

BANPU BANPU TB
THAILAND / MATERIALS

BUY

UNCHANGED

อัตรากำไรปรับขึ้นในขณะที่ผลขาดทุนสัญญาป้องกันความเสี่ยงลดลง

| | |
|-----------------|-----------|
| TARGET PRICE | THB18.80 |
| CLOSE | THB14.00 |
| UP/DOWNSIDE | +34.3% |
| PRIOR TP | THB18.80 |
| CHANGE IN TP | UNCHANGED |
| TP vs CONSENSUS | +14.8% |

- ผู้บริหารคงมุมมองเชิงบวกเกี่ยวกับแนวโน้มราคาถ่านหินและก๊าซในช่วง 2H22-2023
- สัดส่วนผลขาดทุนสัญญาป้องกันความเสี่ยง (Hedging loss) สำหรับธุรกิจถ่านหินและก๊าซในชั้นหินดินดานน่าจะลดลงมากในช่วง 2H22 มาอยู่ที่ 30-40% ของกำไรสุทธิรายไตรมาส
- คงแนะนำซื้อที่ราคาเป้าหมาย 18.8 บาท

คง Upside ในด้านอัตรากำไร

ในระหว่างการประชุมทางโทรศัพท์หลังผลประกอบการ 2Q22 ผู้บริหารของ Banpu ให้ข้อมูลเชิงบวกสำคัญ 3 ประการที่ยืนยันมุมมองเชิงบวกของเราเกี่ยวกับการเติบโตของกำไรของบริษัท ในช่วง 2H22-2023 ข้อแรกในขณะที่ Hedging loss อาจไม่ลดลงในแง่ตัวเลข ผลขาดทุนดังกล่าวจะลดลงมาก h-h เมื่อเทียบเป็นสัดส่วนกับกำไรจากการดำเนินงานทั้งในธุรกิจถ่านหินและก๊าซจากสถานะสัญญาป้องกันความเสี่ยงที่ลดลง ข้อสองอัตรากำไรขั้นต้นในธุรกิจถ่านหินและก๊าซน่าจะเพิ่มต่อเนื่องจากราคาขายเฉลี่ย (ASP) ที่สูงขึ้นและโครงสร้างต้นทุนที่ค่อนข้างคงที่ ข้อสามธุรกิจพลังงานน่าจะปรับตัวดีขึ้นตั้งแต่ 2H22 เป็นต้นไปจากอัตราการใช้กำลังการผลิตที่อยู่ในระดับสูงและกำลังการผลิตไฟฟ้าใหม่

ราคาถ่านหินและก๊าซที่สูงขึ้นเป็นเวลานานขึ้นในช่วง 2H22-2023

พร้อมกับสมมติฐานของเราที่คาดว่าราคาถ่านหินและก๊าซจะอยู่ในระดับสูงในปี 2022 จาก Newcastle index average (NEX) ที่ USD200/t และ Henry Hub shale gas average ที่ USD7/mmbtu ผู้บริหารยังคงมุมมองเชิงบวกเกี่ยวกับราคาถ่านหินและก๊าซในช่วง 2H22-2023 ปัจจุบันราคาสำคัญสำหรับราคาถ่านหินซึ่งเราคาดว่าจะสูงเกิน USD250-300/t ในช่วง 2H22 อยู่ที่ความต้องการที่อยู่ในระดับสูงต่อเนื่องตามฤดูกาลและในฐานะเชื้อเพลิงทดแทนสำหรับอุปทานก๊าซที่รัสเซียส่งให้แก่สหภาพยุโรปที่ลดลงในฤดูหนาวที่กำลังจะมาถึง Banpu จะขายถ่านหินความร้อนต่ำภายใต้ภาระผูกพันสำหรับตลาดในประเทศของอินโดนีเซีย (25% ของปริมาณ) ในขณะที่ปริมาณขายถ่านหินที่เหลือในอินโดนีเซีย จีน และออสเตรเลียจะมี ASP พร้อมส่วนลด 15% เมื่อเทียบกับ NEX การขาดแคลนอุปทานและความต้องการส่งออก LNG ไปยังสหภาพยุโรปที่อยู่ในระดับสูงน่าจะช่วยผลักดันราคาถ่านหิน

Upside จากสัดส่วน Hedging loss ที่ลดลงในธุรกิจถ่านหินและก๊าซ

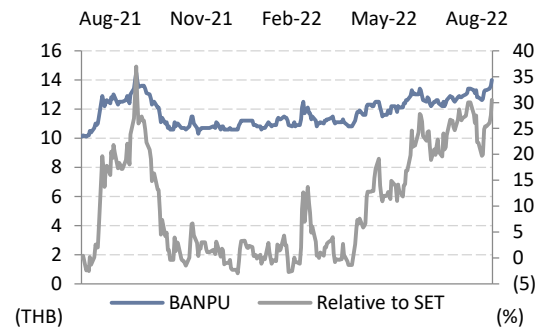
สัดส่วน Hedging loss ในธุรกิจถ่านหินและก๊าซน่าจะลดลงมากในช่วง 2H22 จาก 60-80% ในช่วง 1H22 เหลือ 30-40% ของกำไรสุทธิรายไตรมาสของ Banpu จากสัดส่วนปริมาณป้องกันความเสี่ยงในธุรกิจถ่านหินที่ลดลง 50% h-h มาอยู่ที่ 0.15mt ที่ราคาป้องกันความเสี่ยง USD150/t และในธุรกิจก๊าซจาก 80% ในช่วง 1H22 มาอยู่ที่ 60% ในช่วง 2H22 จากการรวมสินทรัพย์ก๊าซจากชั้นหินดินดานที่ซื้อมาจำนวน 200mmscfd (22% ของกำลังการผลิตรวม 900mmscfd ในช่วง 2H22) ที่ราคาป้องกันความเสี่ยง USD3.5/mmbtu

หุ้นที่ดีที่สุดสำหรับแนวโน้มราคาถ่านหินและก๊าซขาขึ้น

เราคงแนะนำซื้อที่ราคาเป้าหมาย 18.8 บาท เราเชื่อว่าราคาหุ้นจะปรับขึ้นต่อเนื่องจากกำไรที่โตสูงเกินคาดในช่วง 2H22

KEY STOCK DATA

| YE Dec (THB m) | 2021 | 2022E | 2023E | 2024E |
|----------------------|---------|---------|---------|---------|
| Revenue | 133,190 | 176,495 | 159,632 | 154,929 |
| Net profit | 9,852 | 28,728 | 29,682 | 30,388 |
| EPS (THB) | 1.46 | 4.00 | 3.34 | 2.57 |
| vs Consensus (%) | - | (19.0) | 11.0 | 16.9 |
| EBITDA | 61,472 | 78,054 | 78,249 | 79,292 |
| Core net profit | 23,793 | 28,728 | 29,682 | 30,388 |
| Core EPS (THB) | 3.52 | 4.00 | 3.34 | 2.57 |
| Chg. In EPS est. (%) | - | - | - | - |
| EPS growth (%) | nm | 13.6 | (16.4) | (23.2) |
| Core P/E (x) | 4.0 | 3.5 | 4.2 | 5.5 |
| Dividend yield (%) | 3.2 | 15.9 | 12.7 | 9.7 |
| EV/EBITDA (x) | 4.6 | 3.7 | 4.0 | 4.4 |
| Price/book (x) | 1.2 | 0.9 | 0.9 | 1.0 |
| Net debt/Equity (%) | 154.9 | 95.2 | 64.7 | 43.7 |
| ROE (%) | 33.6 | 30.4 | 24.0 | 19.6 |



| Share price performance | 1 Month | 3 Month | 12 Month |
|--------------------------------|---------------------------|---------|----------|
| Absolute (%) | 12.0 | 17.6 | 35.9 |
| Relative to country (%) | 5.5 | 16.3 | 28.6 |
| Mkt cap (USD m) | 2,670 | | |
| 3m avg. daily turnover (USD m) | 48.9 | | |
| Free float (%) | 88 | | |
| Major shareholder | Vongkusolkit Family (13%) | | |
| 12m high/low (THB) | 14.90/10.00 | | |
| Issued shares (m) | 6,766.00 | | |

Sources: Bloomberg consensus; FSSIA estimates



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PREPARED BY FSS INTERNATIONAL INVESTMENT ADVISORY SECURITIES CO LTD (FSSIA). ANALYST CERTIFICATION AND IMPORTANT DISCLOSURES CAN BE FOUND AT THE END OF THIS REPORT

บทวิเคราะห์ฉบับนี้แปลมาจากบทวิเคราะห์ของ FSSIA ฉบับวันที่ 18 สิงหาคม 2022

Investment thesis

We believe Banpu's earnings growth outlook will improve in 2022, driven by its coal, gas, and power businesses due to the improving margin outlook based on stronger demand and tighter supply.

We think that rising Newcastle index coal prices should lead to higher coal earnings in 2022. Power earnings should gradually improve with the resumption of full operations at the Hongsa power plant, as well as from its new solar farms in Japan and China and wind farms in Vietnam.

We see three factors that we think will drive up Banpu's earnings in 2022. First, its gas earnings are in an upcycle due to the tighter supply in the US. Second, we expect higher coal earnings on the back of projected USD200/tonne index coal prices. Finally, we see more upsides for its power earnings due to higher projected net profit contributions from Hongsa.

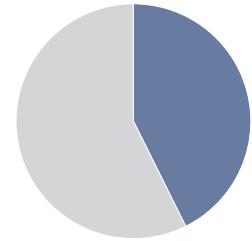
Company profile

BANPU is a leading coal-based energy company in Asia-Pacific with operations in Indonesia and China. It also operates power plants in Thailand and China.

www.banpu.com

Principal activities (revenue, 2021)

■ Coal - 42.6 % ■ Others - 57.4 %

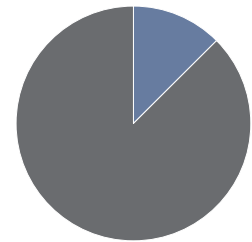


Source: Banpu

Major shareholders

■ Vongkusolkrit Family - 12.5 %

■ Others - 87.5 %



Source: Banpu

Catalysts

A higher coal price, rising coal production volumes and reserves, and improving net profit growth from its power business would all be key positive catalysts

Risks to our call

We see downside risks to our SoTP-based TP from lower coal prices, higher diesel costs and any unplanned shutdowns of its power plants.

Event calendar

| Date | Event |
|----------|---------------------------|
| Oct 2022 | 3Q22 results announcement |

Key assumptions

| | 2022E | 2023E | 2024E |
|--------------------------------|-------|-------|-------|
| Coal sales volume (mtpa) | 34.8 | 34.7 | 33.7 |
| Newcastle coal price (USD/t) | 200.0 | 150.0 | 150.0 |
| ASP for coal (USD/t) | 162.3 | 139.8 | 139.6 |
| Total cost - Indonesia (USD/t) | 85.1 | 69.2 | 66.2 |
| Total cost - Australia (USD/t) | 88.0 | 87.0 | 87.0 |

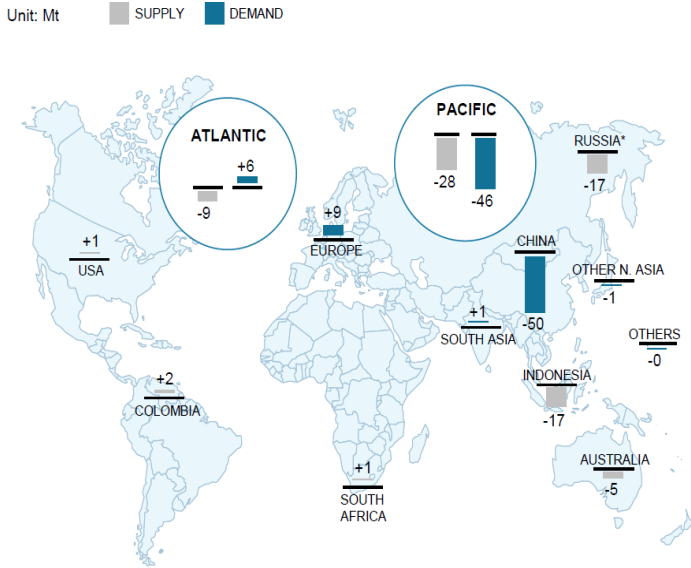
Source: FSSIA estimates

Earnings sensitivity

- Ceteris paribus, for every 1% rise in average coal price, we project 2022 EPS to rise by 2.6%, and vice versa.
- Ceteris paribus, for every 1% rise in coal sales volume, we estimate 2022 EPS to rise by 1.2%, and vice versa.
- Stability in crude oil price, rising coal prices and high utilisation rates of power plants are key to earnings growth.

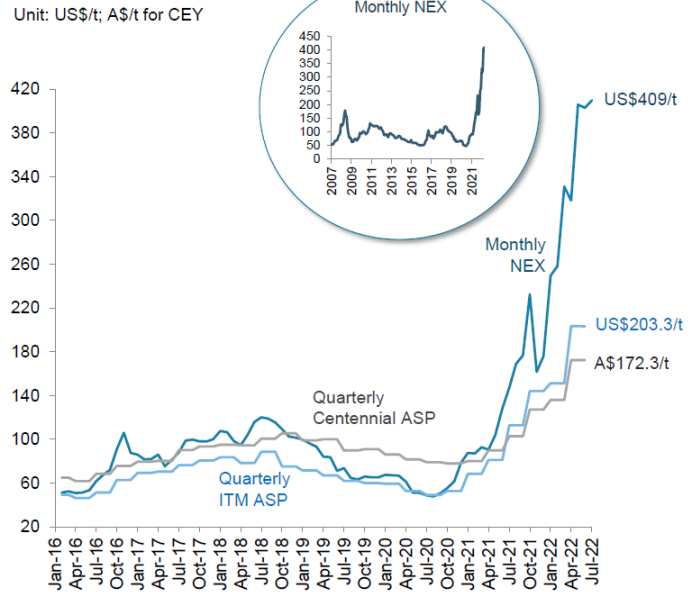
Source: FSSIA estimates

Exhibit 1: Global coal demand growth vs supply growth



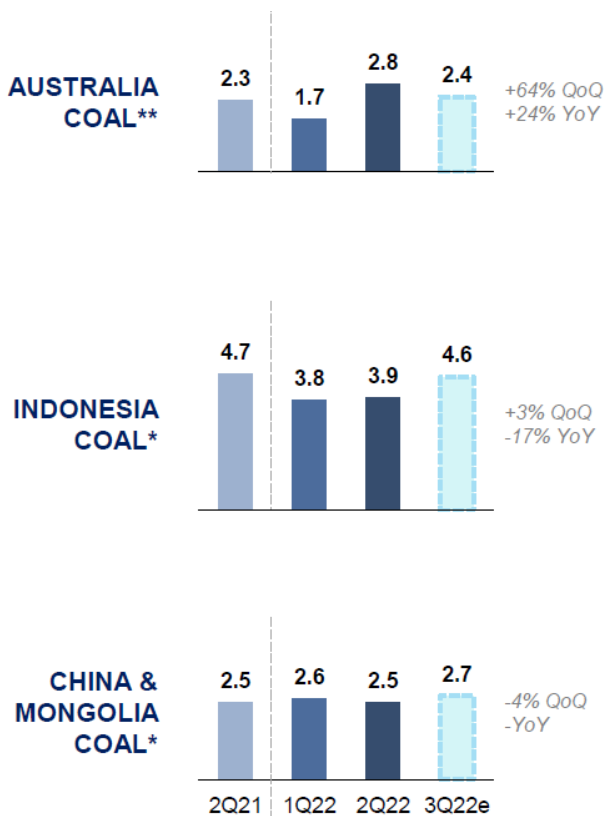
Source: Banpu

Exhibit 2: Banpu's ASP for coal vs NEX



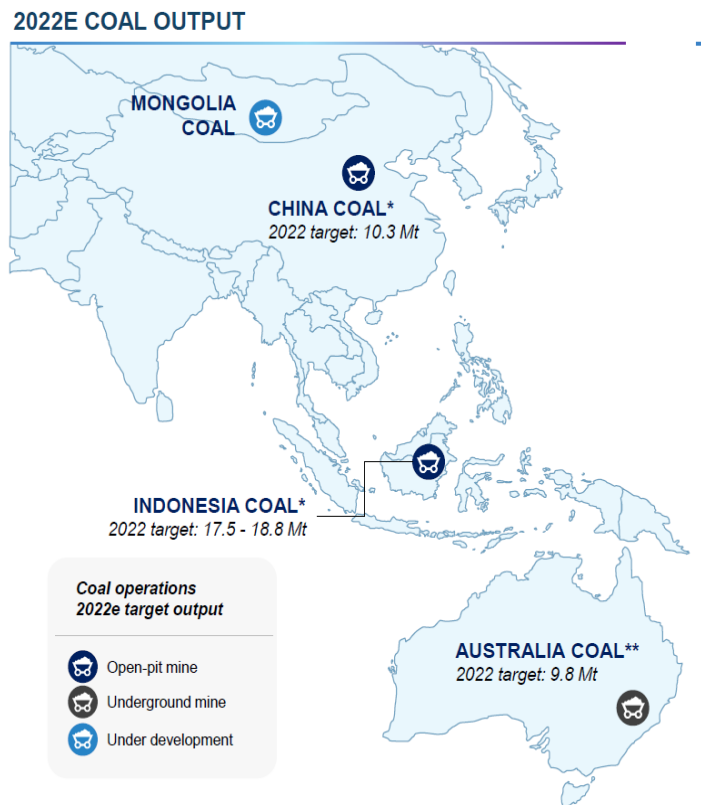
Source: Banpu

Exhibit 3: Banpu's coal production targets in 3Q22 by region



Source: Banpu

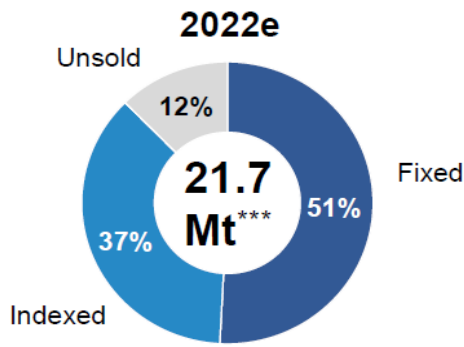
Exhibit 4: Banpu's coal production targets in 2022 by region



Source: Banpu

Exhibit 5: Coal sales price status in Indonesia

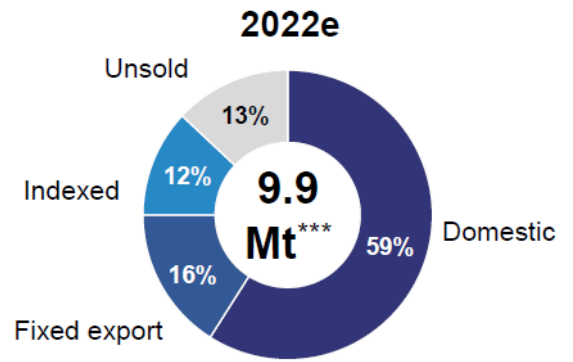
INDONESIA



Source: Banpu

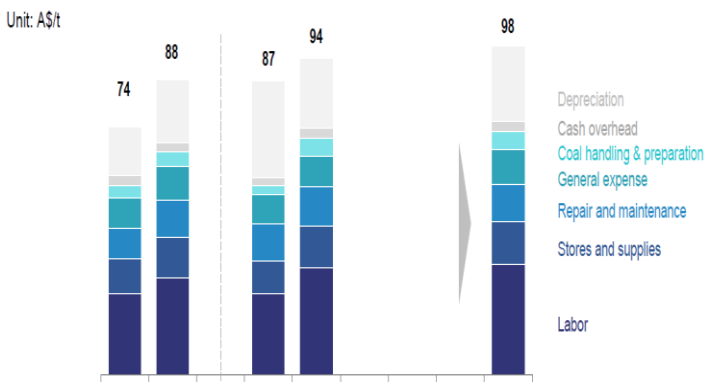
Exhibit 6: Coal sales price status in Australia

AUSTRALIA



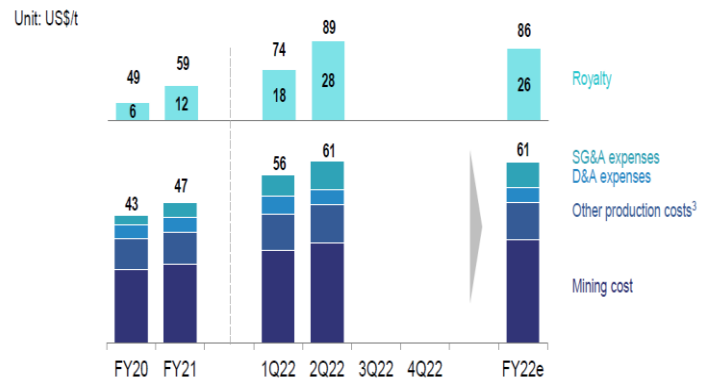
Source: Banpu

Exhibit 7: Australian coal average production cost



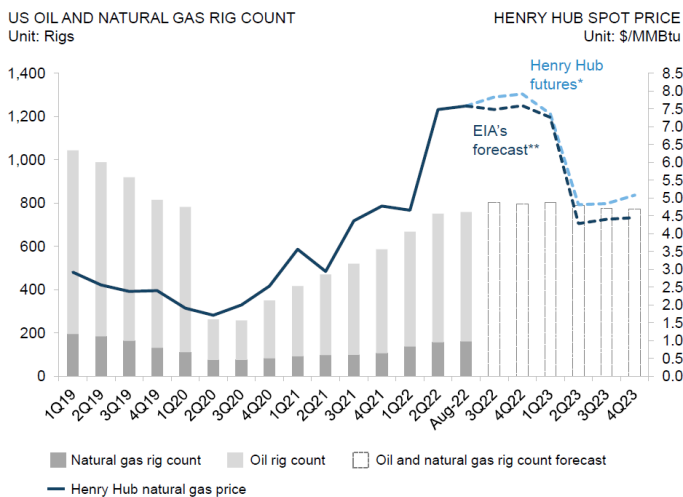
Source: Banpu

Exhibit 8: Indonesian coal average production cost



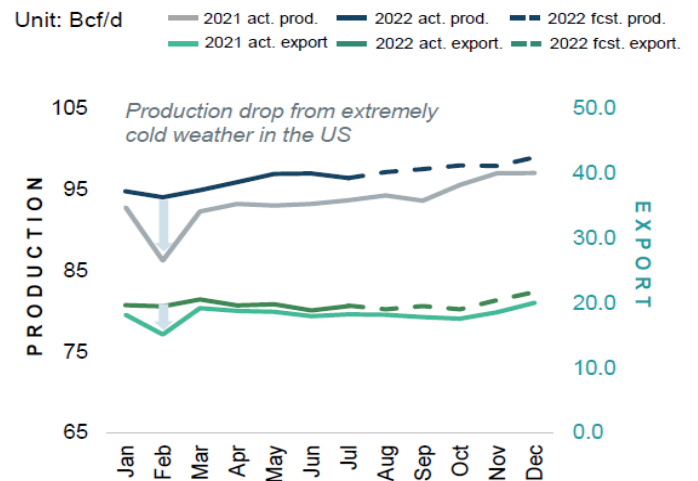
Source: Banpu

Exhibit 9: US rig count vs Henry Hub gas price



Sources: Banpu; Energy Information Administration (EIA)

Exhibit 10: US gas production projections



Sources: Banpu; EIA

Financial Statements

Banpu

| Profit and Loss (THB m) Year Ending Dec | 2020 | 2021 | 2022E | 2023E | 2024E |
|---|----------------|---------------|---------------|---------------|---------------|
| Revenue | 71,332 | 133,190 | 176,495 | 159,632 | 154,929 |
| Cost of goods sold | (51,406) | (56,425) | (77,190) | (64,162) | (58,934) |
| Gross profit | 19,926 | 76,765 | 99,305 | 95,470 | 95,996 |
| Other operating income | - | - | - | - | - |
| Operating costs | (11,419) | (15,293) | (21,251) | (17,221) | (16,704) |
| Operating EBITDA | 8,506 | 61,472 | 78,054 | 78,249 | 79,292 |
| Depreciation | (13,543) | (15,895) | (19,106) | (19,106) | (19,106) |
| Goodwill amortisation | (31) | (186) | (376) | (376) | (376) |
| Operating EBIT | (5,068) | 45,391 | 58,571 | 58,766 | 59,809 |
| Net financing costs | (2,778) | (3,273) | (6,177) | (6,195) | (6,272) |
| Associates | 4,239 | 7,290 | 8,705 | 7,622 | 7,565 |
| Recurring non-operating income | 5,264 | (5,833) | 4,923 | 3,840 | 3,783 |
| Non-recurring items | 2,282 | (13,941) | 0 | 0 | 0 |
| Profit before tax | (300) | 22,344 | 57,318 | 56,411 | 57,320 |
| Tax | (269) | (6,372) | (9,723) | (9,758) | (9,951) |
| Profit after tax | (569) | 15,973 | 47,595 | 46,653 | 47,369 |
| Minority interests | (1,217) | (6,121) | (18,867) | (16,971) | (16,981) |
| Preferred dividends | 0 | 0 | 0 | 0 | 0 |
| Other items | - | - | - | - | - |
| Reported net profit | (1,786) | 9,852 | 28,728 | 29,682 | 30,388 |
| Non-recurring items & goodwill (net) | (2,282) | 13,941 | 0 | 0 | 0 |
| Recurring net profit | (4,068) | 23,793 | 28,728 | 29,682 | 30,388 |
| Per share (THB) | | | | | |
| Recurring EPS * | (0.80) | 3.52 | 4.00 | 3.34 | 2.57 |
| Reported EPS | (0.35) | 1.46 | 4.00 | 3.34 | 2.57 |
| DPS | 0.50 | 0.45 | 2.23 | 1.78 | 1.36 |
| Diluted shares (used to calculate per share data) | 5,075 | 6,766 | 7,189 | 8,881 | 11,841 |
| Growth | | | | | |
| Revenue (%) | (16.8) | 86.7 | 32.5 | (9.6) | (2.9) |
| Operating EBITDA (%) | (56.3) | 622.7 | 27.0 | 0.2 | 1.3 |
| Operating EBIT (%) | nm | nm | 29.0 | 0.3 | 1.8 |
| Recurring EPS (%) | nm | nm | 13.6 | (16.4) | (23.2) |
| Reported EPS (%) | nm | nm | 174.5 | (16.4) | (23.2) |
| Operating performance | | | | | |
| Gross margin inc. depreciation (%) | 8.9 | 45.7 | 45.4 | 47.8 | 49.6 |
| Gross margin of key business (%) | 20.1 | 42.3 | 55.2 | 57.5 | 59.3 |
| Operating EBITDA margin (%) | 11.9 | 46.2 | 44.2 | 49.0 | 51.2 |
| Operating EBIT margin (%) | (7.1) | 34.1 | 33.2 | 36.8 | 38.6 |
| Net margin (%) | (5.7) | 17.9 | 16.3 | 18.6 | 19.6 |
| Effective tax rate (%) | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 |
| Dividend payout on recurring profit (%) | (62.4) | 12.8 | 55.9 | 53.2 | 52.8 |
| Interest cover (X) | 0.1 | 12.1 | 10.3 | 10.2 | 10.2 |
| Inventory days | 24.2 | 22.5 | 22.2 | 29.6 | 30.2 |
| Debtor days | 38.1 | 31.9 | 37.7 | 45.0 | 43.4 |
| Creditor days | 13.6 | 17.2 | 20.3 | 28.7 | 29.3 |
| Operating ROIC (%) | (12.6) | 31.2 | 39.5 | 40.6 | 44.6 |
| ROIC (%) | 0.2 | 10.7 | 17.3 | 15.4 | 14.4 |
| ROE (%) | (6.0) | 33.6 | 30.4 | 24.0 | 19.6 |
| ROA (%) | 0.9 | 10.0 | 13.5 | 11.8 | 10.7 |
| * Pre-exceptional, pre-goodwill and fully diluted | | | | | |
| Revenue by Division (THB m) | | | | | |
| Coal | 55,080 | 56,801 | 78,540 | 78,540 | 78,540 |
| Others | 16,252 | 76,389 | 97,955 | 81,092 | 76,389 |

Sources: Banpu; FSSIA estimates

Financial Statements

Banpu

| Cash Flow (THB m) Year Ending Dec | 2020 | 2021 | 2022E | 2023E | 2024E |
|-----------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Recurring net profit | (4,068) | 23,793 | 28,728 | 29,682 | 30,388 |
| Depreciation | 13,543 | 15,895 | 19,106 | 19,106 | 19,106 |
| Associates & minorities | (4,239) | (7,290) | (8,705) | (7,622) | (7,565) |
| Other non-cash items | 1,302 | 10,734 | 13,641 | 13,660 | 13,737 |
| Change in working capital | 1,403 | (4,978) | (4,400) | 1,989 | 555 |
| Cash flow from operations | 7,941 | 38,154 | 48,370 | 56,815 | 56,221 |
| Capex - maintenance | - | - | - | - | - |
| Capex - new investment | (22,372) | (12,104) | (16,040) | (14,507) | (14,080) |
| Net acquisitions & disposals | 2,828 | (15,822) | (15,822) | (15,822) | (15,822) |
| Other investments (net) | (2,160) | (5,898) | (5,698) | (5,698) | (5,698) |
| Cash flow from investing | (21,704) | (33,824) | (37,559) | (36,027) | (35,600) |
| Dividends paid | (2,864) | (2,749) | (8,463) | (15,943) | (15,901) |
| Equity finance | 0 | 0 | 0 | 0 | 0 |
| Debt finance | 28,455 | 23,861 | (1,300) | 2,500 | 2,500 |
| Other financing cash flows | (6,277) | (7,802) | 12,690 | 12,638 | 14,313 |
| Cash flow from financing | 19,315 | 13,310 | 2,927 | (805) | 912 |
| Non-recurring cash flows | - | - | - | - | - |
| Other adjustments | 0 | 0 | 0 | 0 | 0 |
| Net other adjustments | 0 | 0 | 0 | 0 | 0 |
| Movement in cash | 5,552 | 17,640 | 13,738 | 19,983 | 21,533 |
| Free cash flow to firm (FCFF) | (8,143.91) | 10,212.57 | 17,267.54 | 27,263.32 | 27,173.38 |
| Free cash flow to equity (FCFE) | 8,415.54 | 20,388.72 | 22,201.03 | 35,926.32 | 37,434.37 |

Per share (THB)

| | | | | | |
|-------------------------------|--------|------|------|------|------|
| FCFF per share | (1.20) | 1.51 | 2.55 | 4.03 | 4.02 |
| FCFE per share | 1.24 | 3.01 | 3.28 | 5.31 | 5.53 |
| Recurring cash flow per share | 1.29 | 6.37 | 7.34 | 6.17 | 4.70 |

| Balance Sheet (THB m) Year Ending Dec | 2020 | 2021 | 2022E | 2023E | 2024E |
|---|----------------|----------------|----------------|----------------|----------------|
| Tangible fixed assets (gross) | 112,066 | 148,710 | 164,749 | 179,256 | 193,336 |
| Less: Accumulated depreciation | (34,543) | (34,543) | (53,649) | (74,618) | (97,329) |
| Tangible fixed assets (net) | 77,523 | 114,167 | 111,100 | 104,639 | 96,008 |
| Intangible fixed assets (net) | 192 | 20 | 20 | 20 | 20 |
| Long-term financial assets | - | - | - | - | - |
| Invest. in associates & subsidiaries | 50,761 | 54,991 | 61,874 | 67,674 | 73,417 |
| Cash & equivalents | 21,941 | 39,581 | 53,320 | 73,303 | 94,836 |
| A/C receivable | 7,482 | 15,806 | 20,650 | 18,677 | 18,127 |
| Inventories | 3,045 | 3,905 | 5,471 | 4,949 | 4,803 |
| Other current assets | 14,833 | 26,145 | 26,145 | 26,145 | 26,145 |
| Current assets | 47,301 | 85,437 | 105,586 | 123,073 | 143,911 |
| Other assets | 105,870 | 111,186 | 137,001 | 167,046 | 203,011 |
| Total assets | 281,648 | 365,799 | 415,581 | 462,452 | 516,366 |
| Common equity | 62,344 | 79,277 | 109,691 | 137,809 | 172,594 |
| Minorities etc. | 22,211 | 24,420 | 43,287 | 60,258 | 77,239 |
| Total shareholders' equity | 84,555 | 103,697 | 152,978 | 198,066 | 249,833 |
| Long term debt | 112,559 | 139,747 | 178,957 | 181,457 | 183,957 |
| Other long-term liabilities | 18,129 | 25,164 | 24,954 | 24,743 | 24,533 |
| Long-term liabilities | 130,687 | 164,911 | 203,910 | 206,200 | 208,489 |
| A/C payable | 2,025 | 3,293 | 5,304 | 4,797 | 4,656 |
| Short term debt | 49,140 | 60,510 | 20,000 | 20,000 | 20,000 |
| Other current liabilities | 15,240 | 33,388 | 33,388 | 33,388 | 33,388 |
| Current liabilities | 66,405 | 97,191 | 58,692 | 58,186 | 58,044 |
| Total liabilities and shareholders' equity | 281,648 | 365,799 | 415,581 | 462,452 | 516,366 |
| Net working capital | 8,096 | 9,174 | 13,574 | 11,585 | 11,031 |
| Invested capital | 242,442 | 289,537 | 323,569 | 350,963 | 383,486 |

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

Per share (THB)

| | | | | | |
|-------------------------------|-------|-------|-------|-------|-------|
| Book value per share | 12.29 | 11.72 | 15.26 | 15.52 | 14.58 |
| Tangible book value per share | 12.25 | 11.71 | 15.26 | 15.52 | 14.57 |

Financial strength

| | | | | | |
|---------------------------|-------|-------|------|------|------|
| Net debt/equity (%) | 165.3 | 154.9 | 95.2 | 64.7 | 43.7 |
| Net debt/total assets (%) | 49.6 | 43.9 | 35.0 | 27.7 | 21.1 |
| Current ratio (x) | 0.7 | 0.9 | 1.8 | 2.1 | 2.5 |
| CF interest cover (x) | 12.1 | 10.9 | 7.2 | 9.1 | 9.2 |

| Valuation | 2020 | 2021 | 2022E | 2023E | 2024E |
|---|---------------|------------|------------|------------|------------|
| Recurring P/E (x) * | (17.5) | 4.0 | 3.5 | 4.2 | 5.5 |
| Recurring P/E @ target price (x) * | (23.5) | 5.3 | 4.7 | 5.6 | 7.3 |
| Reported P/E (x) | (39.8) | 9.6 | 3.5 | 4.2 | 5.5 |
| Dividend yield (%) | 3.6 | 3.2 | 15.9 | 12.7 | 9.7 |
| Price/book (x) | 1.1 | 1.2 | 0.9 | 0.9 | 1.0 |
| Price/tangible book (x) | 1.1 | 1.2 | 0.9 | 0.9 | 1.0 |
| EV/EBITDA (x) ** | 27.4 | 4.6 | 3.7 | 4.0 | 4.4 |
| EV/EBITDA @ target price (x) ** | 30.3 | 5.1 | 4.2 | 4.5 | 5.2 |
| EV/invested capital (x) | 1.0 | 1.0 | 0.9 | 0.9 | 0.9 |

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

Sources: Banpu; 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 | DRS | 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 | PPP | 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 |
| AMANAHA | BLA | DOD | HYDRO | KOOL | MODERN | PRINC | SE | STANLY | TNL | WIJK |
| 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 | TIPIP | 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 | WIJK |
| 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

Suwat Sinsadok, CFA, FRM, ERP FSS International Investment Advisory Securities Co., Ltd

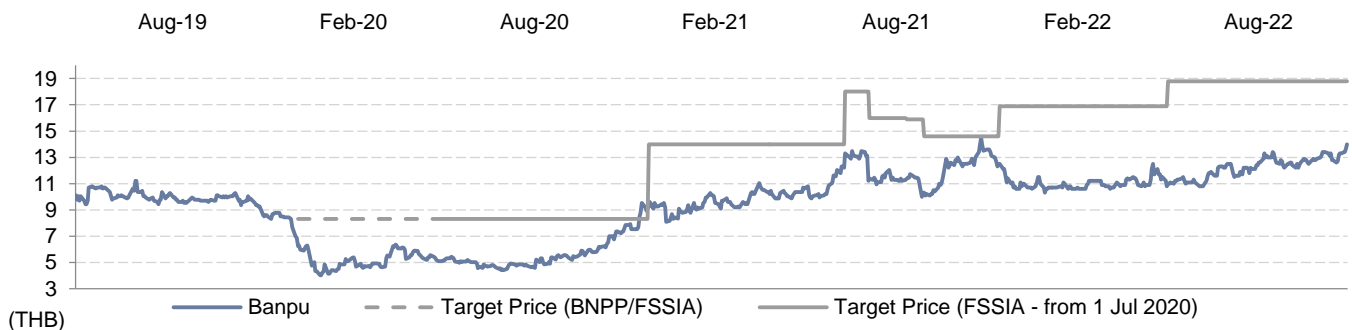
The individual(s) identified above certify(ies) that (i) all views expressed in this report accurately reflect the personal view of the analyst(s) with regard to any and all of the subject securities, companies or issuers mentioned in this report; and (ii) no part of the compensation of the analyst(s)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

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History of change in investment rating and/or target price

Banpu (BANPU TB)



| Date | Rating | Target price | Date | Rating | Target price | Date | Rating | Target price |
|-------------|--------|--------------|-------------|--------|--------------|-------------|--------|--------------|
| 26-Feb-2020 | HOLD | 8.30 | 10-Jun-2021 | BUY | 18.00 | 17-Aug-2021 | BUY | 14.60 |
| 09-Oct-2020 | BUY | 8.30 | 01-Jul-2021 | HOLD | 16.00 | 21-Oct-2021 | BUY | 16.90 |
| 23-Dec-2020 | BUY | 14.00 | 02-Aug-2021 | BUY | 15.90 | 15-Mar-2022 | BUY | 18.80 |

Suwat Sinsadok, CFA, FRM, ERP started covering this stock from 26-Feb-2020

Price and TP are in local currency

Source: FSSIA estimates

| Company | Ticker | Price | Rating | Valuation & Risks |
|---------|----------|-----------|--------|---|
| Banpu | BANPU TB | THB 14.00 | BUY | We see downside risks to our SoTP-based TP from lower coal prices, higher diesel costs and any unplanned shutdowns of its power plants. |

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 Finasia 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 Finasia Syrus Securities Public Company Limited, which is the parent company of FSSIA.

All share prices are as at market close on 17-Aug-2022 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.