income 755 772 702 541 526 Non-operating expenses 0 0 0 0 0 (2,361) (2,303)Interest expense (2, 187)(2, 362)(2,249)2,834 4,089 4,618 4,905 Pre-tax profit 1,145 818 924 981 Income tax 134 398 After-tax profit 1,011 2,436 3,271 3,695 3,924 9.4% 17.4% 19.8% 20.8% 21.3% % net margin Shares in affiliates' Earnings 0 0 0 0 0 (0) (0) Minority interests (1) (0) (0) Extraordinary items 0 0 0 0 0 NET PROFIT 1,010 2,436 3,271 3,695 3,924 Normalized profit 1,010 2,436 3,271 3,695 3,924 EPS (Bt) 0.3 0.1 0.2 0.2 0.2 Normalized EPS (Bt) 0.1 0.2 0.2 0.2 0.3 **BALANCE SHEET**

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
ASSETS:					
Current assets:	4,541	5,566	4,811	5,027	5,140
Cash & cash equivalent	1,897	2,735	1,947	1,947	1,947
Account receivables	473	648	764	822	852
Inventories	0	0	0	0	0
Others	2,170	2,183	2,100	2,258	2,341
Investments & loans	16,030	13,539	13,539	13,539	13,539
Net fixed assets	77,289	77,106	76,998	76,592	81,842
Other assets	17,228	17,918	16,468	15,018	13,568
Total assets	115,088	114,128	111,816	110,175	114,088
LIABILITIES:					
Current liabilities:	10,645	12,092	12,486	11,872	12,102
Account payables	1,492	1,763	1,978	2,085	2,159
Bank overdraft & ST loans	2,000	0	0	0	0
Current LT debt	6,544	9,673	9,659	8,913	9,000
Others current liabilities	609	656	848	875	943
Total LT debt	62,667	60,768	54,737	50,505	51,000
Others LT liabilities	4,077	4,005	4,758	5,139	5,355
Total liabilities	77,390	76,865	71,980	67,516	68,458
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	(101)	(1,820)	(1,820)	(1,820)	(1,820)
Retained earnings	16,697	17,980	20,551	23,375	26,347
Shareholders' equity	37,697	37,262	39,834	42,658	45,629
Liabilities & equity	115,088	114,128	111,816	110,175	114,088

Sources: Company data, Thanachart estimates

We expect record-high

earnings this year

BEM debts are high but that is because of its investment cycle Capex rise in 2025F is because we assume BEM starts to invest in the double-deck expressway

Earnings before tax	1,145	2,834	4,089	4,618	4,905
Tax paid	(148)	(414)	(801)	(929)	(976)
Depreciation & amortization	1,129	1,589	1,408	1,706	2,050
Chg In w orking capital	(177)	96	99	50	44
Chg In other CA & CL / minorities	(98)	51	259	(126)	(19)
Cash flow from operations	1,851	4,156	5,054	5,318	6,003
Сарех	(2,033)	(1,406)	(1,300)	(1,300)	(7,300)
Right of use	(53)	(32)	(50)	(50)	(50)
ST loans & investments	0	0	0	0	0
LT loans & investments	(69)	2,491	0	0	0
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	(993)	(730)	2,253	1,881	1,717
Cash flow from investments	(3,148)	323	903	531	(5,633)
Debt financing	2,123	(770)	(6,045)	(4,978)	582
Capital increase	0	0	0	0	0
Dividends paid	(1,529)	(1,223)	(700)	(871)	(952)
Warrants & other surplus	224	(1,649)	0	0	0
Cash flow from financing	819	(3,641)	(6,745)	(5,849)	(370)
Free cash flow	(181)	2,750	3,754	4,018	(1,297)
VALUATION EX ending Dec	2021A	2022A	2023F	2024F	2025E
FY ending Dec	2021A	2022A	<mark>2023F</mark> 41.6	2024F	2025F
FY ending Dec Normalized PE (x)	134.7	55.8	41.6	36.8	34.7
FY ending Dec Normalized PE (x) Normalized PE - at target price (x)	134.7 178.6	55.8 74.0	41.6 55.1	36.8 48.8	34.7 46.0
FY ending Dec Normalized PE (x) Normalized PE - at target price (x) PE (x)	134.7 178.6 134.7	55.8 74.0 55.8	41.6 55.1 41.6	36.8 48.8 36.8	34.7 46.0 34.7
FY ending Dec Normalized PE (x) Normalized PE - at target price (x) PE (x) PE - at target price (x)	134.7 178.6 134.7 178.6	55.8 74.0 55.8 74.0	41.6 55.1 41.6 55.1	36.8 48.8 36.8 48.8	34.7 46.0 34.7 46.0
FY ending Dec Normalized PE (x) Normalized PE - at target price (x) PE (x) PE - at target price (x) EV/EBITDA (x)	134.7 178.6 134.7 178.6 55.4	55.8 74.0 55.8 74.0 33.9	41.6 55.1 41.6 55.1 27.7	36.8 48.8 36.8 48.8 23.9	34.7 46.0 34.7 46.0 22.4
FY ending Dec Normalized PE (x) Normalized PE - at target price (x) PE (x) PE - at target price (x) EV/EBITDA (x) EV/EBITDA - at target price (x)	134.7 178.6 134.7 178.6 55.4 67.4	55.8 74.0 55.8 74.0 33.9 41.3	41.6 55.1 41.6 55.1 27.7 33.9	36.8 48.8 36.8 48.8 23.9 29.4	34.7 46.0 34.7 46.0 22.4 27.5
FY ending Dec Normalized PE (x) Normalized PE - at target price (x) PE (x) PE - at target price (x) EV/EBITDA (x) EV/EBITDA - at target price (x) P/BV (x)	134.7 178.6 134.7 178.6 55.4 67.4 3.6	55.8 74.0 55.8 74.0 33.9 41.3 3.7	41.6 55.1 41.6 55.1 27.7 33.9 3.4	36.8 48.8 36.8 48.8 23.9 29.4 3.2	34.7 46.0 34.7 46.0 22.4 27.5 3.0
FY ending Dec Normalized PE (x) Normalized PE - at target price (x) PE (x) PE - at target price (x) EV/EBITDA (x) EV/EBITDA - at target price (x) P/BV (x) P/BV - at target price (x)	134.7 178.6 134.7 178.6 55.4 67.4 3.6 4.8	55.8 74.0 55.8 74.0 33.9 41.3 3.7 4.8	41.6 55.1 41.6 55.1 27.7 33.9 3.4 4.5	36.8 48.8 36.8 48.8 23.9 29.4 3.2 4.2	34.7 46.0 34.7 46.0 22.4 27.5 3.0 4.0
FY ending Dec Normalized PE (x) Normalized PE - at target price (x) PE (x) PE - at target price (x) EV/EBITDA (x) EV/EBITDA - at target price (x) P/BV (x) P/BV - at target price (x) P/CFO (x)	134.7 178.6 134.7 178.6 55.4 67.4 3.6 4.8 73.5	55.8 74.0 55.8 74.0 33.9 41.3 3.7 4.8 32.7	41.6 55.1 41.6 55.1 27.7 33.9 3.4 4.5 26.9	36.8 48.8 36.8 48.8 23.9 29.4 3.2 4.2 25.6	34.7 46.0 34.7 46.0 22.4 27.5 3.0 4.0 22.7
FY ending Dec Normalized PE (x) Normalized PE - at target price (x) PE (x) PE - at target price (x) EV/EBITDA (x) EV/EBITDA - at target price (x) P/BV (x) P/BV - at target price (x) P/CFO (x) Price/sales (x)	134.7 178.6 134.7 178.6 55.4 67.4 3.6 4.8 73.5 12.7	55.8 74.0 55.8 74.0 33.9 41.3 3.7 4.8 32.7 9.7	41.6 55.1 41.6 55.1 27.7 33.9 3.4 4.5 26.9 8.2	36.8 48.8 36.8 48.8 23.9 29.4 3.2 4.2 25.6 7.6	34.7 46.0 34.7 46.0 22.4 27.5 3.0 4.0 22.7 7.4
FY ending Dec Normalized PE (x) Normalized PE - at target price (x) PE (x) PE - at target price (x) EV/EBITDA (x) EV/EBITDA - at target price (x) P/BV (x) P/BV - at target price (x) P/CFO (x) Price/sales (x) Dividend yield (%)	134.7 178.6 134.7 178.6 55.4 67.4 3.6 4.8 73.5 12.7 0.9	55.8 74.0 55.8 74.0 33.9 41.3 3.7 4.8 32.7 9.7 0.4	41.6 55.1 41.6 55.1 27.7 33.9 3.4 4.5 26.9 8.2 0.6	36.8 48.8 36.8 48.8 23.9 29.4 3.2 4.2 25.6 7.6 0.7	34.7 46.0 34.7 46.0 22.4 27.5 3.0 4.0 22.7 7.4 0.7
FY ending Dec Normalized PE (x) Normalized PE - at target price (x) PE (x) PE - at target price (x) EV/EBITDA (x) EV/EBITDA - at target price (x) P/BV (x) P/BV - at target price (x) P/CFO (x) Price/sales (x)	134.7 178.6 134.7 178.6 55.4 67.4 3.6 4.8 73.5 12.7	55.8 74.0 55.8 74.0 33.9 41.3 3.7 4.8 32.7 9.7	41.6 55.1 41.6 55.1 27.7 33.9 3.4 4.5 26.9 8.2	36.8 48.8 36.8 48.8 23.9 29.4 3.2 4.2 25.6 7.6	34.7 46.0 34.7 46.0 22.4 27.5 3.0 4.0 22.7 7.4
FY ending Dec Normalized PE (x) Normalized PE - at target price (x) PE (x) PE - at target price (x) EV/EBITDA (x) EV/EBITDA - at target price (x) P/BV (x) P/BV - at target price (x) P/CFO (x) Price/sales (x) Dividend yield (%) FCF Yield (%)	134.7 178.6 134.7 178.6 55.4 67.4 3.6 4.8 73.5 12.7 0.9 (0.1)	55.8 74.0 55.8 74.0 33.9 41.3 3.7 4.8 32.7 9.7 0.4 2.0	41.6 55.1 41.6 55.1 27.7 33.9 3.4 4.5 26.9 8.2 0.6 2.8	36.8 48.8 36.8 48.8 23.9 29.4 3.2 4.2 25.6 7.6 0.7 3.0	34.7 46.0 34.7 46.0 22.4 27.5 3.0 4.0 22.7 7.4 0.7 (1.0)
FY ending Dec Normalized PE (x) Normalized PE - at target price (x) PE (x) PE - at target price (x) EV/EBITDA (x) EV/EBITDA - at target price (x) P/BV (x) P/BV - at target price (x) P/CFO (x) Price/sales (x) Dividend yield (%) FCF Yield (%)	134.7 178.6 134.7 178.6 55.4 67.4 3.6 4.8 73.5 12.7 0.9	55.8 74.0 55.8 74.0 33.9 41.3 3.7 4.8 32.7 9.7 0.4	41.6 55.1 41.6 55.1 27.7 33.9 3.4 4.5 26.9 8.2 0.6	36.8 48.8 36.8 48.8 23.9 29.4 3.2 4.2 25.6 7.6 0.7	34.7 46.0 34.7 46.0 22.4 27.5 3.0 4.0 22.7 7.4 0.7

0.1

2.5

0.1

(0.0)

0.0

2.4

0.3

0.2

0.1

2.6

0.3

0.2

0.1

2.8

0.3

0.3

0.1

3.0

0.4

(0.1)

We believe BEM deserves a premium valuation given its strong earnings recovery and many potential projects

Sources: Company data, Thanachart estimates

DPS

BV/share

CFO/share

FCF/share

2025F

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2024F

. . . .

CASH FLOW STATEMENT FY ending Dec (Bt m)

BEM

2021A

. . . -

2022A

. . . .

2023F

. . . .

FINANCIAL RATIOS					
FY ending Dec	2021A	2022A	2023F	2024F	2025F
Growth Rate					
Sales (%)	(20.5)	30.8	18.0	7.5	3.7
Net profit (%)	(50.8)	141.2	34.3	12.9	6.2
EPS (%)	(50.8)	141.2	34.3	12.9	6.2
Normalized profit (%)	(50.7)	141.2	34.3	12.9	6.2
Normalized EPS (%)	(50.7)	141.2	34.3	12.9	6.2
Dividend payout ratio (%)	121.1	23.9	25.0	25.0	25.0
Operating performance					
Gross margin (%)	34.8	39.8	42.7	43.9	43.9
Operating margin (%)	24.0	31.5	34.7	35.9	35.9
EBITDA margin (%)	34.5	42.9	43.2	45.4	47.0
Net margin (%)	9.4	17.4	19.8	20.8	21.3
D/E (incl. minor) (x)	1.9	1.9	1.6	1.4	1.3
Net D/E(incl. minor)(x)	1.8	1.8	1.6	1.3	1.3
Interest coverage - EBIT (x)	1.2	1.9	2.4	2.8	2.9
Interest coverage - EBITDA (x)	1.7	2.5	3.0	3.5	3.9
ROA - using norm profit (%)	0.9	2.1	2.9	3.3	3.5
ROE - using norm profit (%)	2.7	6.5	8.5	9.0	8.9
DuPont					
ROE - using after tax profit (%)	2.7	6.5	8.5	9.0	8.9
- asset turnover (x)	0.1	0.1	0.1	0.2	0.2
- operating margin (%)	31.1	37.0	39.0	38.9	38.8
- leverage (x)	3.0	3.1	2.9	2.7	2.5
- interest burden (%)	34.4	54.6	63.4	66.7	68.6
- tax burden (%)	88.3	86.0	80.0	80.0	80.0
WACC (%)	#N/A	5.7	5.7	5.7	5.7
ROIC (%)	2.2	3.6	4.4	5.0	5.3
NOPAT (Bt m)	2,276	3,802	4,599	5,104	5,302
invested capital (Bt m)	107,011	104,968	102,283	100,128	103,682

Sources: Company data, Thanachart estimates

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

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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
$\Delta \Delta = \Delta \Delta \Delta$	LEADER: A company leading its industry in managing the most significant ESC risks and opportunities

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

Moody's ESG Solutions

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90-100		Execellent
80-89		Very Good
70-79		Good
60-69		Satisfactory
50-59	<u> </u>	Pass
Below		N/A

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