EQUITY RESEARCH - COMPANY REPORT

BANPU BANPU TB

THAILAND / MATERIALS

No more hedging pains

- We believe Banpu is now poised to post a strong net profit of THB8.6b in 1Q22, with a core net profit of THB12.7b.
- Banpu plans to significantly reduce its hedging volumes via price swaps: coal to 0.75mt in 2022, and gas to 166bcf in 2022.
- Maintain BUY and our SoTP target price of THB18.8.

Operational strength from coal and gas should manifest in 1Q22

We believe Banpu is now poised to post a strong net profit of THB8.6b in 1Q22, with a core net profit of THB12.7b, up from THB10.5b in 4Q21, and a hedging loss of THB4b, down from a THB7b loss in 4Q21. We are confident that Banpu will post very strong quarterly net profits from 1Q22 onward, backed by a sharp decline in its hedging losses for both coal and shale gas swaps and much wider gross margins for coal and shale gas.

Hedging loss to plunge markedly in 1Q22 onward

The most critical factor for Banpu's net profit growth is its hedging loss outlook, given that Banpu suffered from large hedging losses of over USD444.6m in 2021, and USD214.7m in 4Q21 alone. In 2022, according to management, Banpu plans to significantly reduce its hedging volumes for both coal and gas via price swaps, cutting the coal hedging volume down from 3mt in 2021 to 0.75mt in 2022, and the gas hedging volume down from 235bcf in 2021 to 166bcf in 2022 as Banpu changes its hedging policy target from 92% to 65% of shale gas produced. In 1Q22, management guided that its coal hedging volume would be 155kt, with a potential hedging loss margin of USD100-150/t, potentially leading to significantly narrower hedging losses for shale gas in 1Q22 onward.

ASP upside remains wide open

In tandem with the spike in the NCT price to over USD300/t in 1Q22, we project Banpu's coal ASP to rise to USD169/t in 1Q22 and USD185/t in 2Q22 for ITMG, and to USD154/t in 1Q22 and USD170/t in 2Q22 for Centennial (CEY). Our estimated 2022 ASPs of USD154-185/t for ITMG and CEY are significantly higher than the USD106/t average in 2021.

Time to accumulate ahead of strong 1Q22E net profit

We maintain BUY and our SoTP-based target price of THB18.8. We think Banpu's share price remains highly attractive, trading at a mere 3-4x 2022-23E P/E, which we think is highly unjustified given the high visibility of its strong net profit growth outlook in 2022-23 on the back of the high global prices for coal and gas. We believe the strong 1Q22E net profit of THB8.6b should exceed investors' expectations as a higher ASP and lower hedging loss would likely drive its net profit significantly q-q and y-y in 1Q22 onward.



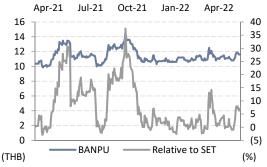
BUY

UNCHANGED

TARGET PRICE THB18.80
CLOSE THB11.60
UP/DOWNSIDE +62.1%
PRIOR TP THB18.80
CHANGE IN TP UNCHANGED
TP vs CONSENSUS +32.4%

KEY STOCK DATA

YE Dec (THB m)	2021	2022E	2023E	2024E
Revenue	133,190	176,495	159,632	154,929
Net profit	9,852	28,728	29,682	30,388
EPS (THB)	1.46	4.00	3.34	2.57
vs Consensus (%)	-	48.3	66.8	24.3
EBITDA	61,472	78,054	78,249	79,292
Core net profit	23,793	28,728	29,682	30,388
Core EPS (THB)	3.52	4.00	3.34	2.57
Chg. In EPS est. (%)	-	-	-	-
EPS growth (%)	nm	13.6	(16.4)	(23.2)
Core P/E (x)	3.3	2.9	3.5	4.5
Dividend yield (%)	3.9	19.2	15.3	11.7
EV/EBITDA (x)	4.3	3.5	3.7	4.1
Price/book (x)	1.0	0.8	0.7	0.8
Net debt/Equity (%)	154.9	95.2	64.7	43.7
ROE (%)	33.6	30.4	24.0	19.6



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	2.7	8.4	14.7
Relative to country (%)	4.0	7.0	8.9
Mkt cap (USD m)			2,287
3m avg. daily turnover (USD m)			46.2
Free float (%)			88
Major shareholder	Vong	kusolkit Fa	mily (13%)
12m high/low (THB)			14.90/9.44
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 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 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 %

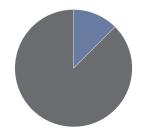


Source: Banpu

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)	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 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

No more hedging pains; time for operational gains

We believe Banpu is now poised to post a strong net profit of THB8.6b in 1Q22, with a core net profit of THB12.7b, up from THB10.5b in 4Q21, and a hedging loss of THB4b, down from a THB7b loss in 4Q21.

We are confident that Banpu will post very strong quarterly net profits in 1Q22 onward, backed by a sharp decline in its hedging losses for both coal and shale gas swaps and much wider gross margins for coal and shale gas.

Exhibit 1: Net profit and core net profit vs hedging gains (losses)

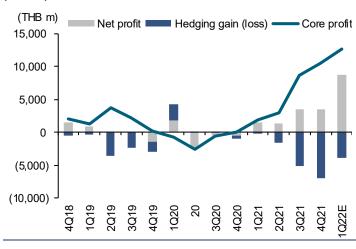
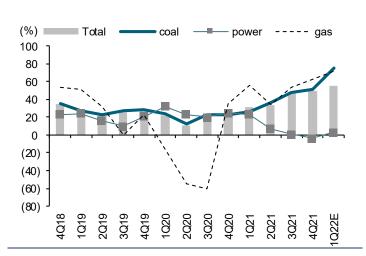


Exhibit 2: Gross margin by segment



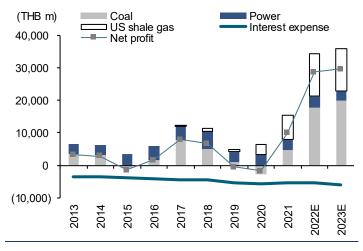
Sources: Banpu: FSSIA estimates

Sources: Banpu: FSSIA estimates

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

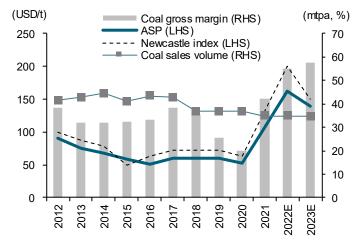
In 2022, according to management, Banpu plans to significantly reduce its hedging volumes for both coal and gas via price swaps, cutting the coal hedging volume down from 3mt in 2021 to 0.75mt in 2022, and the gas hedging volume down from 235bcf in 2021 to 166bcf in 2022 as Banpu changes its hedging policy target from 92% to 65% of shale gas produced. In 1Q22, management guided that its coal hedging volume would be 155kt, with a potential hedging loss margin of USD100-150/t.

Exhibit 3: Core net profit breakdown



Sources: Banpu; FSSIA estimates

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



Sources: Banpu; FSSIA estimates

Similarly, the hedging loss from shale gas should also fall precipitously from USD147.1m in 4Q21 to USD48m in 1Q22, based on a lower hedging volume of 40bcf and a hedging price of USD3.5-3.8/mmbtu. In 4Q21, 57bcf was hedged at a price of USD3/mmbtu

Exhibit 5: Estimated hedging losses for coal and shale gas

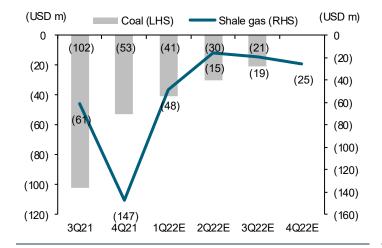
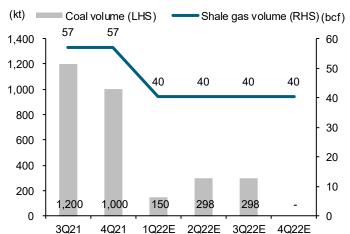


Exhibit 6: Banpu's hedging volumes for coal and shale gas in 2022E



Sources: Banpu; FSSIA estimates

Sources: Banpu; FSSIA estimates

China's shutdown: a boon or bane for Banpu?

Thanks to the continued tight supply-demand situation, the ongoing Russia-Ukraine conflict, and related sanctions imposed by the US and its allies, the prices of commodities, including oil, gas, and coal, have all spiked as a result of the higher supply risks. For coal, the Newcastle index (NCT) spiked to over USD400/t last week but has since stayed above USD300/t as of 26 Apr-22.

We believe the main reasons for the sustained higher coal price are 1) the strong demand for coal used for power generation in China; and 2) the rising supply risk from Russia.

Exhibit 7: Newcastle coal price remains high above USD300/t in Apr-22



Source: Barchart.com

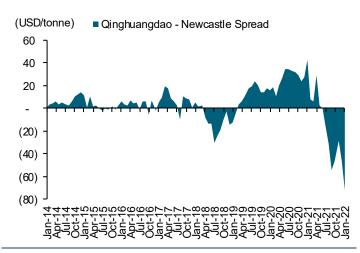
China's coal market remains key. YTD, China has imported lower coal volumes due to its higher coal production mandated by the Chinese government since 4Q21 when China faced a power crunch as a result of the coal supply shortage and the high demand for electricity.

However, China has also maintained its domestic coal prices at high levels of over USD200/t, even at a deep discount to the NCT price, to ensure supply sufficiency for power generation throughout 2022-23 when China intends to continue increasing its new coal-fired power capacity to improve its near-term power security.

Exhibit 8: China's coal imports and exports



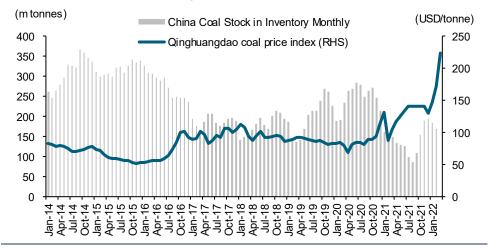
Exhibit 9: Coal price gap between QHD and NCT



Source: Bloomberg Source: Bloomberg

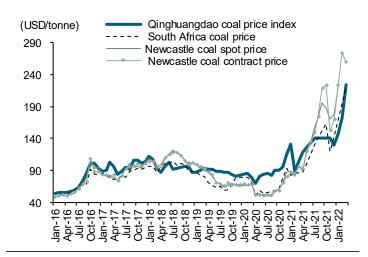
The coal stock in China is still standing at a historically low level despite the government's effort to boost coal production domestically. Coupled with the tight supply for coal from Russia due to the sanctions implemented by the US and its allies, we think China's low coal inventory and higher demand for power in the coming summer should ensure that the NCT price stays above USD250/t throughout 2022, based on our estimate.

Exhibit 10: China's coal inventory vs QHD coal price index



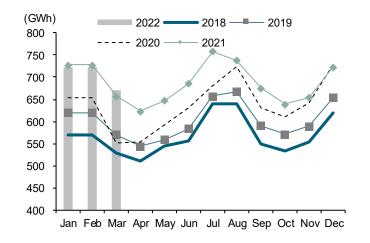
Source: Bloomberg

Exhibit 11: Benchmark coal prices (QHD vs NCT)



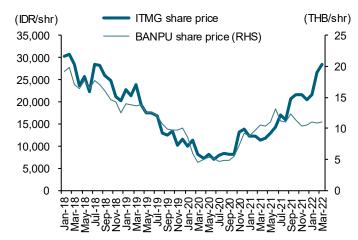
Source: Bloomberg

Exhibit 13: China's electricity supply



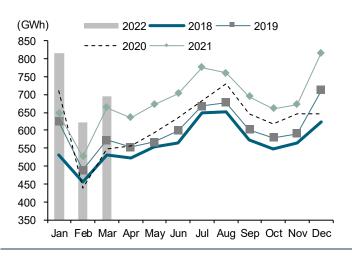
Source: Bloomberg

Exhibit 12: Newcastle coal spot and contract price



Source: Bloomberg

Exhibit 14: China's electricity consumption



Source: Bloomberg

ASP to jump to over USD150-250/t in 2022

In tandem with the spike in the NCT price to over USD300/t in 1Q22, we project Banpu's coal average selling price (ASP) to rise to USD169/t in 1Q22 and USD185/t in 2Q22 for ITMG, and to USD154/t in 1Q22 and USD170/t in 2Q22 for CEY. Our estimated 2022 ASPs of USD154-185/t for ITMG and CEY are significantly higher than the USD106/t average in 2021.

Exhibit 15: EBITDA breakdown

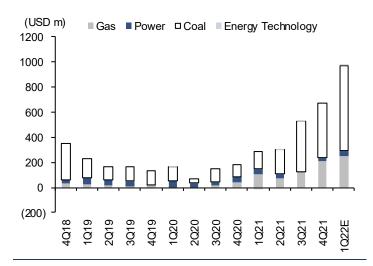
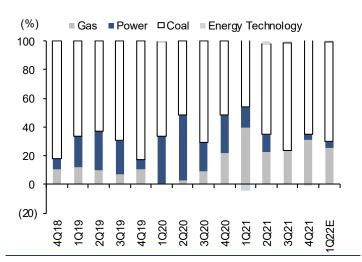


Exhibit 16: EBITDA breakdown (%)



Sources: Banpu; FSSIA estimates

Sources: Banpu; FSSIA estimates

In terms of cost, we expect the production costs for both ITMG and CEY to rise only marginally in 1Q22, with ITMG's production cost increasing to USD70/t, up from USD70/t in 2021, due mainly to the higher cost of diesel, which accounts for one-third of ITMG's total production cost, based on our estimate.

Exhibit 17: ITMG's coal ASP, cost, and gross margin

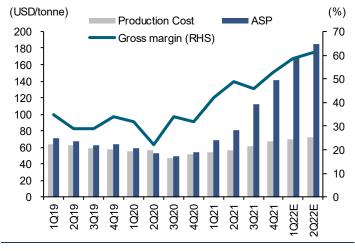
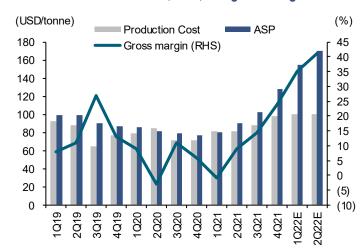


Exhibit 18: CEY's coal ASP, cost, and gross margin



Sources: Banpu; FSSIA estimates

Sources: Banpu; FSSIA estimates

According to management, CEY's coal production is projected to rise to over 3mt in 1Q22, up from 2.2mt in 4Q21 and 2.5mt in 3Q21 when the large-scale mines Mandalong and Springvale witnessed geological difficulties that resulted in lower-than-expected coal production levels. Given its high fixed cost structure, CEY's net profit should improve markedly when its coal production rises in 1Q22.

Banpu

Strong BUY ahead of a strong 1Q22E net profit

We maintain BUY and our SoTP-based target price of THB18.8. We think Banpu's share price remains highly attractive, trading at a mere 3-4x 2022-23E P/E, which we think is highly unjustified given the high visibility of its strong net profit growth outlook in 2022-23 on the back of high global prices for coal and gas. We believe the strong 1Q22E net profit of THB8.6b should exceed investors' expectations as a higher ASP and lower hedging loss would drive its net profit significantly q-q and y-y in 1Q22 onward.

Exhibit 19: SoTP-based target price

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

Sources: Banpu; FSSIA estimates

We believe that once the market and investors see Banpu's true operational strength in coal and gas in the form of strong net profits in 1Q22 onward, it will likely to lead to Banpu's share price catching up with and outperforming its subsidiary's, ITMG. ITMG's share price has outperformed Banpu's significantly since 3Q21 due to Banpu's poor reported net profits in 3Q21 and 4Q21 as a result of its large hedging losses for shale gas and coal vs only coal for ITMG.

Exhibit 20: ITMG's share price vs Banpu's share price

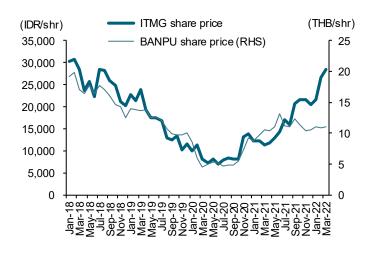
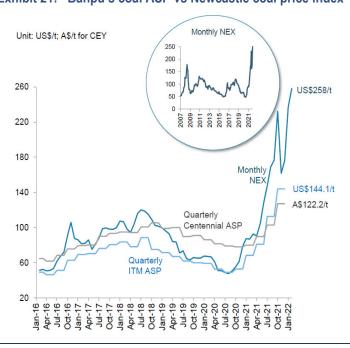


Exhibit 21: Banpu's coal ASP vs Newcastle coal price index



Source: Bloomberg Source: BANPU

Financial Statements

Banpu

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

Sources: Banpu; FSSIA estimates

Financial Statements

Banpu

Banpu					
Cash Flow (THB m) Year Ending Dec	2020	2021	2022E	2023E	2024E
Recurring net profit	(4,068)	23,793	28,728	29,682	30,388
Depreciation	13,543	15,895	19,106	19,106	19,106
Associates & minorities			(8,705)	(7,622)	
Other non-cash items	(4,239)	(7,290)			(7,565)
	1,302	10,734	13,641	13,660	13,737
Change in working capital	1,403	(4,978)	(4,400)	1,989	555
Cash flow from operations	7,941	38,154	48,370	56,815	56,221
Capex - maintenance	-	-	-	-	
Capex - new investment	(22,372)	(12,104)	(16,040)	(14,507)	(14,080)
Net acquisitions & disposals	2,828	(15,822)	(15,822)	(15,822)	(15,822)
Other investments (net)	(2,160)	(5,898)	(5,698)	(5,698)	(5,698)
Cash flow from investing	(21,704)	(33,824)	(37,559)	(36,027)	(35,600)
Dividends paid	(2,864)	(2,749)	(8,463)	(15,943)	(15,901)
Equity finance	0	0	0	0	0
Debt finance	28,455	23,861	(1,300)	2,500	2,500
Other financing cash flows	(6,277)	(7,802)	12,690	12,638	14,313
Cash flow from financing	19,315	13,310	2,927	(805)	912
Non-recurring cash flows	· -	· -	· -	` -	
Other adjustments	0	0	0	0	0
Net other adjustments	0	0	0	0	0
Movement in cash	5,552	17,640	13,738	19,983	21,533
Free cash flow to firm (FCFF)	(8,143.91)	10,212.57	17,267.54	27,263.32	27,173.38
` '	* '		22,201.03		
Free cash flow to equity (FCFE)	8,415.54	20,388.72	22,201.03	35,926.32	37,434.37
Per share (THB)					
FCFF per share	(1.20)	1.51	2.55	4.03	4.02
FCFE per share	1.24	3.01	3.28	5.31	5.53
Recurring cash flow per share	1.29	6.37	7.34	6.17	4.70
Balance Sheet (THB m) Year Ending Dec	2020	2021	2022E	2023E	2024E
Tangible fixed assets (gross)	112,066	148,710	164,749	179,256	193,336
Less: Accumulated depreciation	(34,543)	(34,543)	(53,649)	(74,618)	(97,329)
Tangible fixed assets (net)	77,523	114,167	111,100	104,639	96,008
	192	-	20	•	20
Intangible fixed assets (net)	192	20	20	20	20
Long-term financial assets	-	-	-	-	
Invest. in associates & subsidiaries	50,761	54,991	61,874	67,674	73,417
Cash & equivalents	21,941	39,581	53,320	73,303	94,836
A/C receivable	7,482	15,806	20,650	18,677	18,127
Inventories	3,045	3,905	5,471	4,949	4,803
Other current assets	14,833	26,145	26,145	26,145	26,145
Current assets	47,301	85,437	105,586	123,073	143,911
Other assets	105,870	111,186	137,001	167,046	203,011
Total assets	281,648	365,799	415,581	462,452	516,360
Common equity	62,344	79,277	109,691	137,809	172,594
Minorities etc.	22,211	24,420	43,287	60,258	77,239
Total shareholders' equity	84,555	103,697	152,978	198,066	249,833
Long term debt	112,559	139,747	178,957	181,457	183,957
Other long-term liabilities	18,129	25,164	24,954	24,743	24,533
Long-term liabilities	130,687	164,911	203,910	206,200	208,489
A/C payable	2,025	3,293	5,304	4,797	4,656
Short term debt					
	49,140	60,510	20,000	20,000	20,000
Other current liabilities	15,240	33,388	33,388	33,388	33,388
Current liabilities	66,405	97,191	58,692	58,186	58,044
Total liabilities and shareholders' equity	281,648	365,799	415,581	462,452	516,366
Net working capital	8,096	9,174	13,574	11,585	11,03
nvested capital	242,442	289,537	323,569	350,963	383,486
Includes convertibles and preferred stock which is be	ing treated as debt				
Per share (THB)					
Book value per share	12.29	11.72	15.26	15.52	14.58
Fangible book value per share	12.25	11.71	15.26	15.52	14.57
Financial strength					
Net debt/equity (%)	165.3	154.9	95.2	64.7	43.7
Net debt/total assets (%)	49.6	43.9	35.0	27.7	21.1
Current ratio (x)	49.6 0.7	0.9	1.8	21.1	21.
CF interest cover (x)	0. <i>7</i> 12.1	10.9	7.2	2.1 9.1	9.2
Valuation	2020	2021	2022E	2023E	2024E
Recurring P/E (x) *	(14.5)	3.3	2.9	3.5	4.9
Recurring P/E @ target price (x) *	(23.5)	5.3	4.7	5.6	7.3
Reported P/E (x)	(33.0)	8.0	2.9	3.5	4.
Dividend yield (%)	4.3	3.9	19.2	15.3	11.
Price/book (x)	0.9	1.0	0.8	0.7	0.
Price/tangible book (x)	0.9	1.0	0.8	0.7	0.8
EV/EBITDA (x) **	26.0	4.3	3.5	3.7	4.
EV/EBITDA @ target price (x) **	30.3	5.1	4.2	4.5	5.2
EV/invested capital (x)	0.9	0.9	0.8	0.8	0.8

Sources: Banpu; FSSIA estimates

Corporate Governance report of Thai listed companies 2020

EXCELLE	NT LEVEL									
AV	ADVANC	AF	AIRA	AKP	AKR	ALT	AMA	AMATA	AMATAV	ANAN
ОТ	AP	ARIP	ARROW	ASP	BAFS	BANPU	BAY	BCP	BCPG	BDMS
EC	BEM	BGRIM	BIZ	BKI	BLA	BOL	BPP	BRR	BTS	BWG
ENTEL	CFRESH	CHEWA	CHO	CIMBT	CK	CKP	CM	CNT	COL	COMAN
OTTO	CPALL	CPF	CPI	CPN	CSS	DELTA	DEMCO	DRT	DTAC	DTC
8V6	EA	EASTW	ECF	ECL	EGCO	EPG	ETE	FNS	FPI	FPT
SMART	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
.IT	LPN	MAKRO	MALEE	MBK	MBKET	MC	MCOT	METCO	MFEC	MINT
MONO	MOONG	MSC	MTC	NCH	NCL	NEP	NKI	NOBLE	NSI	NVD
	OISHI	ORI	ОТО	PAP	PCSGH	PDJ	PG		PLANB	PLANET
NYT								PHOL		
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
HIP	THRE	THREL	TIP	TIPCO	TISCO	TK	TKT	TTB	TMILL	TNDT
		TOP				TSC				
ΓNL	TOA		TPBI	TQM	TRC		TSR	TSTE	TSTH	TTA
TTCL	TTW	TU	TVD	TVI	TVO	TWPC	U	UAC	UBIS	UV
/GI	VIH	WACOAL	WAVE	WHA	WHAUP	WICE	WINNER	TRUE		
/ERY GO	OD LEVEL									
S	ABM	ACE	ACG	ADB	AEC	AEONTS	AGE	AH	AHC	AIT
ALLA	AMANAH	AMARIN	APCO	APCS	APURE	AQUA	ASAP	ASEFA	ASIA	ASIAN
ASIMAR	ASK	ASN	ATP30	AUCT	AWC	AYUD	В	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
MH	INET	INSURE	IRC	IRCP	IT .	ITD	ITEL	J	JAS	JCK
JCKH	JMART	JMT	KBS	KCAR	KGI	KIAT	KOOL	KTIS	KWC	KWM
_&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		SUN	SYNEX		TAE	TAKUNI	TBSP
				SUC			T			
CC	TCMC	TEAM	TEAMG	TFG	TIGER	TITLE	TKN	TKS	TM	TMC
ΓMD	TMI	TMT	TNITY	TNP	TNR	TOG	TPA	TPAC	TPCORP	TPOLY
ΓPS	TRITN	TRT	TRU	TSE	TVT	TWP	UEC	UMI	UOBKH	UP
JPF	UPOIC	UT	UTP	UWC	VL	VNT	VPO	WIIK	WP	XO
UASA	ZEN	ZIGA	ZMICO	UVVC	٧L	VIVI	VFO	VVIIIV	VVF	^ U
J. IOA	←! ¥	LIGA	2.000							
OOD LE										
UP	Α	ABICO	AJ	ALL	ALUCON	AMC	APP	ARIN	AS	AU
352	BC	BCH	BEAUTY	BGT	BH	BIG	BKD	BLAND	BM	BR
BROCK	BSBM	BSM	BTNC	CAZ	CCP	CGD	CITY	CMAN	CMO	CMR
PT	CPW	CRANE	CSR	D	EKH	EP	ESSO	FMT	GIFT	GREEN
SSC	GTB	HTECH	HUMAN	IHL	INOX	INSET	IP	JTS	JUBILE	KASET
CM	KKC	KUMWEL	KUN	KWG	KYE	LEE	MATCH	MATI	M-CHAI	MCS
MDX .	MJD	MM	MORE	NC	NDR	NER	NFC	NNCL	NPK	NUSA
CEAN	PAF	PF	PK	PLE	PMTA	POST	PPM	PRAKIT	PRECHA	PRIME
ROUD	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	TPIPP	TPLAS
TI	TYCN	UKEM	UMS	VCOM	VRANDA	WIN	WORK	WPH	lange	
		Description						Score F	=	
		Excellent						90-1		
		Very Good						80-8 70-7		

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,

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

and corruption SEC imposed a civil sanction against insider trading of director and executive; ** delisted

Anti-corruption Progress Indicator 2020

CERTIFIED										
2S	ADVANC	Al	AIE	AIRA	AKP	AMA	AMANAH	AP	AQUA	ARROW
ASK	ASP	AYUD	В	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	GUNKUI
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	РВ	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	SYNTE
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	WIIK	XO
ZEN	TRUE									
DECLARE	D									
7UP	ABICO	AF	ALT	AMARIN	AMATA	AMATAV	ANAN	APURE	B52	BKD
ВМ	BROCK	BUI	СНО	CI	сотто	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



Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
13-Aug-2019 26-Feb-2020 09-Oct-2020 23-Dec-2020	BUY HOLD BUY BUY	16.70 8.30 8.30 14.00	10-Jun-2021 01-Jul-2021 02-Aug-2021 17-Aug-2021	BUY HOLD BUY BUY	18.00 16.00 15.90 14.60	21-Oct-2021 15-Mar-2022	BUY BUY	16.90 18.80

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

Price and TP are in local currency

Source: FSSIA estimates

Company	Ticker	Price	Rating	Valuation & Risks
Banpu	BANPU TB	THB 11.60	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 27-Apr-2022 unless otherwise stated.

RECOMMENDATION STRUCTURE

Stock ratings

Stock ratings are based on absolute upside or downside, which we define as (target price* - current price) / 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.