

BANGKOK EXPRESSWAY AND METRO

THAILAND / TRANSPORT & LOGISTICS

แนวโน้มที่ดีรออยู่ข้างหน้า

- เราคาดว่ากำไร 4Q22 ของ BEM จะโต 57% y-y เป็น 643 ลบ. จากปริมาณจราจรบนทางด่วนและตัวเลขผู้โดยสารรถไฟฟ้าที่ฟื้นตัวที่ดี
- เราคาดว่าปริมาณจราจร และตัวเลขผู้โดยสาร จะโตต่อในปี 2023
- คงแนะนำซื้อที่ราคาเป้าหมายใหม่ที่ 11.5 บาทหลังรวมรถไฟฟ้าสายสีส้มไว้ในการประเมินมูลค่าของเรา (SoTP)

คาดการเติบโต y-y ที่ดีใน 4Q22

เราคาดว่ารายได้ 4Q22 ของ BEM จะโตมาอยู่ที่ 3.9 พัน ลบ. (+4% q-q, +27% y-y) จากการฟื้นตัวอย่างต่อเนื่องของปริมาณจราจร (+3% q-q, +14% y-y) และตัวเลขผู้โดยสาร (+12% q-q, +99% y-y) ในด้านต้นทุนเราคาดว่าต้นทุนจะเพิ่มอย่างต่อเนื่องตามปริมาณจราจร และตัวเลขผู้โดยสาร ที่ปรับตัวดีขึ้น การกลับมาของค่าเชื้อมบำรุงและค่าไฟฟ้าที่เพิ่มขึ้นน่าจะเป็นปัจจัยที่สำคัญที่สุด นอกจากนี้ยังมีต้นทุนภาระคุกคามในช่วง 4Q ด้วยเหตุผลดังกล่าวคาดว่ากำไรสุทธิ 4Q22 จะปรับตัวดีขึ้นอย่างมีนัยสำคัญ y-y เป็น 643 ลบ. (-26% q-q, +57% y-y) หมายเหตุบริษัทฯ จะไม่มีรายได้เงินบันดาลใน 4Q22 ซึ่งจะต่างไปจากใน 3Q22

จากปีที่ดีสู่ปีที่ยอดเยี่ยม

ปริมาณจราจร และตัวเลขผู้โดยสาร น่าจะยังฟื้นตัวดีในอนาคต ในเดือน ธ.ค. 22 ปริมาณจราจร พื้นตัวเป็น 91% เมื่อเทียบกับระดับก่อนโควิดในปี 2019 ซึ่งนับเป็นปริมาณจราจรที่สูงที่สุดในรอบ 2 ปี ในขณะที่ตัวเลขผู้โดยสาร ใน 4Q22 ก็เป็นตัวเลขรายไตรมาสที่สูงที่สุดในรอบ 3 ปี เรายังเชื่อว่าปริมาณจราจร ในปี 2023 น่าจะฟื้นตัวเป็นกว่า 95% ของระดับก่อนโควิด และตัวเลขผู้โดยสาร น่าจะแปรระดับสูงสุดตลอดกาลที่ 4 แสนเที่ยวต่อวันเทียบกับผู้โดยสารเพียง 2.71 แสนเที่ยวต่อวันในปี 2022

BEM น่าจะได้สัมปทานรถไฟฟ้าสายสีส้มภายใน 1Q23

แม้ว่าจะยังไม่เข้าคิบหน้าว่า ครม. จะอนุมัติและให้สัมปทานรถไฟฟ้าสายสีส้ม (OL) แก่ BEM เมื่อใด เราเชื่อว่าโครงการดังกล่าวจะได้รับการอนุมัติก่อน ครม. จะหมดอายุในปลาย 1Q23 มีฉะนั้นการตัดสินใจดังกล่าวอาจเลื่อนไปปีงวด 2H23 เนื่องจากต้องรอจับบาลใหม่ซึ่งอาจทำให้ค่าเชื้อมบำรุงเพิ่มขึ้น หมายเหตุโครงการ OL ซึ่งก่อตั้งมาเป็นกว่าปีแล้ว

คงแนะนำซื้อที่ราคาเป้าหมายใหม่ที่ 11.5 บาท

รวมโครงการ OL ไว้ในประมาณการของเรา (SoTP) โดยประเมินมูลค่าได้ที่ 1.70 บาท/หุ้น ด้วยเหตุผลดังกล่าวคาดว่าราคาเป้าหมายใหม่ของเรานี้อยู่ที่ 11.5 บาท คาดว่าดังกล่าวประกอบด้วยมูลค่าของธุรกิจหลัก 9.8 บาทรวม 1.7 บาทจาก OL เราคงแนะนำซื้อ BEM เป็นหุ้นเด่นของเรานี้ เนื่องจากคาดว่าบริษัทฯ จะรายงานตัวเลขผู้โดยสารที่ฟื้นตัวดีต่อเนื่องซึ่งอาจช่วยหนุนกำไรให้เพิ่ม 64% ในปี 2023

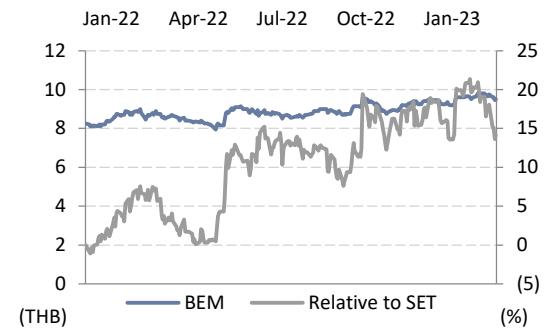
BEM TB

BUY
UNCHANGED

| | |
|-----------------|----------|
| TARGET PRICE | THB11.50 |
| CLOSE | THB9.50 |
| UP/DOWNSIDE | +21.1% |
| PRIOR TP | THB9.90 |
| CHANGE IN TP | +16.2% |
| TP vs CONSENSUS | +5.1% |

KEY STOCK DATA

| YE Dec (THB m) | 2021 | 2022E | 2023E | 2024E |
|----------------------|--------|--------|--------|--------|
| Revenue | 10,727 | 13,986 | 16,584 | 17,997 |
| Net profit | 1,010 | 2,546 | 4,172 | 5,202 |
| EPS (THB) | 0.07 | 0.17 | 0.27 | 0.34 |
| vs Consensus (%) | - | 3.0 | 8.9 | 25.9 |
| EBITDA | 3,926 | 5,808 | 7,752 | 8,871 |
| Core net profit | 1,010 | 2,546 | 4,172 | 5,202 |
| Core EPS (THB) | 0.07 | 0.17 | 0.27 | 0.34 |
| Chg. In EPS est. (%) | - | - | - | - |
| EPS growth (%) | (50.7) | 152.1 | 63.9 | 24.7 |
| Core P/E (x) | 143.8 | 57.0 | 34.8 | 27.9 |
| Dividend yield (%) | 0.8 | 0.9 | 1.4 | 1.8 |
| EV/EBITDA (x) | 54.6 | 36.5 | 26.8 | 22.8 |
| Price/book (x) | 3.9 | 3.7 | 3.5 | 3.3 |
| Net debt/Equity (%) | 183.3 | 171.2 | 151.7 | 131.5 |
| ROE (%) | 2.7 | 6.6 | 10.4 | 12.3 |



| Share price performance | 1 Month | 3 Month | 12 Month |
|--------------------------------|------------------------|---------|-----------|
| Absolute (%) | (1.0) | 6.1 | 13.8 |
| Relative to country (%) | (4.8) | (1.8) | 13.2 |
| Mkt cap (USD m) | | | 4,351 |
| 3m avg. daily turnover (USD m) | | | 14.1 |
| Free float (%) | | | 53 |
| Major shareholder | CH.Karnchang PCL (31%) | | |
| 12m high/low (THB) | | | 9.85/7.90 |
| Issued shares (m) | | | 15,285.00 |

Sources: Bloomberg consensus; FSSIA estimates



Naruedom Mujjalinkool

naruedom.muj@fssia.com

+66 2611 3566

Investment thesis

BEM is the only public company that has been granted concessions to construct and operate expressways, which presently total 87.56km. The company has also secured two mass transit lines (Blue and Purple) and is ranked as the second-largest mass transit operator in Thailand.

The company has solid historical growth, and we expect that momentum to continue thanks to Bangkok's continued expansion and its citizens' demand for public transportation.

We expect the company to benefit from a solid recovery in both expressway traffic and ridership on its Blue mass transit line following more visible signs of recovery in line with the improving Covid-19 situation.

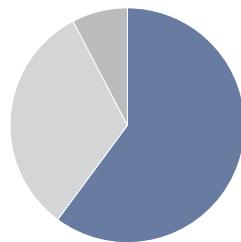
Company profile

Construction and operation of the Expressway and the operational management of the Mass Rapid Transit System, including related businesses.

www.bemplc.co.th

Principal activities (revenue, 2021)

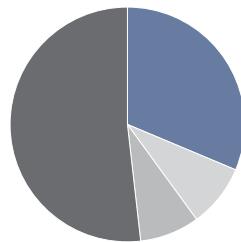
- Expressway - 60.1 %
- Mass transit - 32.2 %
- Commercial development - 7.7 %



Source: Bangkok Expressway and Metro

Major shareholders

- CH.Karnchang PCL - 31.3 %
- Thai NVDR - 8.7 %
- Mass Rapid Transit Authority of Thailand - 8.2 %
- Others - 51.8 %



Source: Bangkok Expressway and Metro

Catalysts

- Winning of the Orange Line mass transit contract.
- Traffic and ridership should see a strong recovery in 2023.

Key assumptions

| | 2021 | 2022E | 2023E | 2024E |
|--|--------|-------|-------|-------|
| Toll traffic (m trips/day) | 0.8 | 1.1 | 1.2 | 1.3 |
| <i>Toll traffic growth (%)</i> | (18.9) | 24.7 | 10.9 | 9.3 |
| Mass transit ridership (m trips/day) | 0.15 | 0.29 | 0.40 | 0.43 |
| <i>Mass transit ridership growth (%)</i> | (43.7) | 96.4 | 38.9 | 8.0 |

Source: FSSIA estimates

Earnings sensitivity

- For every 10,000-passenger increase in average daily expressway traffic, we project 2023 earnings to rise by 1.6%, and vice versa, all else being equal;
- For every 10,000-passenger increase in average daily mass transit ridership, we project 2023 earnings to rise by 1.8%, and vice versa, all else being equal.

Source: FSSIA estimates

Exhibit 1: 4Q22 results preview

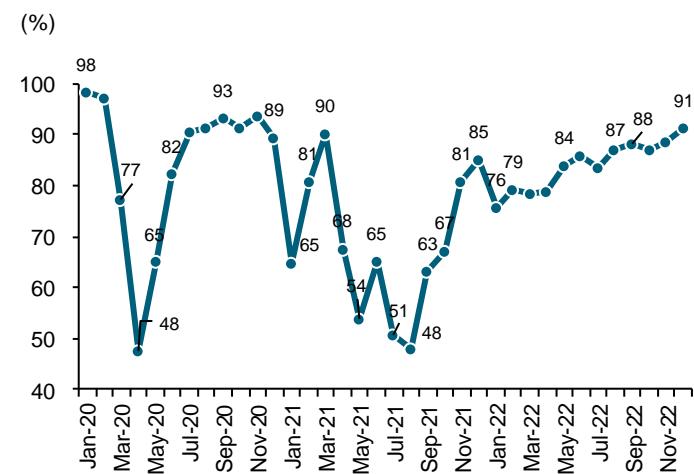
| | 4Q21 (THB m) | 3Q22 (THB m) | 4Q22E (THB m) | Change | | 2021 (THB m) | 2022E (THB m) | Change (y-y%) |
|--------------------------------|-----------------|-----------------|------------------|---------------|-------------|-----------------|------------------|------------------|
| | | | | (q-q%) | (y-y%) | | | |
| Expressway revenue | 1,896 | 2,146 | 2,178 | 1.5 | 14.9 | 6,450 | 8,142 | 26.2 |
| Rail revenue | 931 | 1,351 | 1,458 | 8.0 | 56.7 | 3,454 | 2,943 | (14.8) |
| Commercial development revenue | 233 | 242 | 261 | 8.1 | 12.3 | 822 | 904 | 9.9 |
| Revenue | 3,060 | 3,739 | 3,897 | 4.2 | 27.4 | 10,727 | 11,989 | 11.8 |
| Operating costs | (1,773) | (2,094) | (2,236) | 6.8 | 26.1 | (6,990) | (8,201) | 17.3 |
| Gross profit | 1,287 | 1,644 | 1,661 | 1.0 | 29.1 | 3,737 | 3,788 | 1.4 |
| SG&A expenses | (298) | (278) | (336) | 20.7 | 12.7 | (1,160) | (1,245) | 7.3 |
| EBIT | 989 | 1,366 | 1,325 | (3.0) | 34.0 | 2,577 | 2,543 | (1.3) |
| Depreciation & amortisation | 335 | 431 | 459 | 6.5 | 37.0 | 1,349 | 1,268 | (6.0) |
| EBITDA | 1,324 | 1,797 | 1,784 | (0.7) | 34.8 | 3,926 | 3,811 | (2.9) |
| <i>EBITDA margin (%)</i> | 43 | 48 | 46 | nm | nm | 37 | 32 | nm |
| Interest expense | (556) | (604) | (612) | 1.3 | 10.0 | (2,187) | (2,181) | (0.3) |
| Other income | 77 | 266 | 71 | (73.3) | (7.6) | 755 | 768 | 1.7 |
| Extra items | 0 | 0 | 0 | nm | nm | 0 | 0 | nm |
| Pretax profit | 509 | 1,028 | 784 | (23.7) | 54.0 | 1,145 | 1,130 | (1.3) |
| Tax | (100) | (165) | (141) | (14.5) | 41.4 | (134) | (579) | 332.0 |
| <i>Tax rate (%)</i> | (20) | (16) | (18) | nm | nm | (12) | (51) | nm |
| Minority interests | 0 | 0 | 0 | (100.0) | n.a. | 1 | 2 | 152.1 |
| Net profit | 409 | 863 | 643 | (25.5) | 57.1 | 1,010 | 549 | (45.7) |
| Core net profit | 409 | 863 | 643 | (25.5) | 57.1 | 1,010 | 2,546 | 152.1 |
| EPS (THB) | 0.03 | 0.06 | 0.04 | (25.5) | 57.1 | 0.07 | 0.04 | (45.7) |
| Core EPS (THB) | 0.03 | 0.06 | 0.04 | (25.5) | 57.1 | 0.07 | 0.17 | 152.1 |

Sources: BEM; FSSIA estimates

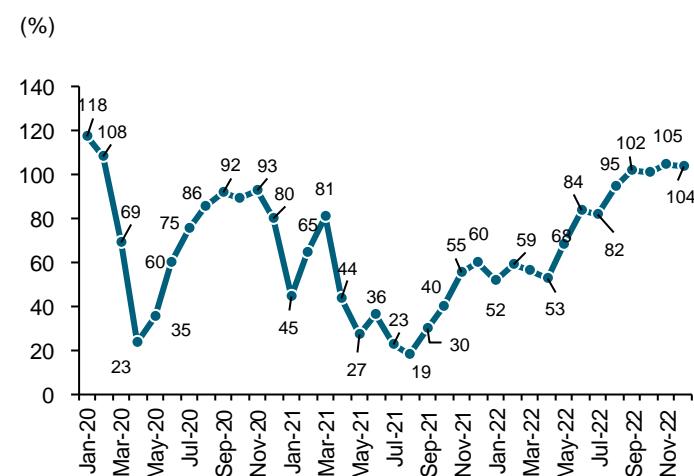
Exhibit 2: BEM – SoTP valuation

| Cost of equity assumptions | (%) | Cost of debt assumptions | (%) |
|----------------------------|----------------|--------------------------|---|
| Risk-free rate | 3 | Pretax cost of debt | 3.9 |
| Market risk premium | 8 | Marginal tax rate | 20.0 |
| Stock beta | 1 | | |
| Cost of equity, Ke | 11 | Net cost of debt, Kd | 3.12 |
| Weight applied | 45 | Weight applied | 55 |
| WACC | 6.7 | | |
| SOTP valuation | (THB m) | (THB/share) | Comments |
| Mass transit | 86,594 | 5.67 | WACC 6.7%, beta 0.99, zero terminal growth |
| Expressway | 98,732 | 6.46 | WACC 7.1%, beta 1, zero terminal growth |
| Commercial development | 10,685 | 0.70 | WACC 7.9%, beta 1.05, 2% terminal growth |
| Orange Line mass transit | 26,140 | 1.70 | WACC 6.7% beta 1.1 zero terminal growth |
| Investment | 16,075 | 1.05 | 17% stake in CKP using FSSIA TP of THB6.6 and 18% stake in TTW using market price |
| Net debt | (62,508) | (4.09) | At end-2023E |
| Total | 175,719 | | |
| Number of shares (m) | 15,285 | | |
| TP (THB) | 11.5 | | |

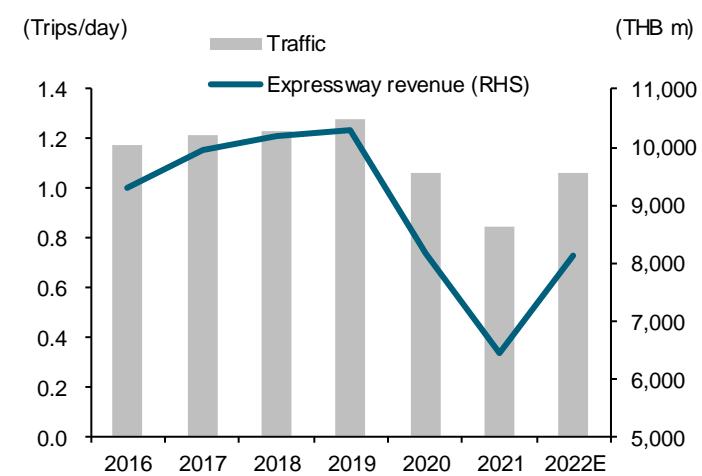
Sources: BEM; Bloomberg; FSSIA estimates

Exhibit 3: Expressway traffic vs average traffic in 2019

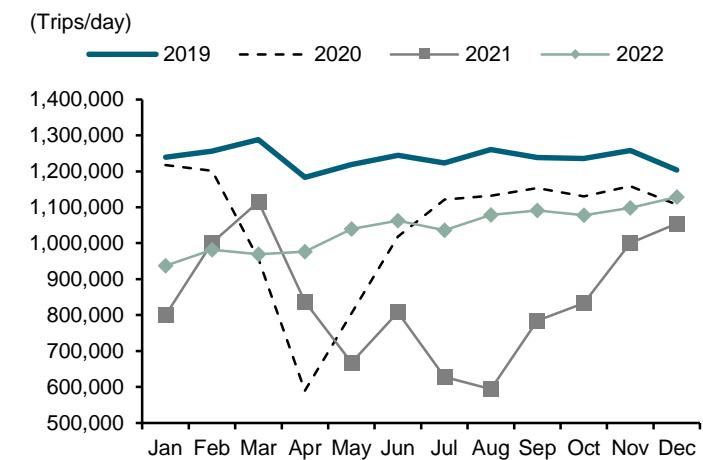
Sources: BEM; FSSIA compilation

Exhibit 5: Mass transit ridership vs average ridership in 2019

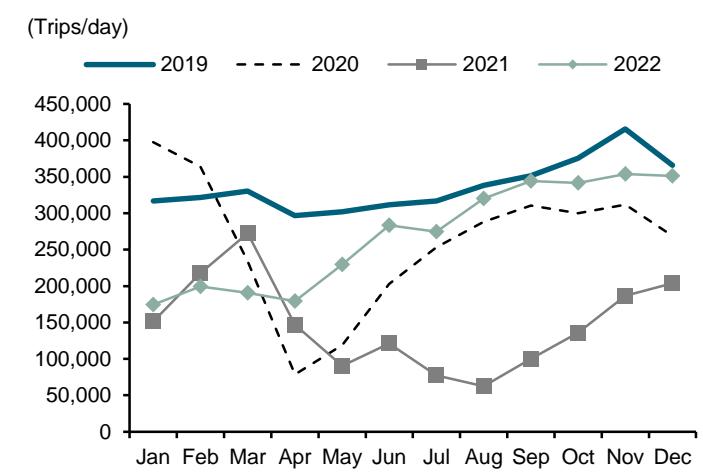
Sources: BEM; FSSIA compilation

Exhibit 7: Yearly expressway traffic and revenue

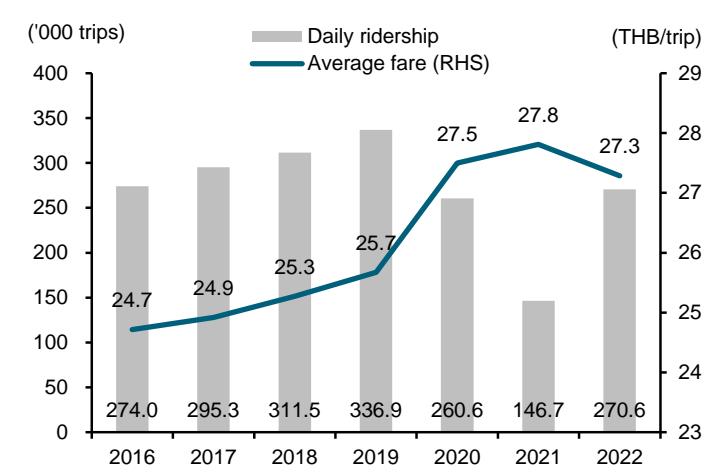
Sources: BEM; FSSIA estimates

Exhibit 4: Expressway daily traffic

Sources: BEM; FSSIA compilation

Exhibit 6: Mass transit daily ridership

Sources: BEM; FSSIA compilation

Exhibit 8: Yearly mass transit ridership and average fare

Sources: BEM; FSSIA compilation

Financial Statements

Bangkok Expressway and Metro

| Profit and Loss (THB m) Year Ending Dec | 2020 | 2021 | 2022E | 2023E | 2024E |
|---|--------------|--------------|--------------|--------------|---------------|
| Revenue | 13,489 | 10,727 | 13,986 | 16,584 | 17,997 |
| Cost of goods sold | (6,218) | (5,640) | (6,933) | (7,372) | (7,615) |
| Gross profit | 7,271 | 5,086 | 7,053 | 9,211 | 10,382 |
| Other operating income | - | - | - | - | - |
| Operating costs | (1,347) | (1,160) | (1,245) | (1,459) | (1,512) |
| Operating EBITDA | 5,925 | 3,926 | 5,808 | 7,752 | 8,871 |
| Depreciation | (2,209) | (1,349) | (1,268) | (1,323) | (1,330) |
| Goodwill amortisation | 0 | 0 | 0 | 0 | 0 |
| Operating EBIT | 3,716 | 2,577 | 4,540 | 6,429 | 7,541 |
| Net financing costs | (1,816) | (1,960) | (1,956) | (1,769) | (1,609) |
| Associates | 0 | 0 | 0 | 0 | 0 |
| Recurring non-operating income | 534 | 528 | 543 | 560 | 578 |
| Non-recurring items | 0 | 0 | 0 | 0 | 0 |
| Profit before tax | 2,433 | 1,145 | 3,127 | 5,220 | 6,509 |
| Tax | (382) | (134) | (579) | (1,044) | (1,302) |
| Profit after tax | 2,051 | 1,011 | 2,549 | 4,176 | 5,207 |
| Minority interests | (4) | (1) | (2) | (4) | (5) |
| Preferred dividends | 0 | 0 | 0 | 0 | 0 |
| Other items | - | - | - | - | - |
| Reported net profit | 2,048 | 1,010 | 2,546 | 4,172 | 5,202 |
| Non-recurring items & goodwill (net) | 0 | 0 | 0 | 0 | 0 |
| Recurring net profit | 2,048 | 1,010 | 2,546 | 4,172 | 5,202 |
| Per share (THB) | | | | | |
| Recurring EPS * | 0.13 | 0.07 | 0.17 | 0.27 | 0.34 |
| Reported EPS | 0.13 | 0.07 | 0.17 | 0.27 | 0.34 |
| DPS | 0.10 | 0.08 | 0.08 | 0.14 | 0.17 |
| Diluted shares (used to calculate per share data) | 15,285 | 15,285 | 15,285 | 15,285 | 15,286 |
| Growth | | | | | |
| Revenue (%) | (16.3) | (20.5) | 30.4 | 18.6 | 8.5 |
| Operating EBITDA (%) | (33.3) | (33.7) | 47.9 | 33.5 | 14.4 |
| Operating EBIT (%) | (16.7) | (30.6) | 76.2 | 41.6 | 17.3 |
| Recurring EPS (%) | (24.7) | (50.7) | 152.1 | 63.9 | 24.7 |
| Reported EPS (%) | (62.3) | (50.7) | 152.1 | 63.9 | 24.7 |
| Operating performance | | | | | |
| Gross margin inc. depreciation (%) | 37.5 | 34.8 | 41.4 | 47.6 | 50.3 |
| Gross margin of key business (%) | 37.5 | 34.8 | 41.4 | 47.6 | 50.3 |
| Operating EBITDA margin (%) | 43.9 | 36.6 | 41.5 | 46.7 | 49.3 |
| Operating EBIT margin (%) | 27.5 | 24.0 | 32.5 | 38.8 | 41.9 |
| Net margin (%) | 15.2 | 9.4 | 18.2 | 25.2 | 28.9 |
| Effective tax rate (%) | 15.7 | 11.7 | 18.5 | 20.0 | 20.0 |
| Dividend payout on recurring profit (%) | 74.6 | 121.1 | 50.0 | 50.0 | 50.0 |
| Interest cover (X) | 2.3 | 1.6 | 2.6 | 4.0 | 5.0 |
| Inventory days | - | - | - | - | - |
| Debtor days | 13.9 | 17.4 | 11.7 | 10.1 | 10.6 |
| Creditor days | 108.1 | 104.7 | 80.1 | 79.1 | 79.9 |
| Operating ROIC (%) | 712.1 | 358.1 | 564.4 | 874.0 | (280.3) |
| ROIC (%) | 3.1 | 2.3 | 3.7 | 5.2 | (1.5) |
| ROE (%) | 5.3 | 2.7 | 6.6 | 10.4 | 12.3 |
| ROA (%) | 3.1 | 2.3 | 3.6 | 5.0 | 4.5 |
| * Pre-exceptional, pre-goodwill and fully diluted | | | | | |
| Revenue by Division (THB m) | 2020 | 2021 | 2022E | 2023E | 2024E |
| Expressway | 8,145 | 6,450 | 8,142 | 9,255 | 10,114 |
| Mass transit | 4,520 | 3,454 | 4,941 | 6,186 | 6,626 |
| Commercial development | 825 | 822 | 904 | 1,143 | 1,257 |

Sources: Bangkok Expressway and Metro; FSSIA estimates

Financial Statements

Bangkok Expressway and Metro

| Cash Flow (THB m) Year Ending Dec | 2020 | 2021 | 2022E | 2023E | 2024E |
|-----------------------------------|----------------|----------------|----------------|----------------|----------------|
| Recurring net profit | 2,048 | 1,010 | 2,546 | 4,172 | 5,202 |
| Depreciation | 2,209 | 1,349 | 1,268 | 1,323 | 1,330 |
| Associates & minorities | 4 | 1 | 2 | 4 | 5 |
| Other non-cash items | 1,938 | 1,694 | 41 | 26 | 26 |
| Change in working capital | (846) | (1,185) | 87 | 1,356 | 1,160 |
| Cash flow from operations | 5,352 | 2,869 | 3,945 | 6,881 | 7,723 |
| Capex - maintenance | (128) | (87) | (80) | (180) | (80) |
| Capex - new investment | (827) | (845) | 0 | 0 | 0 |
| Net acquisitions & disposals | (11) | (123) | 0 | 198 | 159 |
| Other investments (net) | (2,758) | (675) | (230) | (210) | (210) |
| Cash flow from investing | (3,724) | (1,731) | (310) | (192) | (131) |
| Dividends paid | (1,376) | (1,529) | (1,273) | (2,086) | (2,601) |
| Equity finance | 0 | 0 | 0 | 0 | 0 |
| Debt finance | 2,696 | 1,981 | (3,047) | (4,904) | (5,000) |
| Other financing cash flows | (2,038) | (2,073) | 9 | 11 | 12 |
| Cash flow from financing | (717) | (1,621) | (4,311) | (6,978) | (7,589) |
| Non-recurring cash flows | - | - | - | - | - |
| Other adjustments | 0 | 5 | 0 | 0 | 0 |
| Net other adjustments | (172) | 5 | 0 | (198) | (159) |
| Movement in cash | 738 | (477) | (676) | (487) | (155) |
| Free cash flow to firm (FCFF) | 3,740.02 | 3,325.49 | 5,816.07 | 8,713.59 | 9,456.28 |
| Free cash flow to equity (FCFE) | 2,113.97 | 1,051.39 | 596.62 | 1,598.75 | 2,445.90 |

Per share (THB)

| | | | | | |
|-------------------------------|------|------|------|------|------|
| FCFF per share | 0.24 | 0.22 | 0.38 | 0.57 | 0.62 |
| FCFE per share | 0.14 | 0.07 | 0.04 | 0.10 | 0.16 |
| Recurring cash flow per share | 0.41 | 0.27 | 0.25 | 0.36 | 0.43 |

| Balance Sheet (THB m) Year Ending Dec | 2020 | 2021 | 2022E | 2023E | 2024E |
|---|----------------|----------------|----------------|----------------|----------------|
| Tangible fixed assets (gross) | 888 | 928 | 978 | 1,128 | 1,178 |
| Less: Accumulated depreciation | (508) | (544) | (621) | (708) | (800) |
| Tangible fixed assets (net) | 379 | 384 | 358 | 420 | 378 |
| Intangible fixed assets (net) | 77,195 | 78,154 | 77,206 | 76,211 | 75,213 |
| Long-term financial assets | - | - | - | - | - |
| Invest. in associates & subsidiaries | 15,841 | 15,910 | 15,910 | 15,910 | 15,910 |
| Cash & equivalents | 2,599 | 2,122 | 1,446 | 959 | 804 |
| A/C receivable | 2,199 | 2,123 | 2,071 | 2,149 | 2,192 |
| Inventories | - | - | - | - | - |
| Other current assets | 246 | 295 | 322 | 365 | 378 |
| Current assets | 5,044 | 4,541 | 3,839 | 3,473 | 3,374 |
| Other assets | 15,157 | 16,100 | 14,705 | 13,578 | 12,472 |
| Total assets | 113,616 | 115,088 | 112,018 | 109,592 | 107,347 |
| Common equity | 37,991 | 37,697 | 38,973 | 41,063 | 43,669 |
| Minorities etc. | 42 | 2 | 4 | 8 | 13 |
| Total shareholders' equity | 38,034 | 37,699 | 38,977 | 41,071 | 43,682 |
| Long term debt | 57,728 | 62,667 | 63,000 | 56,000 | 51,000 |
| Other long-term liabilities | 4,120 | 4,077 | 2,713 | 2,918 | 2,942 |
| Long-term liabilities | 61,848 | 66,744 | 65,713 | 58,918 | 53,942 |
| A/C payable | 1,745 | 1,492 | 1,550 | 1,644 | 1,691 |
| Short term debt | 11,360 | 8,544 | 5,164 | 7,260 | 7,260 |
| Other current liabilities | 629 | 609 | 614 | 700 | 773 |
| Current liabilities | 13,734 | 10,645 | 7,328 | 9,603 | 9,724 |
| Total liabilities and shareholders' equity | 113,616 | 115,088 | 112,018 | 109,592 | 107,347 |
| Net working capital | 71 | 317 | 228 | 171 | 106 |
| Invested capital | 108,643 | 110,865 | 108,407 | 106,290 | 104,080 |

* Includes convertibles and preferred stock which is being treated as debt

| Per share (THB) | 2020 | 2021 | 2022E | 2023E | 2024E |
|-------------------------------|--------|--------|--------|--------|--------|
| Book value per share | 2.49 | 2.47 | 2.55 | 2.69 | 2.86 |
| Tangible book value per share | (2.56) | (2.65) | (2.50) | (2.30) | (2.06) |

| Financial strength | 2020 | 2021 | 2022E | 2023E | 2024E |
|---------------------------|-------|-------|-------|-------|-------|
| Net debt/equity (%) | 174.8 | 183.3 | 171.2 | 151.7 | 131.5 |
| Net debt/total assets (%) | 58.5 | 60.0 | 59.6 | 56.8 | 53.5 |
| Current ratio (x) | 0.4 | 0.4 | 0.5 | 0.4 | 0.3 |
| CF interest cover (x) | 2.6 | 2.0 | 1.3 | 1.9 | 2.5 |

| Valuation | 2020 | 2021 | 2022E | 2023E | 2024E |
|------------------------------------|-------------|--------------|-------------|-------------|-------------|
| Recurring P/E (x) * | 70.9 | 143.8 | 57.0 | 34.8 | 27.9 |
| Recurring P/E @ target price (x) * | 85.8 | 174.0 | 69.0 | 42.1 | 33.8 |
| Reported P/E (x) | 70.9 | 143.8 | 57.0 | 34.8 | 27.9 |
| Dividend yield (%) | 1.1 | 0.8 | 0.9 | 1.4 | 1.8 |
| Price/book (x) | 3.8 | 3.9 | 3.7 | 3.5 | 3.3 |
| Price/tangible book (x) | (3.7) | (3.6) | (3.8) | (4.1) | (4.6) |
| EV/EBITDA (x) ** | 35.7 | 54.6 | 36.5 | 26.8 | 22.8 |
| EV/EBITDA @ target price (x) ** | 40.9 | 62.4 | 41.7 | 30.7 | 26.3 |
| EV/invested capital (x) | 1.9 | 1.9 | 2.0 | 2.0 | 1.9 |

* Pre-exceptional, pre-goodwill and fully diluted ** EBITDA includes associate income and recurring non-operating income

Sources: Bangkok Expressway and Metro; FSSIA estimates

Corporate Governance report of Thai listed companies 2021

| EXCELLENT LEVEL – Score range 90-100 | | | | | | | | | | | |
|--------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--|
| AAV | BCPG | CPALL | GCAP | K | MSC | PLANET | SAMART | SPI | THRE | TVD | |
| ADVANC | BDMS | CPF | GFPT | KBANK | MST | PLAT | SAMTEL | SPRC | THREL | TVI | |
| AF | BEM | CPI | GGC | KCE | MTC | PORT | SAT | SPVI | TIPCO | TVO | |
| AH | BGC | CPN | GLAND | KKP | MVP | PPS | SC | SSSC | TISCO | TWPC | |
| AIRA | BGRIM | CRC | GLOBAL | KSL | NCL | PR9 | SCB | SST | TK | U | |
| AKP | BIZ | CSS | GPI | KTB | NEP | PREB | SCC | STA | TKT | UAC | |
| AKR | BKI | DDD | GPSC | KTC | NER | PRG | SCCC | STEC | TMT | UBIS | |
| ALT | BOL | DELTA | GRAMMY | LALIN | NKI | PRM | SCG | STI | TNDT | UV | |
| AMA | BPP | DEMCO | GULF | LANNA | NOBLE | PROUD | SCGP | SUN | TNITY | VGI | |
| AMATA | BRR | DRT | GUNKUL | LH | NSI | PSH | SCM | SUSCO | TOA | VIH | |
| AMATAV | BTS | DTAC | HANA | LHFG | NVD | PSL | SDC | SUTHA | TOP | WACOAL | |
| ANAN | BTW | DUSIT | HARN | LIT | NWR | PTG | SEAFCO | SVI | TPBI | WAVE | |
| AOT | BWG | EA | HMPRO | LPN | NYT | PTT | SEAOIL | SYMC | TQM | WHA | |
| AP | CENTEL | EASTW | ICC | MACO | OISHI | PTTEP | SE-ED | SYNTEC | TRC | WHAUP | |
| ARIP | CFRESH | ECF | ICHI | MAJOR | OR | PTTGC | SELIC | TACC | TRU | WICE | |
| ARROW | CHEWA | ECL | III | MAKRO | ORI | PYLON | SENA | TASCO | TRUE | WINNER | |
| ASP | CHO | EE | ILINK | MALEE | OSP | Q-CON | SHR | TCAP | TSC | ZEN | |
| AUCT | CIMBT | EGCO | ILM | MBK | OTO | QH | SIRI | TEAMG | TSR | | |
| AWC | CK | EPG | INTUCH | MC | PAP | QTC | SIS | TFMAMA | TSTE | | |
| AYUD | CKP | ETC | IP | MCOT | PCSGH | RATCH | SITHAI | TGH | TSTH | | |
| BAFS | CM | FPI | IRPC | METCO | PDG | RS | SMK | THANA | TTA | | |
| BANPU | CNT | FPT | ITEL | MFEC | PDJ | S | SMPC | THANI | TTB | | |
| BAY | COM7 | FSMART | IVL | MINT | PG | S & J | SNC | THCOM | TTCL | | |
| BBL | COMAN | GBX | JSP | MONO | PHOL | SAAM | SONIC | THG | TTW | | |
| BCP | COTTO | GC | JWD | MOONG | PLANB | SABINA | SPALI | THIP | TU | | |
| VERY GOOD LEVEL – Score range 80-89 | | | | | | | | | | | |
| 2S | ASIMAR | CHOW | FLOYD | IT | LOXLEY | OCC | RPC | SKY | TCC | TVT | |
| 7UP | ASK | CI | FN | ITD | LRH | OGC | RT | SLP | TCMC | TWP | |
| ABICO | ASN | CIG | FNS | J | LST | PATO | RWI | SMIT | TEAM | UEC | |
| ABM | ATP30 | CMC | FORTH | JAS | M | PB | S11 | SMT | TFG | UMI | |
| ACE | B | COLOR | FSS | JCK | MATCH | PICO | SA | SNP | TFI | UOBKH | |
| ACG | BA | CPL | FTE | JCKH | MBAX | PIMO | SAK | SO | TIGER | UP | |
| ADB | BAM | CPW | FVC | JMART | MEGA | PJW | SALEE | SORKON | TITLE | UPF | |
| AEONTS | BC | CRD | GEL | JMT | META | PL | SAMCO | SPA | TKN | UPOIC | |
| AGE | BCH | CSC | GENCO | KBS | MFC | PM | SANKO | SPC | TKS | UTP | |
| AHC | BEC | CSP | GJS | KCAR | MGT | PMTA | SAPPE | SPCG | TM | VCOM | |
| AIT | BEYOND | CWT | GYT | KEX | MICRO | PPP | SAWAD | SR | TMC | VL | |
| ALL | BFIT | DCC | HEMP | KGI | MILL | PPPM | SCI | SRICHA | TMD | VPO | |
| ALLA | BJC | DCON | HPT | KIAT | MITSIB | PRIME | SCN | SSC | TMI | VRANDA | |
| ALUCON | BJCHI | DHOUSE | HTC | KISS | MK | PRIN | SCP | SSF | TMILL | WGE | |
| AMANAH | BLA | DOD | HYDRO | KOOL | MODERN | PRINC | SE | STANLY | TNL | WIIK | |
| AMARIN | BR | DOHOME | ICN | KTIS | MTI | PSG | SFLEX | STGT | TNP | WP | |
| APCO | BROOK | DV8 | IFS | KUMWEL | NBC | PSTC | SFP | STOWER | TOG | XO | |
| APCS | CBG | EASON | IMH | KUN | NCAP | PT | SFT | STPI | TPA | XPG | |
| APURE | CEN | EFORL | IND | KWC | NCH | QLT | SGF | SUC | TPAC | YUASA | |
| AQUA | CGH | ERW | INET | KWM | NETBAY | RBF | SIAM | SWC | TPCS | | |
| ASAP | CHARAN | ESSO | INSET | L&E | NEX | RCL | SINGER | SYNEX | TPS | | |
| ASEFA | CHAYO | ESTAR | INSURE | LDC | NINE | RICHY | SKE | TAE | TRITN | | |
| ASIA | CHG | ETE | IRC | LEO | NRF | RML | SKN | TAKUNI | TRT | | |
| ASIAN | CHOTI | FE | IRCP | LHK | NTV | ROJNA | SKR | TBSP | TSE | | |
| GOOD LEVEL – Score range 70-79 | | | | | | | | | | | |
| A | BGT | CITY | GIFT | JTS | MDX | PK | SGP | SUPER | TQR | YGG | |
| AI | BH | CMAN | GLOCON | JUBILE | MJD | PLE | SICT | SVOA | TTI | ZIGA | |
| AIE | BIG | CMO | GREEN | KASET | MORE | PPM | SIMAT | TC | TYCN | | |
| AJ | BLAND | CMR | GSC | KCM | MUD | PRAKIT | SISB | TCCC | UKEM | | |
| ALPHAX | BM | CPT | GTB | KK | NC | PRAPAT | SK | THMUI | UMS | | |
| AMC | BROCK | CRANE | HTECH | KKC | NDR | PRECHA | SMART | TNH | UNIQ | | |
| APP | BSBM | CSR | HUMAN | KWI | NFC | PTL | SOLAR | TNR | UPA | | |
| AQ | BSM | D | IHL | KYE | NNCL | RJH | SPACK | TOPP | UREKA | | |
| ARIN | BTNC | EKH | IIG | LEE | NOVA | RP | SPG | TPCH | VIBHA | | |
| AS | BYD | EMC | INGRS | LPH | NPK | RPH | SQ | TPIPL | W | | |
| AU | CAZ | EP | INOX | MATI | NUSA | RSP | SSP | TPIPP | WIN | | |
| B52 | CCP | F&D | JAK | M-CHAI | PAF | SABUY | STARK | TPLAS | WORK | | |
| BEAUTY | CGD | FMT | JR | MCS | PF | SF | STC | TPOLY | WPH | | |

Disclaimer:

The disclosure of the survey results of the Thai Institute of Directors Association ('IOD') regarding corporate governance is made pursuant to the policy of the Office of the Securities and Exchange Commission. The survey of the IOD is based on the information of a company listed on the Stock Exchange of Thailand and the Market for Alternative Investment disclosed to the public and able to be accessed by a general public investor. The result, therefore, is from the perspective of a third party. It is not an evaluation of operation and is not based on inside information.

The survey result is as of the date appearing in the Corporate Governance Report of Thai Listed Companies. As a result, the survey results may be changed after that date. FSS International Investment Advisory Company Limited does not confirm nor certify the accuracy of such survey results.

* CGR scoring should be considered with news regarding wrong doing of the company or director or executive of the company such unfair practice on securities trading, fraud, and corruption SEC imposed a civil sanction against insider trading of director and executive

Sources: Thai Institute of Directors Association (IOD); FSSIA's compilation; data as of 26 October 2021

Anti-corruption Progress Indicator

| CERTIFIED | | | | | | | | | | | |
|-----------|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|--|
| 2S | BCH | CPALL | GC | K | MFC | PE | QLT | SNP | THCOM | TU | |
| 7UP | BCP | CPF | GCAP | KASET | MFEC | PG | QTC | SORKON | THIP | TVD | |
| ADVANC | BCPG | CPI | GEL | KBANK | MILL | PHOL | RATCH | SPACK | THRE | TVI | |
| AF | BE8 | CPN | GFPT | KBS | MINT | PK | RML | SPALI | THREL | TVO | |
| AI | BEYOND | CSC | GGC | KCAR | MONO | PL | RWI | SPC | TIDLOR | TWPC | |
| AIE | BGC | DCC | GJS | KCE | MOONG | PLANB | S & J | SPI | TIPCO | U | |
| AIRA | BGRIM | DELTA | GPI | KGI | MSC | PLANET | SAAM | SPRC | TISCO | UBE | |
| AKP | BJCHI | DEMCO | GPSC | KKP | MST | PLAT | SABINA | SRICHA | TKS | UBIS | |
| ALPHAX | BKI | DIMET | GSTEEL | KSL | MTC | PM | SAPPE | SSF | TKT | UEC | |
| AMA | BLA | DRT | GUNKUL | KTB | MTI | PPP | SAT | SSP | TMD | UKEM | |
| AMANAH | BPP | DTAC | HANA | KTC | NBC | PPPM | SC | SSSC | TMILL | UOBKH | |
| AMATA | BROOK | DUSIT | HARN | KWC | NEP | PPS | SCB | SST | TMT | UPF | |
| AMATAV | BRR | EA | HEMP | KWI | NINE | PR9 | SCC | STA | TNITY | UV | |
| AP | BSBM | EASTW | HENG | L&E | NKI | PREB | SCCC | STOWER | TNL | VGI | |
| APCS | BTS | ECL | HMPRO | LANNA | NMG | PRG | SCG | SUSCO | TNP | VIH | |
| AQUA | BWG | EGCO | HTC | LH | NNCL | PRINC | SCN | SVI | TNR | WACOAL | |
| ARROW | CEN | EP | ICC | LHFG | NOBLE | PRM | SEAOIL | SYMC | TOG | WHA | |
| AS | CENTEL | EPG | ICHI | LHK | NOK | PROS | SE-ED | SYNTEC | TOP | WHAUP | |
| ASIAN | CFRESH | ERW | IFEC | LPN | NSI | PSH | SELIC | TAE | TOPP | WICE | |
| ASK | CGH | ESTAR | IFS | LRH | NWR | PSL | SENA | TAKUNI | TPA | WIIK | |
| ASP | CHEWA | ETE | ILINK | M | OCC | PSTC | SGP | TASCO | TPP | XO | |
| AWC | CHOTI | FE | INET | MAKRO | OGC | PT | SINGER | TBSP | TRU | ZEN | |
| AYUD | CHOW | FNS | INSURE | MALEE | ORI | PTG | SIRI | TCAP | TRUE | | |
| B | CIG | FPI | INTUCH | MATCH | PAP | PTT | SITHAI | TCMC | TSC | | |
| BAFS | CIMBT | FPT | IRC | MBAX | PATO | PTTEP | SKR | TFG | TSTE | | |
| BAM | CM | FSMART | IRPC | MBK | PB | PTTGC | SMIT | TFI | TSTH | | |
| BANPU | CMC | FSS | ITEL | MC | PCSGH | PYLON | SMK | TFMAMA | TTA | | |
| BAY | COM7 | FTE | IVL | MCOT | PDG | Q-CON | SMPC | TGH | TTB | | |
| BBL | COTTO | GBX | JKN | META | PDJ | QH | SNC | THANI | TTCL | | |
| DECLARED | | | | | | | | | | | |
| AJ | CHG | DDD | ETC | JR | MAJOR | NUSA | RS | SSS | TQM | YUASA | |
| ALT | CPL | DHOUSE | FLOYD | JTS | NCAP | NYT | SAK | STECH | TSI | ZIGA | |
| APCO | CPR | DOHOME | GULF | KEX | NCL | OR | SCGP | STGT | VARO | | |
| B52 | CPW | ECF | III | KUMWEL | NOVA | PIMO | SCM | TKN | VCOM | | |
| BEC | CRC | EKH | INOX | LDC | NRF | PLE | SIS | TMI | VIBHA | | |

Level

| | |
|-----------|---|
| Certified | This level indicates practical participation with thoroughly examination in relation to the recommended procedures from the audit committee or the SEC's certified auditor, being a certified member of Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) or already passed examination to ensure independence from external parties. |
| Declared | This level indicates determination to participate in the Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) |

Disclaimer:

The disclosure of the Anti-Corruption Progress Indicators of a listed company on the Stock Exchange of Thailand, which is assessed by Thaipat Institute, is made in order to comply with the policy and sustainable development plan for the listed companies of the Office of the Securities and Exchange Commission. Thaipat Institute made this assessment based on the information received from the listed company, as stipulated in the form for the assessment of Anti-corruption which refers to the Annual Registration Statement (Form 56-1), Annual Report (Form 56-2), or other relevant documents or reports of such listed company. The assessment result is therefore made from the perspective of Thaipat Institute that is a third party. It is not an assessment of operation and is not based on any inside information. Since this assessment is only the assessment result as of the date appearing in the assessment result, it may be changed after that date or when there is any change to the relevant information. Nevertheless, FSS International Investment Advisory Company Limited does not confirm, verify, or certify the accuracy and completeness of the assessment results.

Note: Companies participating in Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) under Thai Institute of Directors (as of 26 October 2021) are categorised into: 1) companies that have declared their intention to join CAC, and; 2) companies certified by CAC.

Sources: The Securities and Exchange Commission, Thailand; * FSSIA's compilation

GENERAL DISCLAIMER

ANALYST(S) CERTIFICATION

Naruedom Mujjalinkool FSS International Investment Advisory Securities Co., Ltd

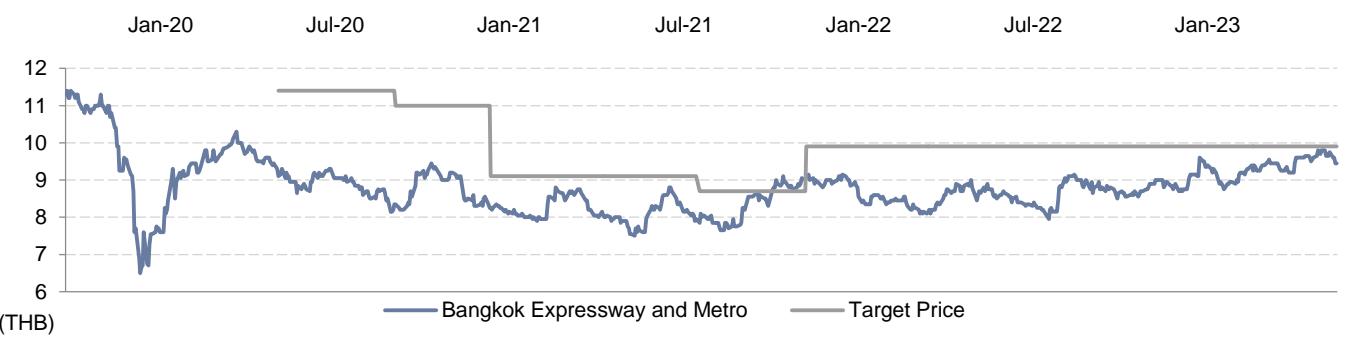
The individual(s) identified above certify(ies) that (i) all views expressed in this report accurately reflect the personal view of the analyst(s) with regard to any and all of the subject securities, companies or issuers mentioned in this report; and (ii) no part of the compensation of the analyst(s) was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed herein.

This report has been prepared by FSS International Investment Advisory Company Limited (FSSIA). The information herein has been obtained from sources believed to be reliable and accurate; however FSS makes no representation as to the accuracy and completeness of such information. Information and opinions expressed herein are subject to change without notice. FSS has no intention to solicit investors to buy or sell any security in this report. In addition, FSS does not guarantee returns nor price of the securities described in the report nor accept any liability for any loss or damage of any kind arising out of the use of such information or opinions in this report. Investors should study this report carefully in making investment decisions. All rights are reserved.

This report may not be reproduced, distributed or published by any person in any manner for any purpose without permission of FSSIA. Investment in securities has risks. Investors are advised to consider carefully before making investment decisions.

History of change in investment rating and/or target price

Bangkok Expressway and Metro (BEM TB)



| Date | Rating | Target price | Date | Rating | Target price | Date | Rating | Target price |
|-------------|--------|--------------|-------------|--------|--------------|-------------|--------|--------------|
| 13-Jul-2020 | BUY | 11.40 | 12-Jan-2021 | HOLD | 9.10 | 09-Jul-2021 | BUY | 8.70 |
| 22-Oct-2020 | BUY | 11.00 | 25-Feb-2021 | BUY | 9.10 | 11-Oct-2021 | BUY | 9.90 |

Naruedom Mujjalinkool started covering this stock from 13-Jul-2020

Price and TP are in local currency

Source: FSSIA estimates

| Company | Ticker | Price | Rating | Valuation & Risks |
|------------------------------|--------|----------|--------|--|
| Bangkok Expressway and Metro | BEM TB | THB 9.50 | BUY | The key downside risks to our SoTP-based TP are 1) traffic and ridership recovering more slowly than our expectations; and 2) the company not winning the new mass transit project bids. |

Source: FSSIA estimates

Additional Disclosures

Target price history, stock price charts, valuation and risk details, and equity rating histories applicable to each company rated in this report is available in our most recently published reports. You can contact the analyst named on the front of this note or your representative at Finansia Syrus Securities Public Company Limited

FSSIA may incorporate the recommendations and target prices of companies currently covered by FSS Research into equity research reports, denoted by an 'FSS' before the recommendation. FSS Research is part of Finansia Syrus Securities Public Company Limited, which is the parent company of FSSIA.

All share prices are as at market close on 12-Jan-2023 unless otherwise stated.

RECOMMENDATION STRUCTURE

Stock ratings

Stock ratings are based on absolute upside or downside, which we define as $(\text{target price}^* - \text{current price}) / \text{current price}$.

BUY (B). The upside is 10% or more.

HOLD (H). The upside or downside is less than 10%.

REDUCE (R). The downside is 10% or more.

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 market price and the formal recommendation.

* In most cases, the target price will equal the analyst's assessment of the current fair value of the stock. However, if the analyst doesn't think the market will reassess the stock over the specified time horizon due to a lack of events or catalysts, then the target price may differ from fair value. In most cases, therefore, our recommendation is an assessment of the mismatch between current market price and our assessment of current fair value.

Industry Recommendations

Overweight. The analyst expects the fundamental conditions of the sector to be positive over the next 12 months.

Neutral. The analyst expects the fundamental conditions of the sector to be maintained over the next 12 months.

Underweight. The analyst expects the fundamental conditions of the sector to be negative over the next 12 months.

Country (Strategy) Recommendations

Overweight (O). Over the next 12 months, the analyst expects the market to score positively on two or more of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.

Neutral (N). Over the next 12 months, the analyst expects the market to score positively on one of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.

Underweight (U). Over the next 12 months, the analyst does not expect the market to score positively on any of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.