

# BANGKOK EXPRESSWAY AND METRO PLC

No. 48/2021  
1 April 2021

## CORPORATES

Company Rating:	A-
Issue Ratings:	
Senior unsecured	A-
Outlook:	Stable

Last Review Date: 28/05/20

### Company Rating History:

Date	Rating	Outlook/Alert
28/05/20	A	Negative
05/04/16	A	Stable

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## RATIONALE

TRIS Rating downgrades the company rating on Bangkok Expressway and Metro PLC (BEM) and the issue ratings on BEM's outstanding senior unsecured debentures to "A-" from "A", and revises the rating outlook to "stable" from "negative". At the same time, TRIS Rating assigns the rating of "A-" with a "stable" outlook to BEM's proposed issue of up to THB6 billion in senior unsecured debentures. The proceeds from the new debentures will be used for refinancing its debt coming due.

The rating actions reflect our view on BEM's weakening financial profile. BEM has a high level of debt while its operating cash flow has been materially impacted by the COVID-19 outbreak, particularly cash flow from the fully operating mass rapid transit (MRT) Blue Line. As earnings from the MRT Blue Line will likely take time to ramp up, BEM's leverage is expected to stay elevated with an adjusted debt to EBITDA ratio of over 7 times over the next few years. Such a level of leverage is not commensurate with an "A" rating.

However, over the longer term, we hold the view that BEM's business profile remains strong with a portfolio of quality concessional assets, strong and steady operating cash flow from its expressway operation, and growth prospects of the MRT operation.

## KEY RATING CONSIDERATIONS

### The impact of COVID-19 on revenue and earnings

We expect the resurgence of COVID-19 infection cases in late 2020 to have lingering impacts on the expressways traffic volume and the ridership volume of the MRT Blue Line this year. Despite the expectation of the expressways traffic volume to recover quickly, following the pattern witnessed last year, we expect it to take another 1-2 years for the MRT Blue Line ridership number to reach the target of 500-600 thousand trips per day, the level that BEM initially expected from the full operation of the MRT Blue Line prior to the disruption from the COVID-19 outbreak.

BEM reported a 16% year-on-year (y-o-y) drop in revenue to THB13.5 billion in 2020, from THB16.1 billion in 2019. While the toll revenue and farebox revenue declined, its operating expenses rose materially as the extension parts of the MRT Blue Line were in full operation. As a result, BEM's earnings before interest, tax, depreciation, and amortization (EBITDA) plummeted by 50% to THB4 billion, from THB8 billion in 2019. EBITDA margin dropped to 29.5% in 2020 from nearly 50% in 2019.

Our base-case forecast projects BEM's revenue to be around THB15 billion in 2021 and improve to THB18-THB20 billion per annum during 2022-2023. EBITDA margin is forecast to be around 30% in 2021 and 38%-40% in 2022-2023. These are expected to translate to EBITDA of around THB4.5 billion in 2021 and THB6.8-THB8 billion annually in 2022-2023. Funds from operations (FFO) is forecast to be at least THB2.2 billion in 2021 and THB4.2-THB5.3 billion annually in 2022-2023. BEM's earnings upside will be driven mainly by the ridership numbers of its MRT Blue Line.

### Ridership volume takes longer time than traffic volume to rebound

The COVID-19 outbreak has affected train ridership volume more than expressways traffic volume. Average daily ridership of the MRT Blue Line dropped by 23% y-o-y to 260 thousand trips in 2020, and by 52% y-o-y to 183

thousand trips in the first two months of 2021. Daily revenue also declined by the same magnitude. Our baseline forecast projects the average daily ridership of the MRT Blue Line to be around 300 thousand trips in 2021 as the pandemic situation is still far from settling and travel restrictions are likely to remain in place until late 2021. We forecast that ridership will improve materially to an average of 450-550 thousand trips per day in 2022-2023 when vaccines have been widely distributed, and daily activities and tourism resume to pre-COVID levels.

The expressways traffic volume has been less affected by the resurgence of COVID-19 cases. Daily traffic volume in the first two months of 2021 declined 26% y-o-y, averaging 0.89 million trips per day. Our base-case forecast assumes an average daily traffic volume of 1.14-1.2 million trips per day in 2021-2022, before returning to the normal level of over 1.2 million trips per day in 2023.

### **Leverage to stay elevated**

We expect BEM's leverage will stay elevated over the next few years. BEM's adjusted debts peaked at around THB59.5 billion in 2020 following the completion of the MRT Blue Line extension. The adjusted debts exclude THB8.6 billion debt of MRT Purple Line since this debt is backed by an agreement with the Mass Rapid Transit Authority of Thailand (MRTA) which stipulates that the debt will be paid back by MRTA in 10 years. With the sharp decline in earnings, BEM's adjusted debt to EBITDA ratio spiked to 14.9 times in 2020, compared to 7 times in 2019. The adjusted ratio of FFO to debt was 2.8% in 2020, compared to 8% in 2019.

We project the company's capital spending to be around THB3 billion in 2021 and THB0.4-THB0.6 billion annually in 2022-2023, with its adjusted debt to EBITDA ratio to stay elevated over 10 times during 2021 before improving to around 8-9.5 times in 2022-2023. The adjusted ratio of FFO to debt is projected to be 3%-4% in 2021 and improve to 6%-8% during 2022-2023.

The leverage ratio could further rise if BEM needs to invest in the MRT Orange Line or Double Deck Expressway. At the "A-" rating, BEM has some headroom for temporary spikes in the leverage ratio. However, in the longer horizon, the company should maintain the ratio of adjusted debt to EBITDA at around 10 times.

### **Liquidity to be manageable**

We expect BEM's liquidity to be manageable over the next 12 months, considering its sources and uses of funds. The primary funding needs are scheduled debt repayments of approximately THB9.9 billion, capital spending of around THB3 billion, and dividend payments of THB1.5 billion. Primary sources of funds are FFO of at least THB2.2 billion, plus cash and cash equivalents of THB1.6 billion at the end of 2020, and THB6 billion from issuance of debentures. BEM will need to refinance some of its debts. Considering its presence in the capital market and relationships with banks, we believe that BEM should have no problems refinancing its debts. In addition, BEM has some financial flexibility from its significant equity investments in TTW PLC and CK Power PLC. The combined market value of these two investments was THB15.9 billion as of 26 March 2021.

### **Strong business profile**

BEM has a strong business profile. Its main lines of business in expressways and mass transit operation are protected by high barriers to entry. There are only a few operators in Thailand that have the capability and the required capital to bid for the construction and operation of expressways or rail mass transit.

BEM's solid business profile is also underpinned by its record of steady and stable earnings in expressways operation, thanks to the strategic location of the Second Stage Expressway (SES) which is connected to the First Stage Expressway (FES). The recent extension of the SES and the Bang Pa-In - Pak Kret Expressway (Sector C+) concessions will help BEM secure steady cash flows in the long term.

BEM is well positioned to capitalize growth opportunities in mass transit operation, given the government policies to promote an integrated mass transit network. As an experienced and well-equipped operator, BEM is in an advantageous position to win future concessions. Furthermore, the strategic advantage of the MRT Blue Line as a circle line, allows it to collect feed-in traffic from other rail mass transit lines.

### **BASE-CASE ASSUMPTIONS**

- Revenue to be THB15 billion in 2021 and improve to THB18-THB20 billion per annum during 2022-2023.
- EBITDA margin is forecast to be around 30% in 2021 and 38%-40% in 2022-2023.
- EBITDA of around THB4.5 billion in 2021 and THB6.8-THB8 billion annually in 2022-2023.
- Capital spending to be THB3 billion in 2021 and about THB0.4-THB0.6 billion annually in 2022-2023.

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**RATING OUTLOOK**

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The “stable” outlook reflects our expectation that BEM’s business profile will remain strong with operating cash flows from both the expressways and the MRT businesses, and the level of debt in accordance with our baseline forecast.

**RATING SENSITIVITIES**

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The rating could be upgraded if BEM’s operating performance and financial metrics improve materially such that the adjusted debt to EBITDA stays below 7 times for a sustained period. The ratings could be under downward pressure if BEM’s financial metrics further weaken either from prolonged deteriorating operating performance or a sizable debt-funded investment such that its adjusted debt to EBITDA stays considerably above 10 times over a sustained period.

**COMPANY OVERVIEW**

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BEM was established on 30 December 2015 through the amalgamation of Bangkok Expressway PLC (BECL) and Bangkok Metro PLC (BMCL). BEM was listed on the Stock Exchange of Thailand (SET) on 5 January 2016. As of March 2021, BEM’s major shareholder was CH. Karnchang PLC (CK) with 31.32% of outstanding shares.

BEM has three main lines of business: constructing and operating expressways, providing mass rapid transit service, and engaging in the commercial development related to its expressway and mass transit networks. In 2020, BEM reported revenue of THB13.5 billion, of which 60% was from the expressway segment, 34% from the mass transit segment, and 6% from the commercial development segment.

BEM built and operates the elevated Si Rat Expressway (the Second Stage Expressway System – or SES), the Udon Rattaya Expressway (Bang Pa In - Pak Kret Expressway, known as Sector C+), and the Sirat - Outer Ring Road Expressway (SOE). All the expressways are operated under 30-year Build-Transfer-Operate (BTO) concessions awarded by the Expressway Authority of Thailand (EXAT). Due to the contract amendment in February 2020, the concessions for SES Sector A, B, C, D, and Sector C+ have been extended to expire in October 2035, while the concession for SOE will still expire in December 2042.

In March 2017, BEM entered into a new MRT Blue Line concession agreement with the MRTA. The new MRT Blue Line concession covers the MRT Initial Blue Line project (Hua Lamphong - Bang Sue Section) which has been operated since 2004 and the MRT Blue Line Extension project (Hua Lamphong - Bang Khae Section and Bang Sue - Tha Phra Section) which just been fully operated in March 2020. The new concession will end in 2050. The MRT Blue Line concession is on a Public-Private Partnership (PPP) Net Cost agreement basis with BEM holding the rights to collect fare box revenue, undertake commercial development activities, and bear the risk of ridership.

BEM also operates the MRT Chalong Ratchadham Line (Purple Line) under a 30-year concession on a PPP Gross Cost scheme basis. Under this type of basis, the MRTA paid for all the civil works while BEM advanced the investment in the M&E systems and the rolling stock. The MRTA gradually repays the cost of the M&E equipment to BEM in 10 years after BEM delivered and transferred ownership of the M&E equipment to the MRTA. BEM provides operation and maintenance (O&M) services to the MRTA until the concession ends in 2043. In return, BEM receives service revenue on a cost-plus basis. BEM does not take the risk of ridership under the Gross Cost scheme basis.

**KEY OPERATING PERFORMANCE**

**Table 1: Revenue Breakdown**

Revenue (Unit: Mil THB)	2015	2016	2017	2018	2019	2020
Toll road	8,815	9,301	9,957	10,174	10,302	8,145
Mass transit	2,374	3,230	4,521	4,736	5,022	4,520
Commercial development	549	573	675	705	783	825
<b>Total</b>	<b>11,738</b>	<b>13,104</b>	<b>15,153</b>	<b>15,615</b>	<b>16,107</b>	<b>13,490</b>

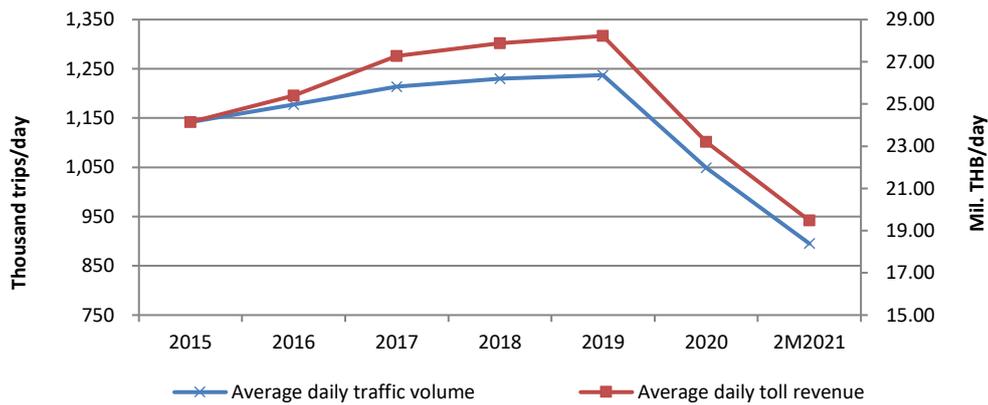
Contribution	2015	2016	2017	2018	2019	2020
Toll road	75%	71%	66%	65%	64%	60%
Mass transit	20%	25%	30%	30%	31%	34%
Commercial development	5%	4%	4%	5%	5%	6%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Change	2015	2016	2017	2018	2019	2020
Toll road	4%	6%	7%	2%	1%	-21%
Mass transit	6%	36%	40%	5%	6%	-10%
Commercial development	10%	4%	18%	4%	11%	5%
<b>Total</b>	<b>4%</b>	<b>12%</b>	<b>16%</b>	<b>3%</b>	<b>3%</b>	<b>-16%</b>

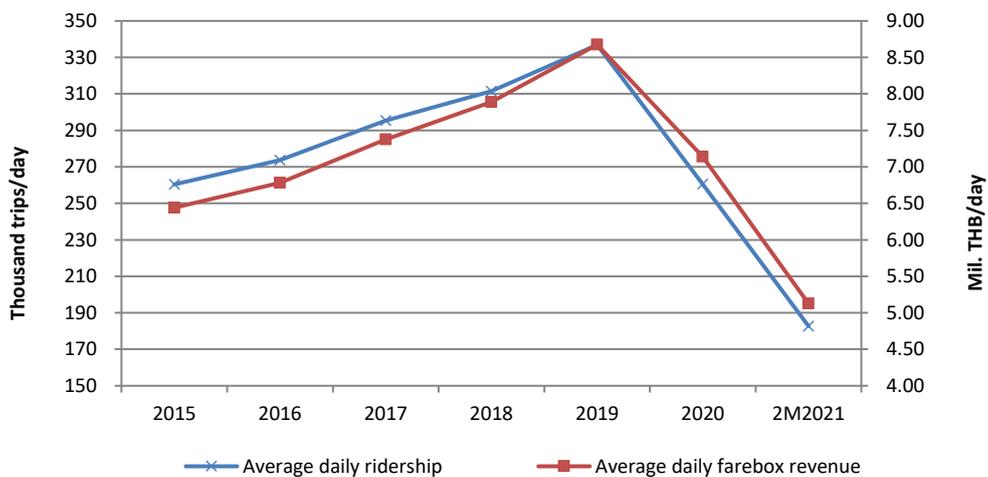
Source: BEM

**Chart 1: Average Daily Traffic Volume and Revenue**



Source: BEM

**Chart 2: Average Daily Ridership and Farebox Revenue**



Source: BEM

**FINANCIAL STATISTICS AND KEY FINANCIAL RATIOS**
*Unit: Mil. THB*

	-----Year Ended 31 December -----				
	2020	2019	2018	2017	2016
Total operating revenues	13,540	16,163	15,641	15,206	13,134
Earnings before interest and taxes (EBIT)	2,075	3,475	3,978	4,466	3,919
Earnings before interest, taxes, depreciation, and amortization (EBITDA)	3,994	7,971	8,387	8,670	8,052
Funds from operations (FFO)	1,672	4,479	5,572	6,419	5,748
Adjusted interest expense	1,940	1,738	1,625	1,556	1,740
Capital expenditures	4,089	8,018	10,484	8,265	7,086
Total assets	113,616	111,697	103,831	98,919	82,786
Adjusted debt	59,516	55,758	51,674	48,128	46,600
Adjusted equity	38,034	38,823	35,612	31,179	29,783
<b>Adjusted Ratios</b>					
EBITDA margin (%)	29.50	49.32	53.62	57.02	61.30
Pretax return on permanent capital (%)	2.12	3.76	4.63	5.42	5.01
EBITDA interest coverage (times)	2.06	4.59	5.16	5.57	4.63
Debt to EBITDA (times)	14.90	7.00	6.16	5.55	5.79
FFO to debt (%)	2.81	8.03	10.78	13.34	12.34
Debt to capitalization (%)	61.01	58.95	59.20	60.69	61.01

**RELATED CRITERIA**

- Rating Methodology – Corporate, 26 July 2019
- Key Financial Ratios and Adjustments, 5 September 2018

**Bangkok Expressway and Metro PLC (BEM)**

**Company Rating:**

A-

**Issue Ratings:**

BEM214A: THB3,000 million senior unsecured debentures due 2021	A-
BEM216A: THB1,615 million senior unsecured debentures due 2021	A-
BEM225A: THB1,000 million senior unsecured debentures due 2022	A-
BEM229A: THB2,000 million senior unsecured debentures due 2022	A-
BEM234A: THB3,500 million senior unsecured debentures due 2023	A-
BEM236A: THB2,000 million senior unsecured debentures due 2023	A-
BEM245A: THB2,000 million senior unsecured debentures due 2024	A-
BEM246A: THB1,000 million senior unsecured debentures due 2024	A-
BEM249A: THB3,000 million senior unsecured debentures due 2024	A-
BEM254A: THB3,500 million senior unsecured debentures due 2025	A-
BEM250A: THB2,500 million senior unsecured debentures due 2025	A-
BEM265A: THB1,000 million senior unsecured debentures due 2026	A-
BEM266A: THB3,335 million senior unsecured debentures due 2026	A-
BEM270A: THB3,000 million senior unsecured debentures due 2027	A-
BEM286A: THB2,750 million senior unsecured debentures due 2028	A-
BEM286B: THB500 million senior unsecured debentures due 2028	A-
BEM295A: THB1,000 million senior unsecured debentures due 2029	A-
BEM306A: THB1,300 million senior unsecured debentures due 2030	A-
BEM326A: THB700 million senior unsecured debentures due 2032	A-
Up to THB6,000 million senior unsecured debentures due within 12 years	A-

**Rating Outlook:**

Stable

**TRIS Rating Co., Ltd.**

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