

BANPU BANPU TB
THAILAND / MATERIALS

BUY

UNCHANGED

ผู้ชนะจากราคาถ่านหินและก๊าซที่ปรับขึ้น

- 3 ประเด็นสำคัญจากผู้บริหารในการประชุมนักวิเคราะห์หุ้นประมาณการแนวโน้มกำไรที่ดีในปี 2022 ของเราประกอบด้วย: ผลขาดทุนจากสัญญาป้องกันความเสี่ยงที่ลดลง, ปริมาณขายถ่านหินที่สูงขึ้น, และกำไรจากกำลังการผลิตไฟฟ้าใหม่
- การซื้อขายหุ้นที่ 3-4x ของค่า 2022-23E P/E ไม่เหมาะสมกับกำไรที่มีความชัดเจน
- คงแนะนำซื้อหลังปรับราคาเป้าหมายเป็น 18.80 บาท

TARGET PRICE	THB18.80
CLOSE	THB11.20
UP/DOWNSIDE	+67.9%
PRIOR TP	THB16.90
CHANGE IN TP	+11.2%
TP vs CONSENSUS	+36.9%

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 (%)	-	86.9	128.1	71.3
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. (%)	-	126.3	193.5	244.9
EPS growth (%)	nm	13.6	(16.4)	(23.2)
Core P/E (x)	3.2	2.8	3.4	4.4
Dividend yield (%)	4.0	19.9	15.9	12.1
EV/EBITDA (x)	4.2	3.5	3.7	4.0
Price/book (x)	1.0	0.7	0.7	0.8
Net debt/Equity (%)	154.9	95.2	64.7	43.7
ROE (%)	33.6	30.4	24.0	19.6

ตลาดยังมองข้าม 3 ปัจจัยขับเคลื่อนการเติบโต

ในระหว่างการประชุมนักวิเคราะห์หุ้นหลังผลประกอบการปี 2021 ผู้บริหารระบุถึง 3 ประเด็นสำคัญที่ช่วยยืนยันมุมมองเชิงบวกของเราเกี่ยวกับแนวโน้มกำไรสุทธิที่ดีของ Banpu ในปี 2022 ประกอบด้วยผลขาดทุนสัญญาป้องกันความเสี่ยงที่ลดลง y-y ปริมาณขายถ่านหินที่สูงขึ้น y-y และกำไรสุทธิของธุรกิจโรงไฟฟ้าที่ดีจากกำลังการผลิตใหม่ที่มีส่วนมากเข้ามาในปี 2021 ประมาณการกำไรสุทธิปี 2022 ที่ปรับใหม่ของเราที่ 28.7 พัน ลบ. ซึ่งสูงกว่าคาดการณ์ของตลาดอยู่ 126% ยังมีความเสี่ยงขาขึ้นอีกมากเมื่อพิจารณาจากสมมติฐานของเราที่คาดว่าจะให้ผลขาดทุนสัญญาป้องกันความเสี่ยงลดลง อัตรากำไรที่ขึ้นต้นสูงขึ้นจากราคาขายเฉลี่ยที่สูงขึ้น และปริมาณขายเพิ่มขึ้น

ผลขาดทุนสัญญาป้องกันความเสี่ยงจะลดลง y-y โดยคาดว่าจะลดลง USD0.2 พันล้านในปี 2022

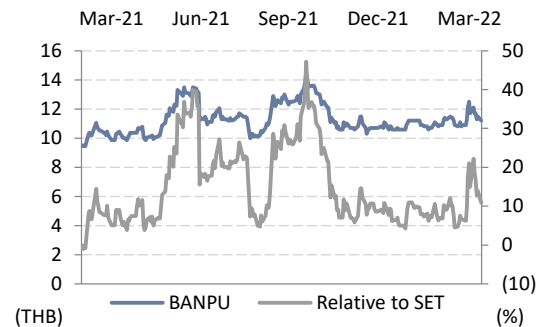
เราคาดว่าผลขาดทุนสัญญาป้องกันความเสี่ยงจากถ่านหินและก๊าซในชั้นหินดินดานที่ลดลงเพียงอย่างเดียวจะเพิ่มเงิน USD200 ล้านให้แก่กำไรสุทธิของ Banpu ในปี 2022 เนื่องจากบริษัท ได้ลดปริมาณป้องกันความเสี่ยงถ่านหินและก๊าซ ผ่านสัญญา Price Swap อย่างมีนัยสำคัญ โดยได้ลดปริมาณป้องกันความเสี่ยงสำหรับถ่านหินลงจาก 3 ล้านตันในปี 2021 เหลือ 0.75 ล้านตันในปี 2022 และปริมาณป้องกันความเสี่ยงสำหรับก๊าซ ชลจาก 235bcf ในปี 2021 เป็น 166bcf ในปี 2022 นโยบายป้องกันความเสี่ยงของ Banpu ลดลงจาก 92% เป็น 65% ของการผลิตก๊าซ และจาก 10% เป็น 5% สำหรับถ่านหิน เพราะฉะนั้นเราจึงคาดว่าผลขาดทุนสัญญาป้องกันความเสี่ยงสำหรับถ่านหินจะลดลงเหลือ USD100-150 ล้านในปี 2022 จาก USD50-80 ต่อตันในปี 2021 ในขณะที่ผลขาดทุนสัญญาป้องกันความเสี่ยงสำหรับก๊าซ มีแนวโน้มทรงตัว y-y ที่ USD2/mcf

กำไรยังโตได้อีกจากปริมาณขายถ่านหินและกำไรจากธุรกิจโรงไฟฟ้าที่สูงขึ้น

Banpu วางแผนเพิ่มปริมาณขายถ่านหินเป็น 36mt ในปี 2022 โดยจะประกอบด้วย 22.1mt จาก ITMG (+1.9mt y-y), 11.7mt จาก Centennial (+1.9mt y-y), และ 1-1.5mt จากถ่านหินในจีน (flat y-y) เราคาดว่ากำไรสุทธิจะสูงขึ้นจากธุรกิจโรงไฟฟ้าส่วนมากจาก Temple I, Nakoso, และโรงไฟฟ้าหองสา ซึ่งให้ผลบวกที่มากกว่าผลเสียจากกำไรของ BLP ที่คาดว่าจะลดลงต่อเนื่อง.

หุ้นมีการซื้อขายที่เพียง 3-4x ของค่า 2022-23E P/E

เราปรับเพิ่มประมาณการกำไรต่อหุ้น (EPS) ปี 2022-24 ขึ้น 126-245% เพื่อสะท้อน: 1) สมมติฐานปริมาณขายถ่านหินที่เปลี่ยนไป; 2) ราคาขายถ่านหินเฉลี่ยที่สูงขึ้น 99.5-115% ในปี 2022-24 เทียบกับสมมติฐาน NCT ที่สูงขึ้น 100-114%; และ 3) ประมาณการต้นทุนการผลิตที่สูงขึ้น 29-56% ของ ITMG เราปรับเพิ่มราคาเป้าหมายจาก 16.9 เป็น 18.8 บาท (SoTP) เพื่อรวมการปรับ EPS ในความเห็นของเราราคาหุ้นของ Banpu ยังน่าสนใจ หุ้นมีการซื้อขายที่เพียง 3-4x ของค่า 2022-23E P/E ซึ่งเราคิดว่าไม่สมเหตุสมผลเป็นอย่างยิ่งเมื่อพิจารณาจากแนวโน้มกำไรสุทธิที่ดีในปี 2022-23 จากราคาถ่านหินและก๊าซ ในตลาดโลกที่อยู่ในระดับสูง.



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	(2.6)	3.7	21.9
Relative to country (%)	(0.2)	1.4	15.0
Mkt cap (USD m)	2,269		
3m avg. daily turnover (USD m)	41.7		
Free float (%)	88		
Major shareholder	Vongkusolkit Family (13%)		
12m high/low (THB)	14.90/9.18		
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 15 มีนาคม 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 on stronger demand and tighter supply.

We think that rising Newcastle index coal prices in the range of USD150-200/tonne 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 USD150-200/tonne index coal prices. Finally, we see more upsides for its power earnings due to higher projected net profit contributions from Hongsa.

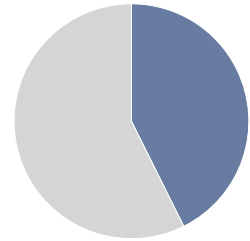
Company profile

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 %

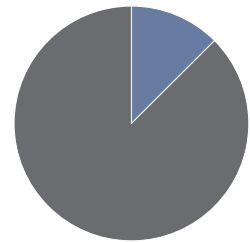


Source: Banpu

Major shareholders

■ Vongkusolkit 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
May 2022	1Q22 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

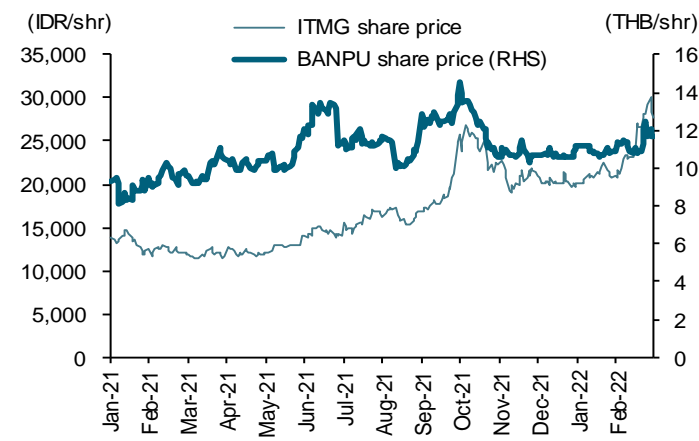
A clear winner from coal and gas price hikes

During the post-2021 results analyst meeting, management indicated three key points that confirm our bullish view on Banpu's strong net profit outlook in 2022 – a y-y lower hedging loss, a y-y higher coal sales volume, and strong power net profits from new capacity mostly acquired in 2021.

In the past two months, Banpu's share price has underperformed the share prices of other regional coal plays, including ITMG, its 65%-owned subsidiary listed on Indonesia's stock market. We think this is due to investors' grave concerns over Banpu's ballooning hedging losses in 3Q21-4Q21, mainly from the combined total of the coal price swaps from ITMG, Centennial (CEY), and shale gas vs the smaller hedging losses on ITMG's coal price swaps.

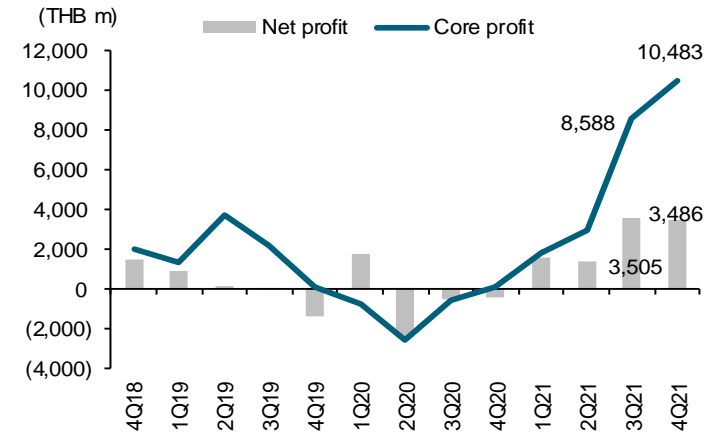
As a result, the reported net profit in 2H21 has been disappointing when compared with the strong quarterly net profits for ITMG in the same period. The large hedging losses for Banpu were mainly from its legacy hedging volumes for coal and shale gas implemented since the beginning of 2021 when the global coal price remained low at below USD200/t.

Exhibit 1: Share price of ITMG vs Banpu



Source: Bloomberg

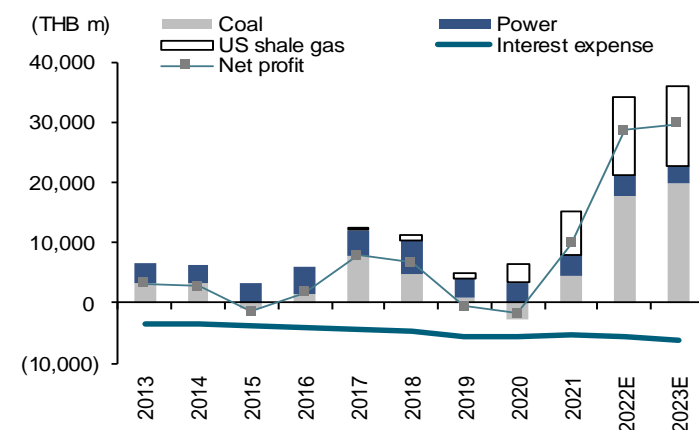
Exhibit 2: Net profit and core net profit



Sources: Banpu; FSSIA estimates

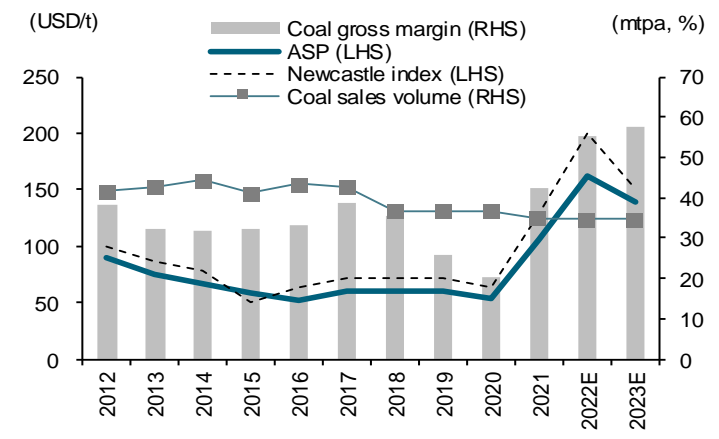
Stronger net profit in 1Q22 onward should beat the Bloomberg consensus estimate. We are confident that Banpu will post a very strong quarterly net profit in 1Q22 onward, backed by a sharp decline in its hedging losses for both coal and shale gas swaps and the much wider gross margins for coal and shale gas. Our revised net profit forecasts for 2022-24 are 93%/135%/53% higher than the Bloomberg consensus estimate due mainly to the higher ASPs for coal and the lower hedging losses.

Exhibit 3: Net profit breakdown



Sources: Banpu; FSSIA estimates

Exhibit 4: Coal gross margin, ASP, and sales volume vs Newcastle coal price index



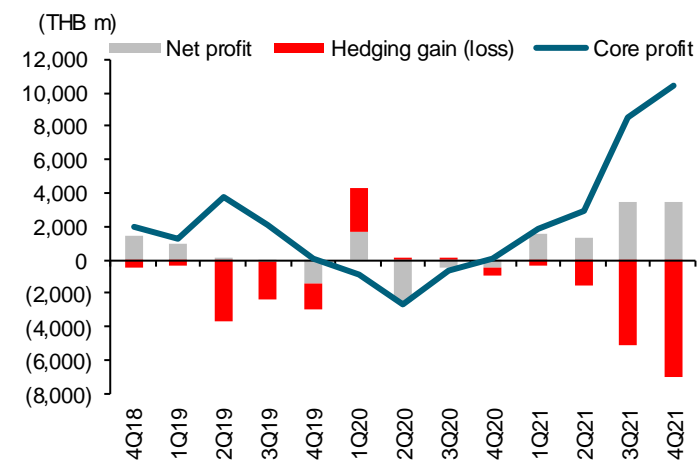
Sources: Banpu; FSSIA estimates

Achilles' heel: hedging loss to shrink substantially in 1Q22 onward

The most critical factor for Banpu's net profit growth outlook is its hedging loss outlook given that Banpu suffered from large hedging losses of over USD444.6m in 2021 and USD214.7m in 4Q21 alone. It lost USD204.5m on its coal swap and USD239.2m from gas hedging in 2022, and USD77.9m on its coal swap and USD147.1m from gas hedging in 4Q21.

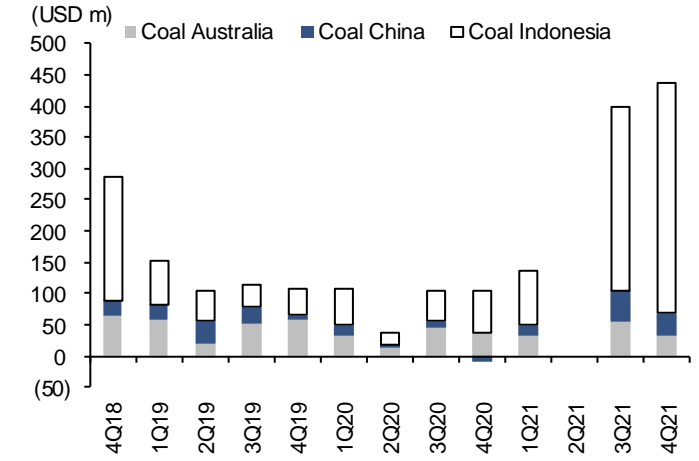
In 2022, according to management, Banpu will significantly reduce its hedging volumes for both coal and gas via price swaps, cutting the coal hedging volume down from 3mt in 2021 to 0.75mt in 2022, and the gas hedging volume down from 235bcf in 2021 to 166bcf in 2022 as Banpu changes its hedging policy target from 92% to 65% of shale gas production.

Exhibit 5: Net profit, core net profit, and hedging loss



Sources: Banpu; FSSIA estimates

Exhibit 6: Coal EBITDA breakdown by country

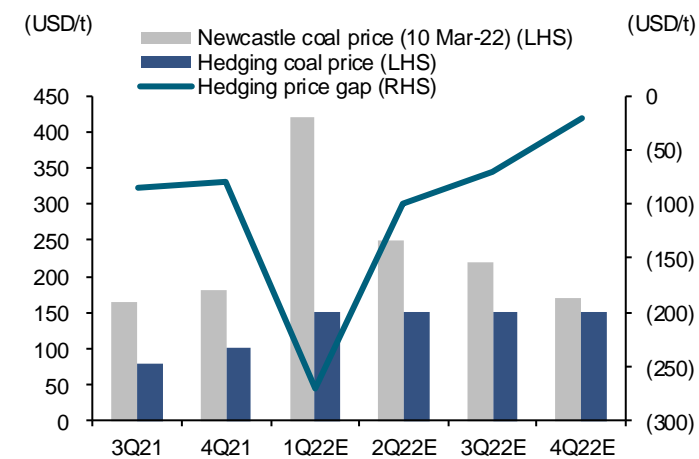


Sources: Banpu; FSSIA estimates

Our revised net profit forecast of THB28.7b in 2022, 93% above the Bloomberg consensus estimate, has a particularly large upside given our expectation of lower hedging losses and a higher gross margin on the higher average selling price and rising sales volumes. We believe that in the next three months Banpu's share price is likely to outperform its peers' and ITMG's as the Achilles' heel of its hedging losses declines substantially y-y and q-q.

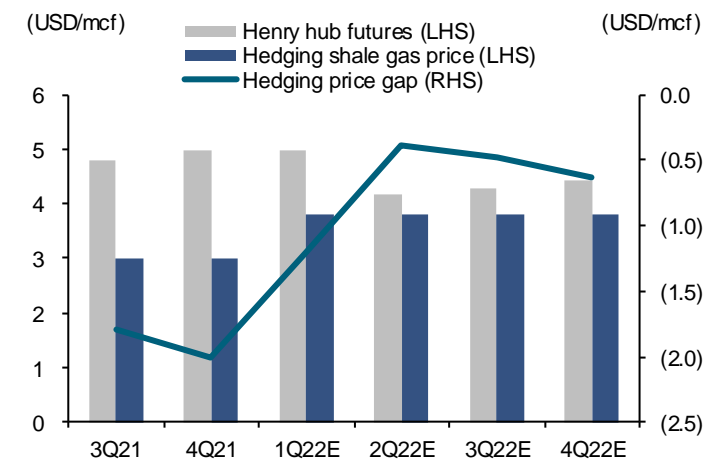
Hedging loss to drop in 1Q22. In 1Q22, management guided that its coal hedging volume would be 155kt, with a potential hedging loss margin of USD100-150/t.

Exhibit 7: Banpu's coal hedging price vs Newcastle coal price index



Sources: Banpu; Bloomberg; FSSIA estimates

Exhibit 8: Banpu's gas hedging price vs Henry Hub gas price index



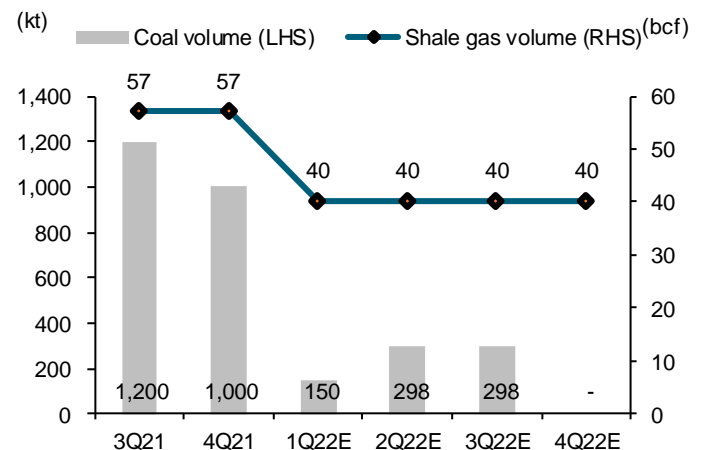
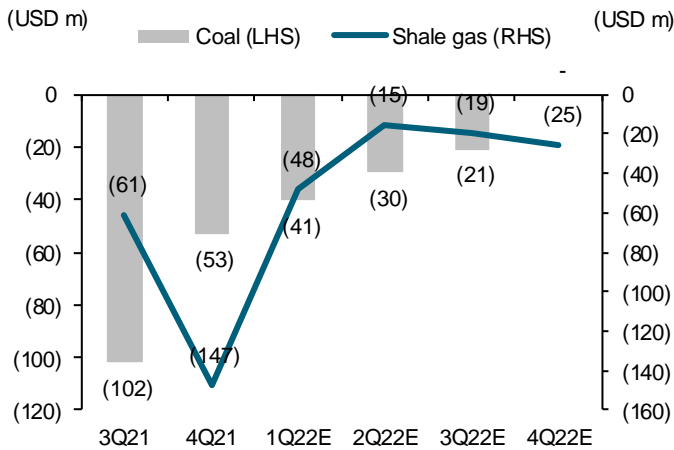
Sources: Banpu; Bloomberg; FSSIA estimates

Even with a much wider hedging margin loss, we estimate that the hedging loss for its coal swaps should sharply plunge from USD77.9m in 4Q21 down to USD20-30m in 1Q22 due to the much smaller hedging volume at the hedging price average of USD140-160/t, up from USD100/t in 4Q21, based on management’s guidance.

Similarly, the hedging loss from shale gas should also fall precipitously from USD147.1m in 4Q21 down to USD41m in 1Q22 based on the lower hedging volume of 40bcf and the hedging price of USD3.5-3.8/mmbtu. In 4Q21, 57bcf was hedged at a price of USD3/mmbtu.

Exhibit 9: Estimated hedging losses for coal and shale gas

Exhibit 10: Banpu’s hedging volumes for coal and shale gas in 2022



Sources: Banpu; FSSIA estimates

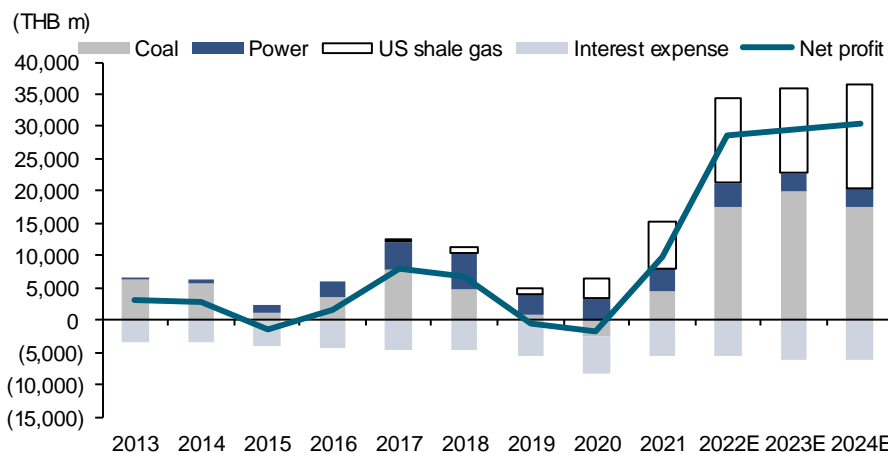
Sources: Banpu; FSSIA estimates

Hence, we expect its total hedging losses to decline to USD100-150m in 2022, down from USD50-80 per tonne in 2021, and likely remain stable y-y with a hedging loss of USD2/mcf for shale gas. We estimate that the lower hedging loss alone for coal and shale gas should add USD200m to Banpu’s net profit in 2022.

Rising gross margins and sales volumes

In 2022-24, we project Banpu’s coal earnings to significantly rise to over THB20b before the hedging losses, which we forecast to plunge sharply due to lower hedging volumes. The net profit from its shale gas unit after the hedging losses is also projected to improve markedly to over THB10b annually, given the change in the hedging policy to 65% from 92% in 2021, and the expectation of a sustainably high price of shale gas to over USD4/mmbtu.

Exhibit 11: Net profit breakdown by unit



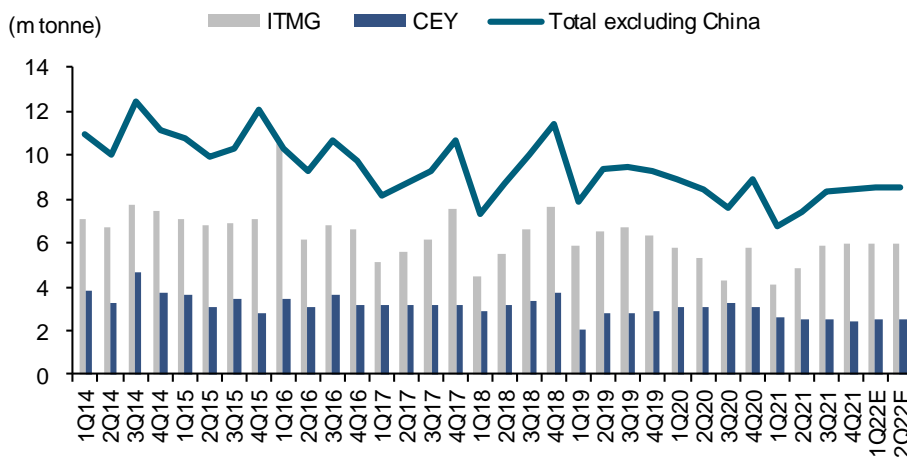
Sources: Banpu; FSSIA estimates

Rising sales volumes. Banpu guided that in 2022 ITMG will produce 22.1mt, up from 20.2mt in 2021, due to improving mining conditions after heavy rains and geological difficulty at some mines has alleviated.

Similarly, coal production at CEY in Australia should improve to 11.7mt in 2022, up from 9.8mt in 2021, as management has already resolved most of the problems related to the geological difficulties at the Mandalong and Springvale mines.

Coal production volume in 1Q22. Banpu guided that ITMG will produce 3.8mt, down from 4.9mt due to seasonal rains. CEY, however, is expected to produce 2.2mt, up from 2.1mt in 4Q21, as geological problems there are gradually resolved over the course of 2022 and coal production increases to 3mt by 4Q22. Banpu's coal mines in China should produce 2.4mt in 1Q22, down slightly from 2.5mt in 4Q21 due to the longwall change at the Hebi mine, while the Gaohe mine should continue to see a strong production volume.

Exhibit 12: Coal sales volumes of ITMG and CEY

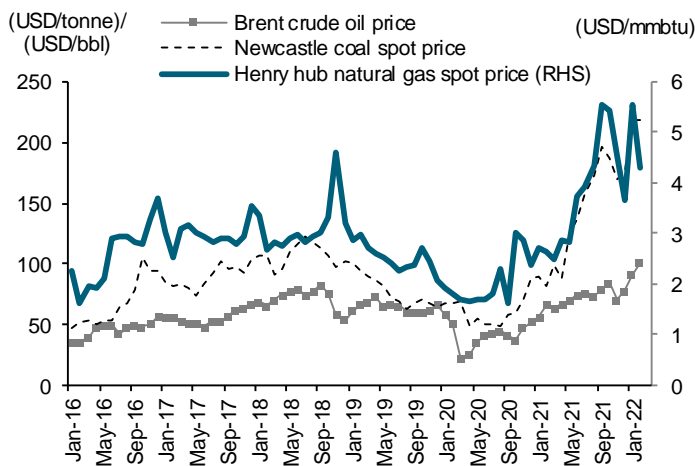


Sources: Banpu; FSSIA estimates

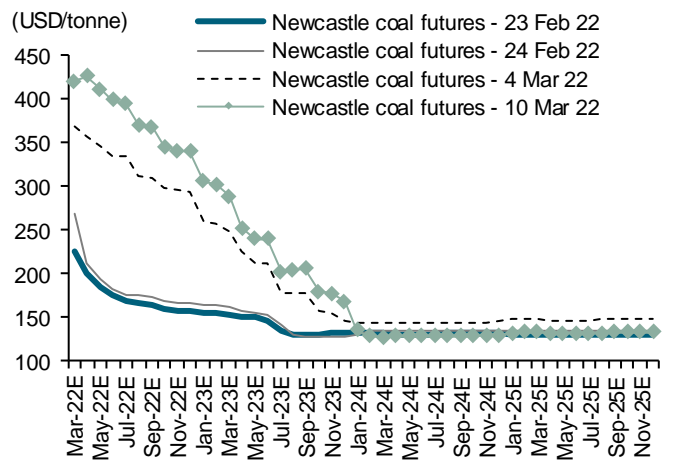
Significant upsides to ASPs for coal in 2022

Thanks to the continued tight supply-demand situation, the ongoing Russia-Ukraine conflict, and related sanctions imposed by the US and its allies, the prices of commodities, including oil, gas, and coal, have all spiked as a result of the higher supply risks. For coal, the price of NCT spiked to over USD400/t last week but has since dropped to USD368/t as of 14 Mar-22.

Exhibit 13: Brent crude, Newcastle coal, Henry Hub gas price **Exhibit 14: Newcastle coal futures**



Source: Bloomberg



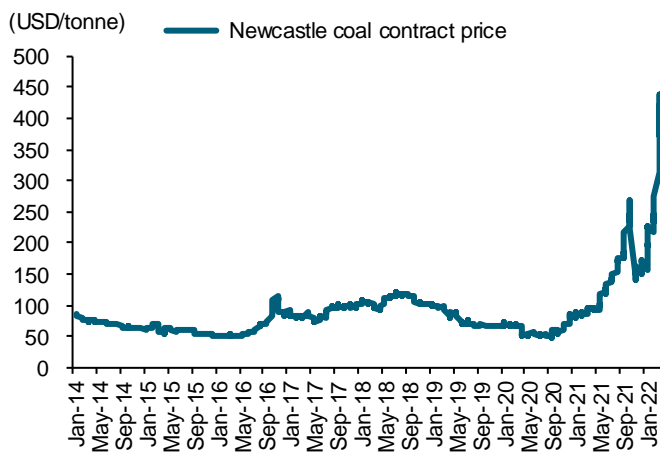
Source: Bloomberg

We believe the Newcastle (NCT) coal price index will continue to remain high above USD250/t throughout 2022, backed by:

- 1) High demand for coal as a substitute fuel for oil and gas, whose prices have risen much higher than the coal price;
- 2) The continued low demand elasticity for coal in the short-term in 2022 given that power and energy security is of strategic importance to a number of coal-consuming countries, particularly China, even though many countries plan to gradually shift their fuel consumption from coal to greener and cleaner energy sources over the next 10 years;
- 3) Higher coal demand in Europe under its recently announced plan to reduce reliance on imported gas from Russia and eventually fully replace it with other fuels and other gas supply sources.

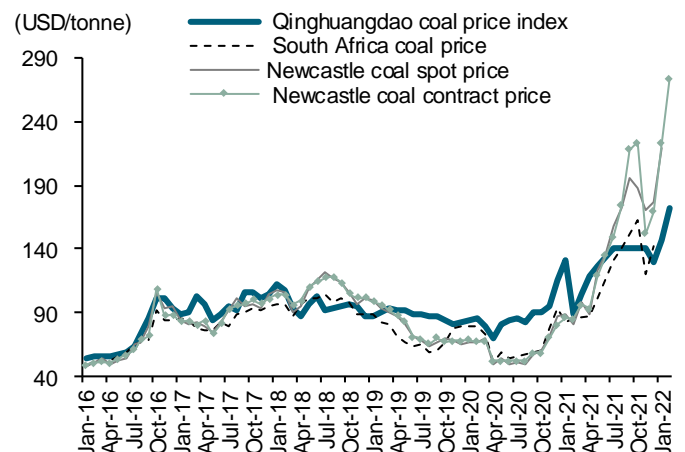
Note that the Qinghuangdao (QHD) coal price index in China is now lower than NCT by a large margin due to the Chinese government’s coal price cap and the ramping up of domestic coal production to ensure energy security in the country and reduce coal imports. Hence, the net profit from Banpu’s China coal unit is expected to be in the range of USD100-150m in 2022 vs USD129m in 2021, based on our estimate.

Exhibit 15: Newcastle coal contract price spike



Source: Bloomberg

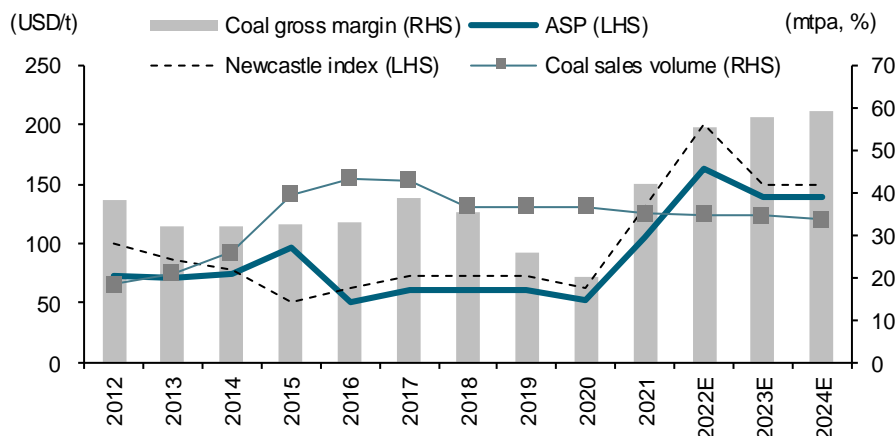
Exhibit 16: Benchmark coal prices (QHD vs NCT)



Source: Bloomberg

The NCT price jumped markedly in 1Q22 from USD200-230/t in 4Q21 to over USD300/t in Mar-22. Consequently, we think Banpu’s coal ASP – based on the contribution from ITMG and CEY’s export sales volumes of 3mt annually – should significantly rise to USD150-200/t in 2022, driving up its coal gross margin to over 55% in 2022, up from 42% in 2021.

Exhibit 17: Coal gross margin, ASP, and sales volume vs Newcastle coal price index

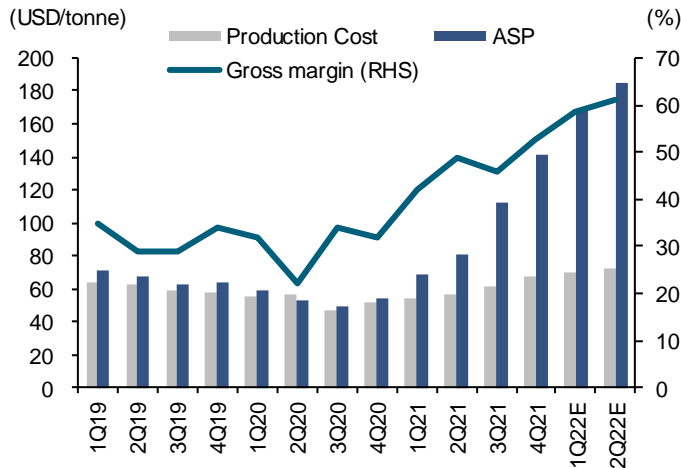


Sources: Banpu; Bloomberg; FSSIA estimates

ASP to jump to over USD150-250/t in 2022. In tandem with the spike in the NCT price to over USD300/t in Mar-22, we project Banpu's coal ASP to rise to USD169/t in 1Q22, USD185/t in 2Q22 for ITMG, and to USD154/t in 1Q22 and USD170/t in 2Q22 for CEY.

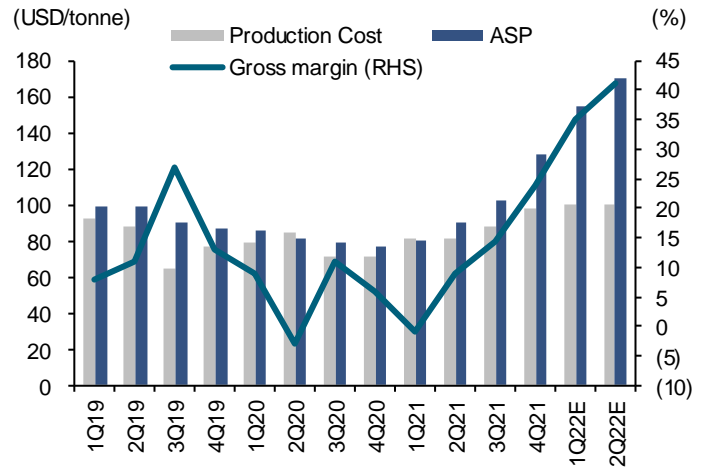
ASP vs cost. Our estimated 2022 ASPs of USD154-185/t for ITMG and CEY are significantly higher than the USD106/t average in 2021. The production costs of both ITMG and CEY are expected to rise only marginally, with ITMG's production cost to increase to USD85/t, up from USD70/t in 2021, due mainly to the higher cost of diesel, which accounts for 1/3 of ITMG's total production cost, based on our estimate.

Exhibit 18: ITMG's coal ASP, cost, and gross margin



Sources: Banpu; FSSIA estimates

Exhibit 19: CEY's coal ASP, cost, and gross margin

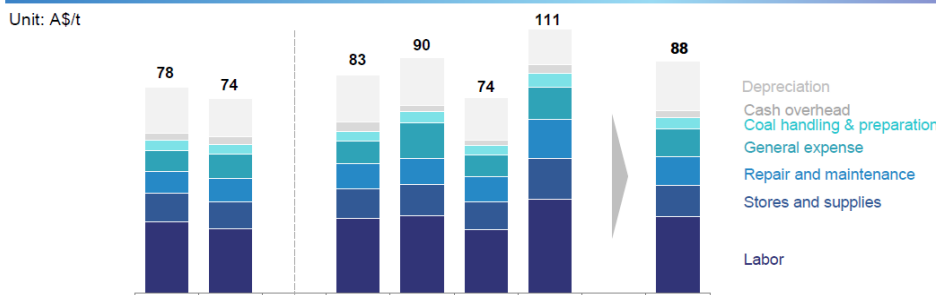


Sources: Banpu; FSSIA estimates

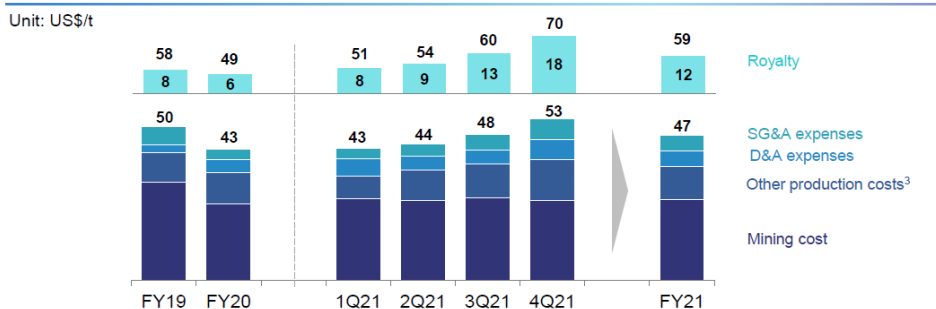
Falling fixed cost per unit for CEY as production volumes rise in 2022. Unlike ITMG's open-pit mines, CEY is an underground mine with a high fixed cost structure at over 2/3 of total cost, comprising mainly depreciation, overhead, handling and preparations, and repair and maintenance expenses. Hence, the projected y-y higher coal production of 11.7mt (+1.9mt y-y) would effectively reduce the fixed cost per unit from USD60/t in 2021 down to USD50-55/t in 2022, based on management's guidance.

Exhibit 20: Cost structures of ITMG and CEY

AUSTRALIA COAL – AVERAGE PRODUCTION COST¹



INDONESIA COAL – AVERAGE TOTAL COST²



Source: Banpu

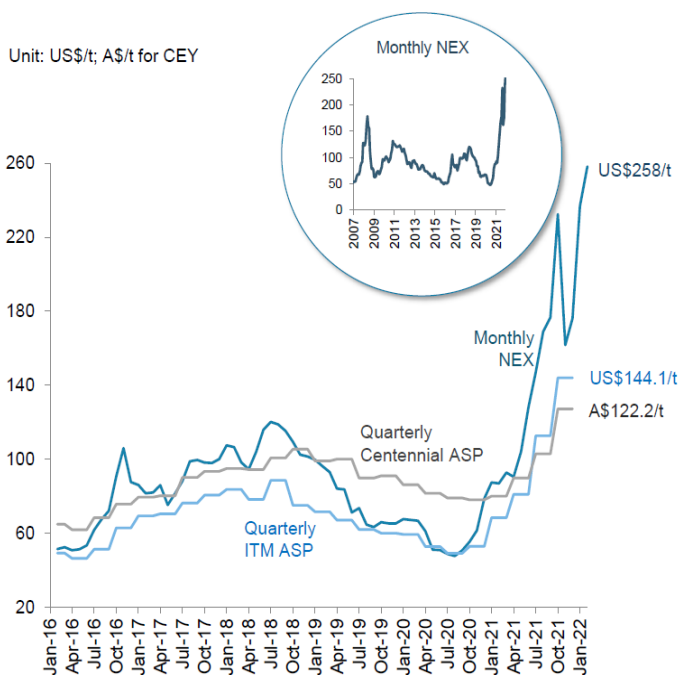
Banpu's coal ASPs should rise in line with the Newcastle coal price index. With a small price discount of USD50-100/t to the NCT price, and the large unpriced coal volumes, we project that Banpu's ASP will jump from USD106/t in 2021 to USD162/t in 2022.

The main driver should come from the sharp rise in the ASP for coal at ITMG given that ITMG has fixed only 17% of its 22.1mt coal sales volume in 2022 as of Mar-22, much lower than its normal policy of 40-50% fixed-price volume at the beginning of the year. Management indicated that as Banpu missed the opportunity in 2021 to capture the higher coal market price due to its large hedging and fixed price volumes, the company decided to reduce both its hedging and fixed price volumes to maximize profitability in 2022.

For CEY, up to 35% of its projected 11.1mt coal sales volume in 2022 remains unpriced, which should allow it to capture the higher coal price in 2022 at over USD250-300/t, based on our estimate.

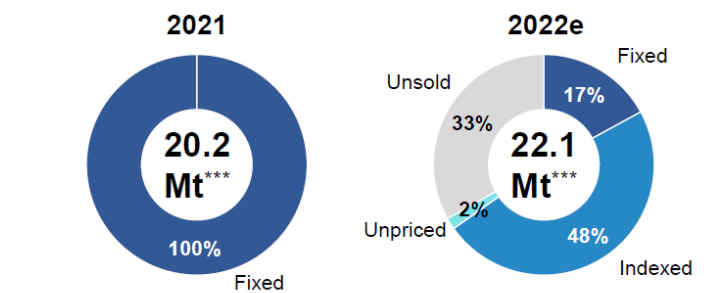
Exhibit 21: Banpu's coal ASP vs Newcastle coal price index

Exhibit 22: Coal pricing status in 2022

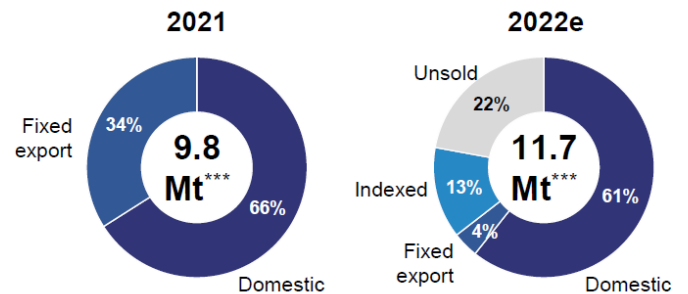


Source: BANPU

INDONESIA



AUSTRALIA



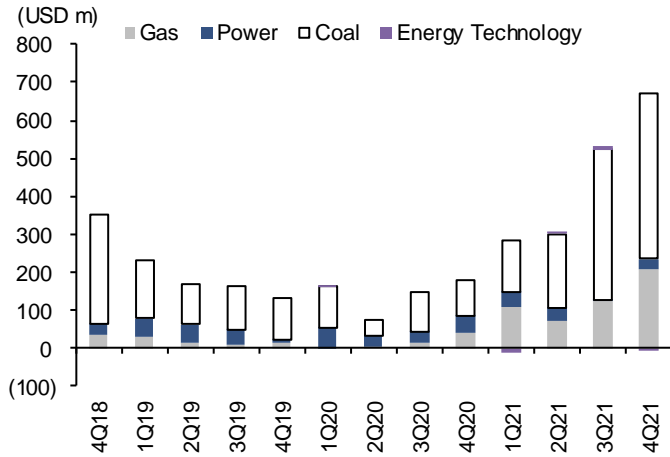
Source: BANPU

Shale gas: return of Banpu's US crown jewel

Right after the acquisition of its Barnett Shale gas asset with a production rate of 500mmscfd, Banpu boosted production to 800mmscfd just before the upcycle in shale gas and global gas prices in 2021-22.

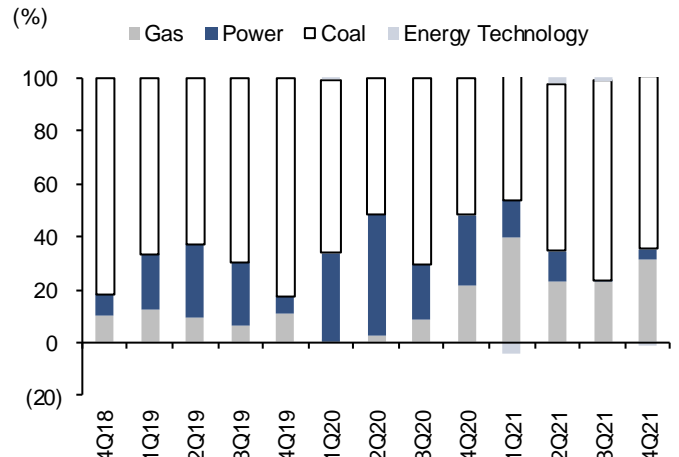
Since 1Q21, the EBITDA generated from shale gas has jumped from less than USD0.1b a quarter to USD207m in 4Q21. However, in 2021, the substantial hedging losses largely negated the increase in the EBITDA from the higher ASP and sales volumes.

Exhibit 23: EBITDA breakdown by business



Sources: Banpu; FSSIA estimates

Exhibit 24: EBITDA breakdown by business (%)



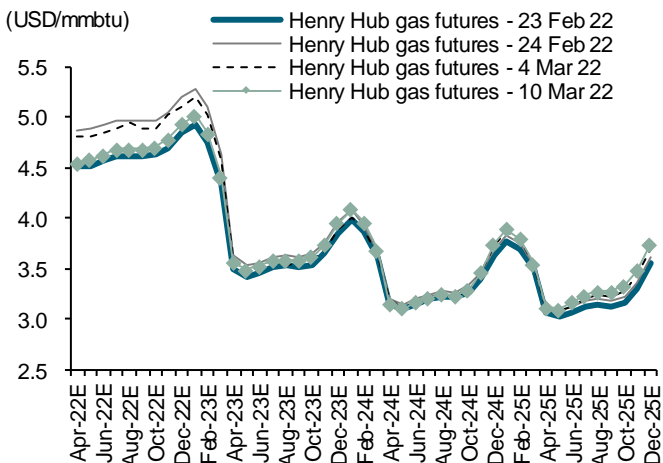
Sources: Banpu; FSSIA estimates

But in 2022 we think the EBITDA from shale gas will grow to over USD300m a quarter, based on our estimate that the quarterly net profits after the smaller y-y hedging loss should exceed USD100m a quarter when coupled with the wider gross margin from the higher ASP to USD3.5-4.0/mmbtu.

The Henry Hub (HH) futures price remains high at over USD4.5/mmbtu throughout 2022 into Feb-23 before normalising to USD3.5-4.0/mmbtu in 2023-25, indicating that the global gas market is projected to remain very tight in 2022-25.

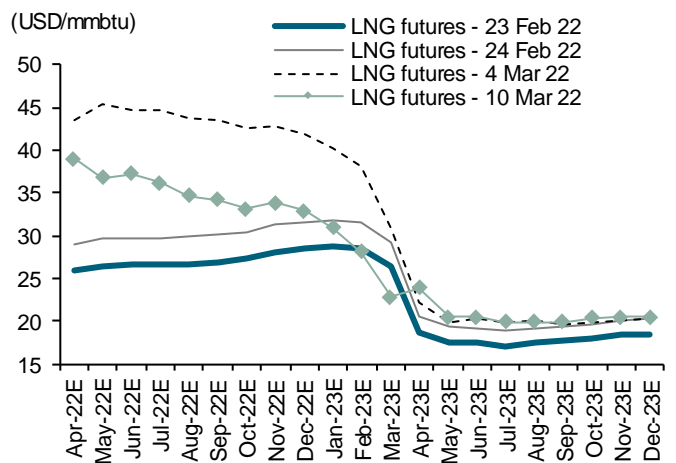
Similarly, the LNG futures shot up to over USD45/mmbtu on 24 Feb-22 after Russia's invasion of Ukraine. We think the LNG futures and spot will stay over USD20/mmbtu in 1H22 and USD10/mmbtu in 2H22 given that European countries plan to replace their current imports of Russian gas with LNG imports.

Exhibit 25: Henry Hub gas futures



Source: Bloomberg

Exhibit 26: LNG futures



Source: Bloomberg

EPS and target price revisions

We raise our EPS forecasts in 2022-24 by 126-245% to reflect: 1) changes in our coal sales volume assumptions by 2.4%/2.1%/-0.9% in 2022-24; 2) our 99.5-115% higher ASP estimates for coal in 2022-24 in tandem with our 100-114% higher NCT assumptions; and 3) our 29-56% higher production cost estimates for ITMG to reflect the higher diesel price. However, we maintain our coal production cost assumptions for CEY given that most of its costs are fixed.

We raise our SoTP target price from THB16.9 to THB18.8 to incorporate our EPS revisions. We think Banpu's share price remains highly attractive, trading at a mere 3-4x 2022-23E P/E, which we think is highly unjustified given the high visibility of its strong net profit growth outlook in 2022-23 on the back of high global prices for coal and gas.

Exhibit 27: Key changes in assumptions

	Current			Previous			Change		
	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E
	(THB b)	(THB b)	(THB b)	(THB b)	(THB b)	(THB b)	(%)	(%)	(%)
Revenue	176,495	159,632	154,929	109,142	96,271	96,270.9	61.7	65.8	60.9
Gross profit	99,305	95,470	95,996	58,203	51,328	50,273.5	70.6	86.0	90.9
Operating profit	58,571	58,766	59,809	25,537	20,283	19,228.8	129.4	189.7	211.0
Net profit	28,728	29,682	30,388	12,697	10,113	8,809.9	126.3	193.5	244.9
Core net profit	28,728	29,682	30,388	12,697	10,113	8,809.9	126.3	193.5	244.9
EPS (THB/shr)	4.00	3.34	2.57	1.77	1.14	0.7	126.3	193.5	244.9
Core EPS (THB/shr)	4.00	3.34	2.57	1.77	1.14	0.7	126.3	193.5	244.9
Key assumptions									
Coal sales volume (mtpa)	34.8	34.7	33.7	34.0	34.0	34.0	2.4	2.1	(0.9)
Newcastle coal price (USD/t)	200.0	150.0	150.0	100.0	70.0	70.0	100.0	114.3	114.3
ASP for coal (USD/t)	162.3	139.8	139.6	81.3	65.0	65.0	99.5	114.9	114.7
Total cost - Indonesia (USD/t)	85.1	69.2	66.2	54.6	51.5	51.5	55.9	34.4	28.6
Total cost - Australia (USD/t)	88.0	87.0	87.0	88.0	87.0	87.0	-	-	-

Sources: Banpu; FSSIA estimates

Exhibit 28: SoTP-based target price

Banpu's valuation breakdown	THB/share	
ITMG (65%) (A)	12.5	DCF 13% WACC, terminal growth is zero for mines
China coal	2.4	DCF 15% WACC, terminal growth is zero for mines
Australian coal (Centennial)	10.1	DCF 15% WACC, terminal growth is zero for mines
Net value of coal (B)	25.1	
Value of power business		
BLCP	0.2	DCF 7.1% WACC, terminal growth is zero at the end of PPA
China power	2.5	DCF 7.1% WACC, terminal growth is zero at the end of PPA
Hongsa	4.3	DCF 7.1% WACC, terminal growth is zero at the end of PPA
SLG	1.2	DCF 7.1% WACC, terminal growth is zero at the end of PPA
NIGGC	1.2	DCF 4% WACC, terminal growth is zero at the end of PPA
Solar farms (Japan, Thailand, China)	1.0	DCF 7.1% WACC, terminal growth is zero at the end of PPA
Net value of power (C)	10.5	
Net value of shale gas (D)	3.5	DCF 7.1% WACC, terminal growth is zero at the end of PPA
Banpu's net debt	(20.3)	at end FY22E
Net value of Banpu (B+C+D)	18.8	Target price

Sources: Banpu; FSSIA estimates

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) *	(14.0)	3.2	2.8	3.4	4.4
Recurring P/E @ target price (x) *	(23.5)	5.3	4.7	5.6	7.3
Reported P/E (x)	(31.8)	7.7	2.8	3.4	4.4
Dividend yield (%)	4.5	4.0	19.9	15.9	12.1
Price/book (x)	0.9	1.0	0.7	0.7	0.8
Price/tangible book (x)	0.9	1.0	0.7	0.7	0.8
EV/EBITDA (x) **	25.7	4.2	3.5	3.7	4.0
EV/EBITDA @ target price (x) **	30.3	5.1	4.2	4.5	5.2
EV/invested capital (x)	0.9	0.9	0.8	0.8	0.8

* 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 2020

EXCELLENT LEVEL										
AAV	ADVANC	AF	AIRA	AKP	AKR	ALT	AMA	AMATA	AMATAV	ANAN
AOT	AP	ARIP	ARROW	ASP	BAFS	BANPU	BAY	BCP	BCPG	BDMS
BEC	BEM	BGRIM	BIZ	BKI	BLA	BOL	BPP	BRR	BTS	BWG
CENTEL	CFRESH	CHEWA	CHO	CIMBT	CK	CKP	CM	CNT	COL	COMAN
COTTO	CPALL	CPF	CPI	CPN	CSS	DELTA	DEMCO	DRT	DTAC	DTC
DV8	EA	EASTW	ECF	ECL	EGCO	EPG	ETE	FNS	FPI	FPT
FSMART	GBX	GC	GCAP	GEL	GFPT	GGC	GPSC	GRAMMY	GUNKUL	HANA
HARN	HMPRO	ICC	ICHI	III	ILINK	INTUCH	IRPC	IVL	JKN	JSP
JWD	K	KBANK	KCE	KKP	KSL	KTB	KTC	LANNA	LH	LHFG
LIT	LPN	MAKRO	MALEE	MBK	MBKET	MC	MCOT	METCO	MFEC	MINT
MONO	MOONG	MSC	MTC	NCH	NCL	NEP	NKI	NOBLE	NSI	NVD
NYT	OISHI	ORI	OTO	PAP	PAP	PCSGH	PDJ	PG	PHOL	PLANB
PLAT	PORT	PPS	PR9	PREB	PRG	PRM	PSH	PSL	PTG	PTT
PTTEP	PTTGC	PYLON	Q-CON	QH	QTC	RATCH	RS	S	S & J	SAAM
SABINA	SAMART	SAMTEL	SAT	SC	SCB	SCC	SCCC	SCG	SCN	SDC
SEAFCO	SEAOIL	SE-ED	SELIC	SENA	SIRI	SIS	SITHAI	SMK	SMPC	SNC
SONIC	SORKON	SEDI	SPI	SPRC	SPVI	SSSC	SST	STA	SUSCO	SUTHA
SVI	SYMC	SYNTEC	TACC	TASCO	TCAP	TFMAMA	THANA	THANI	THCOM	THG
THIP	THRE	THREL	TIP	TIPCO	TISCO	TK	TKT	TTB	TMILL	TNDT
TNL	TOA	TOP	TPBI	TQM	TRC	TSC	TSR	TSTE	TSTH	TTA
TTCL	TTW	TU	TVD	TVI	TVO	TWPC	U	UAC	UBIS	UV
VGI	VIH	WACOAL	WAVE	WHA	WHAUP	WICE	WINNER	TRUE		

VERY GOOD LEVEL										
2S	ABM	ACE	ACG	ADB	AEC	AEONTS	AGE	AH	AHC	AIT
ALLA	AMANAHA	AMARIN	APCO	APCS	APURE	AQUA	ASAP	ASEFA	ASIA	ASIAN
ASIMAR	ASK	ASN	ATP30	AUCT	AWC	AYUD	B	BA	BAM	BBL
BFIT	BGC	BJC	BJCHI	BROOK	BTW	CBG	CEN	CGH	CHARAN	CHAYO
CHG	CHOTI	CHOW	CI	CIG	CMC	COLOR	COM7	CPL	CRC	CRD
CSC	CSP	CWT	DCC	DCON	DDD	DOD	DOHOME	EASON	EE	ERW
ESTAR	FE	FLOYD	FN	FORTH	FSS	FTE	FVC	GENCO	GJS	GL
GLAND	GLOBAL	GLOCON	GPI	GULF	GYT	HPT	HTC	ICN	IFS	ILM
IMH	INET	INSURE	IRC	IRCP	IT	ITD	ITEL	J	JAS	JCK
JCKH	JMART	JMT	KBS	KCAR	KGI	KIAT	KOOL	KTIS	KWC	KWM
L&E	LALIN	LDC	LHK	LOXLEY	LPH	LRH	LST	M	MACO	MAJOR
MBAX	MEGA	META	MFC	MGT	MILL	MITSIB	MK	MODERN	MTI	MVP
NETBAY	NEX	NINE	NTV	NWR	OCC	OGC	OSP	PATO	PB	PDG
PDI	PICO	PIMO	PJW	PL	PM	PPP	PRIN	PRINC	PSTC	PT
QLT	RCL	RICHY	RML	RPC	RWI	S11	SALEE	SAMCO	SANKO	SAPPE
SAWAD	SCI	SCP	SE	SEG	SFP	SGF	SHR	SIAM	SINGER	SKE
SKR	SKY	SMIT	SMT	SNP	SPA	SPC	SPCG	SR	SRICHA	SSC
SSF	STANLY	STI	STPI	SUC	SUN	SYNEX	T	TAE	TAKUNI	TBSP
TCC	TCMC	TEAM	TEAMG	TFG	TIGER	TITLE	TKN	TKS	TM	TMC
TMD	TMI	TMT	TNITY	TNP	TNR	TOG	TPA	TPAC	TPCORP	TPOLY
TPS	TRITN	TRT	TRU	TSE	TVT	TWP	UEC	UMI	UOBKH	UP
UPF	UPOIC	UT	UTP	UWC	VL	VNT	VPO	WIJK	WP	XO
YUASA	ZEN	ZIGA	ZMICO							

GOOD LEVEL										
7UP	A	ABICO	AJ	ALL	ALUCON	AMC	APP	ARIN	AS	AU
B52	BC	BCH	BEAUTY	BGT	BH	BIG	BKD	BLAND	BM	BR
BROCK	BSBM	BSM	BTNC	CAZ	CCP	CGD	CITY	CMAN	CMO	CMR
CPT	CPW	CRANE	CSR	D	EKH	EP	ESSO	FMT	GIFT	GREEN
GSC	GTB	HTECH	HUMAN	IHL	INOX	INSET	IP	JTS	JUBILE	KASET
KCM	KKC	KUMWEL	KUN	KWG	KYE	LEE	MATCH	MATI	M-CHAI	MCS
MDX	MJD	MM	MORE	NC	NDR	NER	NFC	NNCL	NPK	NUSA
OCEAN	PAF	PF	PK	PLE	PMTA	POST	PPM	PRAKIT	PRECHA	PRIME
PROUD	PTL	RBF	RCI	RJH	ROJNA	RP	RPH	RSP	SF	SFLEX
SGP	SISB	SKN	SLP	SMART	SOLAR	SPG	SQ	SSP	STARK	STC
SUPER	SVOA	TC	TCCC	THMUI	TIW	TNH	TOPP	TPCH	TIPIP	TPLAS
TTI	TYCN	UKEM	UMS	VCOM	VRANDA	WIN	WORK	WPH		

Description

Score Range

Excellent

90-100

Very Good

80-89

Good

70-79

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; ** delisted

Source: Thai Institute of Directors Association (IOD); FSSIA's compilation

Anti-corruption Progress Indicator 2020

CERTIFIED										
2S	ADVANC	AI	AIE	AIRA	AKP	AMA	AMANAHA	AP	AQUA	ARROW
ASK	ASP	AYUD	B	BAFS	BANPU	BAY	BBL	BCH	BCP	BCPG
BGC	BGRIM	BJCHI	BKI	BLA	BPP	BROOK	BRR	BSBM	BTS	BWG
CEN	CENTEL	CFRESH	CGH	CHEWA	CHOTI	CHOW	CIG	CIMBT	CM	CMC
COL	COM7	CPALL	CPF	CPI	CPN	CSC	DCC	DELTA	DEMCO	DIMET
DRT	DTAC	DTC	EASTW	ECL	EGCO	FE	FNS	FPI	FPT	FSS
FTE	GBX	GC	GCAP	GEL	GFPT	GGC	GJS	GPSC	GSTEEL	GUNKUL
HANA	HARN	HMPRO	HTC	ICC	ICHI	IFS	INET	INSURE	INTUCH	IRPC
ITEL	IVL	K	KASET	KBANK	KBS	KCAR	KCE	KGI	KKP	KSL
KTB	KTC	KWC	L&E	LANNA	LHFG	LHK	LPN	LRH	M	MAKRO
MALEE	MBAX	MBK	MBKET	MC	MCOT	MFC	MFEC	MINT	MONO	MOONG
MPG	MSC	MTC	MTI	NBC	NEP	NINE	NKI	NMG	NNCL	NSI
NWR	OCC	OCEAN	OGC	ORI	PAP	PATO	PB	PCSGH	PDG	PDI
PDJ	PE	PG	PHOL	PL	PLANB	PLANET	PLAT	PM	PPP	PPPM
PPS	PREB	PRG	PRINC	PRM	PSH	PSL	PSTC	PT	PTG	PTT
PTTEP	PTTGC	PYLON	Q-CON	QH	QLT	QTC	RATCH	RML	RWI	S & J
SABINA	SAT	SC	SCB	SCC	SCCC	SCG	SCN	SEAOIL	SE-ED	SELIC
SENA	SGP	SIRI	SITHAI	SMIT	SMK	SMPC	SNC	SNP	SORKON	SPACK
SPC	SPI	SPRC	SRICHA	SSF	SSSC	SST	STA	SUSCO	SVI	SYNTEC
TAE	TAKUNI	TASCO	TBSP	TCAP	TCMC	TFG	TFI	TFMAMA	THANI	THCOM
THIP	THRE	THREL	TIP	TIPCO	TISCO	TKT	TTB	TMD	TMILL	TMT
TNITY	TNL	TNP	TNR	TOG	TOP	TPA	TPCORP	TPP	TRU	TSC
TSTH	TTCL	TU	TVD	TVI	TVO	TWPC	U	UBIS	UEC	UKEM
UOBKH	UWC	VGI	VIH	VNT	WACOAL	WHA	WHAUP	WICE	WIJK	XO
ZEN	TRUE									

DECLARED										
7UP	ABICO	AF	ALT	AMARIN	AMATA	AMATAV	ANAN	APURE	B52	BKD
BM	BROCK	BUI	CHO	CI	COTTO	DDD	EA	EFORL	EP	ERW
ESTAR	ETE	EVER	FSMART	GPI	ILINK	IRC	J	JKN	JMART	JMT
JSP	JTS	KWG	LDC	MAJOR	META	NCL	NOBLE	NOK	PK	PLE
ROJNA	SAAM	SAPPE	SCI	SE	SHANG	SINGER	SKR	SPALI	SSP	STANLY
SUPER	SYNEX	THAI	TKS	TOPP	TRITN	TTA	UPF	UV	WIN	ZIGA

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 June 24, 2019) are categorised into: 1) companies that have declared their intention to join CAC, and; 2) companies certified by CAC.

Source: 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

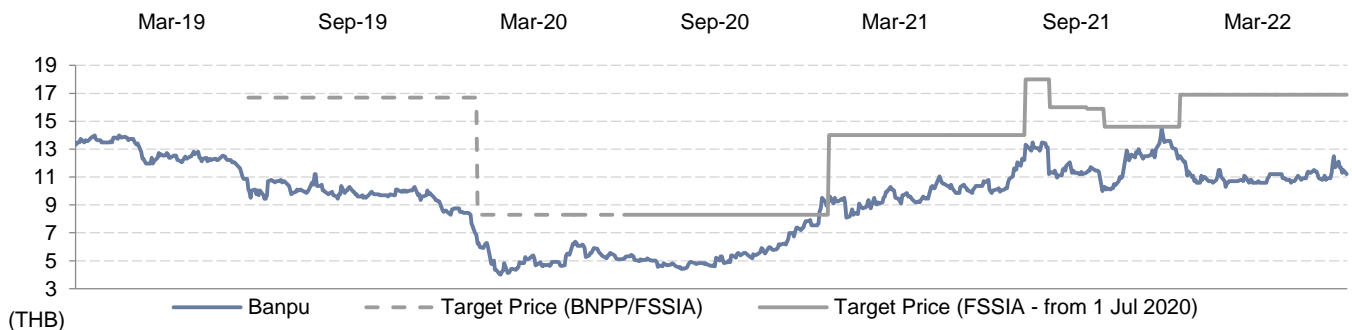
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History of change in investment rating and/or target price

Banpu (BANPU TB)



Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
13-Aug-2019	BUY	16.70	23-Dec-2020	BUY	14.00	02-Aug-2021	BUY	15.90
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

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 11.20	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 14-Mar-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.