

11 NOVEMBER 2021

THAILAND / MATERIALS

BANPU **BANPU TB**
BUY

UNCHANGED

TARGET PRICE	THB16.90
CLOSE	THB10.80
UP/DOWNSIDE	+56.5%
PRIOR TP	THB16.90
CHANGE IN TP	UNCHANGED
TP vs CONSENSUS	+18.1%

Not a falling knife but a rising spear

5.3x 2021E P/E and 4.1x 2022E P/E underlines attractiveness

Under our base case scenario – a USD/130t Newcastle index (NCT) coal price, a USD105.8/t average selling price (ASP) for coal, and a USD3.2/mmbtu gas price – ceteris paribus, Banpu's 2021 net profit would be THB11.1b, with projected quarterly net profits rising from THB6.1b in 4Q21 to THB10.3b in 1Q22. Our net profit forecasts of THB11.1b in 2021 and THB18.4b in 2022 imply an attractive 5.3x 2021E P/E and 4.1x 2022E P/E. Even under our worst-case scenario – a USD120/t NCT price, a USD98/t ASP for coal, and a USD3.2/mmbtu gas price – ceteris paribus, Banpu's net profit in 2021 would be THB7.6b in 2021 and THB11.6b in 2022, implying only 7.7x 2021E P/E and 6.6x 2022E P/E.

USD120-150/t Newcastle index price is now relevant to earnings

We believe the NCT price at over USD170/t is irrelevant to Banpu's coal earnings given 1) the lagging impact of the coal ASP by 3-6 months from the spot price; 2) the price for 30-40% of Banpu's coal sales volume is already secured in advance; and 3) the wider price discount between Banpu's 6,000kcal/kg quality coal and NCT (6,800kcal/kg heat rate).

Winter demand to boost coal prices higher again

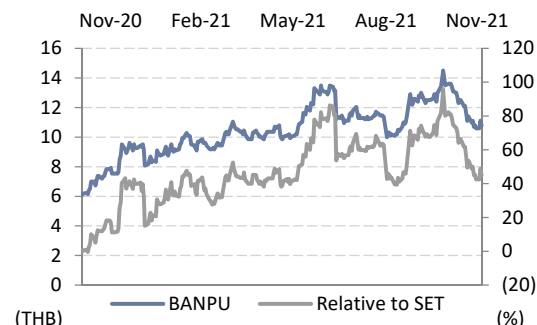
While the recent collapse in the NCT price to its USD139/t bottom is in line with our expectation, we think an NCT price at USD120-150/t is highly sustainable during the upcoming winter period in 4Q21-1H22 – the level that we think would be high enough to boost Banpu's quarterly net profits to THB4b-7b, based on our estimate. Even though the coal inventory of the State Grid Corporation of China, which supplies power to about 1.1b people, rebounded to 20 days last week, the company has warned of a tight balance between the power supply and winter demand.

Stronger growth under USD150/t consolidated coal price

We maintain BUY and our SOTP-based target price of THB16.9. We believe the market still underestimates the 2022-23 earnings growth potential of Banpu, driven by its key growth engines – high and sustainable prices of coal and gas into 2022 and solid power earnings – reflected in its share price collapse by 29% from its recent peak. While our current EPS forecasts for 2021-23 are on par with Bloomberg's consensus estimates, we believe Banpu is likely to post stronger-than-expected net profits in 4Q21-2023, backed by high ASPs for coal and much lower 4Q21-2022E hedging losses.

KEY STOCK DATA

YE Dec (THB m)	2020	2021E	2022E	2023E
Revenue	71,332	122,721	107,504	96,271
Net profit	(1,786)	11,090	12,771	9,984
EPS (THB)	(0.35)	2.02	1.78	1.12
vs Consensus (%)	-	(0.7)	9.5	(3.9)
EBITDA	9,287	54,686	49,651	43,889
Core net profit	(3,288)	11,090	12,771	9,984
Core EPS (THB)	(0.65)	2.02	1.78	1.12
Chg. In EPS est. (%)	nm	-	-	-
EPS growth (%)	nm	nm	(11.9)	(36.7)
Core P/E (x)	(16.7)	5.4	6.1	9.6
Dividend yield (%)	4.6	12.6	8.5	4.8
EV/EBITDA (x)	23.3	4.1	5.1	6.3
Price/book (x)	0.9	0.8	0.8	0.8
Net debt/Equity (%)	165.3	119.6	103.9	89.7
ROE (%)	(4.9)	15.7	14.7	9.6



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	(20.0)	(5.8)	81.8
Relative to country (%)	(19.6)	(10.8)	49.6
Mkt cap (USD m)	2,230		
3m avg. daily turnover (USD m)	59.9		
Free float (%)	88		
Major shareholder	Vongkusolkit Family (13%)		
12m high/low (THB)	14.90/5.77		
Issued shares (m)	6,766.00		

Sources: Bloomberg consensus; FSSIA estimates



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Investment thesis

We believe Banpu's earnings growth outlook will improve in 2021-22, driven by its coal, gas, and power businesses due to the improving margin outlooks on the stronger demand and tighter supply.

We think that rising Newcastle index coal prices in the range of USD68-70/tonne should lead to higher coal earnings in 2021-22. 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.

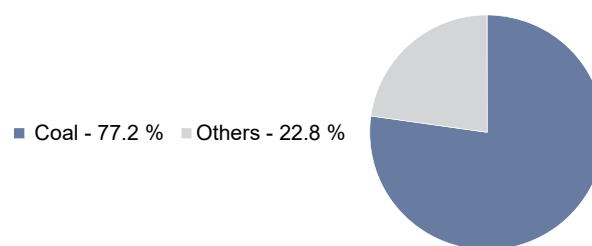
We see three factors that we think will drive up Banpu's earnings in 2021-22. First, its gas earnings are in an upcycle due to the tighter supply in the US. Second, we expect higher coal earnings on the back of USD100-130/tonne index coal prices. Finally, we see more upsides for its power earnings due 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.

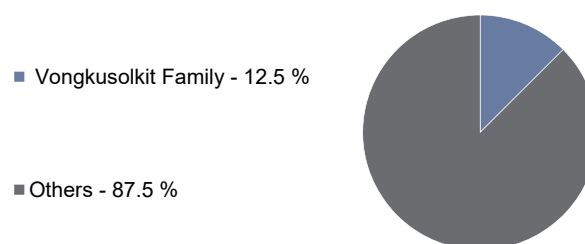
www.banpu.com

Principal activities (revenue, 2020)



Source: Banpu

Major shareholders



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
Nov 2021	3Q21 results announcement

Key assumptions

	2021E	2022E	2023E
Coal sales volume (mtpa)	33.5	34.0	34.0
Newcastle coal price (USD/t)	130.0	100.0	70.0
ASP for coal (USD/t)	105.8	81.3	65.0
Total cost - Indonesia (USD/t)	58.7	54.6	51.5
Total cost - Australia (USD/t)	72.0	72.0	72.0

Source: FSSIA estimates

Earnings sensitivity

- Ceteris paribus, for every 1% rise in average coal price, we project 2021 EPS to rise by 2.6%, and vice versa.
- Ceteris paribus, for every 1% rise in coal sales volume, we estimate 2021 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

Disappointing 3Q21 net profit eroded by a large hedging loss

BANPU's 3Q21 core net profit (NP) was THB8.6b, up 196% q-q and from a net loss (NL) of THB642m in 3Q20, driven by the higher ASPs for coal and gas. Including a THB5.8b non-recurring expense, 3Q21 reported NP was THB3.5b, up 164% q-q and up from an NL of THB516m in 3Q20; 13% below our estimate and 5% below Bloomberg consensus.

EBITDA rose to USD530m, or THB17.4b (+282% y-y, +80% q-q) due to the higher EBITDA from coal at USD399m (+105% q-q) and shale gas at USD122.4m (+74% q-q) but lower power at USD2.6m (-93% q-q), and energy technology at USD5.4m (-18% q-q).

The larger-than-expected USD177m hedging loss from financial derivatives led to the disappointing 3Q21 results.

While EBITDA from Banpu's core businesses of coal and shale gas were much stronger in 3Q21 as expected, the reported net profit of THB3.5b was below our forecast and Bloomberg's consensus estimate due to the larger-than-expected after-tax hedging loss of THB5.1b (USD177m before tax), which consisted of a USD178m realised loss and a USD1m unrealised loss.

The USD177m hedging loss included:

- 1) USD102m loss from coal swap contracts;
- 2) USD61m loss from gas swap contracts;
- 3) USD5m loss from interest swap contracts;
- 4) USD10m loss from FX forward contracts;
- 5) USD1m loss from cross currency and interest rate swap contracts;
- 6) USD1m realised gain on fuel swap contracts;
- 7) USD1m unrealised loss on the fair value of financial derivatives.

Exhibit 1: Summary of 3Q21/9M21 operations

	3Q20	2Q21	----- 3Q21 -----			9M20	9M21	Change	2021E
	(THB m)	(THB m)	(THB m)	(q-q %)	(y-y %)	(THB m)	(THB m)	(y-y %)	(THB m)
Revenue	14,739	25,063	38,234	52.6	159.4	51,073	85,559	67.5	122,721
Operating costs	(10,172)	(15,393)	(20,800)	35.1	104.5	(38,927)	(49,859)	28.1	(68,035)
EBITDA	4,567	9,670	17,433	80.3	281.7	12,146	35,700	193.9	54,686
<i>EBITDA margin (%)</i>	31	39	46	<i>nm</i>	<i>nm</i>	23.8	41.7	<i>nm</i>	45
Depreciation & amort	(3,425)	(3,589)	(4,173)	16.3	21.8	(10,004)	(11,507)	15.0	(17,681)
EBIT	1,142	6,081	13,260	118.1	1,060.7	2,142	24,193	1,029.4	37,005
Interest expense	(1,345)	(1,349)	(1,521)	12.7	13.1	(4,273)	(4,225)	(1.1)	(6,195)
Interest & invt inc	402	365	335	(8.2)	(16.6)	607	953	57.0	280
Associates' contrib	1,000	2,002	2,229	11.3	123.0	3,486	5,609	60.9	6,394
Exceptionals	(1,072)	(3,643)	(7,269)	<i>nm</i>	<i>nm</i>	(1,251)	(12,330)	885.8	(10,787)
Pretax profit	127	3,456	7,035	103.6	5,426.5	711	14,200	1,896.7	26,697
Tax	(353)	(1,018)	(1,996)	96.0	465.0	(1,169)	(4,415)	277.7	(5,685)
<i>Tax rate (%)</i>	277	29	28	<i>nm</i>	<i>nm</i>	164	31	<i>nm</i>	21
Minority interests	(291)	(1,112)	(1,534)	37.9	428.1	(860)	(3,419)	297.4	(9,923)
Net profit	(516)	1,325	3,505	164.4	nm	(1,318)	6,366	nm	11,090
Non-recurring	126	(1,575)	(5,083)	222.8	<i>nm</i>	571	(6,944)	<i>nm</i>	-
Core profit	(642)	2,900	8,588	196.1	nm	(1,889)	13,309	nm	11,090
EPS (THB)	(0.10)	0.26	0.68	164.4	<i>nm</i>	(0.26)	1.23	<i>nm</i>	2.02
Core EPS (THB)	(0.12)	0.56	1.66	196.1	<i>nm</i>	(0.37)	2.58	<i>nm</i>	2.02

Sources: BANPU; FSSIA estimates

Coal EBITDA of USD399m (+105% q-q). Coal operations improved markedly, driven by a higher ASP and a rising sales volume. 3Q21 coal NP from China was at USD50m on a higher gross margin and production, while the China power unit posted a USD1m NL due to the higher coal cost.

The coal sales volume rose to 8.7mt in 3Q21, up 10% y-y and 12% q-q. Sales volumes from Centennial Coal (CEY) remained flat at 2.49mt (-23% y-y, +0.1% q-q) due to the complex geology of the Springvale mine. Coal sales volumes in Indonesia rose to 5.8mt (+35% y-y, +19% q-q), despite the heavy rainfall.

The 3Q21 coal ASP rose to USD99.6/t (+96% y-y, +33% q-q) due to the 39% q-q higher ASP for PT Indo Tambangraya Megah Tbk (ITMG) to USD112.7/t vs the 10.4% q-q rise in coal cost in Indonesia to USD45.9/t on the higher diesel cost. CEY's ASP increased to AUD102.8/t (+30% y-y, +15% q-q), while the coal cost in Australia shot up to AUD88.1/t, up 8% q-q due to higher mining costs.

The average coal gross profit margin (GPM) was 47% in 3Q21 due to the higher GPM for CEY (14% in 3Q21 from 9% in 2Q21), ITMG's improving GPM (59% from 49%), and China traded coal (5% from 12%).

Shale gas EBITDA rose to USD530m (+74% q-q). The sales volume for shale gas inched up to 62bcf in 3Q21, up 3% q-q and 309% y-y, due to the incorporation of the Barnett shale area's sales volume of 50bcf and the strong demand in the US after the economic reopening.

The ASP for gas jumped 43% q-q to USD3.68/mcf vs the USD0.98/mcf cost, with a slightly higher cost of gathering, processing, and transportation, resulting in a higher GPM at 53% in 3Q21, up from 34% in 2Q21 and from -60% in 3Q20.

Exhibit 2: 3Q21 key quarterly performance

	3Q20	2Q21	3Q21	Change	
				(q-q %)	(y-y %)
Total coal sales volume (m tonnes)	7.95	7.84	8.74	11.5	9.9
- Indonesia coal sales volume	4.31	4.88	5.82	19.3	35.0
- Australia coal sales volume	3.24	2.49	2.49	-	(23.1)
ASP for coal (USD/tonne)	50.80	74.84	99.57	33.0	96.0
- ASP for coal - Indonesia (USD/tonne)	49.10	81.05	112.66	39.0	129.5
- ASP for coal - Australia (AUD/tonne)	78.97	89.77	102.83	14.5	30.2
Coal cost - overall (USD/tonne)	38.84	48.05	51.89	8.0	33.6
- Coal cost - Indonesia (USD/tonne)	32.28	41.62	45.94	10.4	42.3
- Coal cost - Australia (AUD/tonne)	70.95	81.72	88.07	7.8	24.1
Sales volume – Gas (bcf)	15.15	60.23	61.96	2.9	309.0
ASP for gas (USD/mcf)	0.55	2.57	3.68	43.2	569.1
Cost for gas (USD/mcf)	1.11	0.91	0.98	7.7	(11.7)
Average GPM (%)*				(ppt)	(ppt)
Average GPM - Indonesia coal	34	49	59	10.0	25.0
Average GPM - Australia coal	11	9	14	5.0	3.0
Average GPM - China (traded coal)	2	12	5	(7.0)	3.0
Average GPM - coal	23	36	48	12.0	25.0
Average GPM - power	20	7	1	(6.0)	(19.0)
Average GPM - gas	(60)	34	53	19.0	113.0
Average GPM	20	34	47	13.0	27.0

*Note: Change in margin % is represented in ppt change

Sources: BANPU; FSSIA estimates

Power EBITDA plunged to USD2.6m (-93% q-q). The power business witnessed poor earnings of THB597m in 3Q21. Key points are:

Lower net profits from the Hongsa power plant to USD21.7m (-38% q-q) due to the planned shutdown of unit 1 and unit 3, resulting in a lower effective availability factor of 75%, down from 92% in 2Q21.

The BCLP power plants contributed a net loss of USD1.7m due to deferred tax expenses and an unrealised FX loss.

China's three small power producers (CHP) posted a net loss of USD1m, caused by the mismatch of the electricity tariff and the coal cost that was partly offset by the heat subsidy for Zhengding power plant.

Shan Xi Lu Guang (SLG) power plant experienced a net loss of USD7.1m due to the high coal cost.

Nakoso power plant in Japan, acquired in Apr-21, recorded a share of profits of USD3.1m.

Energy technology (Banpu NEXT), which includes solar and wind farms in China and Japan, had a net loss of USD2m.

Not a falling knife but a rising spear

We believe the market still underestimates the 2022-23 earnings growth potential of Banpu, driven by its key growth engines – high and sustainable prices of coal and gas into 2022 and solid power earnings – reflected in its share price collapsing by 29% from its recent peak of THB14.9 to THB10.6 as of 8 Nov-21.

The main triggering factors that led to Banpu's share price collapse could also include the sharp and fast drop in the coal price from over USD270/t for the NCT price down to USD150-155/t as of 8 Nov-21.

We believe the NCT price at over USD170/t is irrelevant to Banpu's coal earnings given 1) the lagging impact of the coal ASP by 3-6 months from the spot price; 2) the price for 30-40% of Banpu's coal sales volume is already secured in advance; and 3) the wider price discount between Banpu's 6,000kcal/kg quality coal and NCT (6,800kcal/kg heat rate).

Dwindling impact from hedging loss should allow Banpu's quarterly net profits to rise markedly in 1Q21-1H22. While Banpu's coal gross margins, particularly for its coal sales volume of 23mtpa in Indonesia, have enjoyed a significant rise in ASPs since 2Q21, the gross margin for its coal sales have increased at a much lower degree than the increase in the NCT price due mainly to the large hedging loss that has offset the margin gain from the coal price rise.

Our analysis indicates that Banpu incurred a hedging loss of USD45m in 2Q21, based on 1.1mt of unwound hedging coal volume, and USD102m in 3Q21 (2.1mt), largely offsetting the net profit of USD256m in 3Q21. However, given our sustained high NCT coal price projection at above USD150/t in 4Q21 and over USD100/t at least until 2Q22, we expect Banpu's coal earnings to significantly jump in 4Q21-2Q22 to over THB5b per quarter. We estimate the hedging loss to significantly shrink to USD40m in 4Q21 (0.7mt) and decline to less than USD30m in subsequent quarters in 1Q-2Q22 as the outstanding hedging coal volume should decline from over 1mt per quarter in 2Q-3Q21 to below 0.5mt per quarter in 1H22.

Three coal and gas price scenarios & their impact on Banpu's 2021-23E profit

To see how large and sensitive Banpu's earnings upsides – both on a quarterly and annual forecast basis – could be to the changes in the prices of coal (NCT) and gas (Henry Hub), we have established three scenarios – our base case, worst case, and best case – with a set of different assumptions for the prices of coal (NCT and Banpu's ASP) and gas.

We have found that under our base case scenario – USD/130t NCT, USD105.8/t ASP for coal, and a USD3.2/mmbtu gas price – ceteris paribus, Banpu's 2021 net profit would be THB11.1b, with projected quarterly net profits rising from THB6.1b in 4Q21 to THB10.3b in 1Q22, including a divestment gain, then declining to THB3.5b in 2Q22 and THB2.1b in 4Q22. Our net profit forecasts of THB11.1b in 2021 and THB18.4b in 2022 imply an attractive 5.3x 2021E P/E and 4.1x 2022E P/E. Even under our worst-case scenario – USD120/t NCT, a USD98/t ASP for coal, and a USD3.2/mmbtu gas price – ceteris paribus, Banpu's net profit in 2021 would be THB7.6b in 2021 and THB11.6b in 2022, implying only 7.7x 2021E P/E and 6.6x 2022E P/E.

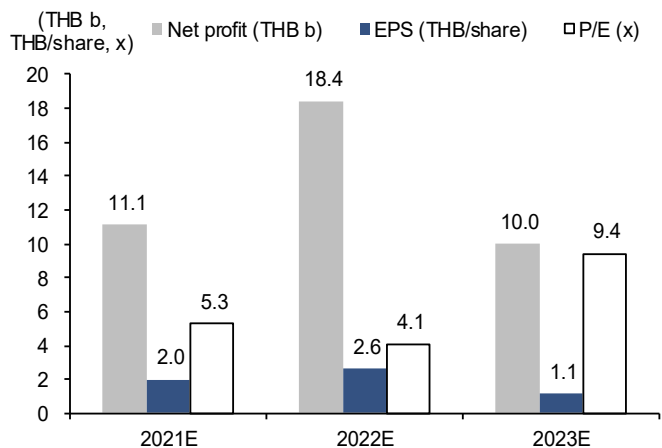
Hence, we believe Banpu's share price at THB10.6 as of 8 Nov-21 is highly attractive based on our 2022 net profit forecasts, trading at only 4.1x P/E (base case), 6.6x P/E (worst case), and 2.8x P/E (best case). We believe our 2022 NCT assumptions of USD100/t under the base case and USD120/t under the best case are highly achievable based on our projected high NCT prices of over USD130/t in 1Q22, USD100/t in 2Q22, and USD82.5/t in 2H22, based on the current NCT futures and incorporating the scenario where China would have a sufficient coal supply for the winter (Nov-21 to Mar-22). Note that we think that it is likely that the coming winter in the Northern Hemisphere could be colder than a normal year, based on China's National Meteorological Centre forecasts.

Exhibit 3: FSSIA's base, worst, and best-case scenarios for the coal and gas price impact on Banpu's earnings

Share price as of 8 Nov-21	10.6 THB/share			3Q21E	4Q21E	1Q22E	2Q22E	3Q22E	4Q22E
	2021E	2022E	2023E						
Base case									
Net profit (THB b)	11.1	18.4	10.0	5.0	6.1	10.3	3.5	2.6	2.1
Gain from divestment of SunSeap (THB b)	-	5.6	-	-	-	5.6	-	-	-
EPS (THB/share)	2.0	2.6	1.1	0.5	0.6	1.0	0.4	0.3	0.2
P/E (x)	5.3	4.1	9.4						
Assumptions									
Newcastle coal price index (USD/t)	130.0	100.0	70.0	150.0	160.0	130.0	100.0	90.0	75.0
ASP - coal (USD/t)	105.8	81.3	65.0	115.0	125.0	115.0	80.0	73.0	64.0
ASP - gas (USD/mmbtu)	3.2	3.5	3.0	3.2	3.2	3.4	3.6	3.5	3.5
Worst case									
Net profit (THB b)	7.6	11.6	6.4	5.0	4.0	7.0	2.0	1.6	1.3
Gain from divestment of SunSeap (THB b)	-	5.6	-	-	-	5.6	-	-	-
EPS (THB/share)	1.4	1.6	0.7	0.5	0.4	0.7	0.2	0.2	0.1
P/E (x)	7.7	6.6	14.7						
Assumptions									
Newcastle coal price index (USD/t)	120.0	80.0	60.0	150.0	160.0	100.0	80.0	75.0	70.0
ASP - coal (USD/t)	98.0	65.0	53.0	115.0	125.0	80.0	63.0	62.0	60.0
ASP - gas (USD/mmbtu)	3.2	2.3	2.0	3.2	3.2	3.0	2.3	2.0	2.0
Best case									
Net profit (THB b)	13.2	27.0	11.0	5.0	7.5	13.0	5.5	4.8	3.7
Gain from divestment of SunSeap (THB b)	-	5.6	-	-	-	5.6	-	-	-
EPS (THB/share)	2.4	3.8	1.2	0.5	0.8	1.3	0.6	0.5	0.4
P/E (x)	4.4	2.8	8.6						
Assumptions									
Newcastle coal price index (USD/t)	135.0	120.0	100.0	150.0	160.0	140.0	130.0	115.0	100.0
ASP - coal (USD/t)	108.0	102.8	80.0	115.0	125.0	120.0	110.0	98.0	83.0
ASP - gas (USD/mmbtu)	3.2	4.0	3.5	3.2	3.2	4.0	4.5	4.0	4.0

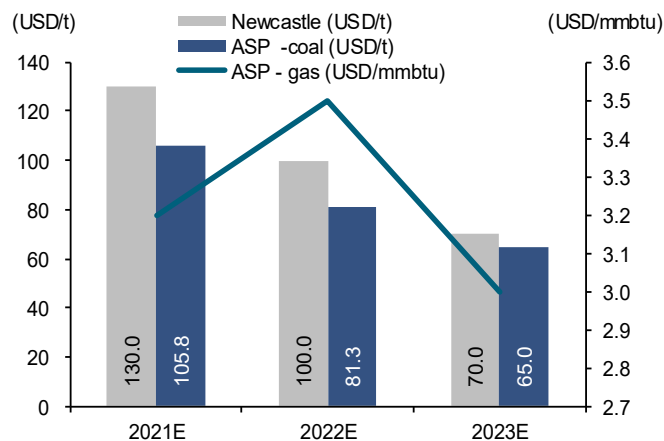
Sources: BANPU; FSSIA estimates

Exhibit 4: Base case annual net profit, EPS, and P/E



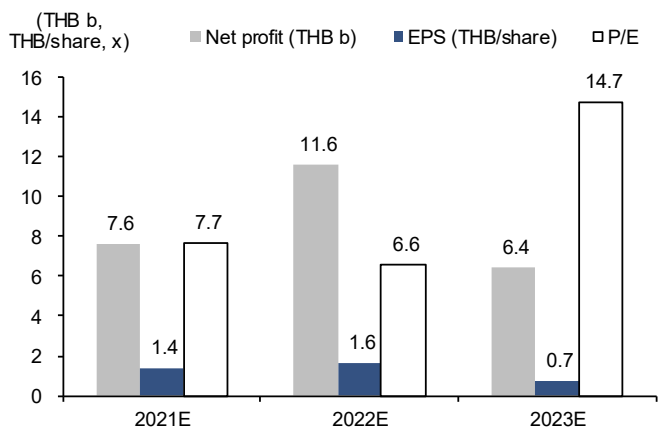
Sources: BANPU; FSSIA estimates

Exhibit 5: Base case assumptions for NCT and ASP for coal and gas



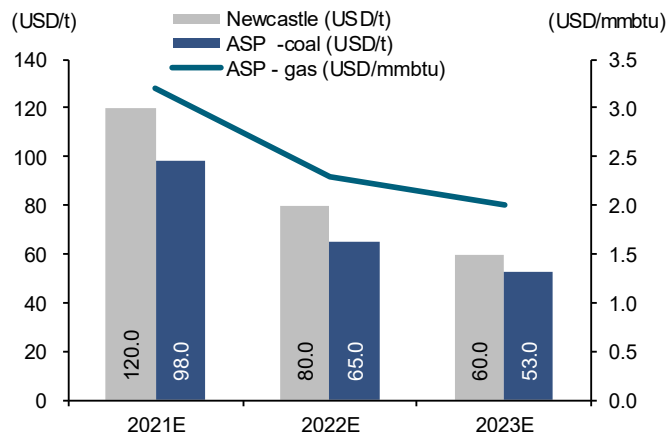
Sources: BANPU; FSSIA estimates

Exhibit 6: Worst case annual net profit, EPS, and P/E



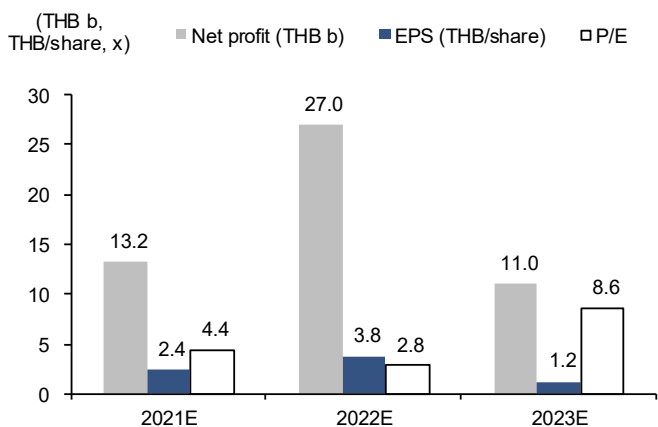
Sources: BANPU; FSSIA estimates

Exhibit 7: Worst case assumptions for NCT and ASP for coal and gas



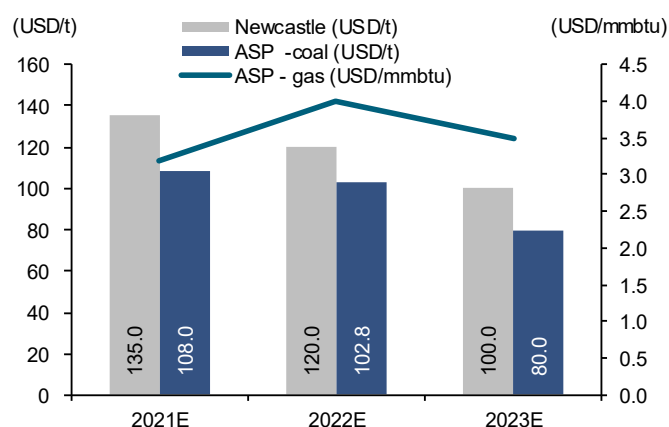
Sources: BANPU; FSSIA estimates

Exhibit 8: Best case annual net profit, EPS, and P/E



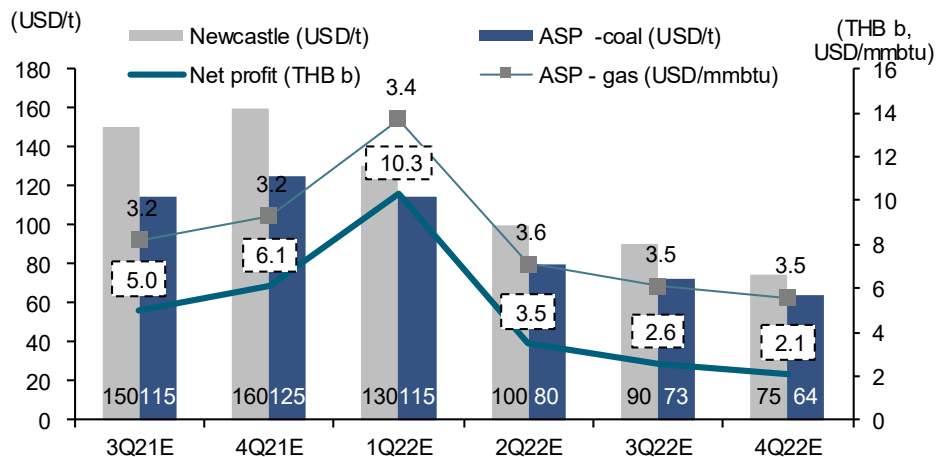
Sources: BANPU; FSSIA estimates

Exhibit 9: Best case assumptions for NCT and ASP for coal and gas



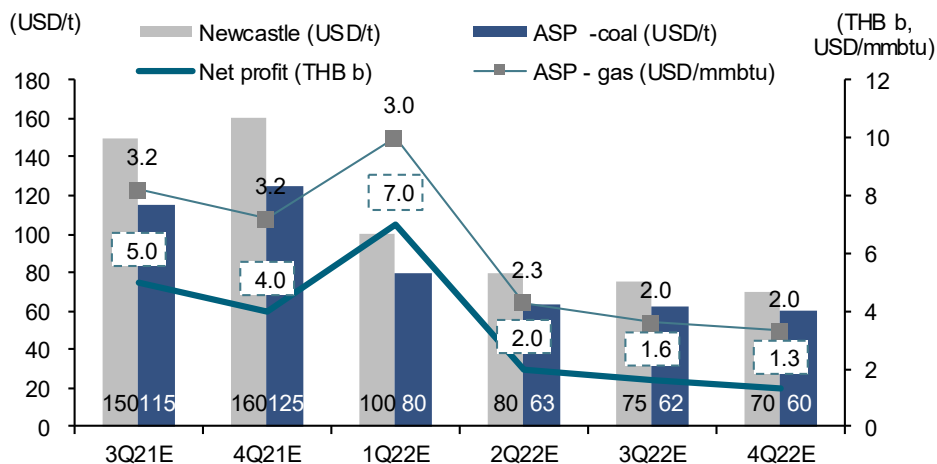
Sources: BANPU; FSSIA estimates

Exhibit 10: Quarterly net profit forecasts vs base case assumptions for NCT and Banpu's ASP for coal and gas



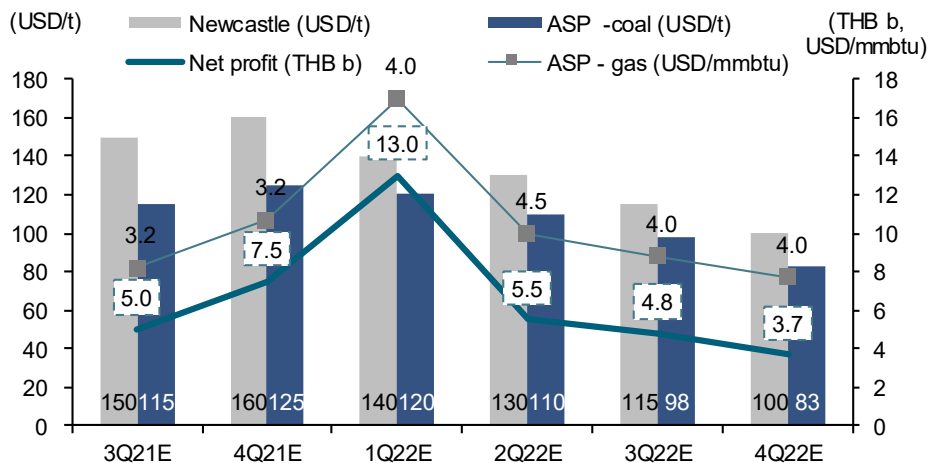
Sources: BANPU; FSSIA estimates

Exhibit 11: Quarterly net profit forecasts vs worst case assumptions for NCT and Banpu's ASP for coal and gas



Sources: BANPU; FSSIA estimates

Exhibit 12: Quarterly net profit forecasts vs best case assumptions for NCT and Banpu's ASP for coal and gas

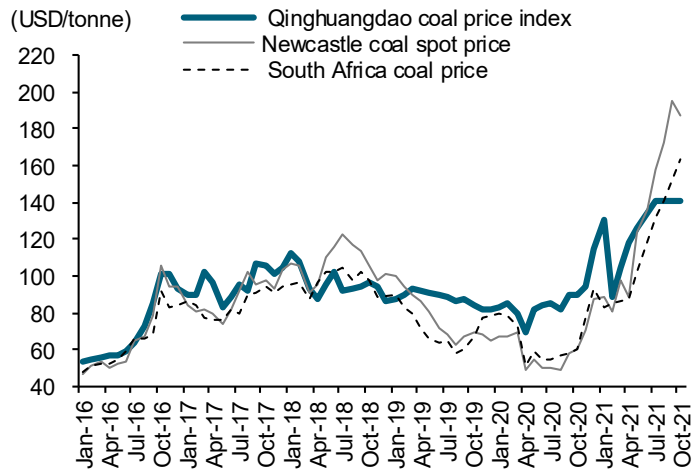


Sources: BANPU; FSSIA estimates

China's policies led to the global coal price dive

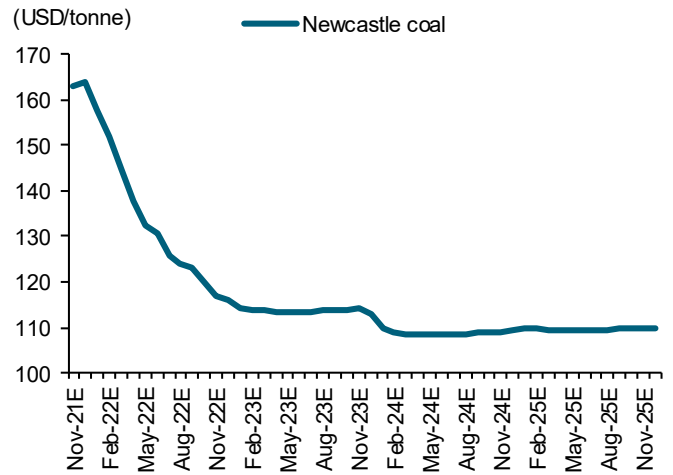
After a sharp spike in the NCT price by USD100/t within only two weeks from USD170/t in mid-Sep to its USD270/t peak on 5 Oct-21 due to fears over an electricity supply shortage in China as a result of the historically low one-day coal inventory at China's power plants and the power rations mandated by China's government in Sep-Oct, the NCT has since collapsed by over USD120/t within one month to its USD139/t bottom on 3 Nov-21.

Exhibit 13: Benchmark coal prices (QHD vs NCT)



Source: Bloomberg

Exhibit 14: Newcastle coal futures



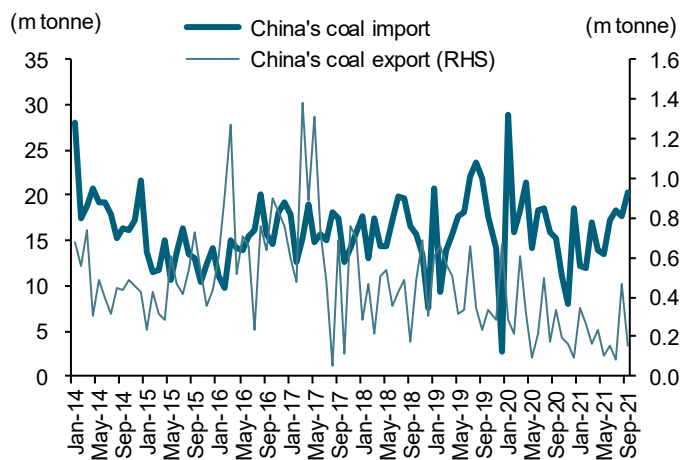
Prices as of 9 November 2021
Source: Bloomberg

The series of events that triggered the coal price collapse began with the Chinese government ordering coal miners, both in operation and already shut-in, to raise their coal production at "all cost" within 30 days.

Rising coal production. China has successfully increased its total coal production from below 11m tonnes per day (mtpd) to 11.93mtpd as of 5 Nov-21, a multi-year high level, according to China's National Development and Reform Commission (NDRC).

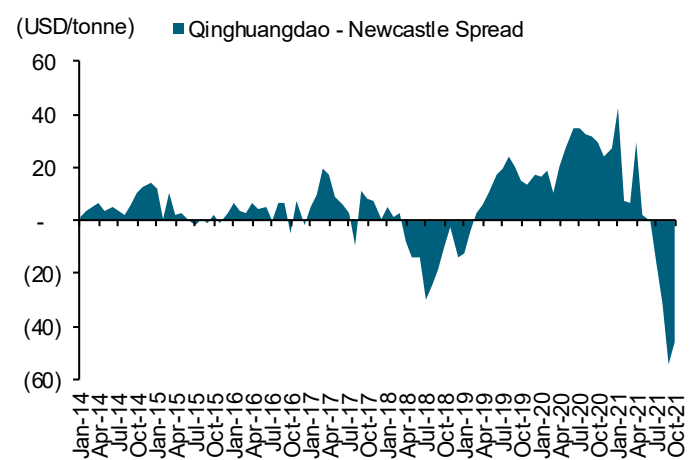
In addition, China increased its monthly coal imports from below 20mt to 20-25mt, mainly from Russia, the US, and Indonesia, to replenish the coal inventories at power plants with a direct connection to the state railway network. Their coal inventories have jumped from a mere 5.1 days in Oct-21 to 19.1 days by end-Oct.

Exhibit 15: China's coal imports and exports



Source: Bloomberg

Exhibit 16: Coal price gap between QHD and NCT

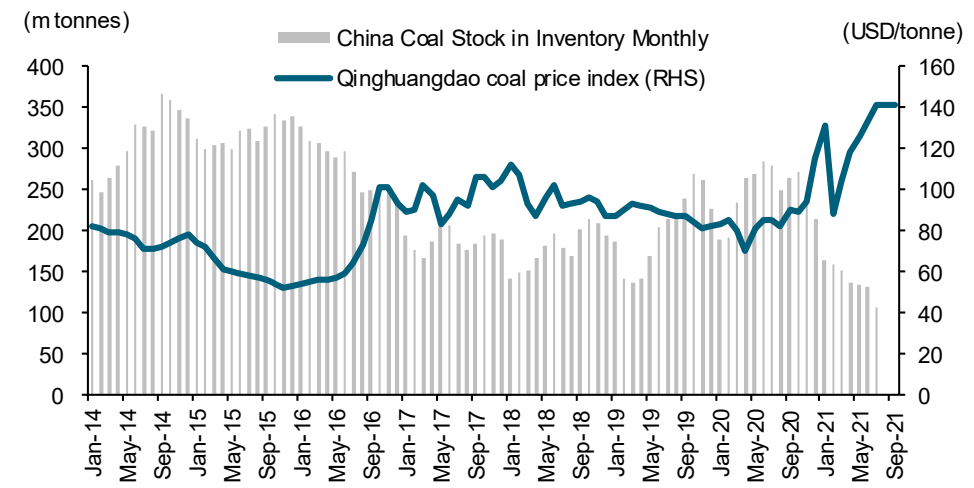


Source: Bloomberg

China increased its coal imports in Sep-Oct. China imported 26.9mt of coal in Oct-21, up 96% y-y but down 18% q-q, despite there already being signs of its power shortage easing, according to China's customs data. As of now, all 18 provinces that faced power shortages at the beginning of Oct, all have sufficient power, and demand has already returned to normalcy since end-Oct.

Coal price cap impact is now less relevant. The final event that triggered the most significant impact on the global coal price was from China's sudden coal price cap. On 28 Oct-21, the NDRC set the near-term coal price of its most-popular 5,500-NAR grade coal at RMB440/t and a price ceiling at RMB528/t, in its effort to curb electricity costs and raise electricity generation.

Exhibit 17: China's coal inventory vs QHD coal price index



Source: Bloomberg

Why we think USD120-150/t NCT price is sustainable in 4Q21-1H22

While the recent collapse in the NCT price to its USD139/t bottom is in line with our expectation, we think an NCT price at USD120-150/t is highly sustainable during the upcoming winter period in 4Q21-1H22 – the level that we think would be high enough to boost Banpu's quarterly net profits to THB4b-7b, based on our estimate.

Current NCT price of USD150/t (6,800kcal/kg heat rate) is already below China's targeted ceiling price of USD176/t (5,500kcal/kg). Most Chinese coal producers in China's three coal-centric provinces of Shanxi, Shaanxi, and Inner Mongolia, are now committed to retain the 5,500kcal thermal coal price at RMB1,200/t (USD176/t), according to the NDRC.

Higher coal supply comes with higher risks. Desperate to meet its electricity needs, China is opening up new coal production of up to 220mt (0.6mtpd), up nearly 6% y-y, at a tremendous cost, to "guarantee the coal supply" to generate sufficient electricity not only for its own people but also for the hundreds of global companies in China. Over 150 mines were ordered to expand their coal production since Sep-21.

However, the extra coal production comes at a high cost, with heightening risks for China's 2.6m coal miners, according to China's National Mine Safety Administration, which reported that 18 workers have died in the past four weeks, mostly in coal mines.

China has closed 5,500 coal mines, most being private-owned, older, smaller, and more polluting and dangerous mines, representing around 50% of the country's total mines, since 2016. The shuttered coal mines' production was partly offset by the rising production from state-owned enterprises, but the net coal production has remained in a downtrend over the past five years. The closure of small mines and a national safety campaign have resulted in much less dangerous outcomes, from 1,973 miners dying in 2011 down to only 228 in 2020.

China is the world's largest producer and consumer of coal, producing 3.2b tonnes per annum and consuming over 3.5b tonnes per annum, with annual coal imports of over 200mt. This 200mt-plus import volume alone accounts for one-third of the entire coal trading volume in Asia Pacific, which includes mostly supplies from Indonesia and Australia. Hence, the axiom, "when China sneezes, the coal price spikes", could not be truer in the current coal price environment.

Colder winter in China could raise coal demand further. China's National Meteorological Centre is predicting snowfall in northern China and cold winds in the next two weeks. China is still facing the risk of a coal and power shortage in the coming winter, according to the Commonwealth Bank of Australia.

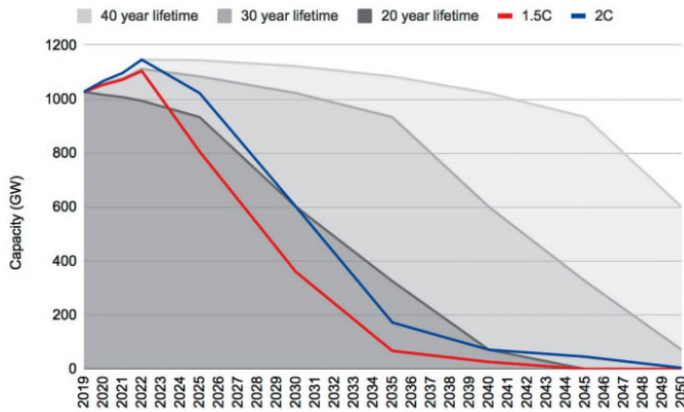
Even though the coal inventory of the State Grid Corporation of China, which supplies power to about 1.1b people, rebounded to 20 days last week, on 7 Nov-21 the company warned of a tight balance between the power supply and winter demand, estimating it to be in the range of 5-10mt of potentially higher coal demand per month, even after the energy crunch eased last week.

Demand for heating is expected to rise as China encounters a cold snap that could see temperatures drop by eight to 10 degrees Celsius, according to the nation's weather office. Heavy snow has already disrupted flights and rail services, with blizzards forecast for northern China including Inner Mongolia, a key coal region. Central and eastern regions are expected to be colder in Jan and Feb than one year ago as a result of the La Nina phenomenon.

China plans to reduce its reliance on coal-fired power plants in the long term

In the short term, in 4Q21-2023, we expect China’s reliance on coal and coal-fired power plants to remain high with coal consumption of over 3b tonnes per annum to feed its over 1,000GW coal-fired power capacity nationwide, representing over 60% of the country’s total power generating capacity in 2020.

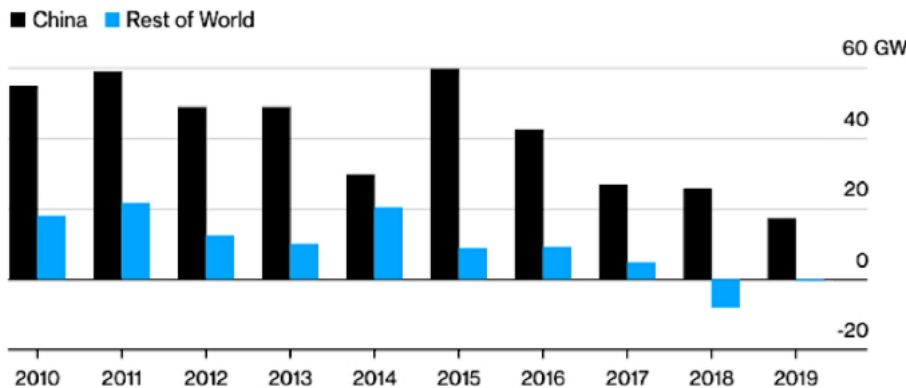
Exhibit 18: China still plans to boost its coal-fired power plants despite its pledge to cut emissions



Source: Mining.com

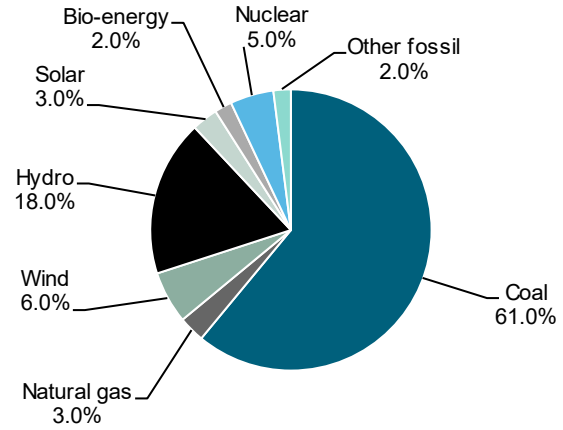
Over 150GW of coal-fired capacity is either being built or is about to begin construction in 2021-25, according to the NDRC, implying an average 30GW capacity of coal-fired power plants to be added annually. While the 30GW addition is lower than China’s 10-year average addition of coal-fired capacity at 36GW per annum, China is still adding a significant amount of coal-fired power plants to serve the country’s over 2,000GW power generating demand.

Exhibit 20: China has added much more coal-fired power capacity than the rest of the world combined since 2010



Note: 2019 figures are for Jan-Jun 2019
Sources: Global Energy Monitor

Exhibit 19: China's total electricity generation by fuel type (total capacity of 2,200GW in 2020)

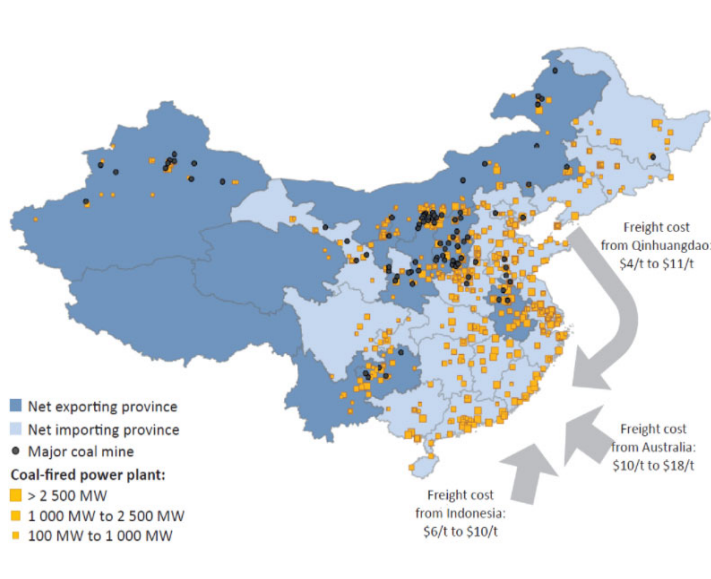


Source: EIA

While coal producing mines are concentrated in only the three northeastern provinces of Shanxi, Shaanxi, and Inner Mongolia, China's power plants are located mostly along the coastal, central, and southwestern areas where the populations are denser than in the three coal producing provinces, resulting in high freight costs within the country and leading to coal imports at major ports on the coastal area.

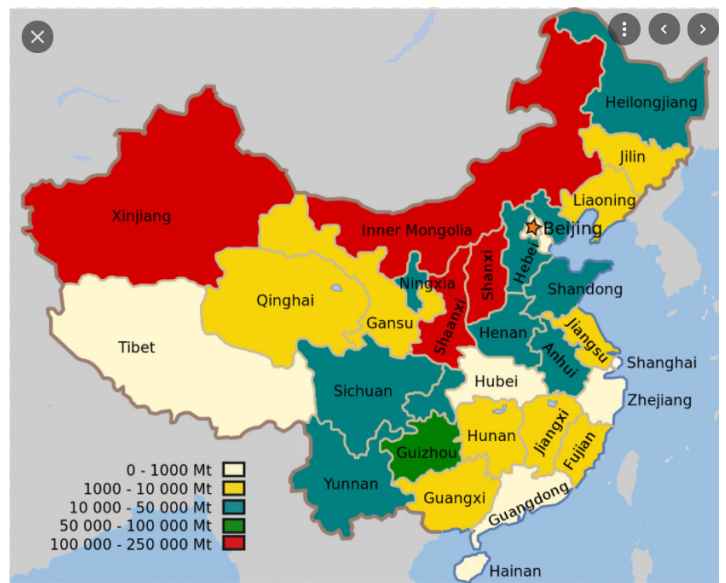
The location mismatch between coal production and consumption has resulted in China importing coal of around 200-300mt annually. Despite the global decarbonisation effort, total thermal coal trading is projected to rise by 5% y-y in Asia Pacific to 0.7b tonnes, and global coal trading could rise to 1.21b tonnes in 2021, with that volume likely increasing in 2022 following the global economic reopening, based on estimates by the Energy Information Administration (EIA). Hence, we believe that coal is likely to remain China's least-loved but most-consumed energy source for years to come.

Exhibit 21: Major coal mines and coal-fired power plants in China (2020)



Source: EIA

Exhibit 22: China's coal mine reserves by province



Source: [Wikimedia](#)

Not a falling knife but a rising spear

While our current EPS forecasts for 2021-23 are on par with Bloomberg's consensus estimates, we believe Banpu is likely to post stronger-than-expected net profits in 4Q21-2023, backed by high ASPs for coal as a result of the tight demand-supply balance of coal that should sustain the NCT price at above USD100/t in 4Q21-2022 vs our assumptions of the NCT price at USD100/t in 2022 and USD70/t in 2023.

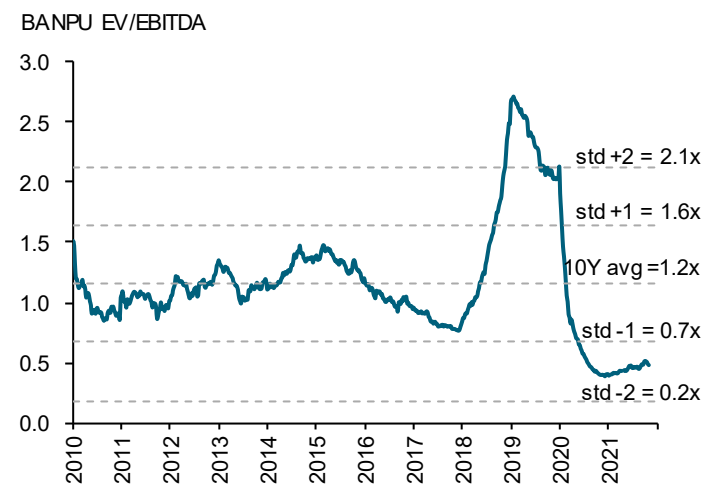
We maintain BUY and our SOTP-based target price of THB16.9. We believe the market still underestimates Banpu's coal earnings power and the sustainably high coal price environment that we think should persist at least until mid-2022. Potential catalysts would be stronger-than-expected 4Q21 and 2022 net profits and a longer-than-expected high coal price into 2H22.

Exhibit 23: SoTP valuation

Banpu's valuation breakdown	THB/share	
ITMG (65%) (A)	10.4	DCF 9% WACC, terminal growth is zero for mines
China coal	2.2	DCF 9% WACC, terminal growth is zero for mines
Australian coal (Centennial)	10.0	DCF 9% WACC, terminal growth is zero for mines
Net value of non-ITMG coal (B)	22.6	
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)	3.0	DCF 7.1% WACC, terminal growth is zero at the end of PPA
Banpu's net debt	(19.2)	at end-2022E
Net value of Banpu (A+B+C+D)	16.9	Target price

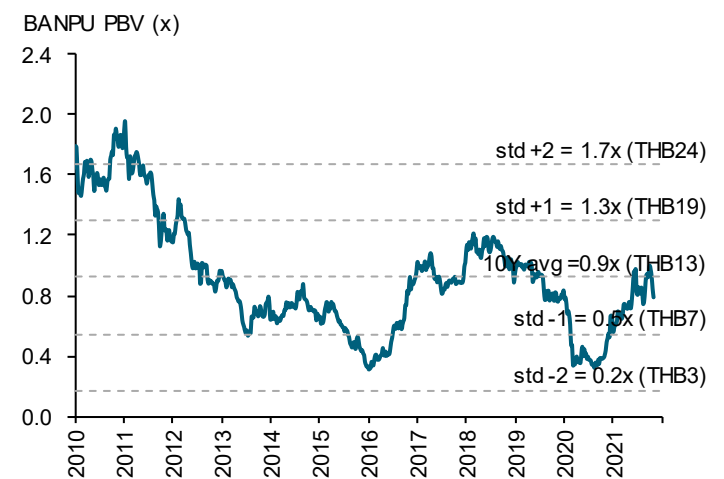
Sources: BANPU; FSSIA estimates

Exhibit 24: EV/EBITDA band



Sources: FSSIA estimates; Bloomberg

Exhibit 25: One-year forward rolling P/BV band



Sources: FSSIA estimates; Bloomberg

Exhibit 26: Peer comparisons

Company	BBG code	Rec	Share Price (LCY)	Target price (LCY)	Up side (%)	Market Cap (USD m)	3Y EPS CAGR (%)	---- PE ----		----- ROE ----		---- PBV ----		EV / EBITDA	
								21E (x)	22E (x)	21E (%)	22E (%)	21E (x)	22E (x)	21E (x)	22E (x)
THAILAND															
Banpu	BANPU TB	BUY	10.80	16.90	56	2,230	nm	5.4	6.1	15.7	14.7	0.8	0.8	4.1	5.1
Thailand avg						2,230	nm	5.4	6.1	15.7	14.7	0.8	0.8	4.1	5.1
INDONESIA															
Adaro Energy	ADRO IJ	n/a	1,690.00	n/a	n/a	3,744	19.7	7.3	7.8	14.1	12.8	0.9	0.9	3.1	3.3
Bukit Asam t	PTBA IJ	n/a	2,680.00	n/a	n/a	2,156	24.2	5.3	5.5	29.0	25.2	1.4	1.3	3.1	3.2
Harum Energy	HRUM IJ	n/a	8,100.00	n/a	n/a	1,506	114.6	19.9	16.4	16.6	21.0	3.3	3.2	12.7	9.7
Indo Tambangraya Megah	ITMG IJ	n/a	22,275.00	n/a	n/a	1,722	56.4	5.2	5.6	32.0	27.3	1.6	1.6	2.8	3.1
Indonesia avg						9,129	53.4	8.5	8.3	21.4	19.8	1.6	1.5	4.6	4.3
CHINA															
China Shenhua Energy	1088 HK	n/a	16.18	n/a	n/a	56,225	11.0	4.9	5.4	14.4	12.6	0.7	0.7	3.4	3.6
China Coal Energy	1898 HK	n/a	4.45	n/a	n/a	11,311	35.4	3.1	3.5	11.8	10.0	0.4	0.4	3.5	3.6
Yanzhou Coal Mining	1171 HK	n/a	11.82	n/a	n/a	13,512	27.6	3.3	3.5	21.1	18.0	0.7	0.6	6.6	6.5
China avg						81,048	14.7	39.3	43.1	134.4	116.7	5.9	5.6	35.1	36.5
AUSTRALIA															
New Hope	NHC AU	n/a	2.00	n/a	n/a	1,237	62.6	10.9	2.5	9.1	35.9	0.9	0.7	5.0	1.8
Whitehaven Coal	WHC AU	n/a	2.48	n/a	n/a	1,855	219.6	nm	2.5	(2.3)	31.0	0.8	0.7	16.5	2.0
Australia avg						3,091	113.8	1.5	0.9	0.8	11.2	0.3	0.2	4.0	0.7
INDIA															
Coal India	COAL IN	n/a	166.70	n/a	n/a	13,829	(2.7)	8.6	6.8	35.0	38.5	2.9	2.5	5.3	4.2
India avg						13,829	(2.7)	13.0	10.3	53.0	58.4	4.3	3.8	8.1	6.3
Coal under coverage						2,230	nm	5.4	6.1	15.7	14.7	0.8	0.8	4.1	5.1
Average (all)						109,328	14.1	31.6	34.1	108.5	96.2	5.0	4.8	27.6	28.4

Share prices as of 10 November 2021
Sources: Bloomberg, FSSIA estimates

Financial Statements

Banpu

Profit and Loss (THB m) Year Ending Dec	2019	2020	2021E	2022E	2023E
Revenue	85,718	71,332	122,721	107,504	96,271
Cost of goods sold	(63,952)	(50,626)	(44,107)	(36,948)	(33,706)
Gross profit	21,766	20,706	78,615	70,555	62,565
Other operating income	-	-	-	-	-
Operating costs	(13,810)	(11,419)	(23,929)	(20,904)	(18,676)
Operating EBITDA	7,955	9,287	54,686	49,651	43,889
Depreciation	(10,761)	(13,543)	(17,315)	(22,076)	(22,076)
Goodwill amortisation	(195)	(31)	(366)	(366)	(366)
Operating EBIT	(3,000)	(4,287)	37,005	27,209	21,447
Net financing costs	(8,393)	(2,778)	(5,992)	(5,984)	(6,006)
Associates	6,444	4,239	6,394	6,295	5,109
Recurring non-operating income	11,416	5,264	(4,315)	2,295	1,109
Non-recurring items	3,697	1,502	0	0	0
Profit before tax	3,720	(300)	26,697	23,521	16,550
Tax	(2,368)	(269)	(5,685)	(4,823)	(3,203)
Profit after tax	1,352	(569)	21,012	18,698	13,347
Minority interests	(1,905)	(1,217)	(9,923)	(5,926)	(3,363)
Preferred dividends	0	0	0	0	0
Other items	-	-	-	-	-
Reported net profit	(553)	(1,786)	11,090	12,771	9,984
Non-recurring items & goodwill (net)	(3,697)	(1,502)	0	0	0
Recurring net profit	(4,249)	(3,288)	11,090	12,771	9,984
Per share (THB)					
Recurring EPS *	(0.82)	(0.65)	2.02	1.78	1.12
Reported EPS	(0.11)	(0.35)	2.02	1.78	1.12
DPS	0.60	0.50	1.36	0.92	0.52
Diluted shares (used to calculate per share data)	5,162	5,075	5,497	7,189	8,881
Growth					
Revenue (%)	(24.0)	(16.8)	72.0	(12.4)	(10.4)
Operating EBITDA (%)	(71.0)	16.7	488.9	(9.2)	(11.6)
Operating EBIT (%)	nm	nm	nm	(26.5)	(21.2)
Recurring EPS (%)	nm	nm	nm	(11.9)	(36.7)
Reported EPS (%)	nm	nm	nm	(11.9)	(36.7)
Operating performance					
Gross margin inc. depreciation (%)	12.8	10.0	50.0	45.1	42.1
Gross margin of key business (%)	25.6	20.1	59.5	54.6	51.5
Operating EBITDA margin (%)	9.3	13.0	44.6	46.2	45.6
Operating EBIT margin (%)	(3.5)	(6.0)	30.2	25.3	22.3
Net margin (%)	(5.0)	(4.6)	9.0	11.9	10.4
Effective tax rate (%)	20.0	20.0	28.0	28.0	28.0
Dividend payout on recurring profit (%)	(72.9)	(77.2)	67.4	51.6	46.4
Interest cover (X)	1.0	0.4	5.5	5.0	3.8
Inventory days	24.6	24.5	28.9	35.9	34.2
Debtor days	43.1	38.1	32.7	45.9	45.2
Creditor days	15.9	13.8	23.6	34.2	33.2
Operating ROIC (%)	(1.6)	(10.6)	29.6	18.6	14.2
ROIC (%)	1.4	0.8	10.3	8.6	6.2
ROE (%)	(5.5)	(4.9)	15.7	14.7	9.6
ROA (%)	0.3	1.2	9.0	7.8	5.6
* Pre-exceptional, pre-goodwill and fully diluted					
Revenue by Division (THB m)					
Coal	30,346	55,080	56,801	55,080	53,359
Others	55,372	16,252	65,920	52,424	42,912

Sources: Banpu; FSSIA estimates

Financial Statements

Banpu

Cash Flow (THB m) Year Ending Dec	2019	2020	2021E	2022E	2023E
Recurring net profit	(4,249)	(3,288)	11,090	12,771	9,984
Depreciation	10,761	13,543	17,315	22,076	22,076
Associates & minorities	(6,444)	(4,239)	(6,394)	(6,295)	(5,109)
Other non-cash items	(544)	1,302	4,517	4,508	4,530
Change in working capital	5,207	1,403	(6,218)	2,040	1,325
Cash flow from operations	4,730	8,722	20,310	35,100	32,806
Capex - maintenance	-	-	-	-	-
Capex - new investment	(11,578)	(22,372)	(38,490)	(33,717)	(30,194)
Net acquisitions & disposals	(3,133)	2,828	2,828	2,828	2,828
Other investments (net)	3,894	(2,160)	(2,160)	(2,160)	(2,160)
Cash flow from investing	(10,817)	(21,704)	(37,822)	(33,049)	(29,526)
Dividends paid	(3,097)	(2,864)	(4,595)	(7,105)	(5,773)
Equity finance	0	0	0	0	0
Debt finance	8,531	28,455	6,700	(1,200)	2,500
Other financing cash flows	(2,923)	(7,056)	4,008	(133)	1,493
Cash flow from financing	2,511	18,536	6,113	(8,438)	(1,780)
Non-recurring cash flows	-	-	-	-	-
Other adjustments	0	0	0	0	0
Net other adjustments	0	0	0	0	0
Movement in cash	(3,576)	5,553	(11,399)	(6,387)	1,500
Free cash flow to firm (FCFF)	(261.79)	(7,363.73)	(11,317.23)	8,389.99	9,643.06
Free cash flow to equity (FCFE)	(479.32)	8,416.72	(6,804.29)	718.09	7,272.49

Per share (THB)

FCFF per share	(0.04)	(1.09)	(1.67)	1.24	1.43
FCFE per share	(0.07)	1.24	(1.01)	0.11	1.07
Recurring cash flow per share	(0.09)	1.44	4.83	4.60	3.54

Balance Sheet (THB m) Year Ending Dec	2019	2020	2021E	2022E	2023E
Tangible fixed assets (gross)	93,339	112,066	150,556	184,273	214,467
Less: Accumulated depreciation	(34,543)	(34,543)	(51,858)	(73,935)	(100,224)
Tangible fixed assets (net)	58,796	77,523	98,697	110,338	114,242
Intangible fixed assets (net)	460	94	94	94	94
Long-term financial assets	-	-	-	-	-
Invest. in associates & subsidiaries	49,104	50,761	52,486	54,111	54,551
Cash & equivalents	16,388	21,941	10,541	4,155	5,655
A/C receivable	7,415	7,482	14,481	12,578	11,264
Inventories	3,759	3,045	3,927	3,333	2,984
Other current assets	13,533	14,833	14,833	14,833	14,833
Current assets	41,095	47,301	43,782	34,898	34,736
Other assets	108,134	105,969	96,321	111,737	131,382
Total assets	257,589	281,648	291,380	311,179	335,006
Common equity	72,195	62,344	78,988	94,804	113,393
Minorities etc.	18,286	22,211	32,134	38,060	41,423
Total shareholders' equity	90,481	84,555	111,122	132,864	154,816
Long term debt	103,749	112,559	123,415	122,140	124,563
Other long-term liabilities	16,285	18,129	17,915	17,704	17,494
Long-term liabilities	120,034	130,687	141,330	139,844	142,057
A/C payable	1,798	2,025	3,688	3,231	2,893
Short term debt	29,964	49,140	20,000	20,000	20,000
Other current liabilities	15,312	15,240	15,240	15,240	15,240
Current liabilities	47,074	66,405	38,928	38,470	38,133
Total liabilities and shareholders' equity	257,589	281,648	291,380	311,179	335,006
Net working capital	7,597	8,096	14,313	12,273	10,948
Invested capital	224,090	242,442	261,911	288,553	311,218

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

Per share (THB)

Book value per share	13.99	12.29	14.37	13.19	12.77
Tangible book value per share	13.90	12.27	14.35	13.17	12.76

Financial strength

Net debt/equity (%)	129.7	165.3	119.6	103.9	89.7
Net debt/total assets (%)	45.5	49.6	45.6	44.3	41.5
Current ratio (x)	0.9	0.7	1.1	0.9	0.9
CF interest cover (x)	2.3	12.1	6.3	6.8	7.2

Valuation	2019	2020	2021E	2022E	2023E
Recurring P/E (x) *	(13.1)	(16.7)	5.4	6.1	9.6
Recurring P/E @ target price (x) *	(20.5)	(26.1)	8.4	9.5	15.0
Reported P/E (x)	(100.8)	(30.7)	5.4	6.1	9.6
Dividend yield (%)	5.6	4.6	12.6	8.5	4.8
Price/book (x)	0.8	0.9	0.8	0.8	0.8
Price/tangible book (x)	0.8	0.9	0.8	0.8	0.8
EV/EBITDA (x) **	24.1	23.3	4.1	5.1	6.3
EV/EBITDA @ target price (x) **	28.0	26.7	4.7	6.0	7.5
EV/invested capital (x)	0.9	0.9	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 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	SPALI	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	TRC	TSC	TSR	TSTE	TSTH
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 FSS International Investment Advisory Securities Co., Ltd

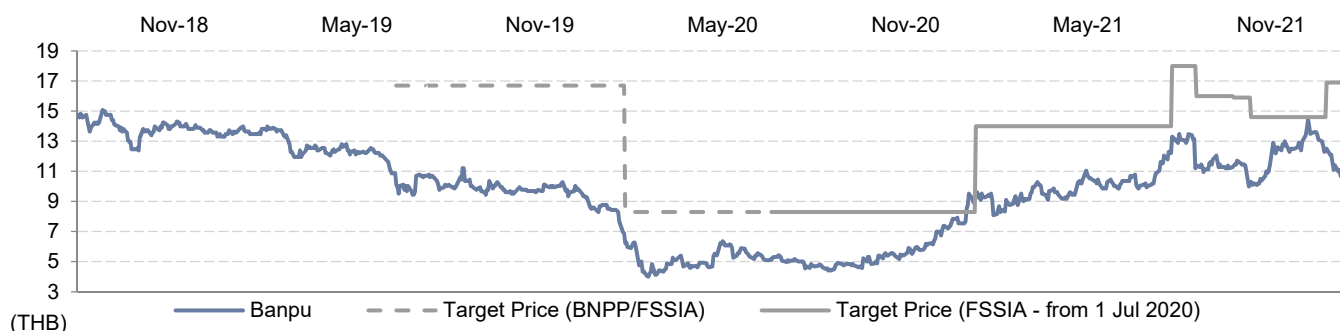
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History of change in investment rating and/or target price

Banpu (BANPU TB)



Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
13-Aug-2019	BUY	16.70	14-Jan-2021	BUY	14.00	17-Aug-2021	BUY	14.60
26-Feb-2020	HOLD	8.30	24-Feb-2021	BUY	14.00	27-Aug-2021	BUY	14.60
26-Feb-2020	HOLD	8.30	10-Jun-2021	BUY	18.00	04-Oct-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			

Suwat Sinsadok started covering this stock from 09-Oct-2018

Price and TP are in local currency

Source: FSSIA estimates

Company	Ticker	Price	Rating	Valuation & Risks
Banpu	BANPU TB	THB 10.80	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 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 10-Nov-2021 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.