

BANPU BANPU TB

THAILAND / MATERIALS

BUY

UNCHANGED

Coal emerges as a dark horse

- We expect quarterly net profit growth to accelerate in 1Q22 onward, driven by a sharp drop in hedging losses.
- Spikes in the oil & gas prices should not only drive up but also sustain the coal price at over USD250/t for the next 3-6 months.
- Maintain BUY, with a TP of THB16.9.

TARGET PRICE	THB16.90
CLOSE	THB12.10
UP/DOWNSIDE	+39.7%
PRIOR TP	THB16.90
CHANGE IN TP	UNCHANGED
TP vs CONSENSUS	+23.8%

KEY STOCK DATA

YE Dec (THB m)	2021	2022E	2023E	2024E
Revenue	133,190	109,142	96,271	96,271
Net profit	9,852	12,697	10,113	8,810
EPS (THB)	1.46	1.77	1.14	0.74
vs Consensus (%)	-	(14.2)	(19.8)	(56.0)
EBITDA	61,472	44,646	39,392	38,338
Core net profit	23,793	12,697	10,113	8,810
Core EPS (THB)	3.52	1.77	1.14	0.74
Chg. In EPS est. (%)	-	-	-	-
EPS growth (%)	nm	(49.8)	(35.5)	(34.7)
Core P/E (x)	3.4	6.9	10.6	16.3
Dividend yield (%)	3.7	7.1	4.1	2.8
EV/EBITDA (x)	4.3	6.1	7.5	8.7
Price/book (x)	1.0	0.9	0.9	1.1
Net debt/Equity (%)	154.9	120.2	101.3	88.8
ROE (%)	33.6	14.3	9.4	7.1

Former underperformer could soon stage a turnaround

Over the past two quarters, Banpu suffered from significant hedging losses of USD215m in 4Q21 and USD177m in 3Q21. The weaker-than-expected net profits during 3Q21-4Q21 led to Banpu's share price underperforming not only the Newcastle index (NCT) coal price but also the share price performance of Indo Tambangraya Megah Tbk PT (ITMG IJ) by a large margin since Sep-21.

Starting again with visible and strong drivers in 1Q22

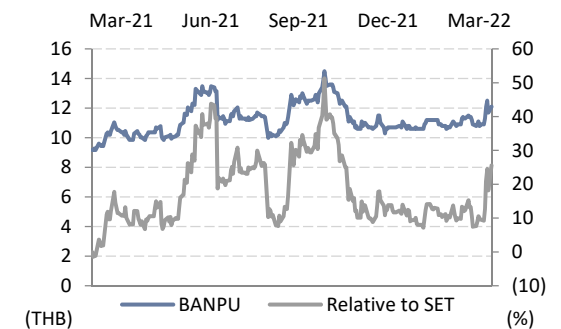
We expect Banpu's quarterly net profit growth to accelerate in 1Q22 onward, driven by a sharp drop in its hedging losses to USD10m-20m for coal swaps and USD50m for shale gas, down from over USD100m in 3Q21 and 4Q21. Outstanding hedging volumes at end-2021 totalled 105kt for coal at a USD134.3/t hedging price and 208m mcf at USD3.2/mmbtu. With average quarterly coal production of 5mt for ITMG and 3mt for Centennial (CEY), plus a 65bcf volume for shale gas, we think the shrinking hedging volumes for both coal and shale gas due to the changing hedging policies from 2021 to 2022 will be the key earnings drivers for Banpu in 2022.

Coal is both a direct and substitute fuel play

As a key fuel substitute for oil & gas, the spike in the prices of oil & gas should not only drive up but also sustain the coal price at a high level of over USD250/t for the next 3-6 months, in our view. Hence, we believe Banpu could see a higher ASP upside for its coal sales volumes from ITMG, China, and CEY in 2022. Based on Banpu's note for its 2021 financial statements, it expects to see a significant drop in its hedging losses due to the sharp decline in its hedging volumes from 1.0-1.2mt in 2H21 to a mere 0.1mt in 1Q22-4Q22.

Banpu as a key winner on the coal and gas price spikes

Even though most of Banpu's earnings are still generated from "dirty" coal, we think that Banpu will greatly benefit from the high coal price in 2022 and into 2023 as the direct demand for coal as a major fuel for power generation worldwide remains highly visible for the next five years, in our view. Also, the "substitute" demand impact should further boost the coal price above USD250/t. Valuation-wise, Banpu is trading at 7-8x 2022E P/E, thanks to its solid 2022E earnings under our conservative NCT assumptions of USD100/t in 2022 and USD70/t in 2023.



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	11.0	13.1	28.2
Relative to country (%)	14.5	11.9	21.7
Mkt cap (USD m)	2,482		
3m avg. daily turnover (USD m)	36.1		
Free float (%)	88		
Major shareholder	Vongkusolkit Family (13%)		
12m high/low (THB)	14.90/9.10		
Issued shares (m)	6,766.00		

Sources: Bloomberg consensus; FSSIA estimates



Suwat Sinsadok, CFA, FRM, ERP
 suwat.sin@fssia.com
 +66 2611 3558

Siriluck Pinthusoonthorn
 siriluck.pin@fssia.com
 +66 2611 3562

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 USD68-70/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 USD100-130/tonne index coal prices. Finally, we see more upsides for its power earnings due to higher projected net profit contributions from Hongsa.

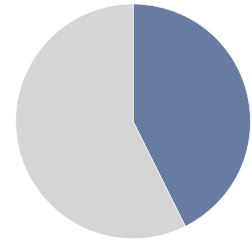
Company profile

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, 2021)

■ Coal - 42.6 % ■ Others - 57.4 %

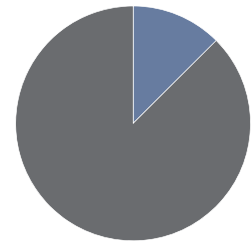


Source: Banpu

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)	34.0	34.0	34.0
Newcastle coal price (USD/t)	100.0	70.0	70.0
ASP for coal (USD/t)	81.3	65.0	65.0
Total cost - Indonesia (USD/t)	54.6	51.5	51.5
Total cost - Australia (USD/t)	88.0	87.0	87.0

Source: FSSIA estimates

Earnings sensitivity

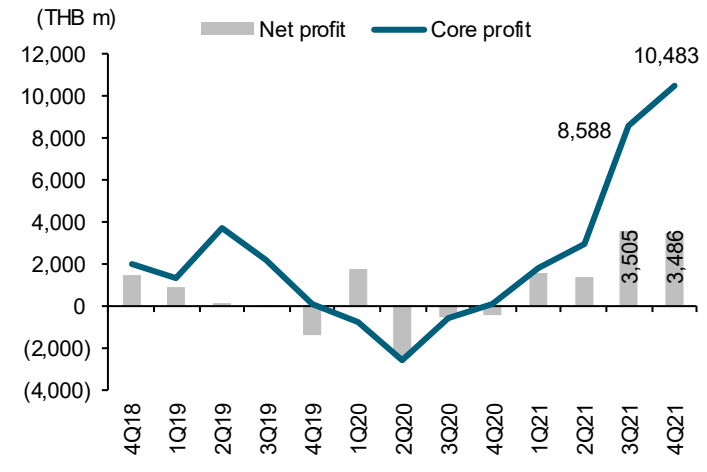
- Ceteris paribus, for every 1% rise in average coal price, we project 2022 EPS to rise by 2.6%, and vice versa.
- Ceteris paribus, for every 1% rise in coal sales volume, we estimate 2022 EPS to rise by 1.2%, and vice versa.
- Stability in crude oil price, rising coal prices and high utilisation rates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

Source: FSSIA estimates

Dark horse coal emerges from the shadows

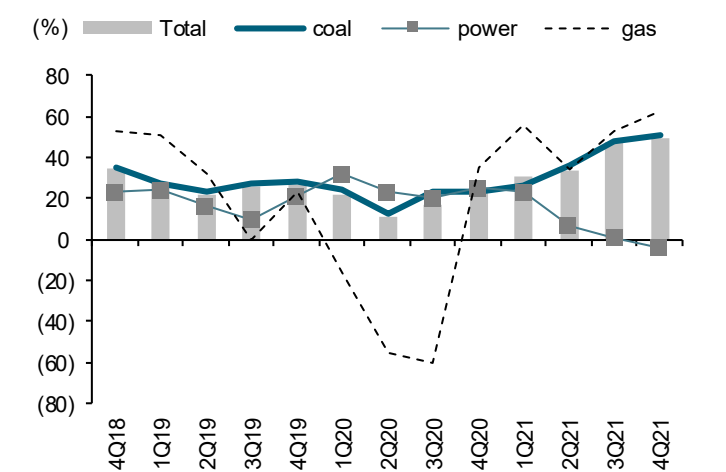
In the past two quarters, Banpu suffered from significant hedging losses of USD215m in 4Q21 and USD177m in 3Q21. The main hedging losses included losses from coal and gas price swaps as a result of Banpu's legacy hedging volumes since 4Q20 for its 2021 operations.

Exhibit 1: Net profit and core net profit by business



Source: Banpu

Exhibit 2: Gross margins by business



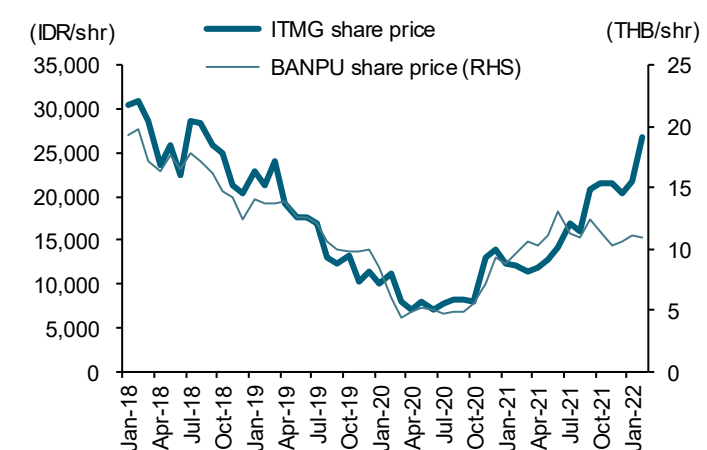
Source: Banpu

In 2H21 alone, Banpu incurred a total of USD0.3b in hedging losses from its two price swaps for coal and shale gas, with quarterly unwinding hedging volumes of 1-1.2mt for coal and 55bcf for shale gas, resulting in estimated hedging margin losses of over USD80/t for coal and USD2/mcf for shale gas.

As a result, Banpu's reported net profits were disappointing at only THB3.5b in 3Q21-4Q21, despite strong EBITDA from its coal and shale gas businesses, which exceeded USD400m for coal and USD100m for shale gas.

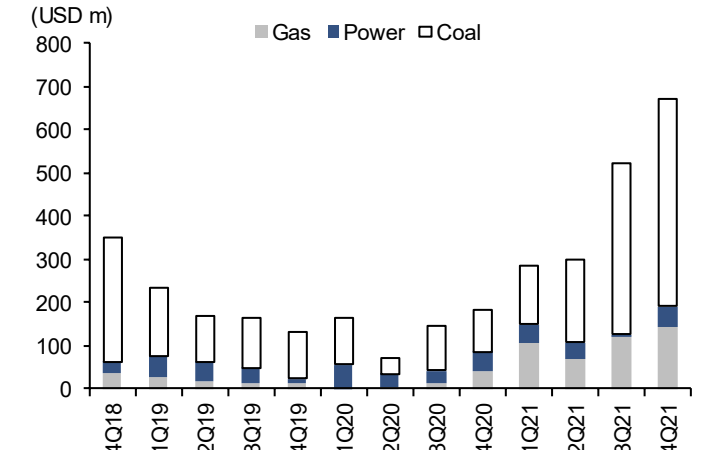
The weaker-than-expected net profits in 3Q21-4Q21 led to Banpu's share price underperforming compared to not only the NCT coal price but also the share price performance of Banpu's subsidiary ITMG by a large margin since Sep-21.

Exhibit 3: ITMG's share price vs Banpu's share price



Source: Bloomberg

Exhibit 4: EBITDA breakdown



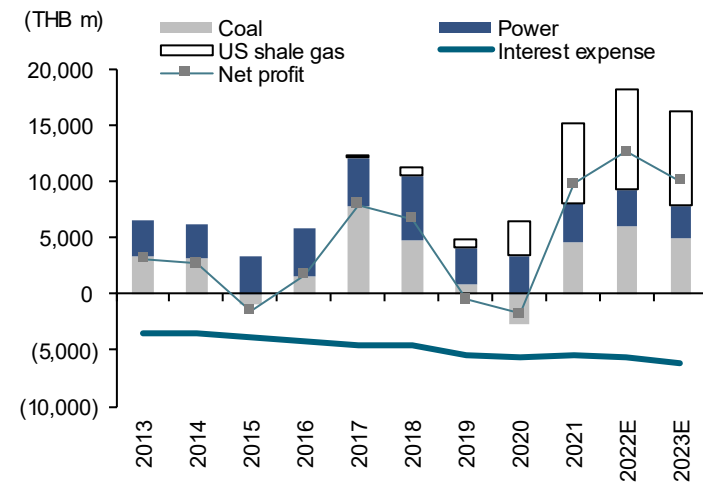
Sources: Banpu; FSSIA estimates

Starting again with visible and strong drivers in 1Q22. We, however, believe its quarterly net profit growth will markedly accelerate starting in 1Q22, driven by:

A sharp drop in hedging losses to USD10m-20m for coal swaps and USD50m for shale gas, down from over USD100m in 3Q21 and 4Q21. The main reasons for the lower hedging losses are the much lower hedging volumes of 105kt for coal at the USD134.3/t hedging price and 208m mcf at USD3.2/mmbtu (equivalent to mcf) at the end of 2021.

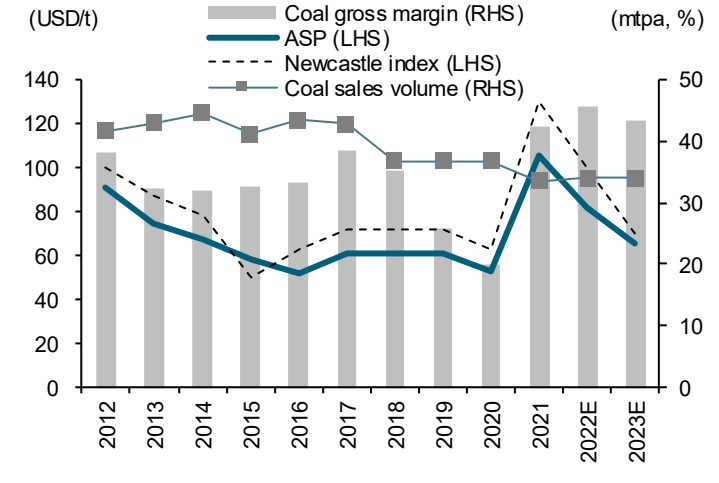
With an average quarterly coal production of 5mt for ITMG and 3mt for CEY in Australia, and 65bcf in shale gas, we think the shrinking hedging volumes for both coal and shale gas due to the change in its hedging policies from 2021 to 2022 will be the key earnings drivers that remain largely overlooked by investors.

Exhibit 5: Net profit breakdown by business



Sources: Banpu; FSSIA estimates

Exhibit 6: Key factors of the coal business

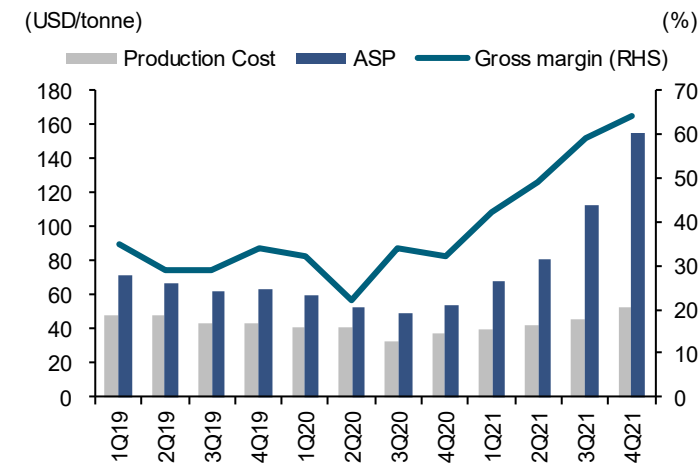


Sources: Banpu; FSSIA estimates

Higher ASPs and gross margins for coal and shale gas. The higher supply risks from the Russia-Ukraine war and sanctions imposed by the US and its allies against Russia have led to spikes in the global prices of commodities, including coal. The NCT price jumped to over USD400/t last week and has remained over USD400/t given that the supply risks for oil, gas, and coal, have increased significantly.

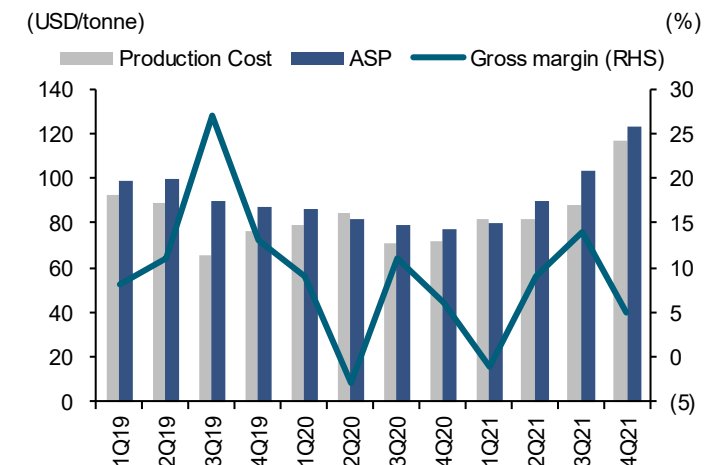
We expect Banpu's average selling price (ASP) for coal to jump markedly in 1Q22 onward, rising from USD155/t for ITMG in 4Q21 to USD190-200/t in 1Q22, and from USD117/t for CEY in 4Q21 to USD140-150/t in 1Q22.

Exhibit 7: ITMG's production cost, ASP, and gross margin



Sources: Banpu; FSSIA estimates

Exhibit 8: CEY's production cost, ASP, and gross margin



Sources: Banpu; FSSIA estimates

Meanwhile, we project the costs for coal to remain relatively stable with only a marginal rise in 2022 due mainly to the higher diesel price. In 4Q21, the production cost of ITMG was USD52.7/t and USD67/t, inclusive of freight and royalty costs, far below the ASP of USD152/t. We expect the production cost per tonne for ITMG to rise by USD8-10/t q-q in 1Q22 to USD60-62/t vs the projected ASP of USD190-200/t, resulting in an expanded gross margin to USD130-140/t, up from USD100/t in 4Q20.

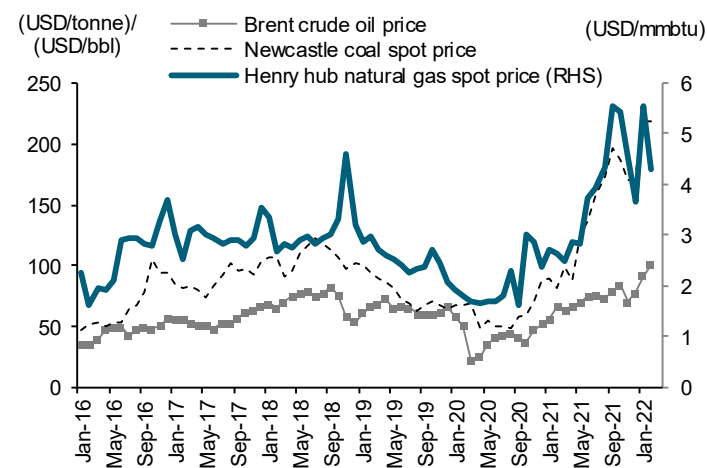
For CEY, the overall cost per tonne is likely to remain high at AUD117-120/t in 1Q22, up from AUD116.6/t in 4Q21, as we expect the production volume to stay low at 3-3.5mt due to the continued geological challenges at its Mandalong and Springvale mines. However, the ASP is likely to increase by AUD5-10/t q-q to AUD133-138/t in 1Q22, up from AUD123/t in 4Q21, mainly from the higher royalty and freight expenses.

How far could the coal price upside go?

Due to supply risks, the prices of oil and gas, the direct substitute fuels for coal, have shot up to over USD120/bbl for Brent crude oil and USD5/mmbtu for US Henry Hub (HH) benchmark gas in the first week of Mar-22. Likewise, the price of NCT has skyrocketed to over USD400/t in the same period, due to the tighter coal supply as a result of ongoing global reductions in coal consumption aimed at curbing carbon emissions.

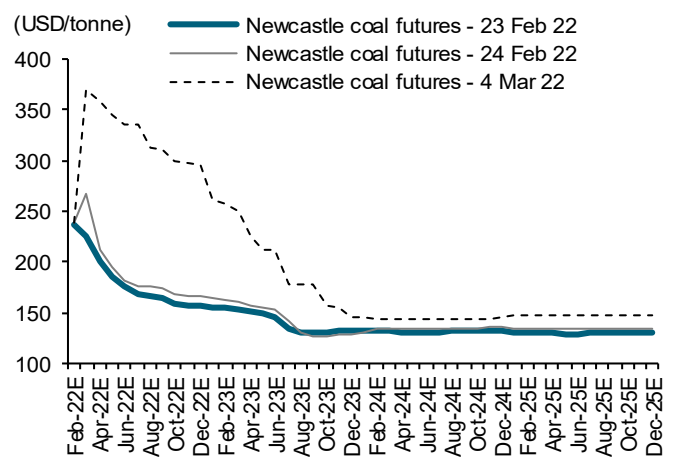
As Russia is one of the world's top five exporters of oil, gas, and coal, the Russia-Ukraine war has triggered global fears of supply disruptions amid the economic recovery that followed the Covid-19 pandemic. NCT futures for the near-month period (Mar-22 to Apr-22) have spiked to over USD350/t, reflecting the tighter supply of coal.

Exhibit 9: Brent crude, Newcastle coal, Henry Hub gas price



Source: Bloomberg

Exhibit 10: Newcastle coal futures

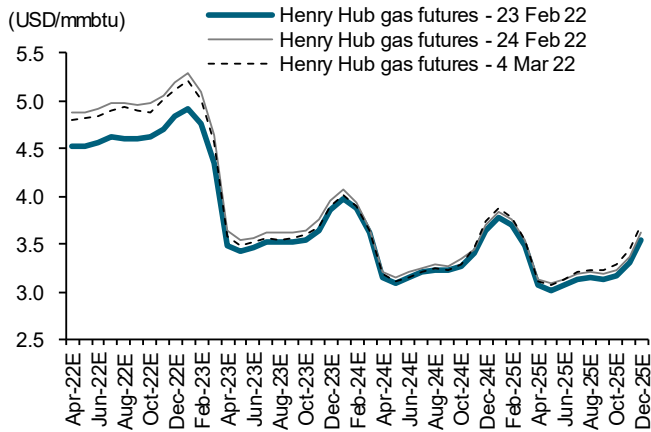


Source: Bloomberg

Meanwhile, the HH gas futures moved up by over USD0.5/mmbtu overnight to surpass the USD5.0/mmbtu mark after Russia decided to cut off the gas supply via its Yamal-Europe pipeline. Gas production from Siberia through this pipeline to Europe via Poland and Germany usually accounts for about 15% of Russia's westbound supply of gas. Since Dec-21, however, the Yamal-Europe pipeline has been operating in reverse (eastward) as Europe imports more LNG to replace Russia's gas supply, driving European gas prices higher.

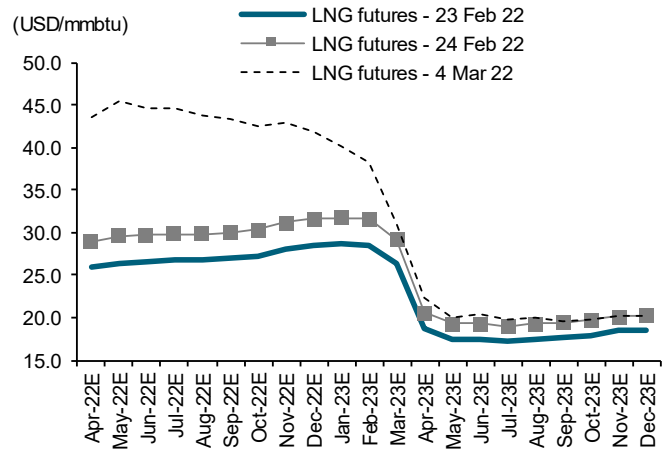
LNG futures react to Russia’s gas supply cuts to Europe. Global spot LNG futures for 2022-23 surged by over USD15/mmbtu (+50%) after Russia began to cut off its gas supply via the Yamal-Europe pipeline on 4 Mar-22, far higher than the increase in the HH futures which rose by USD0.5/mmbtu (+11%), given the higher supply risk for gas in the European market.

Exhibit 11: Henry Hub gas futures



Source: Bloomberg

Exhibit 12: LNG futures

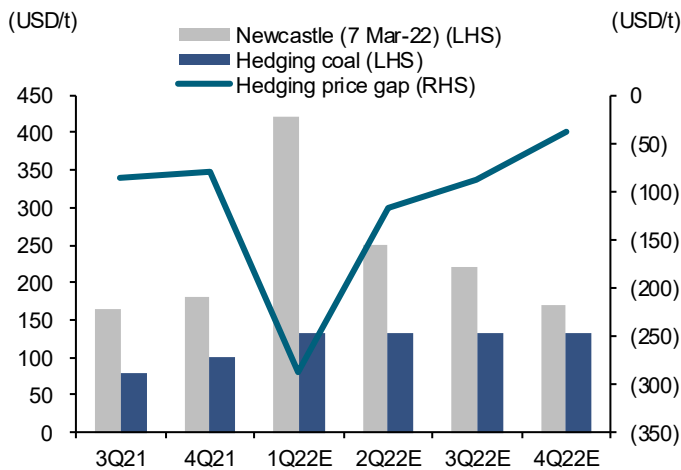


Source: Bloomberg

Higher coal price vs lower hedging loss. As a key fuel substitute for oil & gas, the spike in the prices of oil & gas should not only drive up but also sustain the coal price at a higher level of over USD250/t for the next 3-6 months, in our view. Hence, we believe Banpu is likely to see a higher ASP upside for its coal sales volumes from ITMG, China, and CEY in 2022.

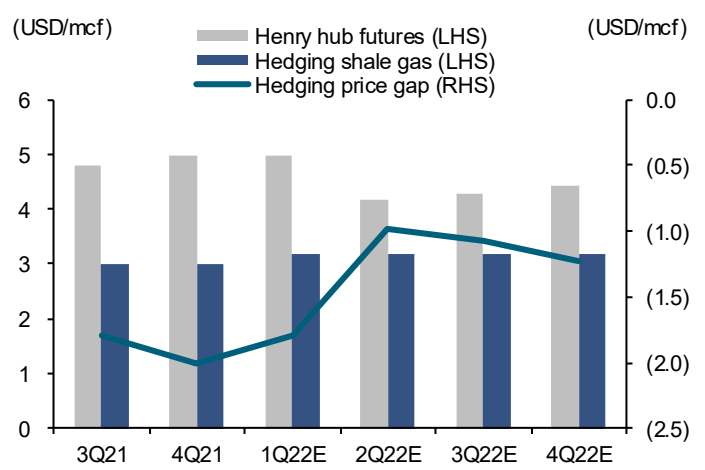
Based on Banpu’s note for its 2021 financial statements, Banpu is expected to witness a significant drop in its hedging losses due to the sharp decline in hedging volumes from 1.0-1.2mt in 2H21 to a mere 0.1mt in 1Q22-4Q22. Even as the global coal price surges, we think the drop in its hedging volumes by over 10x q-q should ensure a much lower q-q hedging loss to USD10m-20m in 1Q22-4Q22.

Exhibit 13: Newcastle coal index price, Banpu’s hedging coal price, and the estimated hedging price gap



Sources: Banpu; FSSIA estimates

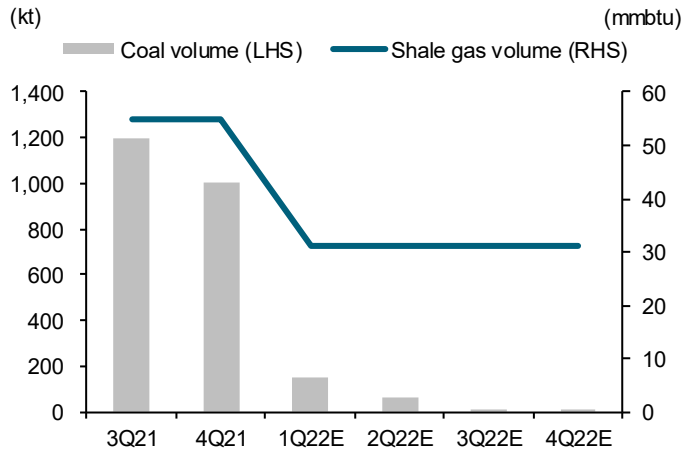
Exhibit 14: Henry Hub gas index price, Banpu’s shale gas hedging price, and the hedging price gap



Sources: Banpu; FSSIA estimates

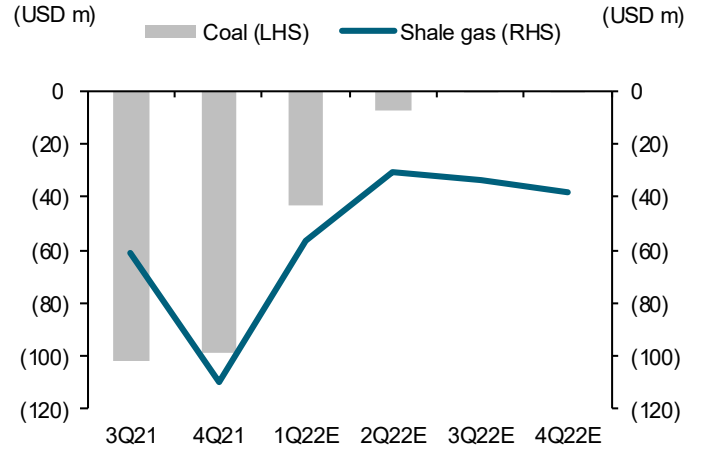
Similarly, Banpu lowered its hedging volume for shale gas from 90% to 50% of its production volume given the significant hedging losses experienced in 2H21. With a production volume of 65bcf a quarter, we estimate that Banpu will realise USD40m-50m a quarter in 1Q22-4Q22 based on: 1) a hedging loss margin of USD100-120/t vs its current average hedging price of USD3.2/mmbtu; and 2) a hedging volume of 33bcf a quarter (50% of 65bcf), down from the 59bcf hedging volume booked in 2H21.

Exhibit 15: Hedging volumes for coal and shale gas units



Sources: Banpu; FSSIA estimates

Exhibit 16: Hedging losses for coal and shale gas units



Sources: Banpu; FSSIA estimates

Coal price spikes on gas supply disruptions

On 7 Mar-22, Russia announced that it had cut off the gas supply via the Yamal-Europe pipeline, which accounts for 18% of Russia's total gas pipeline capacity. Russia's gas supply transportation routes include the Yamal pipeline running through Belarus and Poland with a capacity of 33bcm per year, and the larger Nord Stream 1 pipeline in the Baltic Sea which can transport 55bcm per year.

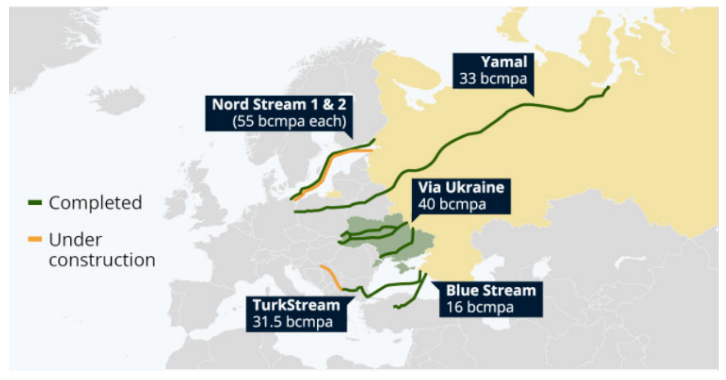
An additional 40bcm of gas can be transported via Ukraine, according to The Economist. Major European economies which obtain 40% or more of their natural gas from Russia include Germany, Italy and Poland. Many smaller countries, especially in Eastern Europe and the Balkans, are even more dependent on Russian gas.

Exhibit 17: Newcastle coal futures (Mar-22E)



Source: [Barchart.com](https://www.barchart.com)

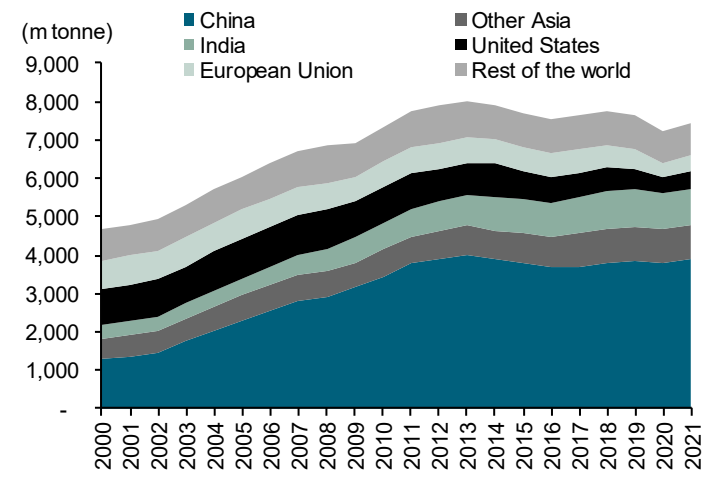
Exhibit 18: Russia's major gas pipelines



Source: [Statista.com](https://www.statista.com)

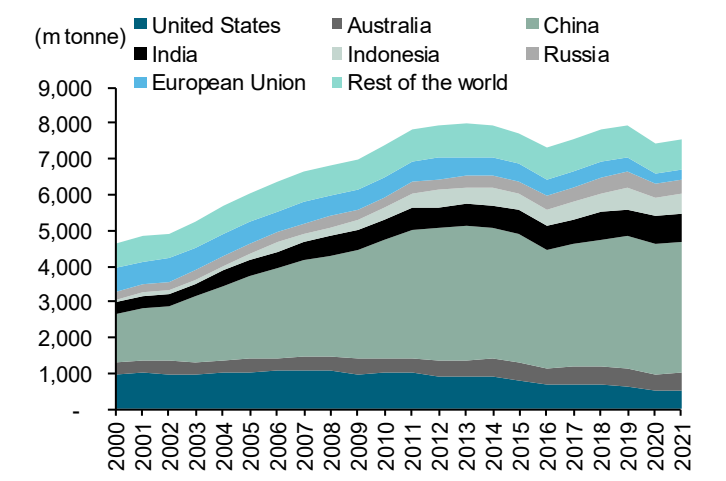
As Russia is one of the world's top exporters of coal, gas, and oil, the prices of these three fuels have moved up sharply in tandem as a result of rising supply risks. Also, all three fuels are consumed interchangeably to produce electricity in Europe.

Exhibit 19: Global coal consumption by region



Source: International Energy Agency (IEA)

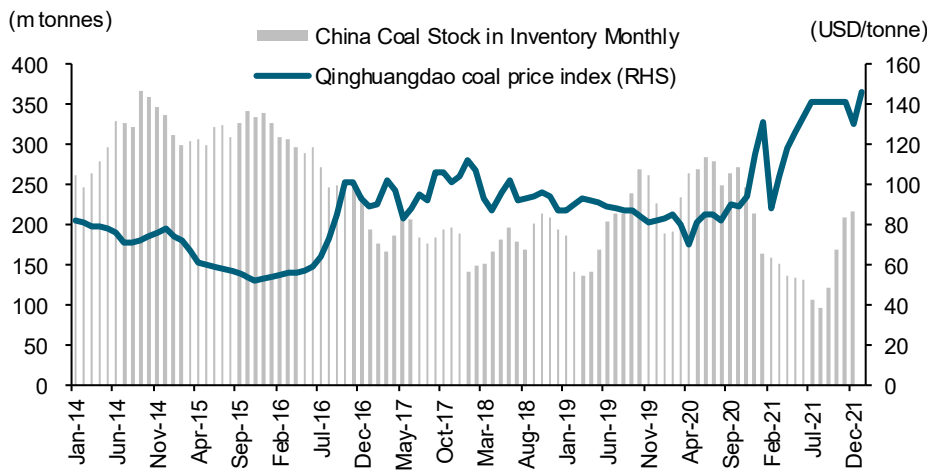
Exhibit 20: Global coal production



Source: IEA

Since the power crunch in Sep-Oct 2021, China has successfully replenished its coal inventory to healthy levels by accelerating coal production at its domestic mines. It also simultaneously succeeded in taming its domestic coal price spike to below USD150/t, which is reflected in the relatively flat price of the Qinghuangdao (QHD) coal index vs the sharp rise in the NCT price to over USD400/t in Mar-22.

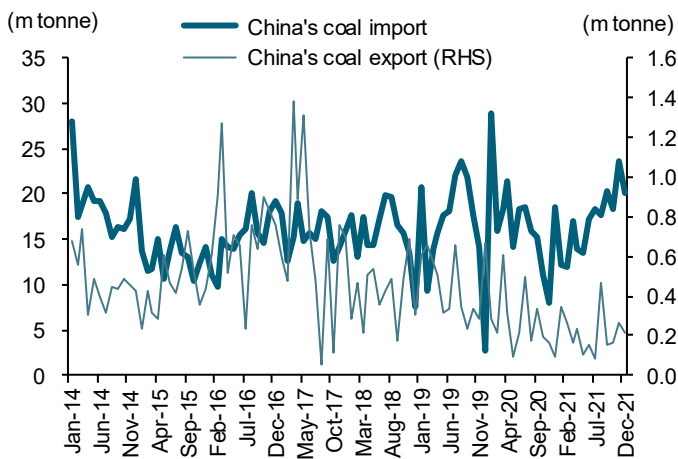
Exhibit 21: China's coal inventory vs QHD coal price index



Source: Bloomberg

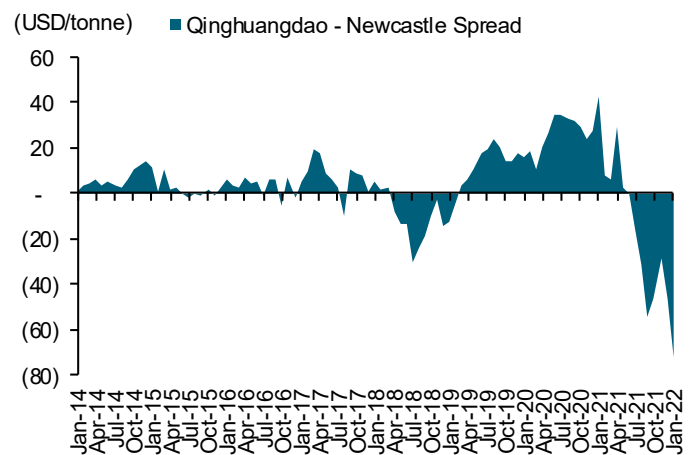
We believe the recent coal price spike to over USD400/t is due to the “substitution” impact of the spikes in gas and oil prices, rather than on China’s demand situation. Nevertheless, we think the substitution impact should be able to sustain the NCT above USD250/t throughout 2022, potentially resulting in a higher ASP for Banpu of over 200/t.

Exhibit 22: China's coal imports and exports



Source: Bloomberg

Exhibit 23: Coal price gap between QHD and NCT

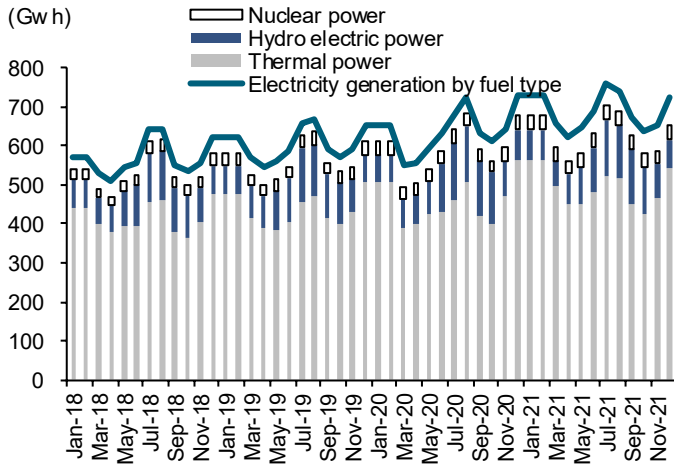


Source: Bloomberg

China’s power consumption has continued to rise, even though China’s government set a tamer GDP target of sub-6% in 2022, thanks to the strong demand recovery in the domestic market.

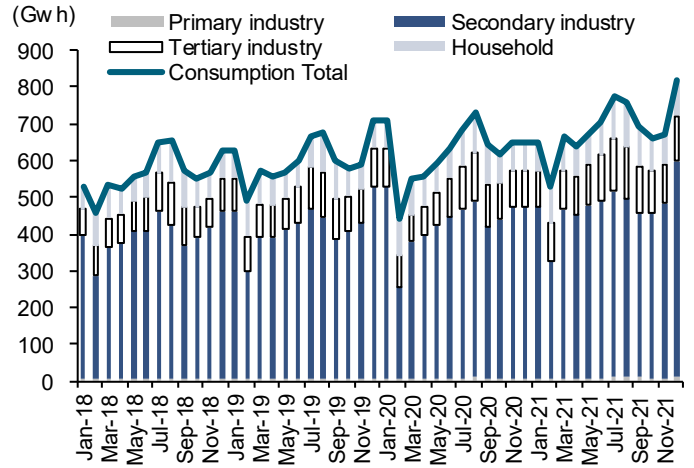
Thermal power generation, mainly from coal-fired power plants accounting for over 60% of China’s total power capacity should continue to be the country’s core strategic energy source for at least the next five years. Beginning in 2022-26, we expect China to start curbing its coal consumption by phasing out coal-fired power plants and replacing them with greener and increasingly more efficient renewable energy from solar and wind farms.

Exhibit 24: Thermal power (mostly coal-fired) remains China's main power generation capacity



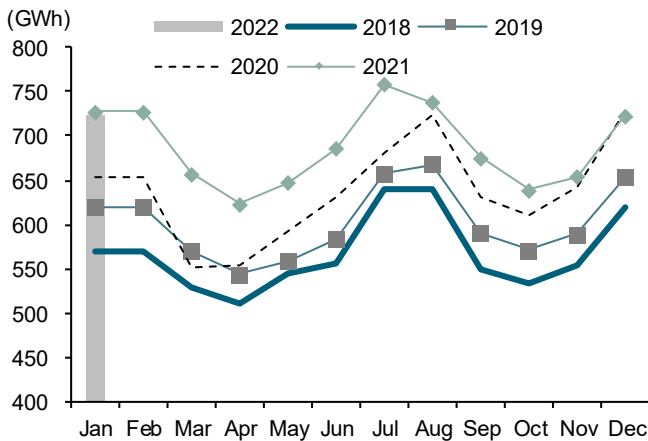
Source: Bloomberg

Exhibit 25: China's electricity demand has sharply rebounded above pre-Covid-19 levels



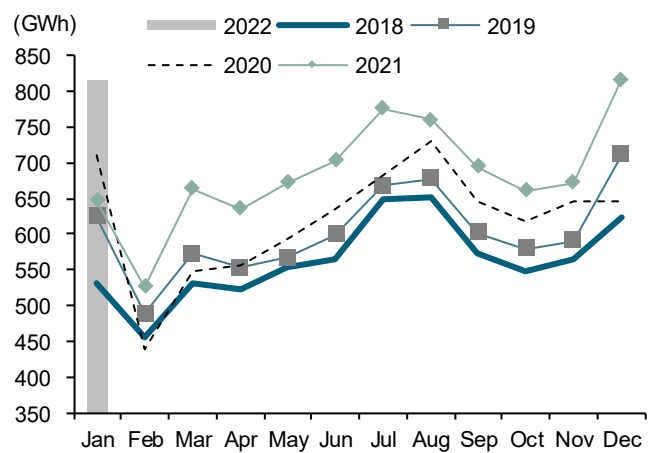
Source: Bloomberg

Exhibit 26: China's electricity generation



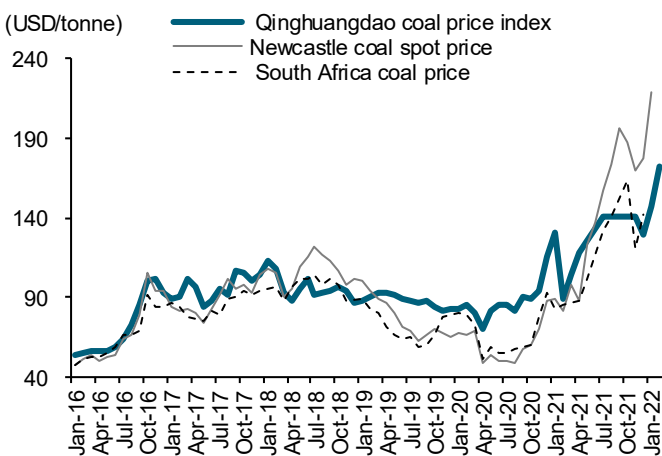
Source: Bloomberg

Exhibit 27: China's electricity consumption



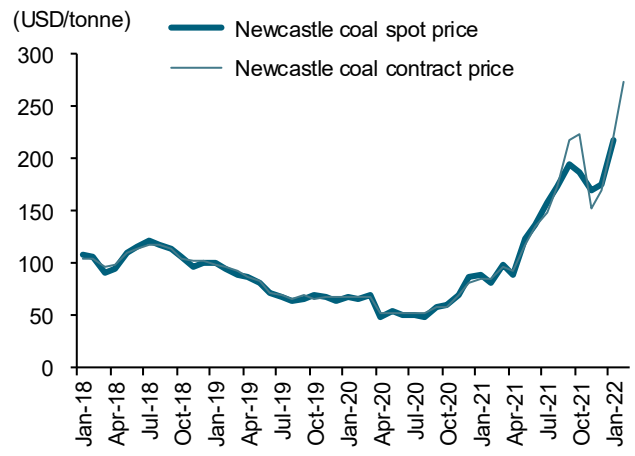
Source: Bloomberg

Exhibit 28: Benchmark coal prices (QHD vs NCT)



Source: Bloomberg

Exhibit 29: Newcastle coal spot and contract price



Source: Bloomberg

Banpu as a key winner on the coal and gas price spikes

Amid the heightening risks of higher energy prices and inflation, along with tighter coal supplies and potentially higher demand for coal as a substitute for gas and oil, we believe Banpu stands out as one of the most attractive commodities plays in Thailand.

Even with most of Banpu's earnings still being generated from "dirty" coal, we think in the short term Banpu should greatly benefit from the higher coal price throughout 2022 and into 2023 as the direct demand for coal as a major source of fuel for power generation worldwide remains highly visible for the next five years, in our view, while the "substitute" demand impact should further boost the coal price above USD250/t.

Valuation-wise, Banpu is now trading at an attractive 7-8x 2022E P/E, thanks to its strong 2022E earnings. Note that our current NCT assumptions of USD100/t in 2022 and USD70/t in 2023 remain highly conservative and still exclude the potential impact of the supply disruptions for coal, oil, and gas due to the Russia-Ukraine war.

Exhibit 30: SoTP-based target price

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 FY22E	
Net value of Banpu (A+B+C+D)	16.9	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	109,142	96,271	96,271
Cost of goods sold	(51,406)	(56,425)	(50,939)	(44,943)	(45,997)
Gross profit	19,926	76,765	58,203	51,328	50,274
Other operating income	-	-	-	-	-
Operating costs	(11,419)	(15,293)	(13,557)	(11,936)	(11,936)
Operating EBITDA	8,506	61,472	44,646	39,392	38,338
Depreciation	(13,543)	(15,895)	(18,733)	(18,733)	(18,733)
Goodwill amortisation	(31)	(186)	(376)	(376)	(376)
Operating EBIT	(5,068)	45,391	25,537	20,283	19,229
Net financing costs	(2,778)	(3,273)	(6,177)	(6,043)	(6,267)
Associates	4,239	7,290	6,359	5,109	5,109
Recurring non-operating income	5,264	(5,833)	2,577	1,327	1,327
Non-recurring items	2,282	(13,941)	0	0	0
Profit before tax	(300)	22,344	21,938	15,567	14,289
Tax	(269)	(6,372)	(3,116)	(2,092)	(1,836)
Profit after tax	(569)	15,973	18,822	13,476	12,453
Minority interests	(1,217)	(6,121)	(6,126)	(3,363)	(3,643)
Preferred dividends	0	0	0	0	0
Other items	-	-	-	-	-
Reported net profit	(1,786)	9,852	12,697	10,113	8,810
Non-recurring items & goodwill (net)	(2,282)	13,941	0	0	0
Recurring net profit	(4,068)	23,793	12,697	10,113	8,810
Per share (THB)					
Recurring EPS *	(0.80)	3.52	1.77	1.14	0.74
Reported EPS	(0.35)	1.46	1.77	1.14	0.74
DPS	0.50	0.45	0.85	0.49	0.34
Diluted shares (used to calculate per share data)	5,075	6,766	7,189	8,881	11,841
Growth					
Revenue (%)	(16.8)	86.7	(18.1)	(11.8)	-
Operating EBITDA (%)	(56.3)	622.7	(27.4)	(11.8)	(2.7)
Operating EBIT (%)	nm	nm	(43.7)	(20.6)	(5.2)
Recurring EPS (%)	nm	nm	(49.8)	(35.5)	(34.7)
Reported EPS (%)	nm	nm	21.3	(35.5)	(34.7)
Operating performance					
Gross margin inc. depreciation (%)	8.9	45.7	36.2	33.9	32.8
Gross margin of key business (%)	20.1	42.3	45.7	43.3	42.2
Operating EBITDA margin (%)	11.9	46.2	40.9	40.9	39.8
Operating EBIT margin (%)	(7.1)	34.1	23.4	21.1	20.0
Net margin (%)	(5.7)	17.9	11.6	10.5	9.2
Effective tax rate (%)	20.0	20.0	20.0	20.0	20.0
Dividend payout on recurring profit (%)	(62.4)	12.8	48.4	43.1	45.4
Interest cover (X)	0.1	12.1	4.6	3.6	3.3
Inventory days	24.2	22.5	26.1	25.9	23.7
Debtor days	38.1	31.9	47.8	45.6	42.7
Creditor days	13.6	17.2	23.6	25.1	23.0
Operating ROIC (%)	(12.6)	31.2	19.0	17.1	18.5
ROIC (%)	0.2	10.7	8.2	6.0	5.4
ROE (%)	(6.0)	33.6	14.3	9.4	7.1
ROA (%)	0.9	10.0	6.4	4.7	4.2
* Pre-exceptional, pre-goodwill and fully diluted					
Revenue by Division (THB m)					
Coal	55,080	56,801	56,801	53,359	53,359
Others	16,252	76,389	52,341	42,912	42,912

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	12,697	10,113	8,810
Depreciation	13,543	15,895	18,733	18,733	18,733
Associates & minorities	(4,239)	(7,290)	(6,359)	(5,109)	(5,109)
Other non-cash items	1,302	10,734	13,641	13,507	13,732
Change in working capital	1,403	(4,978)	3,544	1,518	0
Cash flow from operations	7,941	38,154	42,256	38,762	36,166
Capex - maintenance	-	-	-	-	-
Capex - new investment	(22,372)	(12,104)	(9,919)	(8,749)	(8,749)
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)	(31,439)	(30,269)	(30,269)
Dividends paid	(2,864)	(2,749)	(4,336)	(5,399)	(4,210)
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)	(51)	(1,692)	(420)
Cash flow from financing	19,315	13,310	(5,687)	(4,591)	(2,130)
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	5,131	3,902	3,767
Free cash flow to firm (FCFF)	(8,143.91)	10,212.57	17,273.56	14,966.18	12,444.55
Free cash flow to equity (FCFE)	8,415.54	20,388.72	9,466.05	9,301.49	7,977.16

Per share (THB)

FCFF per share	(1.20)	1.51	2.55	2.21	1.84
FCFE per share	1.24	3.01	1.40	1.37	1.18
Recurring cash flow per share	1.29	6.37	5.38	4.19	3.05

Balance Sheet (THB m) Year Ending Dec	2020	2021	2022E	2023E	2024E
Tangible fixed assets (gross)	112,066	148,710	158,628	167,377	176,126
Less: Accumulated depreciation	(34,543)	(34,543)	(53,276)	(73,148)	(94,085)
Tangible fixed assets (net)	77,523	114,167	105,352	94,230	82,041
Intangible fixed assets (net)	192	20	20	20	20
Long-term financial assets	-	-	-	-	-
Invest. in associates & subsidiaries	50,761	54,991	59,528	62,816	66,103
Cash & equivalents	21,941	39,581	44,712	48,614	52,381
A/C receivable	7,482	15,806	12,770	11,264	11,264
Inventories	3,045	3,905	3,383	2,984	2,984
Other current assets	14,833	26,145	26,145	26,145	26,145
Current assets	47,301	85,437	87,010	89,007	92,775
Other assets	105,870	111,186	137,001	167,046	194,201
Total assets	281,648	365,799	388,911	413,118	435,139
Common equity	62,344	79,277	97,787	116,879	132,968
Minorities etc.	22,211	24,420	30,545	33,908	37,551
Total shareholders' equity	84,555	103,697	128,333	150,787	170,519
Long term debt	112,559	139,747	178,957	181,306	183,806
Other long-term liabilities	18,129	25,164	24,954	24,743	24,533
Long-term liabilities	130,687	164,911	203,910	206,050	208,339
A/C payable	2,025	3,293	3,280	2,893	2,893
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	56,668	56,281	56,281
Total liabilities and shareholders' equity	281,648	365,799	388,911	413,118	435,139
Net working capital	8,096	9,174	5,630	4,112	4,112
Invested capital	242,442	289,537	307,531	328,223	346,477

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

Per share (THB)

Book value per share	12.29	11.72	13.60	13.16	11.23
Tangible book value per share	12.25	11.71	13.60	13.16	11.23

Financial strength

Net debt/equity (%)	165.3	154.9	120.2	101.3	88.8
Net debt/total assets (%)	49.6	43.9	39.7	37.0	34.8
Current ratio (x)	0.7	0.9	1.5	1.6	1.6
CF interest cover (x)	12.1	10.9	4.1	4.0	3.7

Valuation	2020	2021	2022E	2023E	2024E
Recurring P/E (x) *	(15.1)	3.4	6.9	10.6	16.3
Recurring P/E @ target price (x) *	(21.1)	4.8	9.6	14.8	22.7
Reported P/E (x)	(34.4)	8.3	6.9	10.6	16.3
Dividend yield (%)	4.1	3.7	7.1	4.1	2.8
Price/book (x)	1.0	1.0	0.9	0.9	1.1
Price/tangible book (x)	1.0	1.0	0.9	0.9	1.1
EV/EBITDA (x) **	26.3	4.3	6.1	7.5	8.7
EV/EBITDA @ target price (x) **	29.1	4.9	6.9	8.5	10.1
EV/invested capital (x)	0.9	0.9	0.9	0.9	1.0

* 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	ICI	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, CFA, FRM, ERP FSS International Investment Advisory Securities Co., Ltd

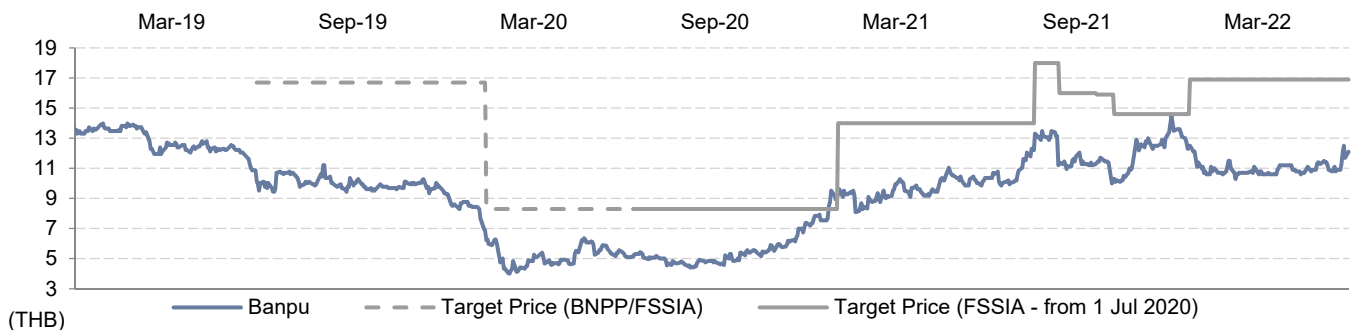
The individual(s) identified above certify(ies) that (i) all views expressed in this report accurately reflect the personal view of the analyst(s) with regard to any and all of the subject securities, companies or issuers mentioned in this report; and (ii) no part of the compensation of the analyst(s)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

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

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

History of change in investment rating and/or target price

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 12.10	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 07-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.