THAILAND

Sector Weighting

Sector Note

Neutral (From: Underweight)

18 JANUARY 2023

Thailand Utilities Sector

A fair trial

Sector Valuation Company	BBG Code	Rec.	Current price (Bt)	Target price (Bt)	Market Cap (US$ m)	Norm EPS grw 2022F (%)	Norm EPS grw 2023F (%)	Norm PE 2022F (x)	Norm PE 2023F (x)	P/BV 2022F (x)	P/BV 2023F (x)	Div yield 2022F (%)	Div yield 2023F (%)
BCPG Pcl	BCPG TB	BUY	10.30	16.00	905	(2.4)	(24.7)	13.5	18.0	1.0	1.0	3.1	3.1
B.Grimm Power Pcl	BGRIM TB	BUY	40.75	48.00	3,209	(67.6)	293.8	134.9	34.3	3.6	3.4	0.4	1.5
Banpu Power Pcl	BPP TB	BUY	16.60	22.00	1,528	32.0	22.4	15.8	12.9	1.1	1.0	4.1	4.3
CK Power Pcl	CKP TB	BUY	4.54	6.50	1,115	13.7	(4.5)	16.3	17.0	1.4	1.3	2.5	2.9
Energy Absolute Pcl	EA TB	BUY	89.25	100.00	10,056	20.8	26.6	45.8	36.2	8.7	7.4	0.7	0.8
Electricity Generating	EGCO TB	BUY	175.00	275.00	2,783	15.4	(0.6)	7.8	7.8	0.8	0.7	3.7	4.0
Global Power Synergy	GPSC TB	SELL	73.25	65.00	6,239	(73.7)	353.0	116.2	25.6	1.9	1.8	0.5	2.3
Gulf Energy Dev. Pcl	GULF TB	HOLD	54.00	45.00	19,139	22.2	37.4	58.6	42.6	5.0	4.0	1.0	1.4
Gunkul Engineering	GUNKUL TB	SELL	5.05	4.80	1,355	(16.2)	3.8	26.5	25.5	3.2	2.9	1.5	1.6
RATCH Group Pcl	RATCH TB	HOLD	43.75	46.00	2,874	49.7	(19.9)	6.8	8.5	0.9	0.9	8.1	4.4

Source: Thanachart estimates, Based on 17 January 2023 closing prices

We upgrade the Thai utilities sector to a NEUTRAL weighting as we believe it is now fairly priced. Its high multiples are justified to us by its decent earnings growth and the start of its rising free cash flow cycle. Amid tight valuations, we pick story-driven plays of an SPP earnings turnaround via BGRIM, and BPP for its solid M&A plans.

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Resilient pricing

We take a NEUTRAL stance on Thai utilities, seeing the sector as fairly priced at 23/20x PE in 2023-24F. We see its high multiples as justified by the sector's 33/15% EPS growth and start of its rising free cash flow cycle, driven by past investments bearing fruit and a lower capex outlook on weakening industry growth. We separate the sector into three major segments: 1) mature conventional players with earnings contraction risk, 2) medium-size renewable players with muted earnings growth, and 3) new-gen companies with a strong growth mindset (Exhibits 17-18). We expect the last segment to continue to outperform with one of the clearest story-driven plays being **BGRIM** (upgrade to BUY) for its SPP turnaround story. We like **BPP** for its M&A story that could make it a bargain stock.

BGRIM, the stand out SPP turnaround story

The fuel price surge hit SPP margins hard over the past two years as electricity tariff hikes lagged heavily. Energy price rises are neutral for IPPs thanks to fuel-cost passthrough contracts. Some renewable projects get a windfall from rising electricity tariffs, but it is small compared to their huge existing subsidies. We see the reversal of fuel prices being a key earnings turnaround driver for SPPs. We upgrade BGRIM to BUY as it benefits the most from this story with 294/29% EPS growth in 2023-24F.

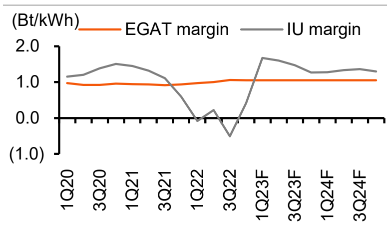
BPP, the M&A story

BPP is a conventional power firm with solid M&A plans. We raise our TP to Bt22/share as we expect it to acquire three operating gas-fired power plants in the US in 2023-24F. Without this inorganic growth, we expect its earnings to rebound by 10% in 2023F from its China coal power plants' recovering profitability. With the M&As, we project its earnings to grow by 22/16% in 2023-24F, implying BPP is trading at only 13x 2023F PE.

Our view on the big caps

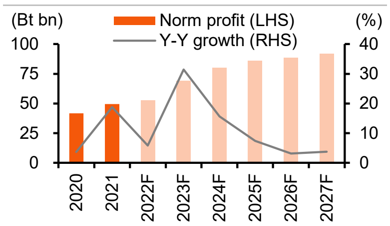
GULF and EA are major big-cap growth stocks in the sector but we think their high valuations already reflect their growth. We like GULF for its solid capacity growth in the IPP segment, but don't expect its investment in the telecom sector to help lift its multiples further. EA is our EV/battery theme favorite, but there is only 12% potential upside to our TP.

Strong SPP Margin Recovery



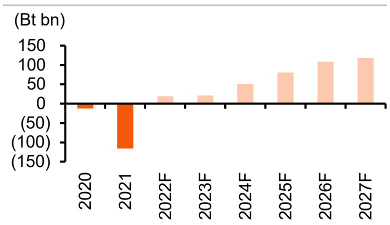
Sources: Company data; Thanachart estimates

Decent Sector's Growth Outlook …



Sources: Company data; Thanachart estimates

… With Rising FCF Cycle



Sources: Company data; Thanachart estimates

Thanachart Securities

Peaking fuel costs

Falling energy prices have a mixed-bag impact on the Utilities sector

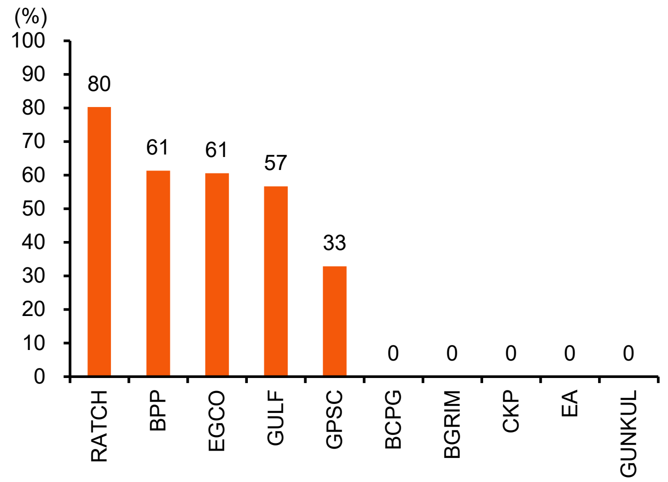
We expect the normalization of global energy prices down from their currently elevated levels to have different impacts on each segment of the Thai Utilities sector this year.

- **Small power producer (SPP) projects:** We expect a swift earnings recovery for SPPs, driven by falling domestic gas and coal prices with a rising national electricity tariff. We project SPPs' electricity sales margin to be inflated over 2023-24F given slow electricity tariff adjustments by the government amid the declining fuel price trend and the need to reverse the financial burden on the Electricity Generating Authority of Thailand (EGAT), which has subsidized electricity prices for the country over the past two years.
- **Independent power producer (IPP) projects:** Fuel price fluctuations are theoretically neutral to IPPs given the fuel-cost passthrough mechanism in their contracts. However, the impact on IPPs' earnings outlook in 2023F looks set to be slightly negative. This is due to the high base impact on IPPs' profitability due to a margin windfall from the gas-to-oil switching policy, which we expect to fade with falling gas prices this year.
- **Renewable projects:** Subsidized renewable projects in Thailand, either solar, wind, or biopower plants, have their electricity selling prices linked to the fuel adjustment value (Ft) so they gain extra margin from accelerating national tariff hikes (a higher Ft). There is no impact from energy price movements on other non-subsidized renewable projects.

NEUTRAL weighting on the sector; BGRIM and BPP are our new picks

We take a NEUTRAL stance on the Thai Utilities sector as we believe the stocks are mostly trading at fair valuations. Our stock picks are, therefore, based on story-driven plays. We ride the SPP earnings turnaround story via BGRIM, as it is the most direct play on SPPs with a secured capacity growth outlook into 2025F. We like BPP as an overlooked beneficiary of falling energy prices. We expect the profitability of its coal-fired power plants in China to improve with the downward normalization of coal prices, while BPP's valuation is highly attractive to us compared to its earnings growth outlook from its solid M&A plans.

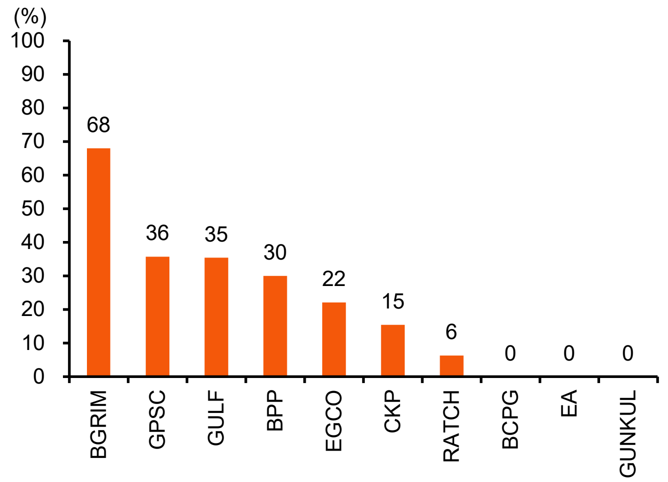
Ex 1: % Of IPP Capacity Vs. Total Portfolio



Source: Company data

Note: As of 2022, including overseas projects with a cost passthrough mechanism or with fuel prices fully hedged

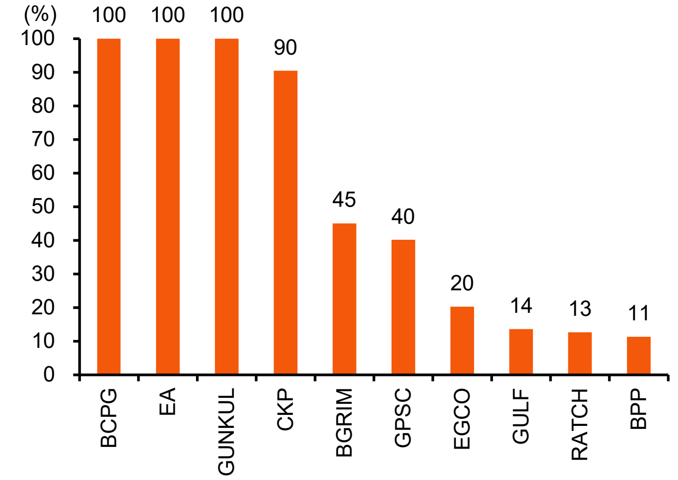
Ex 2: % Of SPP Capacity Vs. Total Portfolio



Source: Company data

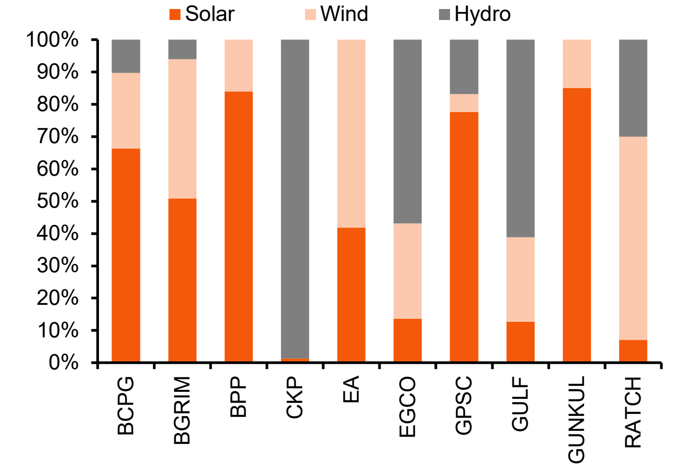
Note: As of 2022, including overseas projects whose margins are sensitive to energy price fluctuations.

Ex 3: % Of Renewable Capacity Vs. Total Portfolio



Source: Company data
Note: As of 2022

Ex 4: Renewable Capacity Breakdown



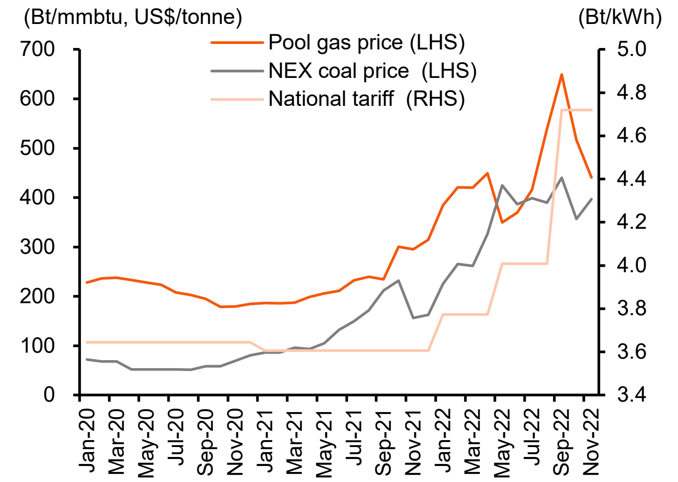
Source: Company data
Note: As of 2022

SPPs: The biggest beneficiary

SPPs benefit the most from the normalizing of global energy prices

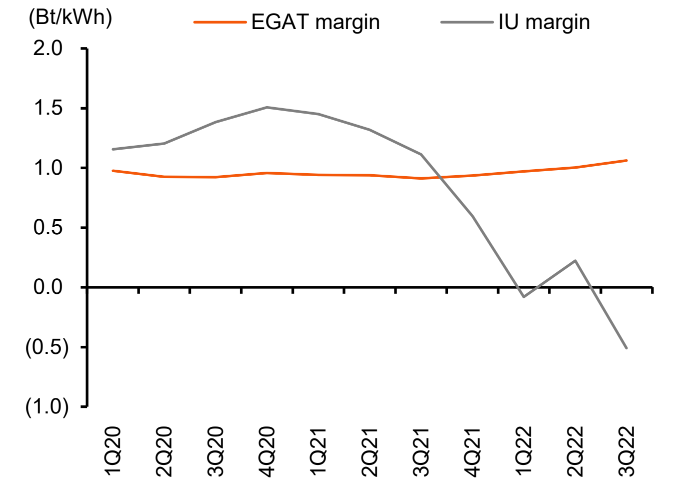
We see domestic SPP power plants as the biggest beneficiaries of the expected reversal in global energy prices. SPP margins have been squeezed since 2H21 when domestic natural gas and global coal prices started increasing while the national electricity tariff adjustment heavily lagged the fuel price surge. As the government began to accelerate tariff hikes from 2H22F, though we expect the domestic gas pool price to fall significantly from 1H23F, we estimate the margin for SPPs to swiftly recover to an elevated level during 2023-24F.

Ex 5: Tariff Price Lagged Fuel Price Surge …



Sources: Bloomberg, ERC, EPPO, Thanachart estimates

Ex 6: … So A Margin Squeeze For SPP Electricity Sales



Sources: Company data, Thanachart estimates

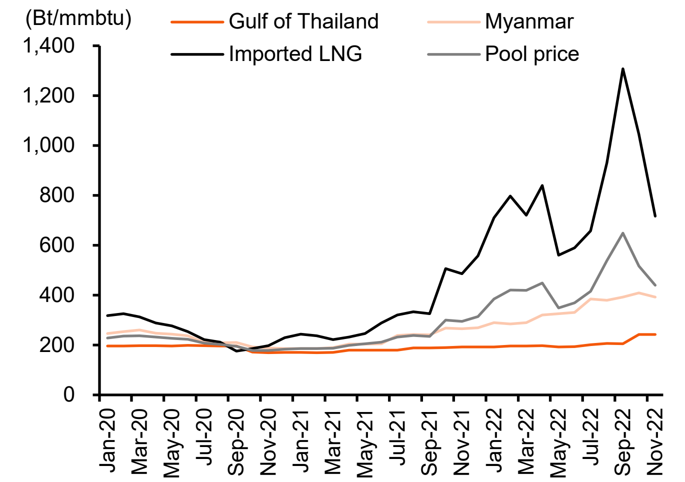
A pool price system in the monopolistic gas market in Thailand

We recap here that the natural gas market in Thailand is a monopoly in which PTT Pcl (PTT TB, Bt33.50, SELL) is the sole supplier and distributor. A pool price system is used to determine one single natural gas price in Thailand based on the average gas cost which PTT procures from three major gas sources: 1) gas fields in the Gulf of Thailand and Myanmar, 2) imported LNG under long-term purchase contracts, and 3) imported LNG from the spot market. The price of directly extracted natural gas from gas fields is linked to the trailing six-month oil price, and it is the cheapest portion of Thailand's natural gas supply. Unfortunately, those fields are being depleted so Thailand will increasingly rely on imported liquified natural gas (LNG) going forward. PTT Group (and later more players that have just had their import licenses granted) imports LNG under oil price-linked long-term purchase contracts from global suppliers. The gap between the gas supply from those two long-term sources is filled by imported LNG from the Asian spot market, the price of which is highly volatile. Based on the current breakdown of gas supply in Thailand, the oil price has the dominant 82% weighting of gas pool price movements while the other 18% depends on the Asian spot LNG price. The foreign exchange rate is also a significant factor as all the energy prices above are US dollar based.

Gas pool price looks set to fall as its three price factors reverse

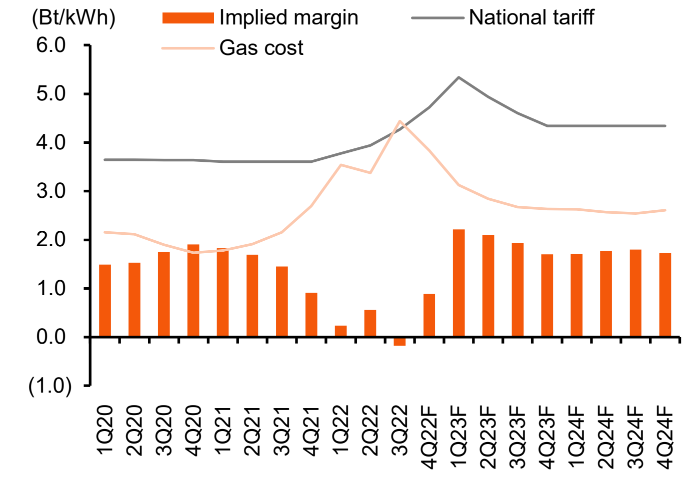
We expect Thailand's gas pool price to reverse to a declining trend in 4Q22F as all its three price drivers are peaking. The Brent oil price hit a historical high in June 2022 and started coming down. The Asian spot LNG price is also correcting with easing supply issues. The Thai baht has appreciated by 13% against the US dollar over the past two months.

Ex 7: LNG Led To A Spike In Domestic Gas Pool Price



Sources: EPPO, Bloomberg, Thanachart estimates

Ex 8: Inflated Margin At SPP Gas Power Plants In 2023-24F



Sources: Company data, Thanachart estimates

As energy prices fall, the government accelerates its tariff hikes

The Thai government started lifting the national electricity tariff in 1Q22 after the price had been fixed since 2018, a year after the beginning of the global fuel price surge in early 2021. Having said that, it had been holding off the hike. At end-2022, the national electricity price was only 31% higher than in early 2021 but the domestic gas pool price (60% of the country's electricity generation) had run up by 117%. Coal (15% of total generation) prices surged nearly 4x over the same period. This means that the heavy subsidy burden for the electricity price has been carried by EGAT over the past two years, resulting in a Bt150bn financial deficit currently. Based on this inefficient tariff adjustment approach of always lagging fuel price movements, we project the margin on electricity sales to be inflated for at least the next two years, partially to wipe out the budget deficit for EGAT.

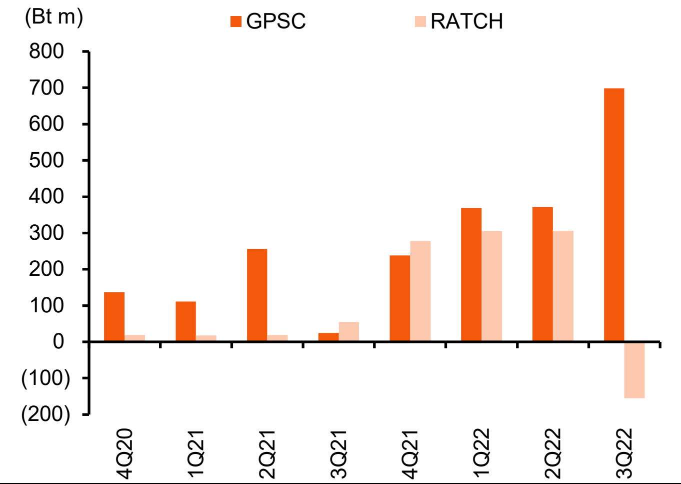
We estimate the margin on SPP electricity sales to industrial users (IUs) to rise to Bt1.6/kWh and Bt1.5/kWh 2023-24F, becoming a major driver for their profitability after it collapsed to Bt0.2 in 2022F. We expect the margin to normalize to Bt1.2 in 2025F.

IPPs: Dwindling windfall

Some IPPs get a margin windfall gas-to-oil switching policy

IPP power plants in Thailand have a fuel-cost passthrough mechanism included in their power purchase agreements (PPAs) with EGAT so they are normally not affected by fuel price fluctuations. However, some newer IPP plants benefited from the spike in the spot LNG price from late 2021, which forced the government to implement the gas-to-oil switching policy. Starting in 4Q21, EGAT ordered IPPs to generate electricity using diesel oil instead of natural gas given that the energy cost per unit generated was cheaper for diesel after the strong LNG price runup. Since oil is a secondary fuel for IPPs and it leaves more residue in the piping system, thus shortening the life cycle of power plants, the margin on energy payment (EP) revenues paid to the IPPs is higher when they are ordered to run on diesel. We observed a clear jump in reported EP profits from GPSC and RATCH, as shown in Exhibit 9. Since we expect the spot LNG price to correct, gas-to-oil switching should gradually reverse so this extra margin on IPPs will diminish. We estimate electricity generation cost parity at an USD80/bbl oil price vs. a USD20/mmbtu LNG price.

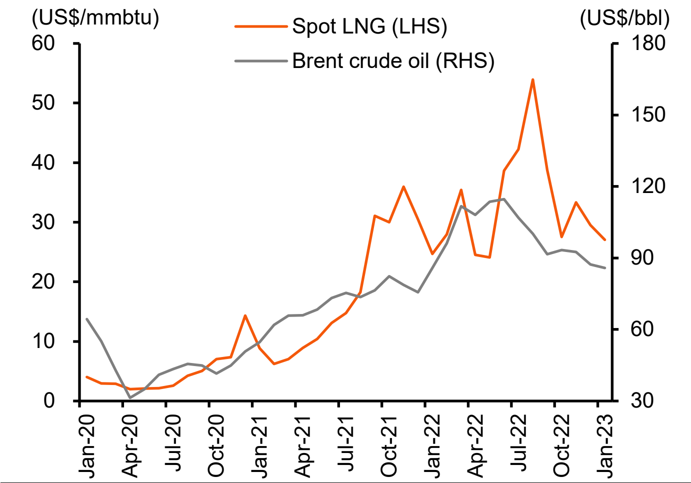
Ex 9: Extra High EP Margin From 'Gas-To-Oil' Policy



Sources: Company data, Thanachart estimates

Note: Only GPSC and RATCH explicitly report financial performances of their IPP projects

Ex 10: Oil Remains Cheaper For Electricity Generation



Sources: Bloomberg

Margin windfall gives a high base for a y-y earnings comparison in 2023F

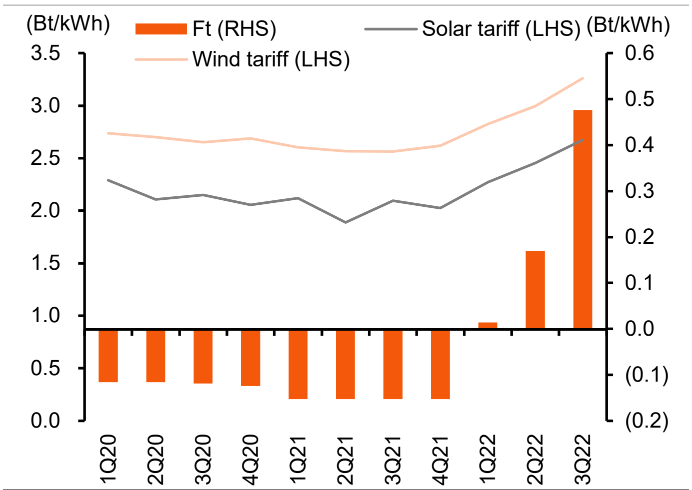
Energy price declines are, therefore, slightly negative for IPPs in the near term as the margin windfall from the gas-to-oil switching policy starts to subside and becomes a high base for a y-y earnings comparison. However, we are not concerned about this issue. We see the windfall as a near-term bonus for IPPs, which may cause a slight negative of a faster deterioration in their piping systems and higher maintenance costs later. We, therefore, maintain our valuations for most IPP projects. Note that the current market prices of USD86/bbl for Brent crude oil and USD27/mmbtu for the Asian spot LNG still favor the gas-to-oil switching policy, which is likely to continue throughout 1H23F.

Renewables: Limited growth outlook

Subsidized renewable projects get an extra margin, but no impact on others

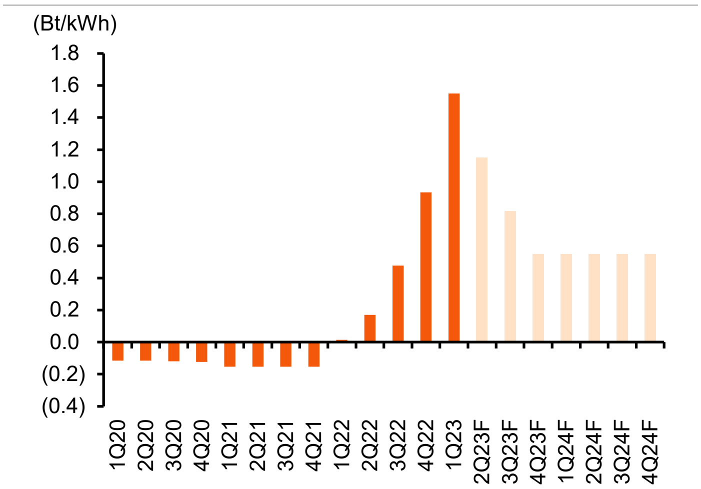
Renewable projects are not affected by fuel prices. The exception is subsidized solar, wind, and biopower projects in Thailand since their electricity selling price is linked to the fuel-price adjustment value (Ft). Their profitability, therefore, rises with stronger energy prices. Wind projects get larger benefits in percentage terms compared to solar farms, given a lower subsidy per unit. Therefore, the earnings base of those subsidized renewable projects will be extraordinarily high in 2023F.

Ex 11: Subsidized Renewable Project Tariff Rises With Ft



Sources: Company data, Energy Regulatory Commission (ERC)

Ex 12: Our Ft Adjustment Assumptions



Sources: ERC, Thanachart estimates

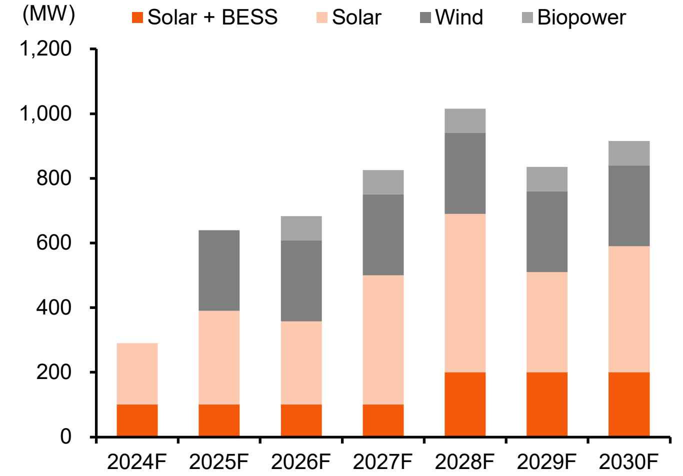
Large capacity growth potential, but relatively small value addition

Renewables appear to be the only segment with capacity growth potential in Thailand. The country's power generation capacity is nearly 50% higher than its peak demand. However, Thailand needs to develop more renewable projects to meet its target of having at least 50% of electricity generation coming from renewable sources. We believe the goal can only be achieved by adding renewable projects to the system, which may create a super oversupply situation for some years, while letting legacy fossil-based power plants expire without replacing them. Despite its solid capacity growth prospects, we see the renewable segment as difficult to play since 1) renewable project value tends to be small compared to the size of mid-to-large cap stocks in the sector, and 2) pure-play renewable stocks either look set to see a sharp earnings fall over 2023-27F due to the expiry of their subsidies (50-80% of their current electricity selling prices) or their valuations are already elevated by the growth potential of investments in new S-curve businesses.

Limited new B2G projects while B2B and B2C markets are too scattered

We estimate the ongoing bidding by the government (B2G) for a total of 5.2GW in renewable contracts to add Bt46bn in value to the Thai utilities sector (Exhibit 14), which implies only 3% potential upside to the combined market capitalization of the 10 utilities stocks under our coverage at Bt1.6tr currently. As the commencement of operation dates of new projects from the bidding range from 2024-30, we don't expect there to be any more sizable renewable contracts released by the government over the next few years. We see the B2B (ie, private off-grid solar farms with energy storage) and B2C (ie, household solar rooftop) segments as alternative markets to grow renewable capacity. However, scattered project sites and large numbers of customers represent significant operational difficulties for large-sized listed companies to cope with, in our view.

Ex 13: COD Timeline For Current 5.2GW Renewable Bids



Sources: Energy Regulatory Commission (ERC)

Ex 14: Our Estimated Value From The 5.2GW Of Projects

	Project cost (Bt/MW)	Tariff (Bt/kWh)	EIRR (%)	Additional value (Bt m/MW)	Quota (MW)	Total value added (Bt m)
Solar + BESS	88.0	2.17	-0.1%	(22.8)	1,000	-
Solar	25.0	2.83	13.1%	7.6	2,328	17,595
Wind	75.0	3.10	15.8%	16.9	1,500	25,364
Biopower	70.0	2.07	11.3%	7.9	375	2,966
Total					**5,203**	**45,925**

Sources: ERC, Thanachart estimates

Note: We project zero value-added from 'Solar+BESS' contracts since we estimate a negative project return at the proposed tariff rate from the bidding

Overseas investments come with low returns

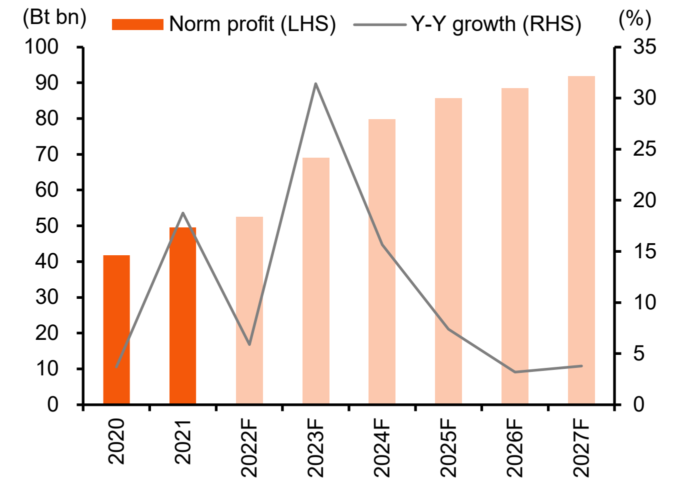
Thai utility companies are therefore trying to find investment opportunities in renewables overseas, either through greenfield developments or acquisitions. However, most projects come with low returns, especially when compared to domestic contracts that are far more favorable to the developers. Overseas projects also have higher risks, ie, regulatory risk (curtailment and unstable policies), financial risks (currency fluctuations and credibility of the off-takers), and political risks in emerging countries. Driven by the global green energy trend, we expect stiffer competition in developing renewable projects and in acquiring projects since all global utility firms have a mandate to expand their renewable capacity. Moreover, we also foresee competition coming from non-utilities firms as they may look to acquire overpriced renewable projects to indirectly gain on emission reduction credits, which would reduce carbon taxes for their core businesses later, even though they might make small losses on those renewable projects.

Our stock picks

We take a NEUTRAL stance as the sector looks fairly priced to us

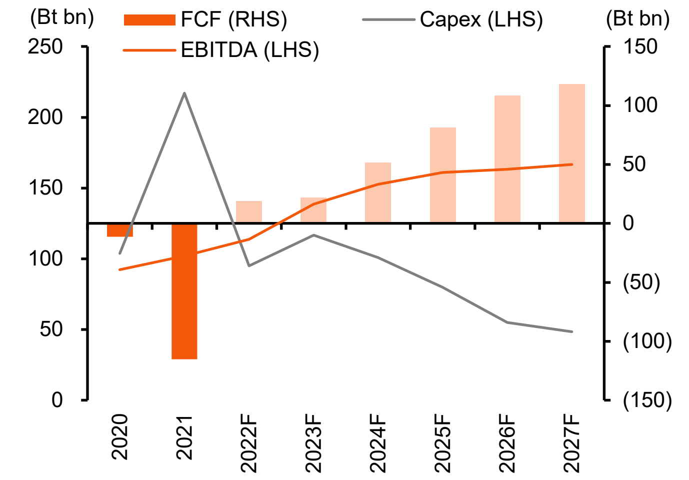
We have a NEUTRAL weighting on the Thai utilities sector, mainly since we now see it as already fairly priced at 23/20x PE in 2023-24F. We believe its relatively high multiples are justified by the sector's high earnings growth of 30/15% in those years and the beginning of a rising free cash flow cycle. Earnings growth is driven by a margin recovery from fuel costs normalizing downward and capacity expansion, while increasing free cash flow is supported by heavy investments over the past five years starting to bear fruit. Capex is also tending to decline with more limited opportunities to develop new projects in the near term.

Ex 15: Sector's Earnings Growth Outlook



Sources: Company data, Thanachart estimates

Ex 16: Rising FCF Trend For Thai Utilities Sector



Sources: Company data, Thanachart estimates

We expect high-growth stocks to still be the outperformers

We categorize the 10 utility stocks under our coverage into three groups based on trading valuations and growth outlook (Exhibits 17-18). *First,* mature conventional plant operators with a long-term falling earnings trend due to the expiry of their aging projects, traded at low valuations (BPP, EGCO, RATCH). *Second,* renewable operators are trading at what we see as high valuations, given our forecasted negative earnings outlook due to their subsidies expiring. We believe their premium multiples are supported by the booming ESG investment theme (BCPG, CKP, GUNKUL). *Third,* new-gen utility firms with an aggressive growth mindset, traded at higher multiples (BGRIM, EA, GPSC, GULF). We expect the Thai market to continue to favour growth stocks, so those in the growth-concentrated group still look set to be the sector's outperformers.

Ex 17: Sector's EPS Comparison

EPS (Bt/share)	2019	2020	2021	2022F	2023F	2024F	2025F	2026F	2027F
1. Mature conventional plant operators									
BPP	1.3	1.1	0.8	1.1	1.3	15	1.6	1.6	1.6
EGCO	20.5	18.0	19.5	24.6	21.8	21.2	20.2	14.6	15.2
RATCH	3.8	3.5	4.2	5.0	5.0	4.9	4.7	4.6	4.3
2. Renewable project operators									
BCPG	0.8	0.8	0.8	0.7	0.6	0.5	0.6	0.8	0.8
CKP	0.0	0.1	0.2	0.3	0.3	0.2	0.2	0.2	0.2
GUNKUL	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
3. Aggressive growth mindset companies									
BGRIM	0.9	1.0	0.9	0.3	1.2	1.5	1.6	2.0	2.5
EA	1.6	1.4	1.6	1.7	2.7	3.1	3.5	3.8	4.1
GPSC	1.8	2.7	2.4	0.6	2.9	3.4	3.2	3.2	3.3
GULF	0.3	0.4	0.8	1.1	1.5	2.0	2.4	2.6	2.7

Sources: Company data, Thanachart estimates

Ex 18: Trading PE Multiples Of Utilities Stocks Under Our Coverage

PE (x)	2019	2020	2021	2022F	2023F	2024F	2025F	2026F	2027F
1. Mature conventional plant operators									
BPP	13.2	15.2	20.8	15.8	12.9	11.1	10.4	10.3	10.7
EGCO	8.5	9.7	9.0	7.1	8.0	8.3	8.7	12.0	11.6
RATCH	11.4	12.7	10.5	8.7	8.8	8.9	9.3	9.4	10.1
2. Renewable project operators									
BCPG	13.2	12.7	13.2	14.8	16.8	20.6	16.8	12.8	12.5
CKP	148.4	79.1	19.1	13.5	17.1	19.2	20.7	21.1	21.4
GUNKUL	18.9	31.6	22.2	26.5	25.5	21.8	18.9	18.7	19.3
3. Aggressive growth mindset companies									
BGRIM	45.8	39.8	43.7	134.9	34.3	26.6	25.9	20.6	16.2
EA	56.2	64.9	55.3	53.2	33.2	28.3	25.8	23.2	21.6
GPSC	41.3	27.5	30.5	116.2	25.6	21.8	22.9	23.0	22.3
GULF	167.2	135.6	71.6	49.8	36.9	27.6	22.6	20.9	20.3
Sector	**40.4**	**39.0**	**32.8**	**31.3**	**23.5**	**20.3**	**19.0**	**18.5**	**17.9**

Sources: Company data, Thanachart estimates

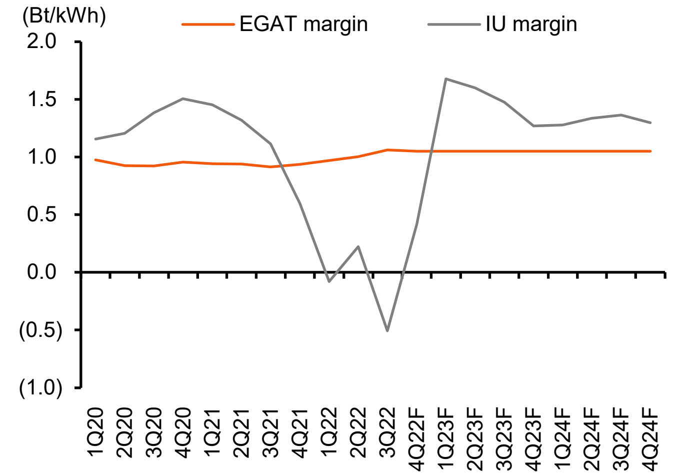
Our sector picks are BGRIM and BPP

Given that we believe the sector is already trading at fair valuations, our sector picks are based on story-driven momentum. **BGRIM**, which we upgrade to BUY (from HOLD), looks to be the most direct play to ride the solid SPP turnaround story. We expect immediate profit contributions from **BPP's** acquisition plans to surprise the market and make it a bargain stock.

BGRIM is our best play on SPP turnaround story

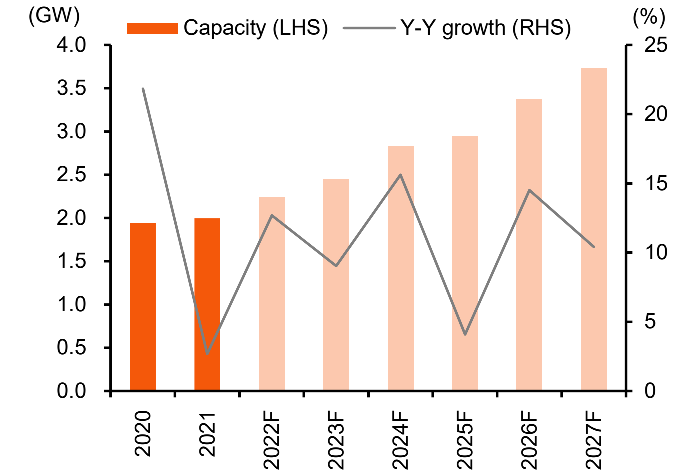
We are turning bullish on BGRIM as we expect its electricity sales margin to be strongly inflated over 2023-24F because of the lag by the government in adjusting the tariff price amid the falling energy price trend. The government also has to lift the financial burden carried by EGAT after it subsidized electricity prices for the country over past two years. We, therefore, expect BGRIM's solid earnings growth of 294/29% in 2023-24F to support its high multiples.

Ex 19: BGRIM's SPP Margin Recovery



Sources: Company data, Thanachart estimates

Ex 20: BGRIM's Capacity Growth Outlook

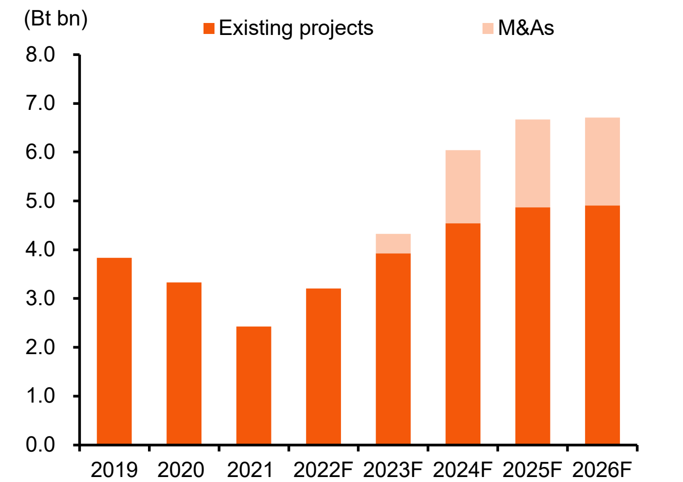


Sources: Company data, Thanachart estimates

BPP is attractive in both growth and value aspects

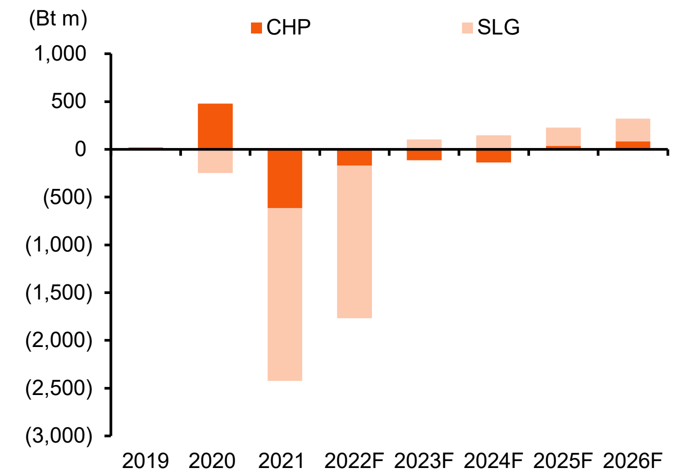
We continue to like BPP for both its attractive valuation and solid earnings growth prospects from inorganic activities. After factoring in its plan to acquire three gas-fired power projects in the US over 2023-24F, BPP is now trading at 13/11x PE with 22/16% earnings growth. BPP is also a beneficiary of normalizing energy prices as we expect the profitability of its coal-fired power plants in China to improve significantly with correcting coal prices.

Ex 21: BPP's Solid Growth Outlook, Even Without M&As



Sources: Company data, Thanachart estimates

Ex 22: Recovering Profit From Coal Power Plants In China

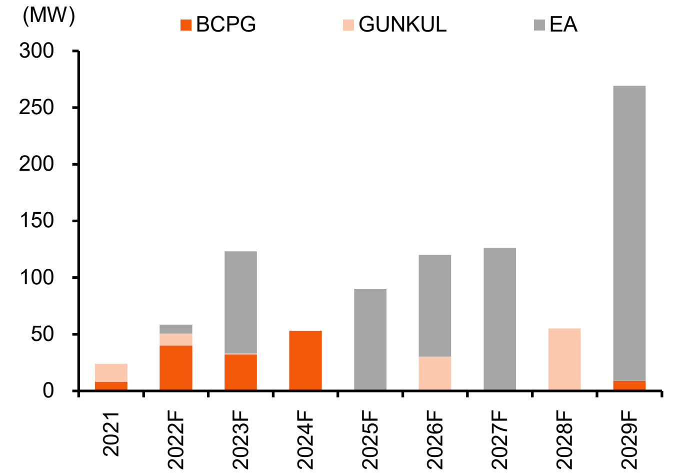


Sources: Company data, Thanachart estimates

We are not bullish on renewable segment

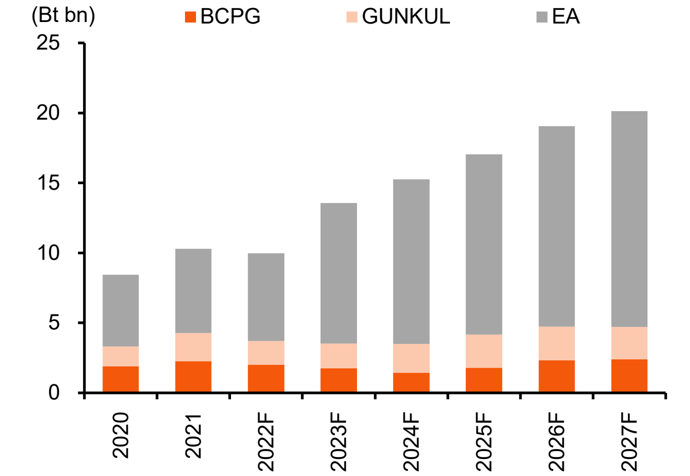
Despite rising investor interest in renewables driven by the ESG investment trend, we are not bullish on Thai renewable stocks as we see their valuations as demanding. The near-term earnings outlook for them is weak since the lower return from new projects won't offset the negative impact from the expiry of their huge subsidies over 2023-27F. BCPG is now the only pure renewable play under our coverage, but we believe its sharply declining earnings trend will make it tough for its share price to perform in the near term even though it is trading at lower multiples than its renewable peers. EA and GUNKUL are two other major renewable operators. However, we expect their share price movements to depend more on the success of their new S-curve businesses rather than renewable power. We like EA's swift penetration of the booming Li-ion battery and commercial EV industries, but we remain doubtful about GUNKUL's decision to invest in cannabis plantations.

Ex 23: Subsidies For Renewable Projects Are Expiring



Sources: Company data, Thanachart estimates

Ex 24: Most Earnings Growth Is From New Businesses



Sources: Company data, Thanachart estimates

Ex 25: Sector Valuation Comparison

		BCPG	BGRIM	BPP	CKP	EA	EGCO	GPSC	GULF	GUNKUL	RATCH	Industry
Rating		**BUY**	**BUY**	**BUY**	**BUY**	**BUY**	**BUY**	**SELL**	**HOLD**	**SELL**	**HOLD**	
Target price (Bt)	**Thanachart**	**16.00**	**48.00**	**22.00**	**6.50**	**100.00**	**275.00**	**65.00**	**45.00**	**4.80**	**46.00**	
	Consensus	11.85	44.00	18.10	6.50	90.00	214.00	76.44	62.00	5.70	53.00	
Consensus rec.	BUY	6	14	6	6	6	7	12	9	4	6	
	HOLD	2	4	1	1	3	2	6	6	1	3	
	SELL	0	2	0	1	1	0	1	1	1	0	
Sales (Bt m)	2021	4,669	46,628	6,784	8,798	20,174	35,903	74,874	47,467	7,945	37,327	290,569
	2022F	5,606	63,111	17,023	10,608	29,654	35,816	113,180	80,636	7,775	41,919	405,328
	2023F	5,552	55,706	17,504	10,212	45,472	35,405	107,759	104,923	9,594	41,559	433,686
	2024F	5,842	57,527	16,863	9,758	52,180	33,104	97,312	134,012	11,488	39,141	457,226
Norm profits (Bt m)	2021	2,258	2,429	2,429	1,996	6,021	10,258	6,769	8,852	2,022	6,573	49,607
	2022F	2,204	788	3,207	2,270	7,272	11,835	1,778	10,820	1,694	9,842	51,709
	2023F	1,659	3,102	3,923	2,168	9,207	11,760	8,055	14,862	1,758	10,680	67,175
	2024F	1,445	3,991	4,539	2,009	10,188	11,191	9,489	21,421	2,058	11,967	78,298
Sales growth (%)	2021	10.4	5.8	23.2	31.4	18.1	6.9	7.6	44.4	6.6	9.1	16.4
	2022F	20.1	35.3	150.9	20.6	47.0	(0.2)	51.2	69.9	(2.1)	12.3	40.5
	2023F	(1.0)	(11.7)	2.8	(3.7)	53.3	(1.1)	(4.8)	30.1	23.4	(0.9)	8.6
	2024F	5.2	3.3	(3.7)	(4.4)	14.8	(6.5)	(9.7)	27.7	19.7	(5.8)	4.1
Norm EPS growth (%)	2021	(4.1)	(9.0)	(27.0)	313.4	17.4	8.4	(9.9)	89.4	42.3	20.6	44.1
	2022F	(2.4)	(67.6)	32.0	13.7	20.8	15.4	(73.7)	22.2	(16.2)	49.7	(0.6)
	2023F	(24.7)	293.8	22.4	(4.5)	26.6	(0.6)	353.0	37.4	3.8	(19.9)	68.7
	2024F	(12.9)	28.7	15.7	(7.3)	10.6	(4.8)	17.8	44.1	17.0	5.1	11.4
Operating margin (%)	2021	53.0	15.1	(16.8)	20.3	33.9	15.9	12.2	22.7	29.9	6.7	19.3
	2022F	53.8	7.5	5.6	15.6	29.3	16.8	3.4	16.5	33.2	11.3	19.3
	2023F	47.1	16.1	9.6	17.3	25.8	16.3	9.8	16.0	29.6	10.9	19.9
	2024F	39.4	17.1	9.3	17.8	22.9	15.6	12.3	17.6	29.0	10.0	19.1
ROE (%)	2021	9.1	8.5	5.6	8.2	20.0	9.5	6.4	11.0	15.9	10.0	10.4
	2022F	7.9	2.7	6.9	8.9	20.6	10.1	1.6	9.7	12.4	13.5	9.4
	2023F	5.8	10.1	8.2	8.1	22.2	9.3	7.3	10.4	11.9	11.4	10.5
	2024F	4.9	12.2	9.1	7.2	21.1	8.4	8.3	12.3	12.9	10.3	10.7
Dividend yield (%)	2021	3.2	1.0	3.9	1.8	0.3	3.7	2.0	0.8	1.2	5.1	2.3
	2022F	3.1	0.4	4.1	2.5	0.7	3.7	0.5	1.0	1.5	8.1	2.5
	2023F	3.1	1.5	4.3	2.9	0.8	4.0	2.3	1.4	1.6	4.4	2.6
	2024F	3.1	1.9	4.9	3.3	1.2	4.0	2.8	2.4	1.8	4.9	3.0
P/BV (x)	2021	1.1	3.6	1.1	1.5	10.2	0.8	1.9	6.6	3.4	1.0	3.1
	2022F	1.0	3.6	1.1	1.4	8.7	0.8	1.9	5.0	3.2	0.9	2.8
	2023F	1.0	3.4	1.0	1.3	7.4	0.7	1.8	4.0	2.9	0.9	2.5
	2024F	1.0	3.1	1.0	1.3	6.4	0.7	1.8	3.3	2.7	0.8	2.2
Norm PE (x)	2021	13.2	43.7	20.8	18.5	55.3	9.0	30.5	71.6	22.2	10.2	29.5
	2022F	13.5	134.9	15.8	16.3	45.8	7.8	116.2	58.6	26.5	6.8	44.2
	2023F	18.0	34.3	12.9	17.0	36.2	7.8	25.6	42.6	25.5	8.5	22.8
	2024F	20.6	26.6	11.1	18.4	32.7	8.2	21.8	29.6	21.8	8.1	19.9
EV/EBITDA (x)	2021	13.1	14.3	na	18.0	38.3	20.8	16.9	53.4	22.3	25.0	24.7
	2022F	8.9	18.0	41.3	18.5	31.1	19.1	25.4	42.0	22.3	20.1	24.7
	2023F	10.5	12.9	35.2	13.7	24.3	18.0	16.4	33.1	23.7	19.5	20.7
	2024F	11.6	12.0	39.0	14.3	23.2	17.8	14.6	23.8	20.0	21.9	19.8
Net D/E (x)	2021	0.7	1.7	0.4	0.7	1.1	0.8	0.9	1.9	1.6	0.6	1.0
	2022F	0.2	1.9	0.4	0.6	0.9	0.7	1.1	1.5	1.2	0.9	0.9
	2023F	0.4	1.8	0.7	0.6	0.7	0.5	1.0	1.2	1.2	0.3	0.8
	2024F	0.5	1.6	0.8	0.6	0.5	0.4	0.8	0.9	1.0	0.2	0.7

Sources: Company data; Thanachart estimates

Valuation Comparison

Ex 26: Comparison With Regional Peers

Name	BBG code	Country	EPS growth 22F (%)	EPS growth 23F (%)	PE 22F (x)	PE 23F (x)	P/BV 22F (x)	P/BV 23F (x)	EV/EBITDA 22F (x)	EV/EBITDA 23F (x)	Div yield 22F (%)	Div yield 23F (%)
Huadian Power	1071 HK	China	na	40.4	9.0	6.4	0.6	0.6	15.6	11.9	6.4	8.3
Huaneng Power	600011 CH	China	68.5	na	na	13.8	1.2	1.2	14.4	9.5	0.5	3.9
Cheung Kong Infrastructure	1038 HK	Hong Kong	8.8	(3.0)	11.8	12.1	0.9	0.9	42.8	42.8	5.8	5.9
China Power Int'l	2380 HK	Hong Kong	na	67.4	18.1	10.8	1.1	1.0	10.6	8.0	3.1	4.2
China Resources Power	836 HK	Hong Kong	23.1	34.1	9.2	6.8	0.8	0.8	7.4	6.0	4.5	6.0
CLP Holdings	2 HK	Hong Kong	(45.6)	83.4	23.8	13.0	1.3	1.3	12.9	8.7	5.4	5.5
Hongkong Electric Holdings	6 HK	Hong Kong	5.4	(2.0)	13.8	14.1	1.1	1.1	62.0	65.9	6.5	6.5
Huaneng Power	902 HK	Hong Kong	na	67.7	11.8	7.0	0.6	0.6	13.4	9.1	1.8	5.6
Tata Power	TPWR IN	India	28.2	69.3	33.6	19.9	3.0	2.6	15.6	14.5	0.8	0.8
Tenaga Nasional	TNB MK	Malaysia	(8.5)	8.7	12.0	11.1	0.9	0.9	7.2	7.2	4.2	4.7
YTL Corp	YTL MK	Malaysia	na	181.3	na	43.5	0.5	0.5	10.7	28.7	4.1	5.3
YTL Power	YTLP MK	Malaysia	(105.4)	na	na	13.8	0.4	0.4	12.0	9.8	5.1	6.3
Manila Electric	MER PM	Philippines	na	na	na	12.3	3.2	2.9	9.5	7.7	5.0	5.6
BCPG Pcl *	BCPG TB	Thailand	(2.4)	(24.7)	13.5	18.0	1.0	1.0	8.9	10.5	3.1	3.1
B.Grimm Power Pcl *	BGRIM TB	Thailand	(67.6)	293.8	134.9	34.3	3.6	3.4	18.0	12.9	0.4	1.5
Banpu Power Pcl *	BPP TB	Thailand	32.0	22.4	15.8	12.9	1.1	1.0	41.3	35.2	4.1	4.3
CK Power Pcl *	CKP TB	Thailand	13.7	(4.5)	16.3	17.0	1.4	1.3	18.5	13.7	2.5	2.9
EA Pcl*	EA TB	Thailand	20.8	26.6	45.8	36.2	8.7	7.4	31.1	24.3	0.7	0.8
Electricity Generating *	EGCO TB	Thailand	15.4	(0.6)	7.8	7.8	0.8	0.7	19.1	18.0	3.7	4.0
Global Power Synergy *	GPSC TB	Thailand	(73.7)	353.0	116.2	25.6	1.9	1.8	25.4	16.4	0.5	2.3
Gulf Energy Dev. Pcl *	GULF TB	Thailand	22.2	37.4	58.6	42.6	5.0	4.0	42.0	33.1	1.0	1.4
Gunkul Engineering *	GUNKUL TB	Thailand	(16.2)	3.8	26.5	25.5	3.2	2.9	22.3	23.7	1.5	1.6
RATCH Group *	RATCH TB	Thailand	49.7	(19.9)	6.8	8.5	0.9	0.9	20.1	19.5	8.1	4.4
WHA Utilities & Power *	WHAUP TB	Thailand	45.9	9.3	11.3	10.3	1.2	1.1	26.6	23.6	5.3	5.8
Average			**0.7**	**59.2**	**29.8**	**17.6**	**1.9**	**1.7**	**21.1**	**19.2**	**3.5**	**4.2**

Sources: Bloomberg, * Thanachart estimates

Based on 17 January 2023 closing prices

STOCK PERFORMANCE

	Absolute (%)				Rel SET (%)			
	1M	3M	12M	YTD	1M	3M	12M	YTD
SET Index	**3.8**	**5.7**	**1.3**	**0.7**	—	—	—	—
Utilities Sector	**0.4**	**11.4**	**(5.8)**	**(0.6)**	**(3.4)**	**5.7**	**(7.0)**	**(1.3)**
BCPG	2.0	11.4	(16.3)	1.0	(1.9)	5.6	(17.5)	0.2
BGRIM	2.5	34.7	4.5	2.5	(1.3)	29.0	3.2	1.8
BPP	5.1	17.7	(2.4)	1.2	1.2	12.0	(3.6)	0.5
CKP	(3.0)	(5.8)	(11.0)	(0.4)	(6.8)	(11.5)	(12.2)	(1.2)
EA	(7.3)	(4.0)	(6.8)	(8.0)	(11.1)	(9.7)	(8.0)	(8.7)
EGCO	2.9	8.4	0.9	1.4	(0.9)	2.7	(0.4)	0.7
GPSC	0.3	25.8	(16.0)	0.3	(3.5)	20.0	(17.3)	(0.4)
GULF	(0.5)	11.3	3.8	(2.3)	(4.3)	5.6	2.6	(3.0)
GUNKUL	(1.0)	1.0	(17.9)	(3.8)	(4.8)	(4.7)	(19.1)	(4.6)
RATCH	2.9	13.6	3.6	2.3	(0.9)	7.9	2.3	1.6

Source: Bloomberg

SECTOR - SWOT ANALYSIS

S — Strength

- Defensive as agreed revenues on PPAs are predetermined.
- Changes in fuel prices are passed through via PPAs for IPPs and mostly by formulae adjustments for SPPs.

W — Weakness

- Most IPPs set their tariff as front-end loaded, so tariffs for ageing plants, especially ones approaching expiry, are set to fall drastically.
- There is sometimes intervention in the Ft adjustment.

O — Opportunity

- Huge investment potential in neighboring countries.
- Government supports and subsidizes renewable energy.

T — Threat

- Local communities may protest against new projects.
- Increased regulatory risk on environmental concerns.

REGIONAL COMPARISON

	—EPS growth—		—— PE ——		—— P/BV ——		— EV/EBITDA —		— Div. Yield —	
Name	**22F**	**23F**	**22F**	**23F**	**22F**	**23F**	**22F**	**23F**	**22F**	**23F**
	(%)	**(%)**	**(x)**	**(x)**	**(x)**	**(x)**	**(x)**	**(x)**	**(%)**	**(%)**
China	68.5	40.4	9.0	10.1	0.9	0.9	15.0	10.7	3.5	6.1
Hong Kong	(2.1)	41.3	14.7	10.7	1.0	0.9	24.8	23.4	4.5	5.6
India	28.2	69.3	33.6	19.9	3.0	2.6	15.6	14.5	0.8	0.8
Malaysia	(56.9)	95.0	12.0	22.8	0.6	0.6	10.0	15.2	4.5	5.4
Philippines	na	na	na	12.3	3.2	2.9	9.5	7.7	5.0	5.6
Thailand	3.6	63.3	41.2	21.7	2.6	2.3	24.9	21.0	2.8	2.9
Average	**8.3**	**61.8**	**22.1**	**16.2**	**1.9**	**1.7**	**16.6**	**15.4**	**3.5**	**4.4**

Sources: Bloomberg Consensus
Note: * Thanachart estimate – using normalized EPS

BUY (From: HOLD)

Change in Recommendation

TP: Bt 48.00 (From: Bt 40.00)

Upside : 28.0%

18 JANUARY 2023

B.Grimm Power Pcl (BGRIM TB)

Higher for longer

We believe national electricity tariff adjustments will heavily lag the faster-than-expected fall in domestic gas pool prices. We thus raise BGRIM's earnings by 5-17% in 2023-25F on a longer and stronger inflated margin at its SPP plants. We upgrade BGRIM to BUY as our best pick to play the solid earnings recovery story of SPPs.

NUTTAPOP PRASITSUKSANT

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Thanachart Securities

Upgrading to BUY

We upgrade BGRIM to BUY (from Hold) after raising our 2023-25F earnings by 17/6/5% and our DCF-derived SOTP-based TP (2023F base year) to Bt48 (from Bt40). Our more bullish view is driven by three factors. *First,* we expect an exceptionally high margin of electricity sales to industrial users (IUs) at its SPP plants at Bt1.5-1.6/kWh in 2023-24F since we don't expect national electricity price adjustments to keep up with the swiftly normalizing domestic gas pool price. *Second,* the global energy price outlook has been much weaker than we'd expected earlier. *Third,* we believe its 294/29% EPS growth could support a further rally despite its already high 34/27x PE multiples in 2023-24F. BGRIM is also one of our Thai Utilities sector picks for its SPP earnings turnaround story and decent capacity growth prospects.

Inflated SPP margins

We project higher throughput margins (tariff price – fuel cost per unit) for BGRIM's electricity sales to IUs (34% of electricity sales volume from its SPP plants) of Bt1.6/kWh and Bt1.5 in 2023-24F (from Bt1.3 and Bt1.4). The margins are much higher than the normal Bt1.2/kWh since the government will likely be slow to cut the national electricity tariff amid falling energy prices since 1) it looks to have underestimated the pace of decline in global fuel prices and 2) it must compensate Electricity Generating Authority of Thailand (EGAT) for the subsidies EGAT paid to keep national electricity price low over the past two years. We also expect its margin for electricity sold to EGAT (66% of sales volume) to rise to Bt1.1/kWh (from Bt1.0) on continuous efficiency improvements.

Faster-than-expected gas price normalization

We expect a sharper gas pool price fall to Bt335/305/mmbtu in 2023-24F, implying 25% and 9% y-y drops from Bt448 in 2022F. Three drivers of lower pool prices are reversing swiftly. The oil price has come down 30% from its peak in June 2022. Given its impact on the gas pool price has a six-month lag, it should bring down the pool price significantly from 1Q23F. The Asian spot LNG has collapsed by 35% from its peak in mid-2022 and did not spike in the winter as the market had earlier expected. The 14% appreciation of the Thai Baht against the US dollar over the past two months also drags the pool price down in baht terms.

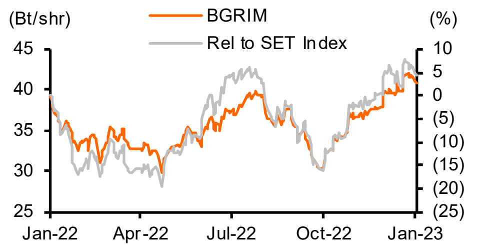
Capacity growth intact

On top of its strong earnings turnaround outlook from recovering SPP margins, BGRIM has secured 11% capacity growth p.a. over 2023-26F. New projects include 276MW of gas power plants in Thailand, 1.0GW of wind farms in South Korea, and 120MW of solar projects in ASEAN. We project 3.5GW of capacity for BGRIM in 2026F (2.2GW in 2022F), with 44% from renewables.

COMPANY VALUATION

Y/E Dec (Bt m)	2021A	2022F	2023F	2024F
Sales	46,628	63,111	55,706	57,527
Net profit	2,276	788	3,102	3,991
Consensus NP	—	258	2,504	3,613
Diff frm cons (%)	—	*205.8*	*23.9*	*10.5*
Norm profit	2,429	788	3,102	3,991
Prev. Norm profit	—	756	2,655	3,772
Chg frm prev (%)	—	*4.1*	*16.8*	*5.8*
Norm EPS (Bt)	0.9	0.3	1.2	1.5
Norm EPS grw (%)	(9.0)	(67.6)	293.8	28.7
Norm PE (x)	43.7	134.9	34.3	26.6
EV/EBITDA (x)	14.3	18.0	12.9	12.0
P/BV (x)	3.6	3.6	3.4	3.1
Div yield (%)	1.0	0.4	1.5	1.9
ROE (%)	8.5	2.7	10.1	12.2
Net D/E (%)	171.6	189.8	178.9	159.7

PRICE PERFORMANCE



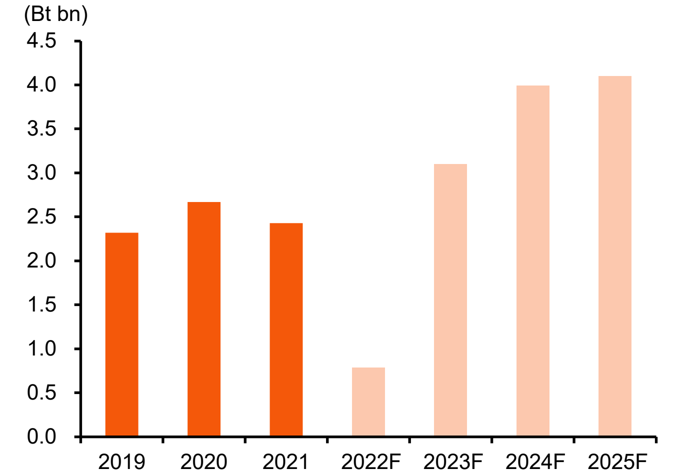
COMPANY INFORMATION

Price *as of* 17-Jan-23 (Bt)	40.75
Market Cap (US$ m)	3,208.9
Listed Shares (m shares)	2,606.9
Free Float (%)	31.3
Avg Daily Turnover (US$ m)	13.6
12M Price H/L (Bt)	42.00/29.75
Sector	Utilities
Major Shareholder	B.Grimm Group 35.8%

Sources: Bloomberg, Company data, Thanachart estimates

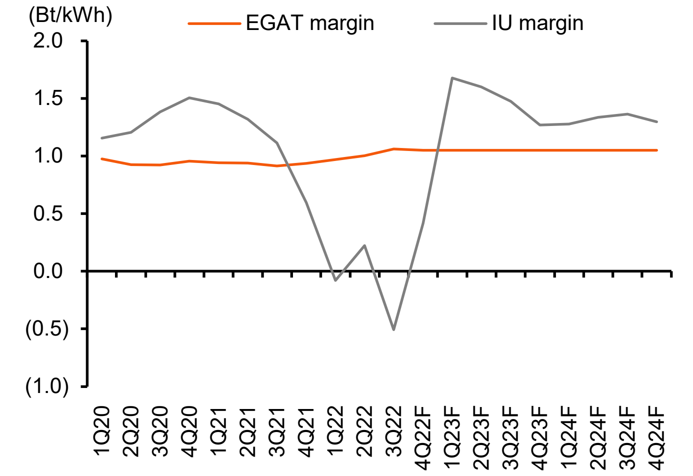
ESG Summary Report P19

Ex 1: Swift Earnings Turnaround …



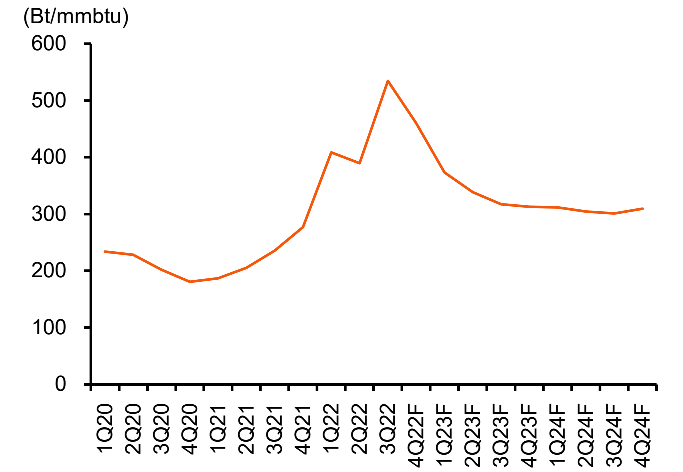
Sources: Company data, Thanachart estimates

Ex 2: … Driven By Inflated Margin Of Its SPP Plants



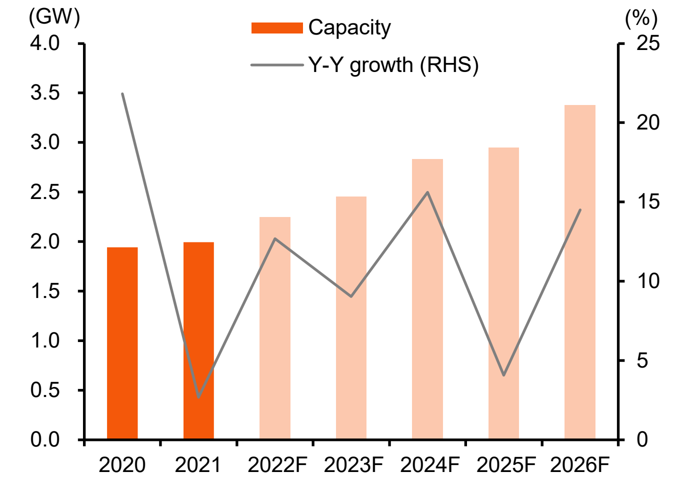
Sources: Company data, Thanachart estimates

Ex 3: Domestic Gas Pool Price Likely Peaked In 3Q22



Sources: Energy Policy and Planning Office (EPPO), Thanachart estimates

Ex 4: Secured Capacity Growth Intact



Sources: Company data, Thanachart estimates

Ex 5: Our DCF-derived Sum-Of-The-Parts (SOTP)-Based 12-month TP Calculation

	Valuation method	WACC (%)	Value per BGRIM's share (Bt)
Operating gas-fired SPP plants	**DCF**	**5.2 - 6.4%**	**10.9**
(ABP, ABPR, BPLC, BPWHA, BIP, BPAM, ATP, UVBGP)			
SPP Replacement projects	**DCF**	**5.5%**	**8.9**
(ABP1, ABP2, BPLC1, BPAM1, BPAM2)			
Developing projects	**DCF**	**5.5 - 6.5%**	**3.8**
(BGPR, U-Tapao airport, other IPS projects)			
Renewable projects			**16.1**
Solar - Thailand	DCF	6.0%	1.2
Solar - Vietnam	DCF	6.7%	1.0
Solar - Cambodia	DCF	7.1%	0.0
Solar - Malaysia	DCF	6.4%	2.0
Wind - Thailand	DCF	5.1%	0.5
Hydro - Thailand + Laos	DCF	6.7%	1.2
Korea offshore wind farms	DCF	5.4%	5.9
Other developing renewable projects	DCF	6.0 - 7.2%	4.2
Others & cash on hand			**1.5**
Potential projects			**6.8**
- Vietnam wind farms	DCF	10.0%	0.3
- Vietnam LNG-to-Power	DCF	10.0%	6.5
Grand total			**48.0**

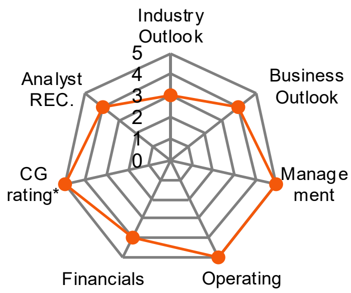
Source: Thanachart estimates

COMPANY DESCRIPTION

Established in 1993, BGRIM, a power arm of B.Grimm Group which has been operating businesses in Thailand for over 140 years, is one of the largest power producers in Thailand under the Small Power Producer (SPP) scheme. BGRIM provides electricity and steam for the national power grid as well as nearly 200 large manufacturers in many industrial estates and has also expanded its power business into Vietnam and Laos. The company has a target to expand its total capacity to 5.0GW by 2025.

Source: Thanachart

COMPANY RATING



Rating Scale	
Excellent	**5**
Good	**4**
Fair	**3**
Weak	**2**
Very Weak	**1**
None	**0**

Source: Thanachart; * CG rating

THANACHART'S SWOT ANALYSIS

S — Strength

- Good engineering team with strong expertise in developing and operating gas-fired power plants for over 20 years.
- Benefits from relationships with B.Grimm Group and other key strategic partners.

W — Weakness

- Financial gearing looks a bit high compared with peers', but is still well below its targeted threshold.

O — Opportunity

- Expansion of power business in neighbouring countries and the rest of Asia.
- Increasing power industry liberalization opens room for new business areas, i.e., smart grid and peer-to-peer trading.

T — Threat

- Relies on government's policy in balancing between fuel cost pass-on for power plants and its potential inflationary impacts on economy.
- Regulatory risks from business overseas.

CONSENSUS COMPARISON

	Consensus	Thanachart	Diff
Target price (Bt)	43.88	48.00	9%
Net profit 22F (Bt m)	258	788	206%
Net profit 23F (Bt m)	2,504	3,102	24%
Consensus REC	**BUY: 14**	**HOLD: 4**	**SELL: 2**

HOW ARE WE DIFFERENT FROM THE STREET?

- Our 2022-23F earnings forecasts are significantly higher than the Bloomberg consensus numbers, which we attribute to us assuming a much sharper rise in margins of its SPP plants.
- Our DCF-derived SOTP-based TP is therefore 9% higher.

Sources: Bloomberg consensus, Thanachart estimates

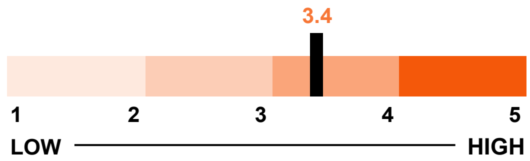
RISKS TO OUR INVESTMENT CASE

- A slower-than-expected fall in the domestic gas pool price than our assumptions is the key downside risk to our earnings forecasts and target price.
- Faster national electricity tariff adjustments to reflect actual fuel price normalization, and thus a lower-than-expected margin at its SPP plants, are another key downside risk to our numbers.
- Slower-than-expected capacity growth, either from greenfield project development or M&As, than we currently expect would represent a secondary downside risk to our valuation.

Source: Thanachart

BGRIM is one of the major gas-fired power plant operators in Thailand. Of its 2.2GW operating capacity, 67% is gas power plants in Thailand and another 33% is renewable plants across ASEAN. We rate its ESG score at 3.4 on its policy to raise its green energy mix, various social activity initiatives, and its large dedicated team to improve the company's ESG aspects.

Thanachart ESG Rating



	SETTHSI Index	THSI Index	DJSI Index	MSCI (CCC-AAA)	Arabesque S-Ray (0-100)	Refinitiv (0-100)	S&P Global (0-100)	Moody's (0-100)	CG Rating (0-5)
BGRIM	YES	YES	-	BBB	50.39	64.36	76.60	-	5.0

Sources: SETTRADE, SETTHSI Index, Thailand Sustainability Investment (THSI), The Dow Jones Industrial Average (DJSI), MSCI ESG Research LLC, Arabesque S-Ray®, Refinitiv ESG Information, S&P Global Market Intelligence, Moody's ESG Solutions, Thai IOD (CG rating)
Note: Please see third party on "term of use" in the following back page.

Factors	Our Comments
ENVIRONMENT – **Environmental Policies & Guidelines** – **Energy Management** – **Carbon Management** – **Water Management** – **Waste Management**	▪ BGRIM provides detailed sets of data on the company's environmental reporting, including energy consumption, pollution emissions, and waste-management aspects. ▪ BGRIM targets net-zero carbon emissions by 2050. However, it projects the mix of renewables in its total capacity to decline to 25% (from 33% in 2022) given that its expansion plans are still focused on gas-based projects. BGRIM plans to invest in carbon capture units to offset this. ▪ BGRIM emitted 5.6m tonnes of CO_2 equivalent in 2021, implying an emission intensity of 0.38 tonnes per MWh. Its emission reduction rate was 7% between 2018-21. ▪ BGRIM is one of the few Thai companies with a biodiversity policy. We like this initiative for helping to preserve the global environment apart from the global warming issue.
SOCIAL – **Human Rights** – **Staff Management** – **Health & Safety** – **Product Safety & Quality** – **Social Responsibility**	▪ BGRIM's human rights policy is in line with the UN Guiding Principles (UNGP) to protect, respect, and remedy staff and all stakeholders. The company has not reported any human rights or staff violations for the past five years. ▪ BGRIM has developed a strong platform for its employers to self-develop their competencies under the name "B.Grimm Academy". The courses are formed based on BGRIM's core cultures of "positivity, partnership, pioneering, and professionalism". ▪ It also shares academic support to help develop human resources for Thais with 232 schools and over 100 students under its care. ▪ Since its core fossil-based power plant business leads to the risk of accidents and health issues in surrounding communities, BGRIM is committed to high standards and protocols to prevent unexpected chemical leaks and to ensure a swift emergency response.
GOVERNANCE & SUSTAINABILITY – **Board** – **Ethics & Transparency** – **Business Sustainability** – **Risk Management** – **Innovation**	▪ BGRIM's board of directors comprises 10 members. Six of them are independent directors while half are female. ▪ We see BGRIM as one of leading companies in providing clear and detailed data on both its operations and (recently) ESG issues. It has developed a dedicated team to ensure high ESG standards, including business transparency. ▪ BGRIM has high business sustainability supported by long-term contracts for all of its power plants, while the company continuously looks for more investments to deliver business growth to its shareholders. ▪ BGRIM still lacks an innovative business plan, in our view. It may need to accelerate the exploration of new technology to complement its traditional power business, especially the carbon capture, utilization, and storage (CCUS) trend, to mitigate the risk to its business from global emission regulations being implemented.

Sources: Thanachart, Company note

INCOME STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Sales	44,087	46,628	63,111	55,706	57,527
Cost of sales	34,848	37,935	56,541	44,985	45,730
Gross profit	**9,239**	**8,694**	**6,571**	**10,722**	**11,797**
% gross margin	21.0%	18.6%	10.4%	19.2%	20.5%
Selling & administration expenses	2,008	1,673	1,807	1,766	1,983
Operating profit	**7,231**	**7,021**	**4,763**	**8,956**	**9,813**
% operating margin	16.4%	15.1%	7.5%	16.1%	17.1%
Depreciation & amortization	5,616	5,308	5,432	5,478	5,570
EBITDA	**12,847**	**12,329**	**10,196**	**14,435**	**15,383**
% EBITDA margin	29.1%	26.4%	16.2%	25.9%	26.7%
Non-operating income	251	188	254	224	232
Non-operating expenses	0	0	0	0	0
Interest expense	(3,056)	(3,384)	(4,028)	(4,269)	(4,075)
Pre-tax profit	**4,426**	**3,825**	**990**	**4,911**	**5,970**
Income tax	233	298	79	417	507
After-tax profit	**4,193**	**3,526**	**910**	**4,494**	**5,463**
% net margin	9.5%	7.6%	1.4%	8.1%	9.5%
Shares in affiliates' Earnings	58	44	11	334	575
Minority interests	(1,581)	(1,141)	(134)	(1,727)	(2,046)
Extraordinary items	(495)	(153)	0	0	0
NET PROFIT	**2,175**	**2,276**	**788**	**3,102**	**3,991**
Normalized profit	**2,670**	**2,429**	**788**	**3,102**	**3,991**
EPS (Bt)	0.8	0.9	0.3	1.2	1.5
Normalized EPS (Bt)	1.0	0.9	0.3	1.2	1.5

We expect its swift earnings recovery to surprise the market

BALANCE SHEET

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
ASSETS:					
Current assets:	29,879	41,058	48,446	36,407	31,851
Cash & cash equivalent	20,389	25,707	30,000	20,000	15,000
Account receivables	6,818	8,983	10,374	9,157	9,456
Inventories	1,033	971	1,549	1,232	1,253
Others	1,638	5,397	6,523	6,017	6,142
Investments & loans	1,086	3,124	3,871	6,427	9,570
Net fixed assets	80,300	84,804	94,386	96,930	95,783
Other assets	19,431	20,211	20,629	21,035	21,382
Total assets	**130,696**	**149,198**	**167,333**	**160,799**	**158,585**
LIABILITIES:					
Current liabilities:	26,993	12,724	22,110	19,231	18,618
Account payables	5,641	5,691	9,294	7,395	7,517
Bank overdraft & ST loans	15,080	750	5,390	5,011	4,671
Current LT debt	5,705	5,745	6,656	6,188	5,769
Others current liabilities	567	538	769	637	660
Total LT debt	**58,361**	**89,241**	**95,746**	**89,016**	**82,987**
Others LT liabilities	6,038	6,418	8,484	7,703	7,867
Total liabilities	**91,392**	**108,382**	**126,340**	**115,950**	**109,472**
Minority interest	11,834	11,344	11,479	13,205	15,252
Preferreds shares	0	0	0	0	0
Paid-up capital	5,214	5,214	5,214	5,214	5,214
Share premium	9,644	9,644	9,644	9,644	9,644
Warrants	0	0	0	0	0
Surplus	5,544	6,842	6,842	6,842	6,842
Retained earnings	**7,068**	**7,771**	**7,814**	**9,944**	**12,161**
Shareholders' equity	27,470	29,471	29,514	31,644	33,862
Liabilities & equity	**130,696**	**149,198**	**167,333**	**160,799**	**158,585**

Balance sheet was not hit by energy price issues

Sources: Company data, Thanachart estimates

High capex investment to maintain its growth pace

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Earnings before tax	4,426	3,825	990	4,911	5,970
Tax paid	(233)	(298)	(79)	(417)	(507)
Depreciation & amortization	5,616	5,308	5,432	5,478	5,570
Chg In working capital	(12,339)	(2,054)	1,635	(366)	(197)
Chg In other CA & CL / minorities	739	(4,504)	(883)	708	474
Cash flow from operations	**(1,792)**	**2,277**	**7,095**	**10,314**	**11,309**
Capex	(13,663)	(9,643)	(14,806)	(7,794)	(4,177)
Right of use	(1,256)	(309)	(200)	(200)	(150)
ST loans & investments	(16)	(1,413)	0	0	0
LT loans & investments	581	(2,038)	(747)	(2,556)	(3,143)
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	(320)	(629)	1,639	(1,215)	(279)
Cash flow from investments	**(14,673)**	**(14,031)**	**(14,113)**	**(11,765)**	**(7,749)**
Debt financing	16,040	17,346	12,056	(7,577)	(6,788)
Capital increase	0	0	0	0	0
Dividends paid	(965)	(1,173)	(744)	(972)	(1,773)
Warrants & other surplus	(1,884)	898	0	0	0
Cash flow from financing	**13,192**	**17,072**	**11,312**	**(8,549)**	**(8,561)**
Free cash flow	**(15,454)**	**(7,366)**	**(7,711)**	**2,520**	**7,133**

High multiples look justified by its strong earnings turnaround outlook

VALUATION

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Normalized PE (x)	39.8	43.7	134.9	34.3	26.6
Normalized PE - at target price (x)	46.9	51.5	158.9	40.3	31.4
PE (x)	48.8	46.7	134.9	34.3	26.6
PE - at target price (x)	57.5	55.0	158.9	40.3	31.4
EV/EBITDA (x)	12.8	14.3	18.0	12.9	12.0
EV/EBITDA - at target price (x)	14.3	15.8	19.9	14.2	13.2
P/BV (x)	3.9	3.6	3.6	3.4	3.1
P/BV - at target price (x)	4.6	4.2	4.2	4.0	3.7
P/CFO (x)	(59.3)	46.7	15.0	10.3	9.4
Price/sales (x)	2.4	2.3	1.7	1.9	1.8
Dividend yield (%)	1.1	1.0	0.4	1.5	1.9
FCF Yield (%)	(14.5)	(6.9)	(7.3)	2.4	6.7
(Bt)					
Normalized EPS	1.0	0.9	0.3	1.2	1.5
EPS	0.8	0.9	0.3	1.2	1.5
DPS	0.5	0.4	0.2	0.6	0.8
BV/share	10.5	11.3	11.3	12.1	13.0
CFO/share	(0.7)	0.9	2.7	4.0	4.3
FCF/share	(5.9)	(2.8)	(3.0)	1.0	2.7

Sources: Company data, Thanachart estimates

Recovering profitability trend as pressures from fuel price surge subsides

FINANCIAL RATIOS

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Growth Rate					
Sales (%)	(0.1)	5.8	35.3	(11.7)	3.3
Net profit (%)	(6.3)	4.6	(65.4)	293.8	28.7
EPS (%)	(6.3)	4.6	(65.4)	293.8	28.7
Normalized profit (%)	15.2	(9.0)	(67.6)	293.8	28.7
Normalized EPS (%)	15.2	(9.0)	(67.6)	293.8	28.7
Dividend payout ratio (%)	53.9	48.1	50.0	50.0	50.0
Operating performance					
Gross margin (%)	21.0	18.6	10.4	19.2	20.5
Operating margin (%)	16.4	15.1	7.5	16.1	17.1
EBITDA margin (%)	29.1	26.4	16.2	25.9	26.7
Net margin (%)	9.5	7.6	1.4	8.1	9.5
D/E (incl. minor) (x)	2.0	2.3	2.6	2.2	1.9
Net D/E (incl. minor) (x)	1.5	1.7	1.9	1.8	1.6
Interest coverage - EBIT (x)	2.4	2.1	1.2	2.1	2.4
Interest coverage - EBITDA (x)	4.2	3.6	2.5	3.4	3.8
ROA - using norm profit (%)	2.1	1.7	0.5	1.9	2.5
ROE - using norm profit (%)	9.6	8.5	2.7	10.1	12.2
DuPont					
ROE - using after tax profit (%)	15.1	12.4	3.1	14.7	16.7
- asset turnover (x)	0.3	0.3	0.4	0.3	0.4
- operating margin (%)	17.0	15.5	8.0	16.5	17.5
- leverage (x)	4.5	4.9	5.4	5.4	4.9
- interest burden (%)	59.2	53.1	19.7	53.5	59.4
- tax burden (%)	94.7	92.2	92.0	91.5	91.5
WACC (%)	5.1	5.1	5.1	5.1	5.1
ROIC (%)	10.2	7.5	4.4	7.6	8.0
NOPAT (Bt m)	6,850	6,473	4,382	8,195	8,979
invested capital (Bt m)	86,226	99,500	107,307	111,859	112,289

Sources: Company data, Thanachart estimates

BUY (Unchanged)	**TP: Bt 22.00** (From: Bt 18.00)	**18 JANUARY 2023**
Change in Numbers	**Upside : 32.5%**	

Banpu Power Pcl (BPP TB)

Factoring in M&A plans

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Thanachart Securities

We reaffirm BUY on BPP for its solid growth outlook with an attractive valuation. After factoring in inorganic growth potential, we estimate a 26% EPS CAGR for BPP over 2022-25F backed by profit contributions from M&As and a recovering margin of its existing coal power plants from normalizing down coal prices. Our TP is lifted to Bt22.

Reaffirming BUY

We reaffirm our BUY call on BPP as one of our top picks in the Thai Utilities sector. We raise our DCF-derived SOTP-based 12-month TP (2023F base year) to Bt22 (from Bt18). *First,* we factor in its inorganic growth potential via the acquisition of three more gas-fired power plants in the US. *Second,* we expect its existing core business unit of coal-fired power projects in China to see a profitability turnaround, based on our expectation for a gradually declining coal price this year. *Third,* BPP is now the only stock in the sector which offers both growth and value, in our view.

Solid inorganic growth story

Based on its target to have 5.3GW of operating capacity by 2025 (from 3.0GW at end-2022) and its announced acquisition plans, we assume BPP successfully acquires three gas power projects in the US over 2023-24F, with a total of 1.2GW capacity added to its portfolio. We are confident the deals will be a success given a good track record from its first US gas power plant deal in 2021, Banpu Group's strong business footprint in the US gas market, and the many successes of Thai utility firms in acquiring US gas power plants over the past three years. We project the deals to contribute Bt0.2/0.8/1.0bn to BPP's earnings base in 2023-25F, or 6/21/24% earnings growth from these inorganic activities.

Recovering profitability of existing plants

BPP is one among the beneficiaries of global energy prices normalizing back down. BPP operates three coal-fired combined heat and power (CHP) projects and one coal IPP plant in China, with a total equity-capacity of 707MW. Those coal plants suffered heavily from the coal price surge in China over the past three years, while the electricity tariff was almost unchanged, causing a severe margin squeeze. We expect the profitability to gradually improve with peaking coal prices in 2023F. We also have seen local government help in facilitating low-priced coal purchase contracts for major power plants, ie, BPP's 396MW equity-capacity Shanxi Luguang project (SLG) has secured an 18-month coal purchase contract with local suppliers at CNY800/tonne, or around 40% below the market price

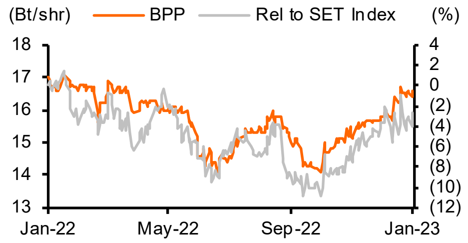
Highly attractive valuations

We see BPP's valuations as the most attractive among its peers as it offers solid earnings growth at relatively low multiples. We estimate 32/22/16% EPS growth in 2022-24F, implying 13x 2023F PE and a 4% dividend yield. We also see BPP as a stock with an improving ESG outlook since it is moving away from investing in coal projects to cleaner fossil-based conventional projects via gas-fired power plants. It also aims to lift renewables to 15% of its total capacity in 2025 (from 9% in 2022).

COMPANY VALUATION

Y/E Dec (Bt m)	2021A	2022F	2023F	2024F
Sales	6,784	17,023	17,504	16,863
Net profit	3,127	3,207	3,923	4,539
Consensus NP	—	5,824	4,912	4,834
Diff frm cons (%)	—	*(44.9)*	*(20.1)*	*(6.1)*
Norm profit	2,429	3,207	3,923	4,539
Prev. Norm profit	—	3,003	3,445	3,885
Chg frm prev (%)	—	*6.8*	*13.9*	*16.8*
Norm EPS (Bt)	0.8	1.1	1.3	1.5
Norm EPS grw (%)	(27.0)	32.0	22.4	15.7
Norm PE (x)	20.8	15.8	12.9	11.1
EV/EBITDA (x)	na	41.3	35.2	39.0
P/BV (x)	1.1	1.1	1.0	1.0
Div yield (%)	3.9	4.1	4.3	4.9
ROE (%)	5.6	6.9	8.2	9.1
Net D/E (%)	38.7	45.0	71.8	76.7

PRICE PERFORMANCE



COMPANY INFORMATION

Price *as of* 17-Jan-23 (Bt)	16.60
Market Cap (US$ m)	1,528.2
Listed Shares (m shares)	3,047.7
Free Float (%)	21.2
Avg Daily Turnover (US$ m)	0.7
12M Price H/L (Bt)	17.10/14.10
Sector	Utilities
Major Shareholder	BANPU 78.66%

Sources: Bloomberg, Company data, Thanachart estimates

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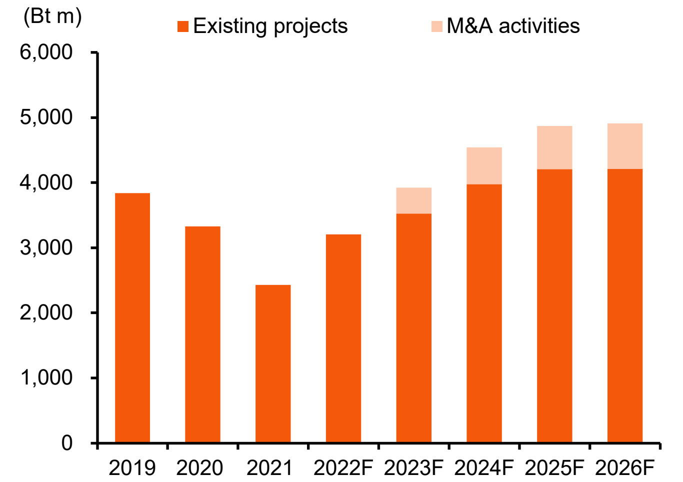
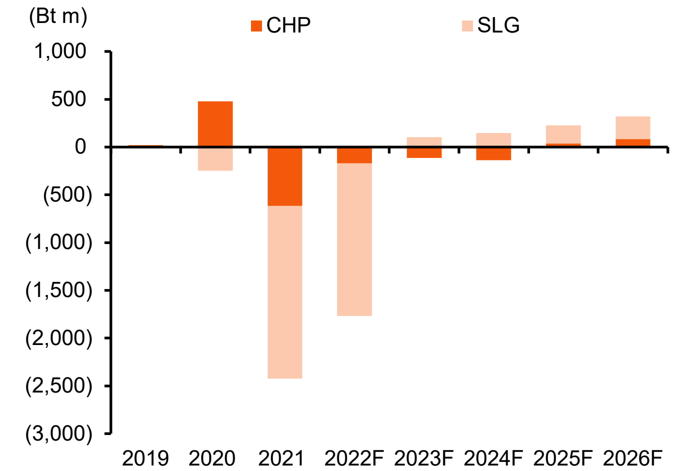
Ex 1: M&A Activities Add Spice To Earnings Growth



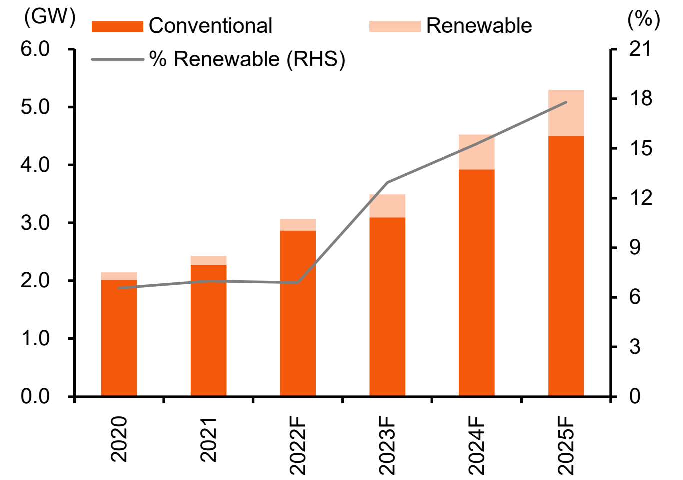
Sources: Company data, Thanachart estimates

Ex 2: Recovering Profits From Coal Plants In China



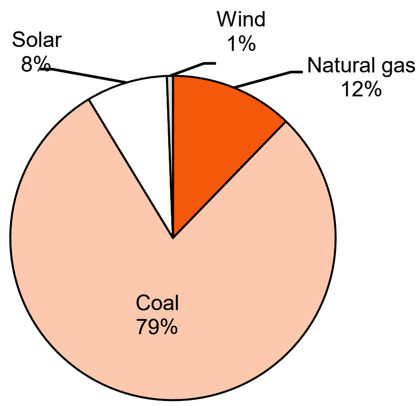
Sources: Company data, Thanachart estimates

Ex 3: BPP's Capacity Growth Target



Sources: Company data

Ex 4: Capacity Breakdown By Fuel Type (2022)



Sources: Company data

Ex 5: 12-month DCF-derived SOTP-based TP Calculation

	Valuation method	WACC (%)	Value per BPP's share (Baht)
China CHP	DCF	6.4%	1.06
BLCP	DCF	6.5%	3.01
HPC	DCF	7.8%	7.93
SLG	DCF	5.8%	0.60
Nakoso	DCF	6.7%	1.53
Temple-1	DCF	5.9%	2.21
Banpu NEXT	DCF	6-10%	2.39
M&A - US gas power plants	DCF	8.0%	3.76
Parents - HQ & Cash	DCF	10.0%	(0.50)
Grand total			**22.0**

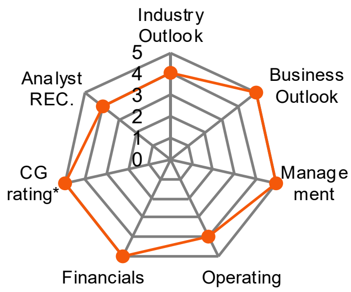
Source: Thanachart estimates

COMPANY DESCRIPTION

Banpu Power Pcl (BPP), the power arm of Banpu Pcl (BANPU), has a well-diversified power portfolio in growing markets in the Asia-Pacific region, including China, Thailand, Laos, and lately in the US market. BPP has started to invest in renewable power projects to grow in line with the global trend, starting with diversification into solar power projects in China and Japan, while Vietnam has now become its latest focus. Currently, the company has a total of 3.2GW of committed capacity in hand and aims to reach 5.3GW by 2025, with 800MW of that to be from renewable sources.

Source: Thanachart

COMPANY RATING



Rating Scale	
Excellent	5
Good	4
Fair	3
Weak	2
Very Weak	1
None	0

Source: Thanachart; *CG Rating

THANACHART'S SWOT ANALYSIS

S — Strength

- Experienced management and a good track record with power investments.
- Advantages from BANPU's relationships in penetrating new power markets.

W — Weakness

- A bit late in tendering for Thailand's early renewable power contracts which obtained high returns.
- More risk of forex translation losses given diversified portfolio.

O — Opportunity

- High demand for power in the Asia-Pacific region.
- Growing trend of renewable power capacity creating new areas for expansion.

T — Threat

- Regulatory risks regarding power tariffs as many countries are looking to lower investors' returns.

CONSENSUS COMPARISON

	Consensus	Thanachart	Diff
Target price (Bt)	18.04	22.00	22%
Net profit 22F (Bt m)	5,824	3,207	-45%
Net profit 23F (Bt m)	4,912	3,923	-20%
Consensus REC	**BUY: 6**	**HOLD: 1**	**SELL: 0**

HOW ARE WE DIFFERENT FROM THE STREET?

- Our 2022-23F earnings are 45/20% lower than the Bloomberg consensus numbers, which we believe is due to us still having much higher coal price assumptions.
- However, our SOTP-based TP is 22% higher, likely because we are early in factoring in the value from its potential M&As.

Sources: Bloomberg consensus, Thanachart estimates

RISKS TO OUR INVESTMENT CASE

- Weaker-than-expected support from China's government in alleviating the impact of fuel price surges on local power plants is a downside risk to our earnings forecasts.
- A slower-than-expected decline in global coal prices is another downside risk to our numbers.
- Weaker-than-expected electricity demand in the US market represents a secondary downside risk to our numbers.
- Slower-than-expected finalization or smaller-than-expected sizes of upcoming M&A deals, especially the three gas-fired power plants in the US, represents a significant downside risk to our valuation.

Source: Thanachart

BPP

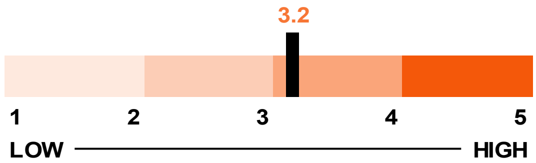
Banpu Power Pcl.

Sector: Resources | Energy & Utilities

ESG & Sustainability Report

BPP is a large power plant operator in Thailand with coal-fired exposure at 80% of its current 3.1GW of operating capacity. Despite its heavy exposure to coal, our ESG score for BPP of 3.2 is in line with the sector average since we see BPP, along with its parent company Banpu Pcl (BANPU TB), as having one of the best sets of ESG policies in Thailand.

Thanachart ESG Rating



	SETTHSI Index	THSI Index	DJSI Index	MSCI (CCC-AAA)	Arabesque S-Ray (0-100)	Refinitiv (0-100)	S&P Global (0-100)	Moody's (0-100)	CG Rating (0-5)
BPP	YES	YES	-	-	60.97	64.17	71.85	-	5.0

Sources: SETTRADE, SETTHSI Index, Thailand Sustainability Investment (THSI), The Dow Jones Industrial Average (DJSI), MSCI ESG Research LLC, Arabesque S-Ray®, Refinitiv ESG Information, S&P Global Market Intelligence, Moody's ESG Solutions, Thai IOD (CG rating)
Note: Please see third party on “term of use” in the following back page.

Factors	Our Comments
ENVIRONMENT – **Environmental Policies & Guidelines** – **Energy Management** – **Carbon Management** – **Water Management** – **Waste Management**	▪ Our key concern regarding BPP’s environmental issues is its high exposure to coal. Coal-fired power plants make up 80% of its total operating capacity and we believe it would take at least five years to bring this down to below 50%. Leaving aside difficulties in lowering coal-based capacity exposure, BPP is strongly committed to overall ESG issues. ▪ BPP emitted 3.63m tonnes of CO_2 equivalent of greenhouse gas (GHG) and had an emission intensity of 0.603 tonnes of CO_2 equivalent per MWh in 2021. This was 4% below its 2012 baseline and 0.676-tonne intensity target. ▪ BPP has a “Greener and Smarter” policy to grow capacity with its “High Efficiency, Low Emission” (HELE) concept, i.e., Integrated Gasification Combined Cycle (IGCC) coal plants, machinery efficiency improvements, and emission capture systems. ▪ BPP targets to raise the portion of renewable projects to 15% (800MW) of its power generation portfolio by 2025 from 8% (254MW) in 2022.
SOCIAL – **Human Rights** – **Staff Management** – **Health & Safety** – **Product Safety & Quality** – **Social Responsibility**	▪ BPP ensures rights protection and prevents discrimination and harassment for its staff through communication channels which allow them to voice workplace issues. Its 2021 employee engagement survey participation stood at 69% in Thailand and 93% in China. ▪ BPP shares the “Banpu Heart” corporate culture with its group, mainly a smarter and faster work environment to achieve business success for the Banpu Group, while the group provides equal training for all staff to enhance their skills and opportunities. ▪ Health and safety protocols are the core standard at all BPP’s power plants. ▪ BPP serves local communities by improving their quality of life, i.e., job opportunities, compensation, and support for potential harm from power plants (including emissions), and educational and training group workshops for local residents.
GOVERNANCE & SUSTAINABILITY – **Board** – **Ethics & Transparency** – **Business Sustainability** – **Risk Management** – **Innovation**	▪ BPP has 10 members on its board of directors (BOD), four of whom are independent directors and two female. ▪ BPP has an internal control system to monitor and evaluate its own (and stakeholders in its supply and value chains) transparency and corporate governance, including channels for staff to report suspicious issues. ▪ For business sustainability, BPP has made strong attempts to lower the proportion of coal in its portfolio and increase the proportion of gas-based and renewable power projects. ▪ BPP invests, through its 50%-owned subsidiary Banpu NEXT, in smart energy solutions, energy storage platforms, and smart electricity trading platforms to capture potential growth from these innovative business opportunities.

Sources: Thanachart , Company data

M&A activities likely to boost its near-term earnings growth

Decent gearing room for more investments to grow capacity

INCOME STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Sales	5,506	6,784	17,023	17,504	16,863
Cost of sales	4,391	6,824	14,623	14,317	13,799
Gross profit	**1,115**	**(40)**	**2,401**	**3,187**	**3,064**
% gross margin	20.2%	-0.6%	14.1%	18.2%	18.2%
Selling & administration expenses	946	1,103	1,448	1,507	1,501
Operating profit	**169**	**(1,143)**	**953**	**1,680**	**1,563**
% operating margin	3.1%	-16.8%	5.6%	9.6%	9.3%
Depreciation & amortization	445	581	824	849	839
EBITDA	**614**	**(562)**	**1,777**	**2,529**	**2,401**
% EBITDA margin	11.1%	-8.3%	10.4%	14.4%	14.2%
Non-operating income	1,021	1,034	744	728	623
Non-operating expenses	(577)	0	0	0	0
Interest expense	(243)	(249)	(795)	(1,088)	(1,318)
Pre-tax profit	**370**	**(358)**	**901**	**1,320**	**867**
Income tax	300	57	316	396	260
After-tax profit	**70**	**(416)**	**586**	**924**	**607**
% net margin	1.3%	-6.1%	3.4%	5.3%	3.6%
Shares in affiliates' Earnings	3,340	2,892	2,876	3,637	4,561
Minority interests	(81)	(47)	(255)	(638)	(629)
Extraordinary items	373	698	0	0	0
NET PROFIT	**3,702**	**3,127**	**3,207**	**3,923**	**4,539**
Normalized profit	**3,329**	**2,429**	**3,207**	**3,923**	**4,539**
EPS (Bt)	1.2	1.0	1.1	1.3	1.5
Normalized EPS (Bt)	1.1	0.8	1.1	1.3	1.5

BALANCE SHEET

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
ASSETS:					
Current assets:	7,519	9,883	18,294	12,851	11,940
Cash & cash equivalent	2,319	2,760	7,300	2,300	2,300
Account receivables	938	1,311	3,265	3,357	3,234
Inventories	505	1,186	1,602	1,569	1,512
Others	3,757	4,625	6,126	5,625	4,893
Investments & loans	32,379	39,245	44,392	63,300	72,099
Net fixed assets	8,001	23,811	23,618	23,273	22,863
Other assets	1,664	1,928	4,048	4,196	4,124
Total assets	**49,563**	**74,867**	**90,352**	**103,619**	**111,026**
LIABILITIES:					
Current liabilities:	4,067	10,968	16,360	17,800	18,692
Account payables	170	331	801	981	945
Bank overdraft & ST loans	1,454	6,551	6,045	6,098	6,819
Current LT debt	951	1,439	2,418	3,455	3,864
Others current liabilities	1,492	2,647	7,095	7,266	7,063
Total LT debt	**3,481**	**13,965**	**21,763**	**31,098**	**34,778**
Others LT liabilities	37	354	1,240	1,292	1,286
Total liabilities	**7,585**	**25,287**	**39,363**	**50,191**	**54,757**
Minority interest	869	3,944	4,199	4,837	5,466
Preferreds shares	0	0	0	0	0
Paid-up capital	30,510	30,477	30,457	30,457	30,457
Share premium	7,231	7,231	7,231	7,231	7,231
Warrants	0	0	0	0	0
Surplus	(7,826)	(4,369)	(4,369)	(4,369)	(4,369)
Retained earnings	**11,193**	**12,295**	**13,470**	**15,272**	**17,484**
Shareholders' equity	41,109	45,635	46,789	48,592	50,804
Liabilities & equity	**49,563**	**74,867**	**90,352**	**103,619**	**111,026**

Sources: Company data, Thanachart estimates

Resilient cash flows from IPP plants the key source for its investment budget

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Earnings before tax	370	(358)	901	1,320	867
Tax paid	(297)	(115)	(225)	(439)	(240)
Depreciation & amortization	445	581	824	849	839
Chg In working capital	(86)	(894)	(1,900)	121	144
Chg In other CA & CL / minorities	3,451	6,214	5,132	3,753	4,469
Cash flow from operations	**3,882**	**5,428**	**4,734**	**5,604**	**6,080**
Capex	3,450	(16,390)	(595)	(460)	(380)
Right of use	(569)	(62)	(200)	(100)	(100)
ST loans & investments	(3,179)	50	600	600	600
LT loans & investments	(11,835)	(6,866)	(5,146)	(18,908)	(8,799)
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	6,517	438	(1,071)	(40)	116
Cash flow from investments	**(5,616)**	**(22,831)**	**(6,412)**	**(18,908)**	**(8,563)**
Debt financing	(943)	16,445	8,271	10,425	4,811
Capital increase	0	(33)	(20)	0	0
Dividends paid	(1,829)	(1,981)	(2,032)	(2,121)	(2,327)
Warrants & other surplus	157	3,413	0	0	0
Cash flow from financing	**(2,616)**	**17,844**	**6,218**	**8,304**	**2,483**
Free cash flow	**7,332**	**(10,963)**	**4,139**	**5,144**	**5,700**

We see its valuation as the most attractive among its utilities peers

VALUATION

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Normalized PE (x)	15.2	20.8	15.8	12.9	11.1
Normalized PE - at target price (x)	20.1	27.6	20.9	17.1	14.8
PE (x)	13.7	16.2	15.8	12.9	11.1
PE - at target price (x)	18.1	21.4	20.9	17.1	14.8
EV/EBITDA (x)	88.2	na	41.3	35.2	39.0
EV/EBITDA - at target price (x)	115.0	na	50.6	41.7	45.9
P/BV (x)	1.2	1.1	1.1	1.0	1.0
P/BV - at target price (x)	1.6	1.5	1.4	1.4	1.3
P/CFO (x)	13.0	9.3	10.7	9.0	8.3
Price/sales (x)	9.2	7.5	3.0	2.9	3.0
Dividend yield (%)	3.9	3.9	4.1	4.3	4.9
FCF Yield (%)	14.5	(21.7)	8.2	10.2	11.3
(Bt)					
Normalized EPS	1.1	0.8	1.1	1.3	1.5
EPS	1.2	1.0	1.1	1.3	1.5
DPS	0.7	0.7	0.7	0.7	0.8
BV/share	13.5	15.0	15.4	16.0	16.7
CFO/share	1.3	1.8	1.6	1.8	2.0
FCF/share	2.4	(3.6)	1.4	1.7	1.9

Sources: Company data, Thanachart estimates

Recovering profitability on an easing of coal prices

FINANCIAL RATIOS

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Growth Rate					
Sales (%)	(3.2)	23.2	150.9	2.8	(3.7)
Net profit (%)	24.7	(15.5)	2.5	22.4	15.7
EPS (%)	24.7	(15.5)	2.5	22.4	15.7
Normalized profit (%)	(13.2)	(27.0)	32.0	22.4	15.7
Normalized EPS (%)	(13.2)	(27.0)	32.0	22.4	15.7
Dividend payout ratio (%)	53.5	63.3	65.0	55.0	55.0
Operating performance					
Gross margin (%)	20.2	(0.6)	14.1	18.2	18.2
Operating margin (%)	3.1	(16.8)	5.6	9.6	9.3
EBITDA margin (%)	11.1	(8.3)	10.4	14.4	14.2
Net margin (%)	1.3	(6.1)	3.4	5.3	3.6
D/E (incl. minor) (x)	0.1	0.4	0.6	0.8	0.8
Net D/E (incl. minor) (x)	0.1	0.4	0.4	0.7	0.8
Interest coverage - EBIT (x)	0.7	na	1.2	1.5	1.2
Interest coverage - EBITDA (x)	2.5	na	2.2	2.3	1.8
ROA - using norm profit (%)	6.8	3.9	3.9	4.0	4.2
ROE - using norm profit (%)	8.3	5.6	6.9	8.2	9.1
DuPont					
ROE - using after tax profit (%)	0.2	na	1.3	1.9	1.2
- asset turnover (x)	0.1	0.1	0.2	0.2	0.2
- operating margin (%)	11.1	na	10.0	13.8	13.0
- leverage (x)	1.2	1.4	1.8	2.0	2.2
- interest burden (%)	60.4	328.8	53.1	54.8	39.7
- tax burden (%)	18.8	na	65.0	70.0	70.0
WACC (%)	5.2	5.2	5.2	5.2	5.2
ROIC (%)	0.1	(2.6)	1.0	1.7	1.3
NOPAT (Bt m)	32	(1,143)	619	1,176	1,094
invested capital (Bt m)	44,675	64,831	69,715	86,943	93,966

Sources: Company data, Thanachart estimates

SELL (Unchanged)

Change in Numbers

TP: Bt 65.00 (From: Bt 62.00)

Downside : 11.3%

18 JANUARY 2023

Global Power Synergy (GPSC TB)

Unattractive long-term outlook

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Thanachart Securities

We reaffirm our SELL rating on GPSC despite expecting an inflated margin for electricity sales from its SPP plants in 2023-24F. We don't see its 26x PE in 2023F as attractive against its muted growth outlook beyond 2025F. We also see a high risk of its new S-curve investments missing market expectations, both in timing and returns.

Still a SELL

We reaffirm our SELL rating on GPSC even after our earnings upgrades on higher electricity sales margin assumptions. We also lift our DCF-derived SOTP-based TP (2023F) to Bt65 (from Bt62) after the hikes. *First,* we don't see its 26x 2023F PE as attractive given its muted growth outlook beyond 2025F. *Second,* benefits from a strong SPP margin recovery will likely partially be offset by an easing margin windfall at its IPP plants and weaker electricity output from its hydropower projects in 2023F. *Third,* we expect its new S-curve businesses, renewable projects and Li-ion batteries, to progress slowly with a risk of lower-than-expected returns.

Near-term earnings upgrades

We lift GPSC's earnings by 34/33/10% in 2022-24F since we now believe its SPP electricity sales margins will be inflated during the period, due to the faster-than-expected fall in energy costs while the national tariff price remains elevated. This implies strong earnings recovery of 353/18% growth for GPSC in 2023-24F, after falling 74% in 2022F when SPP projects suffered from the energy price surge but tariff hikes by the government were very slow. Given what we see as this inefficient tariff price adjustment, we project the throughput margin of electricity sales from GPSC's SPP plants to fatten to Bt1.2/1.3/kWh in 2023-24F, from Bt0.5 in 2022F, before normalizing to Bt1.1 from 2025F onward.

Major assets expiring

We worry about the sustainability of GPSC's power business since its major IPP and SPP plants (total capacity of 1.3GW) will expire over 2022-25. We expect profit contributions from secured new renewable projects, despite a larger size of 2.1GW, to just offset this earnings gap. This implies limited growth beyond 2025F when all its new renewable plants have begun operations. GPSC's net D/E at 1.1x in 2022F is already close to its target, while it also seems to be focusing more on investing in its new S-curve businesses, so power segment growth will likely be muted.

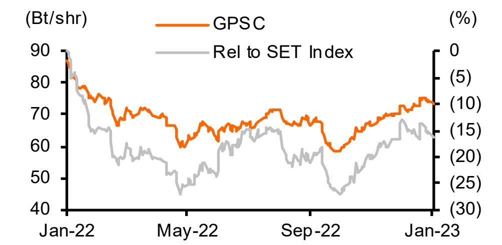
Risks for its new businesses

We believe investments in green energy and Li-ion batteries are GPSC's two key growth strategies for the next three to five years. However, we foresee a high level of uncertainty in those business units. GPSC, as the utility arm of the PTT group, may need to acquire more green energy projects to fulfil the mission of reducing the carbon footprint for the group but at lower-than-usual returns. Business synergies in the group for the EV business are still cloudy, so the ramping up of production at its battery plant remains slow. Its battery technology from 24M also doesn't seem to be the best fit for EV applications.

COMPANY VALUATION

Y/E Dec (Bt m)	2021A	2022F	2023F	2024F
Sales	74,874	113,180	107,759	97,312
Net profit	7,319	1,778	8,055	9,489
Consensus NP	—	2,345	6,121	8,990
Diff frm cons (%)	—	*(24.2)*	*31.6*	*5.6*
Norm profit	6,769	1,778	8,055	9,489
Prev. Norm profit	—	1,325	6,051	8,617
Chg frm prev (%)	—	*34.2*	*33.1*	*10.1*
Norm EPS (Bt)	2.4	0.6	2.9	3.4
Norm EPS grw (%)	(9.9)	(73.7)	353.0	17.8
Norm PE (x)	30.5	116.2	25.6	21.8
EV/EBITDA (x)	16.9	25.4	16.4	14.6
P/BV (x)	1.9	1.9	1.8	1.8
Div yield (%)	2.0	0.5	2.3	2.8
ROE (%)	6.4	1.6	7.3	8.3
Net D/E (%)	89.9	107.4	96.3	84.1

PRICE PERFORMANCE



COMPANY INFORMATION

Price *as of* 17-Jan-23 (Bt)	73.25
Market Cap (US$ m)	6,239.1
Listed Shares (m shares)	2,819.7
Free Float (%)	24.8
Avg Daily Turnover (US$ m)	14.5
12M Price H/L (Bt)	87.25/58.25
Sector	Utilities
Major Shareholder	PTT Group 67.27%

Sources: Bloomberg, Company data, Thanachart estimates

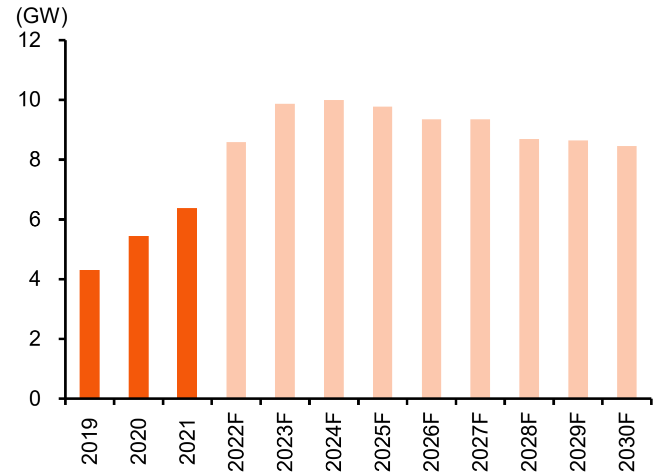
ESG Summary Report P34

Ex 1: Changes In Our Key Assumptions

	2020	2021	2022F	2023F	2024F	2025F
Gas pool price (Bt/mmbtu)						
New	245	266	475	360	325	332
Old			475	420	340	350
Change (%)			-	*(14.3)*	*(4.4)*	*(1.0)*
National electricity tariff (Bt/kWh)						
New	3.64	3.61	4.20	4.80	4.34	4.20
Old			4.20	4.90	4.30	4.10
Change (%)			-	*(2.0)*	*0.9*	*2.4*
Average SPP throughput margin (Bt/kWh)						
New	1.00	1.11	0.47	1.00	1.21	1.20
Old			0.38	0.77	1.03	1.25

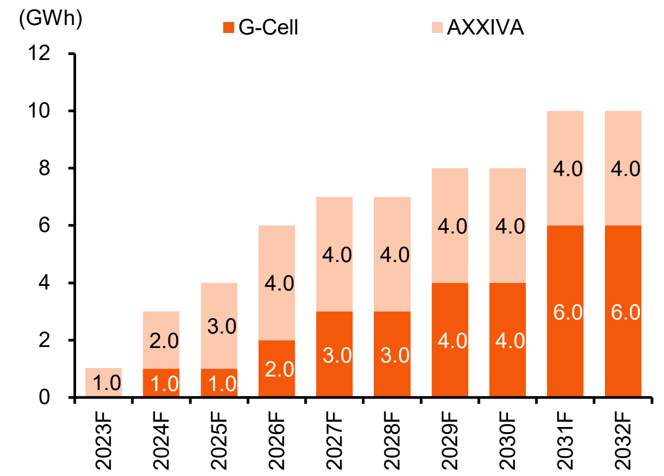
Sources: Company data, Energy Policy and Planning Office (EPPO), Thanachart estimates

Ex 2: Long-Term Capacity Outlook



Sources: Company data, Thanachart estimates

Ex 3: Our Assumptions For Its Li-ion Battery Business



Source: Thanachart estimates

Ex 4: Our 12-month DCF-derived Valuation Plus Potential Capacity

(Bt m)		2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F	2033F	Terminal value
EBITDA excl. depre from right of use		19,732	21,461	20,448	19,932	19,807	19,816	19,239	18,137	17,758	18,206	18,854	
Free cash flow		6,993	12,140	906	18,263	17,155	17,206	17,109	16,213	16,036	16,395	17,275	215,969
PV of free cash flow		6,657	11,001	782	14,995	13,123	12,474	11,757	10,560	9,900	9,592	9,140	114,266
Risk-free rate (%)	2.5												
Market risk premium (%)	8.0												
Beta	0.9												
WACC (%)	5.1												
Terminal growth (%)	2.0												
Enterprise value - add investments	224,246												
Net debt (2022F)	125,941												
Minority interest	9,766												
Equity value	88,538												
# of shares (m)	2,820												
Valuation/share (Bt)	**31.4**												

	Valuation method	WACC	Equity value	Value per share
Plus associates				
BIC	DCF	5.1%	1,451	0.5
TSR/SSE	DCF	6.4%	1,991	0.7
NNEG	DCF	4.9%	5,252	1.9
GRP	DCF	7.1%	1,620	0.6
NL1PC	DCF	6.0%	2,571	0.9
RPCL	DCF	4.8%	648	0.2
XPCL	DCF	6.0%	17,973	6.4
Avaada	DCF	6.5%	14,395	5.1
Taiwan wind farms	DCF	6.0%	3,189	1.1
Li-ion battery business	DCF	8.0%	27,735	9.8
Total				**27.2**
Plus potential				
Renewable projects	DCF	6.0%	18,470	6.4
Total				**6.4**
Grand total				**65.0**

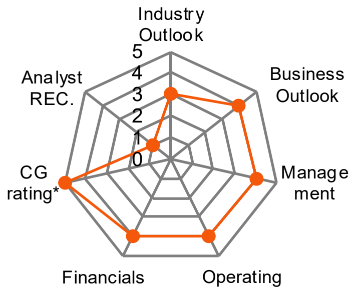
Source: Thanachart estimates

COMPANY DESCRIPTION

Established in January 2013, Global Power Synergy Company Ltd (GPSC) emerged from the amalgamation of PTTUT and IPT as PTT Group's flagship in power and utility businesses. GPSC generates and distributes electricity, steam, and processed water to the national grid and industrial customers in Thailand. GPSC acquired Glow Energy which doubled its generation capacity in March 2019. The company now has total of 8.0GW equity-capacity power plants, both domestic and overseas, in which 33% is from renewable sources.

Source: Thanachart

COMPANY RATING



Rating Scale	
Excellent	**5**
Good	**4**
Fair	**3**
Weak	**2**
Very Weak	**1**
None	**0**

Source: Thanachart; * CG rating

THANACHART'S SWOT ANALYSIS

S — Strength

- Growing along with PTT Group's expansion.
- Access to low financing costs as part of PTT Group.
- Strong balance sheet providing ability and flexibility to fund new investments.

W — Weakness

- No direct experience in investing abroad.
- Late player in the renewable segment.

O — Opportunity

- Expansion into neighboring countries' power industries, both domestic and overseas expansion, through greenfield development and M&As.
- Tapping into new S-curve industries of electric vehicle (EV) and energy storage system (ESS) through its investment in Li-ion battery plant.

T — Threat

- Thailand's high reserve margin and EGAT's own planned generation look as if they will last longer than the market had earlier anticipated.
- Relies on group's policy in key investment decisions.

CONSENSUS COMPARISON

	Consensus	Thanachart	Diff
Target price (Bt)	76.30	65.00	-15%
Net profit 22F (Bt m)	2,345	1,778	-24%
Net profit 23F (Bt m)	6,121	8,055	32%
Consensus REC	**BUY: 12**	**HOLD: 6**	**SELL: 1**

HOW ARE WE DIFFERENT FROM THE STREET?

- Our 2023F earnings forecast is 32% higher than the Bloomberg consensus number, likely since we assume a stronger margin from SPP projects.
- However, our TP is 15% lower, which we believe is due to our more bearish view on profit contributions from GPSC's new S-curve businesses (renewable projects and Li-ion batteries).

Sources: Bloomberg consensus, Thanachart estimates

RISKS TO OUR INVESTMENT CASE

- A faster-than-expected recovery of SPP margin, either from the cost or the tariff side, is the key upside risk to our investment case and earnings forecasts.
- A faster-than-expected development of its Li-ion battery plants in Thailand and in China represents a secondary upside risk to our valuation.
- A faster investment pace and a higher rate of return from asset acquisitions and new development projects than our current assumptions would represent another upside risk to our numbers.

Source: Thanachart

GPSC

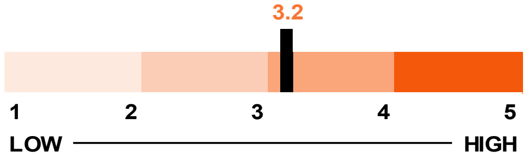
Global Power Synergy Pcl.

Sector: Resources | Energy & Utilities

ESG & Sustainability Report

GPSC is the utilities investment arm of the PTT Group. It ran 6.1GW of power generating capacity in 2022; 52% gas, 17% coal, and 31% renewables. Its ESG policy is relatively strong since it needs to align its performance with PTT Group. We thus rate its ESG score at 3.2. But we see some negatives over its business sustainability and innovation aspects.

Thanachart ESG Rating



	SETTHSI Index	THSI Index	DJSI Index	MSCI (CCC-AAA)	Arabesque S-Ray (0-100)	Refinitiv (0-100)	S&P Global (0-100)	Moody's (0-100)	CG Rating (0-5)
GPSC	YES	YES	YES	B	65.15	69.99	88.44	-	5.0

Sources: SETTRADE, SETTHSI Index, Thailand Sustainability Investment (THSI), The Dow Jones Industrial Average (DJSI), MSCI ESG Research LLC, Arabesque S-Ray®, Refinitiv ESG Information, S&P Global Market Intelligence, Moody's ESG Solutions, Thai IOD (CG rating)
Note: Please see third party on "term of use" in the following back page.

Factors	Our Comments
ENVIRONMENT – **Environmental Policies & Guidelines** – **Energy Management** – **Carbon Management** – **Water Management** – **Waste Management**	▪ GPSC shares the same targets as PTT Group in achieving carbon neutrality by 2050 and net-zero emissions by 2060, slightly ahead of the country's goals. Its nearer-term plan is to increase its renewable mix to 50% of its capacity by 2030 (from 31% in 2022), and reduce its carbon emission intensity by 10% in 2025 and 35% in 2030, from 2020's base. ▪ GPSC allocates an annual budget to emission reduction equipment and technology, based on its internal carbon pricing policy to minimize air and water pollution from its plants. ▪ The 3Rs approach (Reduce, Reuse, and Recycle) is implemented to reduce waste creation from all its business activities. ▪ GPSC saved 1.78MWh of electricity consumption through efficiency measures and solar rooftop investments while emitting greenhouse gases (GHG) of 0.44kg CO2 equivalent per kWh of electricity generated in 2021.
SOCIAL – **Human Rights** – **Staff Management** – **Health & Safety** – **Product Safety & Quality** – **Social Responsibility**	▪ GPSC sticks to the UN Guiding Principles (UNGP) in developing its human rights policies to protect the rights of its direct staff and all stakeholders along its supply chain. ▪ GPSC is committed to providing a self-development platform and building a clear career path for staff. This is based on the company's belief that its business success relies heavily on 1) an internal succession plan, 2) preparation to keep its staff up-to-date with industry dynamics, 3) ensuring morale/unity among staff, and 4) enjoying good employer branding. ▪ GPSC collaboratively provides support donations to communities around its power plants and facilities with other business entities under the PTT Group; thus it has significant impacts in boosting the local economy and quality of life.
GOVERNANCE & SUSTAINABILITY – **Board** – **Ethics & Transparency** – **Business Sustainability** – **Risk Management** – **Innovation**	▪ GPSC's board of directors comprises 12 members, of whom seven them are independent directors and one is female. ▪ We see GPSC's corporate governance (including transparency) as very strong, in line with the protocols from the PTT Group. ▪ We are slightly concerned over GPSC's business sustainability as power purchase contracts for some big power plants are expiring and it now looks difficult amid the current market situation to find investment opportunities to acquire new plants to offset the gap. ▪ GPSC had a good initiative via an investment in 24M's Li-ion battery technology in 2017. However, it has yet to reach the commercialized stage despite already having launched various product prototypes with the support of the PTT Group.

Sources: Thanachart, Company note

INCOME STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Sales	69,578	74,874	113,180	107,759	97,312
Cost of sales	56,448	63,616	107,459	95,214	83,302
Gross profit	**13,129**	**11,258**	**5,721**	**12,545**	**14,010**
% gross margin	18.9%	15.0%	5.1%	11.6%	14.4%
Selling & administration expenses	1,951	2,095	1,885	1,942	2,000
Operating profit	**11,178**	**9,163**	**3,836**	**10,603**	**12,010**
% operating margin	16.1%	12.2%	3.4%	9.8%	12.3%
Depreciation & amortization	8,706	9,314	9,230	9,268	9,593
EBITDA	**19,885**	**18,477**	**13,066**	**19,871**	**21,603**
% EBITDA margin	28.6%	24.7%	11.5%	18.4%	22.2%
Non-operating income	1,405	1,483	1,053	1,070	1,185
Non-operating expenses	0	0	0	0	0
Interest expense	(4,024)	(3,860)	(4,275)	(4,455)	(3,988)
Pre-tax profit	**8,560**	**6,786**	**613**	**7,219**	**9,207**
Income tax	993	1,031	49	722	1,013
After-tax profit	**7,567**	**5,754**	**564**	**6,497**	**8,194**
% net margin	10.9%	7.7%	0.5%	6.0%	8.4%
Shares in affiliates' Earnings	924	1,536	1,567	2,401	2,359
Minority interests	(982)	(522)	(353)	(843)	(1,064)
Extraordinary items	(1)	550	0	0	0
NET PROFIT	**7,508**	**7,319**	**1,778**	**8,055**	**9,489**
Normalized profit	**7,509**	**6,769**	**1,778**	**8,055**	**9,489**
EPS (Bt)	2.7	2.6	0.6	2.9	3.4
Normalized EPS (Bt)	2.7	2.4	0.6	2.9	3.4

Faster-than-expected near-term earnings recovery

BALANCE SHEET

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
ASSETS:					
Current assets:	43,454	45,490	63,068	50,351	51,395
Cash & cash equivalent	20,289	13,793	20,000	10,000	15,000
Account receivables	9,084	13,441	15,504	14,762	13,330
Inventories	6,253	6,938	11,776	10,434	9,129
Others	7,828	11,318	15,787	15,155	13,936
Investments & loans	17,376	37,660	44,522	54,560	55,238
Net fixed assets	99,978	95,581	92,858	88,114	89,424
Other assets	95,849	91,648	111,746	106,136	97,416
Total assets	**256,656**	**270,379**	**312,194**	**299,161**	**293,472**
LIABILITIES:					
Current liabilities:	22,063	23,036	37,167	34,825	31,228
Account payables	6,746	6,407	13,248	11,739	10,270
Bank overdraft & ST loans	0	0	5,838	5,148	4,925
Current LT debt	11,993	9,121	9,807	8,649	8,274
Others current liabilities	3,324	7,508	8,274	9,290	7,759
Total LT debt	**102,239**	**110,474**	**130,296**	**114,903**	**109,930**
Others LT liabilities	20,487	19,121	27,455	26,166	23,757
Total liabilities	**144,789**	**152,632**	**194,919**	**175,893**	**164,915**
Minority interest	8,966	9,413	9,766	10,610	11,673
Preferreds shares	0	0	0	0	0
Paid-up capital	28,197	28,197	28,197	28,197	28,197
Share premium	70,176	70,176	70,176	70,176	70,176
Warrants	0	0	0	0	0
Surplus	(17,563)	(15,219)	(15,219)	(15,219)	(15,219)
Retained earnings	**22,091**	**25,180**	**24,354**	**29,504**	**33,730**
Shareholders' equity	102,901	108,334	107,509	112,658	116,884
Liabilities & equity	**256,656**	**270,379**	**312,194**	**299,161**	**293,472**

Already tight balance sheet to add new investments

Sources: Company data, Thanachart estimates

We still expect flat earnings despite its huge capex over 2022-24F

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Earnings before tax	8,560	6,786	613	7,219	9,207
Tax paid	(993)	(1,031)	(49)	(722)	(1,013)
Depreciation & amortization	8,706	9,314	9,230	9,268	9,593
Chg In working capital	83	(5,381)	(59)	575	1,268
Chg In other CA & CL / minorities	(3,391)	3,198	(2,137)	4,050	1,923
Cash flow from operations	**12,965**	**12,885**	**7,598**	**20,390**	**20,978**
Capex	(7,235)	(4,715)	(4,200)	(2,215)	(8,590)
Right of use	(2,973)	78	(50)	(50)	(50)
ST loans & investments	(68)	(1,408)	0	0	0
LT loans & investments	5	(20,284)	(6,862)	(10,038)	(677)
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	5,520	3,526	(14,021)	2,061	4,172
Cash flow from investments	**(4,751)**	**(22,804)**	**(25,133)**	**(10,242)**	**(5,145)**
Debt financing	(2,229)	5,308	26,346	(17,242)	(5,570)
Capital increase	0	0	0	0	0
Dividends paid	(3,666)	(4,230)	(2,604)	(2,905)	(5,263)
Warrants & other surplus	(1,834)	2,344	0	0	0
Cash flow from financing	**(7,729)**	**3,422**	**23,743**	**(20,147)**	**(10,833)**
Free cash flow	**5,730**	**8,170**	**3,398**	**18,175**	**12,388**

Valuation not yet attractive to us given its muted long-term growth outlook

VALUATION

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Normalized PE (x)	27.5	30.5	116.2	25.6	21.8
Normalized PE - at target price (x)	24.5	27.2	103.4	22.8	19.4
PE (x)	27.5	28.2	116.2	25.6	21.8
PE - at target price (x)	24.5	25.1	103.4	22.8	19.4
EV/EBITDA (x)	15.1	16.9	25.4	16.4	14.6
EV/EBITDA - at target price (x)	14.0	15.7	23.7	15.2	13.5
P/BV (x)	2.0	1.9	1.9	1.8	1.8
P/BV - at target price (x)	1.8	1.7	1.7	1.6	1.6
P/CFO (x)	15.9	16.0	27.2	10.1	9.8
Price/sales (x)	3.0	2.8	1.8	1.9	2.1
Dividend yield (%)	2.0	2.0	0.5	2.3	2.8
FCF Yield (%)	2.8	4.0	1.6	8.8	6.0
(Bt)					
Normalized EPS	2.7	2.4	0.6	2.9	3.4
EPS	2.7	2.6	0.6	2.9	3.4
DPS	1.5	1.5	0.3	1.7	2.0
BV/share	36.5	38.4	38.1	40.0	41.5
CFO/share	4.6	4.6	2.7	7.2	7.4
FCF/share	2.0	2.9	1.2	6.4	4.4

Sources: Company data, Thanachart estimates

GPSC targets to keep its net gearing below 1.0x

FINANCIAL RATIOS

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Growth Rate					
Sales (%)	4.5	7.6	51.2	(4.8)	(9.7)
Net profit (%)	84.9	(2.5)	(75.7)	353.0	17.8
EPS (%)	38.5	(2.5)	(75.7)	353.0	17.8
Normalized profit (%)	100.6	(9.9)	(73.7)	353.0	17.8
Normalized EPS (%)	50.3	(9.9)	(73.7)	353.0	17.8
Dividend payout ratio (%)	56.3	57.8	55.0	60.0	60.0
Operating performance					
Gross margin (%)	18.9	15.0	5.1	11.6	14.4
Operating margin (%)	16.1	12.2	3.4	9.8	12.3
EBITDA margin (%)	28.6	24.7	11.5	18.4	22.2
Net margin (%)	10.9	7.7	0.5	6.0	8.4
D/E (incl. minor) (x)	1.0	1.0	1.2	1.0	1.0
Net D/E (incl. minor) (x)	0.8	0.9	1.1	1.0	0.8
Interest coverage - EBIT (x)	2.8	2.4	0.9	2.4	3.0
Interest coverage - EBITDA (x)	4.9	4.8	3.1	4.5	5.4
ROA - using norm profit (%)	3.0	2.6	0.6	2.6	3.2
ROE - using norm profit (%)	7.4	6.4	1.6	7.3	8.3
DuPont					
ROE - using after tax profit (%)	7.4	5.4	0.5	5.9	7.1
- asset turnover (x)	0.3	0.3	0.4	0.4	0.3
- operating margin (%)	18.1	14.2	4.3	10.8	13.6
- leverage (x)	2.5	2.5	2.7	2.8	2.6
- interest burden (%)	68.0	63.7	12.5	61.8	69.8
- tax burden (%)	88.4	84.8	92.0	90.0	89.0
WACC (%)	5.1	5.1	5.1	5.1	5.1
ROIC (%)	5.0	3.9	1.6	4.1	4.6
NOPAT (Bt m)	9,882	7,770	3,529	9,543	10,689
invested capital (Bt m)	196,845	214,137	233,450	231,357	225,013

Sources: Company data, Thanachart estimates

BCPG Pcl

INCOME STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Sales	4,231	4,669	5,606	5,552	5,842
Cost of sales	1,436	1,608	1,902	2,189	2,674
Gross profit	**2,794**	**3,061**	**3,704**	**3,363**	**3,168**
% gross margin	66.1%	65.6%	66.1%	60.6%	54.2%
Selling & administration expenses	532	588	687	745	867
Operating profit	**2,262**	**2,473**	**3,017**	**2,617**	**2,301**
% operating margin	53.5%	53.0%	53.8%	47.1%	39.4%
Depreciation & amortization	1,078	1,180	1,099	1,299	1,606
EBITDA	**3,340**	**3,653**	**4,116**	**3,916**	**3,907**
% EBITDA margin	79.0%	78.2%	73.4%	70.5%	66.9%
Non-operating income	29	72	119	115	67
Non-operating expenses	0	0	0	0	0
Interest expense	(820)	(787)	(821)	(915)	(744)
Pre-tax profit	**1,472**	**1,757**	**2,315**	**1,818**	**1,624**
Income tax	33	99	219	176	207
After-tax profit	**1,439**	**1,658**	**2,096**	**1,642**	**1,417**
% net margin	34.0%	35.5%	37.4%	29.6%	24.3%
Shares in affiliates' Earnings	460	600	108	17	28
Minority interests	1	0	0	0	0
Extraordinary items	12	(247)	0	0	0
NET PROFIT	**1,912**	**2,011**	**2,204**	**1,659**	**1,445**
Normalized profit	**1,900**	**2,258**	**2,204**	**1,659**	**1,445**
EPS (Bt)	0.8	0.7	0.8	0.6	0.5
Normalized EPS (Bt)	0.8	0.8	0.8	0.6	0.5

BALANCE SHEET

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
ASSETS:					
Current assets:	12,493	13,933	27,243	12,237	7,345
Cash & cash equivalent	11,138	11,228	25,000	10,000	5,000
Account receivables	1,219	2,317	1,843	1,825	1,921
Inventories	0	0	0	0	0
Others	135	389	400	412	425
Investments & loans	11,723	13,486	3,186	4,060	5,439
Net fixed assets	14,668	17,372	18,687	23,418	27,242
Other assets	12,336	13,931	13,676	13,422	13,167
Total assets	**51,220**	**58,721**	**62,792**	**53,137**	**53,193**
LIABILITIES:					
Current liabilities:	4,046	4,678	6,312	4,804	5,221
Account payables	540	888	938	1,079	1,319
Bank overdraft & ST loans	1,771	0	1,587	1,057	1,020
Current LT debt	1,678	3,527	3,601	2,425	2,658
Others current liabilities	58	263	185	242	224
Total LT debt	**23,219**	**25,574**	**26,555**	**17,664**	**16,713**
Others LT liabilities	1,405	1,241	1,432	1,441	1,512
Total liabilities	**28,671**	**31,493**	**34,299**	**23,909**	**23,446**
Minority interest	69	69	69	69	69
Preferreds shares	0	0	0	0	0
Paid-up capital	13,202	14,470	14,470	14,470	14,470
Share premium	6,990	7,753	7,753	7,753	7,753
Warrants	2	24	24	24	24
Surplus	(1,641)	(144)	(144)	(144)	(144)
Retained earnings	**3,927**	**5,056**	**6,321**	**7,055**	**7,575**
Shareholders' equity	22,480	27,160	28,425	29,159	29,679
Liabilities & equity	**51,220**	**58,721**	**62,792**	**53,137**	**53,193**

Sources: Company data, Thanachart estimates

BCPG Pcl

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Earnings before tax	1,472	1,757	2,315	1,818	1,624
Tax paid	(25)	(45)	(239)	(161)	(212)
Depreciation & amortization	1,078	1,180	1,099	1,299	1,606
Chg In working capital	(438)	(749)	524	159	144
Chg In other CA & CL / minorities	104	585	38	47	3
Cash flow from operations	**2,191**	**2,728**	**3,737**	**3,163**	**3,165**
Capex	(2,070)	(3,884)	(2,414)	(6,030)	(5,430)
Right of use	(397)	(36)	(20)	(20)	(20)
ST loans & investments	0	0	0	0	0
LT loans & investments	1,901	(1,763)	10,300	(874)	(1,379)
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	(3,996)	(2,091)	465	283	345
Cash flow from investments	**(4,563)**	**(7,774)**	**8,331**	**(6,641)**	**(6,484)**
Debt financing	7,002	2,467	2,643	(10,597)	(756)
Capital increase	7,270	2,031	0	0	0
Dividends paid	(639)	(882)	(941)	(926)	(926)
Warrants & other surplus	(1,569)	1,520	1	1	1
Cash flow from financing	**12,064**	**5,136**	**1,704**	**(11,522)**	**(1,680)**
Free cash flow	**121**	**(1,157)**	**1,323**	**(2,867)**	**(2,265)**

VALUATION

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Normalized PE (x)	12.7	13.2	13.5	18.0	20.6
Normalized PE - at target price (x)	19.7	20.5	21.0	27.9	32.1
PE (x)	12.6	14.8	13.5	18.0	20.6
PE - at target price (x)	19.5	23.0	21.0	27.9	32.1
EV/EBITDA (x)	11.9	13.1	8.9	10.5	11.6
EV/EBITDA - at target price (x)	15.8	17.6	12.9	14.7	15.8
P/BV (x)	1.3	1.1	1.0	1.0	1.0
P/BV - at target price (x)	2.1	1.7	1.6	1.6	1.6
P/CFO (x)	11.0	10.9	8.0	9.4	9.4
Price/sales (x)	7.1	6.4	5.3	5.4	5.1
Dividend yield (%)	3.2	3.2	3.1	3.1	3.1
FCF Yield (%)	0.5	(3.9)	4.4	(9.6)	(7.6)
(Bt)					
Normalized EPS	0.8	0.8	0.8	0.6	0.5
EPS	0.8	0.7	0.8	0.6	0.5
DPS	0.3	0.3	0.3	0.3	0.3
BV/share	7.8	9.4	9.8	10.1	10.3
CFO/share	0.9	0.9	1.3	1.1	1.1
FCF/share	0.1	(0.4)	0.5	(1.0)	(0.8)

Sources: Company data, Thanachart estimates

BCPG Pcl

FINANCIAL RATIOS

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Growth Rate					
Sales (%)	23.5	10.4	20.1	(1.0)	5.2
Net profit (%)	6.2	5.2	9.6	(24.7)	(12.9)
EPS (%)	0.7	(15.1)	9.6	(24.7)	(12.9)
Normalized profit (%)	10.1	18.8	(2.4)	(24.7)	(12.9)
Normalized EPS (%)	4.5	(4.1)	(2.4)	(24.7)	(12.9)
Dividend payout ratio (%)	49.9	47.5	42.0	55.8	64.1
Operating performance					
Gross margin (%)	66.1	65.6	66.1	60.6	54.2
Operating margin (%)	53.5	53.0	53.8	47.1	39.4
EBITDA margin (%)	79.0	78.2	73.4	70.5	66.9
Net margin (%)	34.0	35.5	37.4	29.6	24.3
D/E (incl. minor) (x)	1.2	1.1	1.1	0.7	0.7
Net D/E (incl. minor) (x)	0.7	0.7	0.2	0.4	0.5
Interest coverage - EBIT (x)	2.8	3.1	3.7	2.9	3.1
Interest coverage - EBITDA (x)	4.1	4.6	5.0	4.3	5.3
ROA - using norm profit (%)	4.3	4.1	3.6	2.9	2.7
ROE - using norm profit (%)	10.0	9.1	7.9	5.8	4.9
DuPont					
ROE - using after tax profit (%)	7.6	6.7	7.5	5.7	4.8
- asset turnover (x)	0.1	0.1	0.1	0.1	0.1
- operating margin (%)	54.2	54.5	55.9	49.2	40.5
- leverage (x)	2.3	2.2	2.2	2.0	1.8
- interest burden (%)	64.2	69.1	73.8	66.5	68.6
- tax burden (%)	97.8	94.4	90.5	90.3	87.3
WACC (%)	8.2	8.2	8.2	8.2	8.2
ROIC (%)	6.5	6.1	6.1	6.7	5.0
NOPAT (Bt m)	2,212	2,333	2,732	2,364	2,008
invested capital (Bt m)	38,010	45,033	35,168	40,306	45,070

Sources: Company data, Thanachart estimates

CK Power Pcl

INCOME STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Sales	6,695	8,798	10,608	10,212	9,758
Cost of sales	5,990	6,520	8,329	7,836	7,434
Gross profit	**705**	**2,278**	**2,279**	**2,375**	**2,323**
% gross margin	10.5%	25.9%	21.5%	23.3%	23.8%
Selling & administration expenses	428	494	629	612	584
Operating profit	**277**	**1,783**	**1,650**	**1,764**	**1,739**
% operating margin	4.1%	20.3%	15.6%	17.3%	17.8%
Depreciation & amortization	1,598	1,611	1,541	2,525	2,465
EBITDA	**1,875**	**3,395**	**3,191**	**4,289**	**4,205**
% EBITDA margin	28.0%	38.6%	30.1%	42.0%	43.1%
Non-operating income	482	537	493	456	456
Non-operating expenses	0	0	0	0	0
Interest expense	(996)	(1,070)	(1,144)	(1,166)	(1,194)
Pre-tax profit	**(236)**	**1,250**	**998**	**1,053**	**1,001**
Income tax	(16)	61	65	100	87
After-tax profit	**(221)**	**1,189**	**933**	**953**	**914**
% net margin	-3.3%	13.5%	8.8%	9.3%	9.4%
Shares in affiliates' Earnings	496	1,380	1,818	1,820	1,628
Minority interests	207	(572)	(481)	(605)	(533)
Extraordinary items	(78)	183	0	0	0
NET PROFIT	**405**	**2,179**	**2,270**	**2,168**	**2,009**
Normalized profit	**483**	**1,996**	**2,270**	**2,168**	**2,009**
EPS (Bt)	0.0	0.3	0.3	0.3	0.2
Normalized EPS (Bt)	0.1	0.2	0.3	0.3	0.2

BALANCE SHEET

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
ASSETS:					
Current assets:	10,566	9,712	8,063	7,967	7,859
Cash & cash equivalent	8,901	7,084	5,002	5,002	5,002
Account receivables	1,054	1,557	1,878	1,808	1,727
Inventories	61	68	87	81	77
Others	551	1,003	1,097	1,076	1,053
Investments & loans	20,069	24,901	26,261	30,339	34,417
Net fixed assets	8,919	8,491	7,743	6,013	5,488
Other assets	27,484	25,874	25,106	24,336	23,564
Total assets	**67,038**	**68,977**	**67,172**	**68,655**	**71,327**
LIABILITIES:					
Current liabilities:	6,275	3,394	4,071	3,970	4,044
Account payables	620	927	1,184	1,114	1,057
Bank overdraft & ST loans	0	0	0	0	0
Current LT debt	5,544	2,331	2,722	2,698	2,830
Others current liabilities	111	136	165	158	158
Total LT debt	**24,961**	**28,979**	**24,495**	**24,283**	**25,468**
Others LT liabilities	764	474	505	523	539
Total liabilities	**32,000**	**32,847**	**29,070**	**28,776**	**30,051**
Minority interest	11,264	11,296	11,777	12,382	12,915
Preferreds shares	0	0	0	0	0
Paid-up capital	8,129	8,129	8,129	8,129	8,129
Share premium	13,319	13,319	13,319	13,319	13,319
Warrants	0	0	0	0	0
Surplus	373	(462)	(462)	(462)	(462)
Retained earnings	**1,953**	**3,847**	**5,338**	**6,510**	**7,375**
Shareholders' equity	23,774	24,834	26,324	27,497	28,361
Liabilities & equity	**67,038**	**68,977**	**67,172**	**68,655**	**71,327**

Sources: Company data, Thanachart estimates

CK Power Pcl

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Earnings before tax	(236)	1,250	998	1,053	1,001
Tax paid	18	(42)	(65)	(100)	(87)
Depreciation & amortization	1,598	1,611	1,541	2,525	2,465
Chg In w orking capital	168	(203)	(82)	5	27
Chg In other CA & CL / minorities	39	835	1,752	1,833	1,651
Cash flow from operations	**1,587**	**3,451**	**4,144**	**5,317**	**5,059**
Capex	(1,233)	(1,142)	(771)	(771)	(1,913)
Right of use	(423)	(31)	(50)	(50)	(50)
ST loans & investments	(66)	(394)	0	0	0
LT loans & investments	(468)	(4,832)	(1,359)	(4,078)	(4,078)
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	1,769	1,412	826	814	810
Cash flow from investments	**(422)**	**(4,987)**	**(1,355)**	**(4,085)**	**(5,230)**
Debt financing	3,005	839	(4,093)	(235)	1,317
Capital increase	0	0	0	0	0
Dividends paid	(774)	(824)	(779)	(996)	(1,145)
Warrants & other surplus	595	(296)	0	0	0
Cash flow from financing	**2,827**	**(280)**	**(4,872)**	**(1,231)**	**172**
Free cash flow	**354**	**2,309**	**3,374**	**4,546**	**3,146**

VALUATION

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Normalized PE (x)	76.4	18.5	16.3	17.0	18.4
Normalized PE - at target price (x)	109.4	26.5	23.3	24.4	26.3
PE (x)	91.2	16.9	16.3	17.0	18.4
PE - at target price (x)	130.6	24.2	23.3	24.4	26.3
EV/EBITDA (x)	31.2	18.0	18.5	13.7	14.3
EV/EBITDA - at target price (x)	39.7	22.7	23.5	17.4	18.1
P/BV (x)	1.6	1.5	1.4	1.3	1.3
P/BV - at target price (x)	2.2	2.1	2.0	1.9	1.9
P/CFO (x)	23.3	10.7	8.9	6.9	7.3
Price/sales (x)	5.5	4.2	3.5	3.6	3.8
Dividend yield (%)	0.8	1.8	2.5	2.9	3.3
FCF Yield (%)	1.0	6.3	9.1	12.3	8.5
(Bt)					
Normalized EPS	0.1	0.2	0.3	0.3	0.2
EPS	0.0	0.3	0.3	0.3	0.2
DPS	0.0	0.1	0.1	0.1	0.1
BV/share	2.9	3.1	3.2	3.4	3.5
CFO/share	0.2	0.4	0.5	0.7	0.6
FCF/share	0.0	0.3	0.4	0.6	0.4

Sources: Company data, Thanachart estimates

CK Power Pcl

FINANCIAL RATIOS

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Growth Rate					
Sales (%)	(20.1)	31.4	20.6	(3.7)	(4.4)
Net profit (%)	(47.4)	438.4	4.2	(4.5)	(7.3)
EPS (%)	(49.6)	438.4	4.2	(4.5)	(7.3)
Normalized profit (%)	96.1	313.4	13.7	(4.5)	(7.3)
Normalized EPS (%)	87.6	313.4	13.7	(4.5)	(7.3)
Dividend payout ratio (%)	70.3	29.8	40.0	50.0	60.0
Operating performance					
Gross margin (%)	10.5	25.9	21.5	23.3	23.8
Operating margin (%)	4.1	20.3	15.6	17.3	17.8
EBITDA margin (%)	28.0	38.6	30.1	42.0	43.1
Net margin (%)	(3.3)	13.5	8.8	9.3	9.4
D/E (incl. minor) (x)	0.9	0.9	0.7	0.7	0.7
Net D/E (incl. minor) (x)	0.6	0.7	0.6	0.6	0.6
Interest coverage - EBIT (x)	na	na	na	na	na
Interest coverage - EBITDA (x)	na	na	na	na	na
ROA - using norm profit (%)	0.7	2.9	3.3	3.2	2.9
ROE - using norm profit (%)	2.0	8.2	8.9	8.1	7.2
DuPont					
ROE - using after tax profit (%)	na	4.9	3.6	3.5	3.3
- asset turnover (x)	0.1	0.1	0.2	0.2	0.1
- operating margin (%)	na	26.4	20.2	21.7	22.5
- leverage (x)	2.8	2.8	2.7	2.5	2.5
- interest burden (%)	(31.1)	53.9	46.6	47.5	45.6
- tax burden (%)	na	95.1	93.5	90.5	91.3
WACC (%)	9.2	9.2	9.2	9.2	9.2
ROIC (%)	0.6	3.7	3.1	3.3	3.2
NOPAT (Bt m)	277	1,696	1,542	1,596	1,588
invested capital (Bt m)	45,379	49,060	48,539	49,476	51,657

Sources: Company data, Thanachart estimates

Energy Absolute

INCOME STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Sales	17,080	20,174	29,654	45,472	52,180
Cost of sales	9,271	11,893	19,004	31,189	37,436
Gross profit	**7,808**	**8,280**	**10,651**	**14,283**	**14,743**
% gross margin	45.7%	41.0%	35.9%	31.4%	28.3%
Selling & administration expenses	1,278	1,437	1,961	2,553	2,774
Operating profit	**6,530**	**6,843**	**8,690**	**11,731**	**11,969**
% operating margin	38.2%	33.9%	29.3%	25.8%	22.9%
Depreciation & amortization	2,844	2,896	3,186	3,358	3,783
EBITDA	**9,373**	**9,739**	**11,876**	**15,089**	**15,752**
% EBITDA margin	54.9%	48.3%	40.0%	33.2%	30.2%
Non-operating income	120	384	148	227	261
Non-operating expenses	0	0	0	0	0
Interest expense	(1,637)	(1,388)	(1,353)	(1,276)	(1,244)
Pre-tax profit	**5,013**	**5,840**	**7,485**	**10,682**	**10,986**
Income tax	(18)	3	37	53	55
After-tax profit	**5,031**	**5,837**	**7,448**	**10,629**	**10,931**
% net margin	29.5%	28.9%	25.1%	23.4%	20.9%
Shares in affiliates' Earnings	(61)	14	368	773	1,261
Minority interests	157	171	(543)	(2,195)	(2,004)
Extraordinary items	78	79	0	0	0
NET PROFIT	**5,205**	**6,100**	**7,272**	**9,207**	**10,188**
Normalized profit	**5,127**	**6,021**	**7,272**	**9,207**	**10,188**
EPS (Bt)	1.4	1.6	1.9	2.5	2.7
Normalized EPS (Bt)	1.4	1.6	1.9	2.5	2.7

BALANCE SHEET

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
ASSETS:					
Current assets:	7,389	11,650	15,166	21,871	24,833
Cash & cash equivalent	2,962	2,944	3,017	3,017	3,017
Account receivables	2,750	3,690	4,875	7,475	8,577
Inventories	833	1,483	2,083	3,418	4,103
Others	843	3,532	5,192	7,962	9,136
Investments & loans	0	0	0	0	0
Net fixed assets	55,857	58,421	59,278	62,765	67,377
Other assets	15,238	15,406	14,649	14,834	15,023
Total assets	**78,484**	**85,476**	**89,093**	**99,470**	**107,234**
LIABILITIES:					
Current liabilities:	13,564	12,676	13,244	15,667	15,886
Account payables	373	358	781	1,282	1,538
Bank overdraft & ST loans	2,674	1,877	1,955	1,844	1,772
Current LT debt	9,342	7,580	7,429	7,007	6,734
Others current liabilities	1,176	2,860	3,078	5,535	5,841
Total LT debt	**31,090**	**33,777**	**29,717**	**28,026**	**26,936**
Others LT liabilities	4,203	3,921	4,865	5,579	5,440
Total liabilities	**48,857**	**50,375**	**47,826**	**49,273**	**48,263**
Minority interest	1,815	2,601	3,144	5,339	7,343
Preferreds shares	0	0	0	0	0
Paid-up capital	373	373	373	373	373
Share premium	3,681	3,681	3,681	3,681	3,681
Warrants	0	0	0	0	0
Surplus	(428)	(720)	(720)	(720)	(720)
Retained earnings	**24,186**	**29,167**	**34,789**	**41,525**	**48,294**
Shareholders' equity	27,812	32,501	38,123	44,858	51,627
Liabilities & equity	**78,484**	**85,476**	**89,093**	**99,470**	**107,234**

Sources: Company data, Thanachart estimates

Energy Absolute

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Earnings before tax	5,013	5,840	7,485	10,682	10,986
Tax paid	18	(3)	(37)	(53)	(55)
Depreciation & amortization	2,844	2,896	3,186	3,358	3,783
Chg In w orking capital	(73)	(1,604)	(1,361)	(3,435)	(1,531)
Chg In other CA & CL / minorities	449	(326)	(1,074)	461	392
Cash flow from operations	**8,251**	**6,802**	**8,199**	**11,013**	**13,576**
Capex	(7,216)	(5,332)	(3,950)	(6,750)	(8,299)
Right of use	(1,892)	(83)	(20)	(20)	(20)
ST loans & investments	(4)	7	0	0	0
LT loans & investments	0	0	0	0	0
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	(6,631)	(196)	1,627	454	(404)
Cash flow from investments	**(15,743)**	**(5,604)**	**(2,343)**	**(6,316)**	**(8,723)**
Debt financing	1,171	194	(4,133)	(2,225)	(1,434)
Capital increase	0	0	0	0	0
Dividends paid	(1,119)	(1,119)	(1,650)	(2,472)	(3,419)
Warrants & other surplus	361	(292)	0	0	0
Cash flow from financing	**414**	**(1,216)**	**(5,783)**	**(4,697)**	**(4,853)**
Free cash flow	**1,035**	**1,470**	**4,249**	**4,263**	**5,276**

VALUATION

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Normalized PE (x)	64.9	55.3	45.8	36.2	32.7
Normalized PE - at target price (x)	72.8	62.0	51.3	40.5	36.6
PE (x)	64.0	54.6	45.8	36.2	32.7
PE - at target price (x)	71.7	61.1	51.3	40.5	36.6
EV/EBITDA (x)	39.8	38.3	31.1	24.3	23.2
EV/EBITDA - at target price (x)	44.1	42.4	34.4	27.0	25.7
P/BV (x)	12.0	10.2	8.7	7.4	6.4
P/BV - at target price (x)	13.4	11.5	9.8	8.3	7.2
P/CFO (x)	40.3	48.9	40.6	30.2	24.5
Price/sales (x)	19.5	16.5	11.2	7.3	6.4
Dividend yield (%)	0.3	0.3	0.7	0.8	1.2
FCF Yield (%)	0.3	0.4	1.3	1.3	1.6
(Bt)					
Normalized EPS	1.4	1.6	1.9	2.5	2.7
EPS	1.4	1.6	1.9	2.5	2.7
DPS	0.3	0.3	0.6	0.7	1.1
BV/share	7.5	8.7	10.2	12.0	13.8
CFO/share	2.2	1.8	2.2	3.0	3.6
FCF/share	0.3	0.4	1.1	1.1	1.4

Sources: Company data, Thanachart estimates

Energy Absolute

FINANCIAL RATIOS

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Growth Rate					
Sales (%)	14.7	18.1	47.0	53.3	14.8
Net profit (%)	(14.4)	17.2	19.2	26.6	10.6
EPS (%)	(14.4)	17.2	19.2	26.6	10.6
Normalized profit (%)	(13.4)	17.4	20.8	26.6	10.6
Normalized EPS (%)	(13.4)	17.4	20.8	26.6	10.6
Dividend payout ratio (%)	21.5	18.3	30.0	30.0	40.0
Operating performance					
Gross margin (%)	45.7	41.0	35.9	31.4	28.3
Operating margin (%)	38.2	33.9	29.3	25.8	22.9
EBITDA margin (%)	54.9	48.3	40.0	33.2	30.2
Net margin (%)	29.5	28.9	25.1	23.4	20.9
D/E (incl. minor) (x)	1.5	1.2	0.9	0.7	0.6
Net D/E (incl. minor) (x)	1.4	1.1	0.9	0.7	0.5
Interest coverage - EBIT (x)	na	na	na	na	na
Interest coverage - EBITDA (x)	na	na	na	na	na
ROA - using norm profit (%)	6.9	7.3	8.3	9.8	9.9
ROE - using norm profit (%)	20.0	20.0	20.6	22.2	21.1
DuPont					
ROE - using after tax profit (%)	19.7	19.4	21.1	25.6	22.7
- asset turnover (x)	0.2	0.2	0.3	0.5	0.5
- operating margin (%)	38.9	35.8	29.8	26.3	23.4
- leverage (x)	2.9	2.7	2.5	2.3	2.1
- interest burden (%)	75.4	80.8	84.7	89.3	89.8
- tax burden (%)	100.4	99.9	99.5	99.5	99.5
WACC (%)	5.0	5.0	5.0	5.0	5.0
ROIC (%)	11.9	10.1	11.9	15.7	15.1
NOPAT (Bt m)	6,553	6,839	8,646	11,672	11,909
invested capital (Bt m)	67,955	72,792	74,208	78,718	84,053

Sources: Company data, Thanachart estimates

Electricity Generating

INCOME STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Sales	33,578	35,903	35,816	35,405	33,104
Cost of sales	25,258	27,560	27,140	26,911	25,181
Gross profit	**8,320**	**8,343**	**8,676**	**8,494**	**7,923**
% gross margin	24.8%	23.2%	24.2%	24.0%	23.9%
Selling & administration expenses	2,613	2,646	2,673	2,708	2,748
Operating profit	**5,707**	**5,697**	**6,003**	**5,786**	**5,175**
% operating margin	17.0%	15.9%	16.8%	16.3%	15.6%
Depreciation & amortization	3,131	3,124	3,050	3,072	3,094
EBITDA	**8,838**	**8,821**	**9,053**	**8,858**	**8,269**
% EBITDA margin	26.3%	24.6%	25.3%	25.0%	25.0%
Non-operating income	2,413	2,234	2,120	1,664	1,291
Non-operating expenses	0	0	0	0	0
Interest expense	(3,869)	(3,714)	(4,222)	(4,082)	(3,733)
Pre-tax profit	**4,250**	**4,216**	**3,901**	**3,368**	**2,733**
Income tax	1,022	818	780	674	547
After-tax profit	**3,228**	**3,398**	**3,121**	**2,694**	**2,186**
% net margin	9.6%	9.5%	8.7%	7.6%	6.6%
Shares in affiliates' Earnings	6,259	6,873	8,764	9,115	9,051
Minority interests	(27)	(13)	(50)	(49)	(46)
Extraordinary items	(727)	(6,154)	0	0	0
NET PROFIT	**8,733**	**4,104**	**11,835**	**11,760**	**11,191**
Normalized profit	**9,460**	**10,258**	**11,835**	**11,760**	**11,191**
EPS (Bt)	16.6	7.8	22.5	22.3	21.3
Normalized EPS (Bt)	18.0	19.5	22.5	22.3	21.3

BALANCE SHEET

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
ASSETS:					
Current assets:	34,911	38,495	42,535	46,061	43,745
Cash & cash equivalent	17,237	17,898	20,000	25,000	25,000
Account receivables	4,811	7,060	5,397	5,335	4,988
Inventories	2,760	2,947	2,974	2,949	2,760
Others	10,104	10,591	14,164	12,777	10,998
Investments & loans	97,903	124,462	124,462	124,462	124,462
Net fixed assets	49,750	49,597	47,078	44,539	41,980
Other assets	31,873	29,377	27,158	26,559	25,863
Total assets	**214,438**	**241,932**	**241,233**	**241,620**	**236,051**
LIABILITIES:					
Current liabilities:	16,290	27,019	21,390	20,007	17,740
Account payables	2,510	4,380	2,974	2,949	2,760
Bank overdraft & ST loans	0	0	101	93	80
Current LT debt	11,170	19,670	15,063	13,896	11,958
Others current liabilities	2,610	2,970	3,252	3,069	2,943
Total LT debt	**81,758**	**89,747**	**85,359**	**78,743**	**67,760**
Others LT liabilities	13,556	11,129	11,985	12,115	12,244
Total liabilities	**111,603**	**127,895**	**118,733**	**110,865**	**97,744**
Minority interest	591	596	646	695	741
Preferreds shares	0	0	0	0	0
Paid-up capital	5,265	5,265	5,265	5,265	5,265
Share premium	8,601	8,601	8,601	8,601	8,601
Warrants	0	0	0	0	0
Surplus	(14,349)	(3,702)	(3,702)	(3,702)	(3,702)
Retained earnings	**102,726**	**103,277**	**111,689**	**119,896**	**127,401**
Shareholders' equity	102,243	113,441	121,854	130,060	137,566
Liabilities & equity	**214,438**	**241,932**	**241,233**	**241,620**	**236,051**

Sources: Company data, Thanachart estimates

Electricity Generating

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Earnings before tax	4,250	4,216	3,901	3,368	2,733
Tax paid	(1,022)	(818)	(780)	(674)	(547)
Depreciation & amortization	3,131	3,124	3,050	3,072	3,094
Chg In w orking capital	287	(565)	229	62	347
Chg In other CA & CL / minorities	(1,516)	6,036	3,865	10,346	10,732
Cash flow from operations	**5,131**	**11,993**	**10,265**	**16,174**	**16,358**
Capex	(100)	(2,971)	(500)	(500)	(500)
Right of use	(513)	(71)	(50)	(50)	(50)
ST loans & investments	(1,513)	(91)	1,609	(27)	(28)
LT loans & investments	(9,391)	(26,559)	0	0	0
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	3,401	(4,896)	3,094	747	839
Cash flow from investments	**(8,116)**	**(34,587)**	**4,153**	**170**	**262**
Debt financing	6,016	16,162	(8,894)	(7,790)	(12,935)
Capital increase	0	0	0	0	0
Dividends paid	(3,325)	(3,565)	(3,422)	(3,554)	(3,685)
Warrants & other surplus	(7,655)	10,659	0	0	0
Cash flow from financing	**(4,964)**	**23,255**	**(12,316)**	**(11,344)**	**(16,620)**
Free cash flow	**5,031**	**9,022**	**9,765**	**15,674**	**15,858**

VALUATION

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Normalized PE (x)	9.7	9.0	7.8	7.8	8.2
Normalized PE - at target price (x)	15.3	14.1	12.2	12.3	12.9
PE (x)	10.5	22.5	7.8	7.8	8.2
PE - at target price (x)	16.6	35.3	12.2	12.3	12.9
EV/EBITDA (x)	19.0	20.8	19.1	18.0	17.8
EV/EBITDA - at target price (x)	24.9	26.8	24.9	24.0	24.1
P/BV (x)	0.9	0.8	0.8	0.7	0.7
P/BV - at target price (x)	1.4	1.3	1.2	1.1	1.1
P/CFO (x)	18.0	7.7	9.0	5.7	5.6
Price/sales (x)	2.7	2.6	2.6	2.6	2.8
Dividend yield (%)	3.7	3.7	3.7	4.0	4.0
FCF Yield (%)	5.5	9.8	10.6	17.0	17.2
(Bt)					
Normalized EPS	18.0	19.5	22.5	22.3	21.3
EPS	16.6	7.8	22.5	22.3	21.3
DPS	6.5	6.5	6.5	7.0	7.0
BV/share	194.2	215.5	231.5	247.0	261.3
CFO/share	9.7	22.8	19.5	30.7	31.1
FCF/share	9.6	17.1	18.5	29.8	30.1

Sources: Company data, Thanachart estimates

Electricity Generating

FINANCIAL RATIOS

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Growth Rate					
Sales (%)	(10.5)	6.9	(0.2)	(1.1)	(6.5)
Net profit (%)	(33.1)	(53.0)	188.4	(0.6)	(4.8)
EPS (%)	(33.1)	(53.0)	188.4	(0.6)	(4.8)
Normalized profit (%)	(12.5)	8.4	15.4	(0.6)	(4.8)
Normalized EPS (%)	(12.5)	8.4	15.4	(0.6)	(4.8)
Dividend payout ratio (%)	39.2	83.4	28.9	31.3	32.9
Operating performance					
Gross margin (%)	24.8	23.2	24.2	24.0	23.9
Operating margin (%)	17.0	15.9	16.8	16.3	15.6
EBITDA margin (%)	26.3	24.6	25.3	25.0	25.0
Net margin (%)	9.6	9.5	8.7	7.6	6.6
D/E (incl. minor) (x)	0.9	1.0	0.8	0.7	0.6
Net D/E (incl. minor) (x)	0.7	0.8	0.7	0.5	0.4
Interest coverage - EBIT (x)	1.5	1.5	1.4	1.4	1.4
Interest coverage - EBITDA (x)	2.3	2.4	2.1	2.2	2.2
ROA - using norm profit (%)	4.5	4.5	4.9	4.9	4.7
ROE - using norm profit (%)	9.2	9.5	10.1	9.3	8.4
DuPont					
ROE - using after tax profit (%)	3.1	3.2	2.7	2.1	1.6
- asset turnover (x)	0.2	0.2	0.1	0.1	0.1
- operating margin (%)	24.2	22.1	22.7	21.0	19.5
- leverage (x)	2.0	2.1	2.1	1.9	1.8
- interest burden (%)	52.3	53.2	48.0	45.2	42.3
- tax burden (%)	76.0	80.6	80.0	80.0	80.0
WACC (%)	7.2	7.2	7.2	7.2	7.2
ROIC (%)	2.6	2.6	2.3	2.3	2.1
NOPAT (Bt m)	4,335	4,591	4,802	4,629	4,140
invested capital (Bt m)	177,934	204,960	202,376	197,792	192,363

Sources: Company data, Thanachart estimates

Gulf Energy Dev. Pcl

INCOME STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Sales	32,863	47,467	80,636	104,923	134,012
Cost of sales	23,702	34,388	64,876	85,213	107,048
Gross profit	**9,161**	**13,079**	**15,759**	**19,710**	**26,964**
% gross margin	27.9%	27.6%	19.5%	18.8%	20.1%
Selling & administration expenses	2,116	2,297	2,493	2,891	3,355
Operating profit	**7,045**	**10,782**	**13,266**	**16,819**	**23,609**
% operating margin	21.4%	22.7%	16.5%	16.0%	17.6%
Depreciation & amortization	3,431	4,989	6,691	8,574	10,781
EBITDA	**10,476**	**15,771**	**19,958**	**25,393**	**34,390**
% EBITDA margin	31.9%	33.2%	24.8%	24.2%	25.7%
Non-operating income	543	2,516	217	186	151
Non-operating expenses	0	0	0	0	0
Interest expense	(3,665)	(5,596)	(7,424)	(7,335)	(7,019)
Pre-tax profit	**3,923**	**7,703**	**6,060**	**9,670**	**16,740**
Income tax	107	347	315	362	478
After-tax profit	**3,816**	**7,356**	**5,745**	**9,307**	**16,262**
% net margin	11.6%	15.5%	7.1%	8.9%	12.1%
Shares in affiliates' Earnings	2,462	3,853	7,947	9,073	10,424
Minority interests	(1,862)	(2,356)	(2,872)	(3,518)	(5,266)
Extraordinary items	(134)	(1,182)	0	0	0
NET PROFIT	**4,282**	**7,670**	**10,820**	**14,862**	**21,421**
Normalized profit	**4,416**	**8,852**	**10,820**	**14,862**	**21,421**
EPS (Bt)	0.4	0.7	0.9	1.3	1.8
Normalized EPS (Bt)	0.4	0.8	0.9	1.3	1.8

BALANCE SHEET

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
ASSETS:					
Current assets:	30,354	38,811	44,858	45,493	57,158
Cash & cash equivalent	21,772	22,634	23,000	18,000	23,000
Account receivables	5,660	9,569	16,569	21,560	27,537
Inventories	331	1,303	1,777	2,335	2,933
Others	2,591	5,306	3,511	3,599	3,689
Investments & loans	26,717	142,229	147,486	153,265	160,657
Net fixed assets	129,718	130,128	170,373	200,212	204,695
Other assets	58,790	51,506	21,267	21,385	21,500
Total assets	**245,581**	**362,674**	**383,983**	**420,355**	**444,010**
LIABILITIES:					
Current liabilities:	29,643	35,016	27,923	30,083	31,870
Account payables	1,353	3,080	5,332	7,004	8,798
Bank overdraft & ST loans	11,500	9,998	4,540	4,511	4,169
Current LT debt	6,787	9,528	8,899	8,842	8,171
Others current liabilities	10,002	12,410	9,151	9,726	10,731
Total LT debt	**136,482**	**212,465**	**213,583**	**212,205**	**196,115**
Others LT liabilities	7,376	7,684	2,017	2,393	2,907
Total liabilities	**173,501**	**255,165**	**243,523**	**244,680**	**230,892**
Minority interest	8,053	10,913	13,785	17,303	22,569
Preferreds shares	0	0	0	0	0
Paid-up capital	11,733	11,733	11,733	11,733	11,733
Share premium	51,822	51,822	51,822	51,822	51,822
Warrants	0	0	0	0	0
Surplus	(7,496)	(3,891)	(3,891)	(3,891)	(3,891)
Retained earnings	**7,968**	**36,931**	**67,011**	**98,707**	**130,885**
Shareholders' equity	64,027	96,596	126,676	158,372	190,550
Liabilities & equity	**245,581**	**362,674**	**383,983**	**420,355**	**444,010**

Sources: Company data, Thanachart estimates

Gulf Energy Dev. Pcl

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Earnings before tax	3,923	7,703	6,060	9,670	16,740
Tax paid	(112)	(259)	(323)	(290)	(465)
Depreciation & amortization	3,431	4,989	6,691	8,574	10,781
Chg In w orking capital	(971)	(3,153)	(5,223)	(3,876)	(4,781)
Chg In other CA & CL / minorities	1,342	3,586	6,491	9,488	11,326
Cash flow from operations	**7,614**	**12,865**	**13,695**	**23,566**	**33,602**
Capex	(52,189)	(5,399)	(46,901)	(38,373)	(15,218)
Right of use	(787)	131	(100)	(100)	(100)
ST loans & investments	0	(596)	0	0	0
LT loans & investments	(3,146)	(115,511)	(5,257)	(5,779)	(7,392)
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	(42,844)	8,326	24,637	317	454
Cash flow from investments	**(98,967)**	**(113,049)**	**(27,621)**	**(43,935)**	**(22,256)**
Debt financing	76,997	76,147	(4,968)	(1,465)	(17,102)
Capital increase	31,999	0	0	0	0
Dividends paid	(2,773)	(4,459)	(6,492)	(8,917)	(14,995)
Warrants & other surplus	(7,908)	29,357	25,752	25,752	25,752
Cash flow from financing	**98,315**	**101,046**	**14,292**	**15,369**	**(6,345)**
Free cash flow	**(44,575)**	**7,467**	**(33,205)**	**(14,807)**	**18,384**

VALUATION

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Normalized PE (x)	135.6	71.6	58.6	42.6	29.6
Normalized PE - at target price (x)	113.0	59.6	48.8	35.5	24.6
PE (x)	139.8	82.6	58.6	42.6	29.6
PE - at target price (x)	116.5	68.8	48.8	35.5	24.6
EV/EBITDA (x)	69.8	53.4	42.0	33.1	23.8
EV/EBITDA - at target price (x)	60.3	46.8	36.7	29.0	20.7
P/BV (x)	9.9	6.6	5.0	4.0	3.3
P/BV - at target price (x)	8.2	5.5	4.2	3.3	2.8
P/CFO (x)	78.6	49.2	46.3	26.9	18.9
Price/sales (x)	19.3	13.3	7.9	6.0	4.7
Dividend yield (%)	0.7	0.8	1.0	1.4	2.4
FCF Yield (%)	(7.4)	1.2	(5.2)	(2.3)	2.9
(Bt)					
Normalized EPS	0.4	0.8	0.9	1.3	1.8
EPS	0.4	0.7	0.9	1.3	1.8
DPS	0.4	0.4	0.6	0.8	1.3
BV/share	5.5	8.2	10.8	13.5	16.2
CFO/share	0.7	1.1	1.2	2.0	2.9
FCF/share	(4.0)	0.6	(2.8)	(1.3)	1.6

Sources: Company data, Thanachart estimates

Gulf Energy Dev. Pcl

FINANCIAL RATIOS

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Growth Rate					
Sales (%)	9.4	44.4	69.9	30.1	27.7
Net profit (%)	(12.4)	79.1	41.1	37.4	44.1
EPS (%)	(14.1)	69.3	41.1	37.4	44.1
Normalized profit (%)	25.8	100.5	22.2	37.4	44.1
Normalized EPS (%)	23.4	89.4	22.2	37.4	44.1
Dividend payout ratio (%)	104.1	67.3	60.0	60.0	70.0
Operating performance					
Gross margin (%)	27.9	27.6	19.5	18.8	20.1
Operating margin (%)	21.4	22.7	16.5	16.0	17.6
EBITDA margin (%)	31.9	33.2	24.8	24.2	25.7
Net margin (%)	11.6	15.5	7.1	8.9	12.1
D/E (incl. minor) (x)	2.1	2.2	1.6	1.3	1.0
Net D/E (incl. minor) (x)	1.8	1.9	1.5	1.2	0.9
Interest coverage - EBIT (x)	1.9	1.9	1.8	2.3	3.4
Interest coverage - EBITDA (x)	2.9	2.8	2.7	3.5	4.9
ROA - using norm profit (%)	2.3	2.9	2.9	3.7	5.0
ROE - using norm profit (%)	8.6	11.0	9.7	10.4	12.3
DuPont					
ROE - using after tax profit (%)	7.4	9.2	5.1	6.5	9.3
- asset turnover (x)	0.2	0.2	0.2	0.3	0.3
- operating margin (%)	23.1	28.0	16.7	16.2	17.7
- leverage (x)	3.7	3.8	3.3	2.8	2.5
- interest burden (%)	51.7	57.9	44.9	56.9	70.5
- tax burden (%)	97.3	95.5	94.8	96.3	97.1
WACC (%)	4.3	4.3	4.3	4.3	4.3
ROIC (%)	6.8	5.2	4.1	4.9	6.3
NOPAT (Bt m)	6,852	10,296	12,577	16,189	22,934
invested capital (Bt m)	197,024	305,953	330,699	365,930	376,005

Sources: Company data, Thanachart estimates

Gunkul Engineering

INCOME STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Sales	7,453	7,945	7,775	9,594	11,488
Cost of sales	5,608	5,574	5,195	6,751	8,162
Gross profit	**1,845**	**2,372**	**2,580**	**2,843**	**3,326**
% gross margin	24.8%	29.9%	33.2%	29.6%	29.0%
Selling & administration expenses	955	972	1,029	1,109	1,165
Operating profit	**889**	**1,400**	**1,551**	**1,734**	**2,161**
% operating margin	11.9%	17.6%	19.9%	18.1%	18.8%
Depreciation & amortization	1,353	1,542	1,213	937	950
EBITDA	**2,243**	**2,942**	**2,764**	**2,671**	**3,111**
% EBITDA margin	30.1%	37.0%	35.6%	27.8%	27.1%
Non-operating income	1,285	1,446	388	107	127
Non-operating expenses	0	0	0	0	0
Interest expense	(912)	(971)	(855)	(774)	(784)
Pre-tax profit	**1,262**	**1,875**	**1,084**	**1,067**	**1,503**
Income tax	119	188	108	128	226
After-tax profit	**1,143**	**1,687**	**975**	**939**	**1,278**
% net margin	15.3%	21.2%	12.5%	9.8%	11.1%
Shares in affiliates' Earnings	291	357	729	830	791
Minority interests	(13)	(22)	(10)	(11)	(11)
Extraordinary items	1,992	208	0	0	0
NET PROFIT	**3,412**	**2,229**	**1,694**	**1,758**	**2,058**
Normalized profit	**1,421**	**2,022**	**1,694**	**1,758**	**2,058**
EPS (Bt)	0.4	0.3	0.2	0.2	0.2
Normalized EPS (Bt)	0.2	0.2	0.2	0.2	0.2

BALANCE SHEET

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
ASSETS:					
Current assets:	11,782	7,567	6,200	6,887	7,860
Cash & cash equivalent	6,279	3,868	2,019	2,019	2,019
Account receivables	2,864	1,466	1,917	2,366	2,833
Inventories	637	809	854	1,110	1,342
Others	2,003	1,424	1,410	1,392	1,667
Investments & loans	1,566	1,833	1,833	1,833	1,833
Net fixed assets	26,943	26,536	26,682	27,081	27,530
Other assets	5,741	6,550	6,421	7,797	9,229
Total assets	**46,032**	**42,485**	**41,137**	**43,597**	**46,452**
LIABILITIES:					
Current liabilities:	12,983	9,054	10,972	10,825	13,024
Account payables	2,404	1,681	1,708	2,220	2,683
Bank overdraft & ST loans	4,659	1,645	941	1,026	968
Current LT debt	3,315	4,469	3,575	3,899	3,677
Others current liabilities	2,604	1,258	4,748	3,680	5,696
Total LT debt	**18,793**	**18,630**	**14,299**	**15,598**	**14,708**
Others LT liabilities	1,781	1,518	1,483	1,714	1,953
Total liabilities	**33,557**	**29,202**	**26,754**	**28,136**	**29,686**
Minority interest	125	162	172	183	193
Preferreds shares	0	0	0	0	0
Paid-up capital	2,221	2,221	2,221	2,221	2,221
Share premium	5,179	5,179	5,179	5,179	5,179
Warrants	0	0	0	0	0
Surplus	(1,359)	(674)	(674)	(674)	(674)
Retained earnings	**6,309**	**6,395**	**7,484**	**8,552**	**9,847**
Shareholders' equity	12,350	13,122	14,210	15,278	16,573
Liabilities & equity	**46,032**	**42,485**	**41,137**	**43,597**	**46,452**

Sources: Company data, Thanachart estimates

Gunkul Engineering

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Earnings before tax	1,262	1,875	1,084	1,067	1,503
Tax paid	(114)	(194)	(105)	(124)	(218)
Depreciation & amortization	1,353	1,542	1,213	937	950
Chg In w orking capital	(287)	504	(470)	(193)	(235)
Chg In other CA & CL / minorities	(2,482)	(440)	4,184	(265)	2,484
Cash flow from operations	**(267)**	**3,286**	**5,907**	**1,422**	**4,485**
Capex	(3,729)	(1,135)	(1,360)	(1,335)	(1,400)
Right of use	(682)	138	0	0	0
ST loans & investments	170	0	0	0	0
LT loans & investments	165	(267)	0	0	0
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	3,728	(1,052)	139	(1,105)	(1,151)
Cash flow from investments	**(348)**	**(2,315)**	**(1,221)**	**(2,440)**	**(2,551)**
Debt financing	4,451	(1,924)	(5,929)	1,709	(1,170)
Capital increase	0	0	0	0	0
Dividends paid	(1,194)	(2,131)	(605)	(690)	(763)
Warrants & other surplus	(580)	674	0	0	0
Cash flow from financing	**2,676**	**(3,382)**	**(6,535)**	**1,018**	**(1,934)**
Free cash flow	**(3,996)**	**2,152**	**4,547**	**87**	**3,085**

VALUATION

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Normalized PE (x)	31.6	22.2	26.5	25.5	21.8
Normalized PE - at target price (x)	30.0	21.1	25.2	24.2	20.7
PE (x)	13.1	20.1	26.5	25.5	21.8
PE - at target price (x)	12.5	19.1	25.2	24.2	20.7
EV/EBITDA (x)	29.1	22.3	22.3	23.7	20.0
EV/EBITDA - at target price (x)	28.1	21.6	21.5	22.9	19.3
P/BV (x)	3.6	3.4	3.2	2.9	2.7
P/BV - at target price (x)	3.5	3.2	3.0	2.8	2.6
P/CFO (x)	(168.0)	13.6	7.6	31.6	10.0
Price/sales (x)	6.0	5.6	5.8	4.7	3.9
Dividend yield (%)	3.6	1.2	1.5	1.6	1.8
FCF Yield (%)	(8.9)	4.8	10.1	0.2	6.9
(Bt)					
Normalized EPS	0.2	0.2	0.2	0.2	0.2
EPS	0.4	0.3	0.2	0.2	0.2
DPS	0.2	0.1	0.1	0.1	0.1
BV/share	1.4	1.5	1.6	1.7	1.9
CFO/share	(0.0)	0.4	0.7	0.2	0.5
FCF/share	(0.5)	0.2	0.5	0.0	0.3

Sources: Company data, Thanachart estimates

Gunkul Engineering

FINANCIAL RATIOS

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Growth Rate					
Sales (%)	35.0	6.6	(2.1)	23.4	19.7
Net profit (%)	58.9	(34.7)	(24.0)	3.8	17.0
EPS (%)	42.2	(34.7)	(24.0)	3.8	17.0
Normalized profit (%)	(33.2)	42.3	(16.2)	3.8	17.0
Normalized EPS (%)	(40.2)	42.3	(16.2)	3.8	17.0
Dividend payout ratio (%)	47.4	23.9	40.0	40.0	40.0
Operating performance					
Gross margin (%)	24.8	29.9	33.2	29.6	29.0
Operating margin (%)	11.9	17.6	19.9	18.1	18.8
EBITDA margin (%)	30.1	37.0	35.6	27.8	27.1
Net margin (%)	15.3	21.2	12.5	9.8	11.1
D/E (incl. minor) (x)	2.1	1.9	1.3	1.3	1.2
Net D/E (incl. minor) (x)	1.6	1.6	1.2	1.2	1.0
Interest coverage - EBIT (x)	1.0	1.4	1.8	2.2	2.8
Interest coverage - EBITDA (x)	2.5	3.0	3.2	3.4	4.0
ROA - using norm profit (%)	3.3	4.6	4.1	4.2	4.6
ROE - using norm profit (%)	12.3	15.9	12.4	11.9	12.9
DuPont					
ROE - using after tax profit (%)	9.9	13.2	7.1	6.4	8.0
- asset turnover (x)	0.2	0.2	0.2	0.2	0.3
- operating margin (%)	29.2	35.8	24.9	19.2	19.9
- leverage (x)	3.7	3.5	3.1	2.9	2.8
- interest burden (%)	58.1	65.9	55.9	57.9	65.7
- tax burden (%)	90.5	90.0	90.0	88.0	85.0
WACC (%)	5.8	5.8	5.8	5.8	5.8
ROIC (%)	2.8	3.8	4.1	4.9	5.4
NOPAT (Bt m)	805	1,259	1,396	1,526	1,837
invested capital (Bt m)	32,839	33,998	31,006	33,782	33,907

Sources: Company data, Thanachart estimates

Ratchaburi Electricity Generating

INCOME STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Sales	34,206	37,327	41,919	41,559	39,141
Cost of sales	30,063	33,116	35,472	35,256	33,443
Gross profit	**4,143**	**4,210**	**6,447**	**6,303**	**5,698**
% gross margin	12.1%	11.3%	15.4%	15.2%	14.6%
Selling & administration expenses	1,601	1,702	1,691	1,765	1,798
Operating profit	**2,542**	**2,508**	**4,756**	**4,538**	**3,900**
% operating margin	7.4%	6.7%	11.3%	10.9%	10.0%
Depreciation & amortization	1,833	2,144	2,129	2,058	1,990
EBITDA	**4,374**	**4,653**	**6,885**	**6,596**	**5,890**
% EBITDA margin	12.8%	12.5%	16.4%	15.9%	15.0%
Non-operating income	716	886	1,032	944	1,178
Non-operating expenses	0	0	0	0	0
Interest expense	(1,551)	(1,868)	(2,390)	(2,090)	(1,367)
Pre-tax profit	**1,706**	**1,527**	**3,398**	**3,392**	**3,712**
Income tax	528	178	1,020	1,018	1,113
After-tax profit	**1,178**	**1,349**	**2,379**	**2,374**	**2,598**
% net margin	3.4%	3.6%	5.7%	5.7%	6.6%
Shares in affiliates' Earnings	4,273	5,231	7,881	8,753	9,653
Minority interests	(0)	(7)	(418)	(447)	(284)
Extraordinary items	836	1,199	0	0	0
NET PROFIT	**6,287**	**7,772**	**9,842**	**10,680**	**11,967**
Normalized profit	**5,451**	**6,573**	**9,842**	**10,680**	**11,967**
EPS (Bt)	4.1	5.1	6.4	5.1	5.4
Normalized EPS (Bt)	3.5	4.3	6.4	5.1	5.4

BALANCE SHEET

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
ASSETS:					
Current assets:	18,485	25,316	20,999	17,922	17,390
Cash & cash equivalent	8,614	9,861	8,500	5,500	5,500
Account receivables	4,982	8,934	5,742	5,693	5,362
Inventories	1,783	1,902	1,944	1,932	1,832
Others	3,106	4,619	4,813	4,797	4,696
Investments & loans	43,387	51,723	81,597	83,472	84,096
Net fixed assets	29,479	36,228	36,141	36,833	36,906
Other assets	18,752	39,414	40,203	41,007	41,827
Total assets	**110,103**	**152,681**	**178,939**	**179,234**	**180,219**
LIABILITIES:					
Current liabilities:	6,877	20,270	23,078	16,336	14,825
Account payables	4,801	7,677	5,831	5,796	5,497
Bank overdraft & ST loans	60	5,365	7,237	3,916	3,381
Current LT debt	1,486	4,670	7,253	3,924	3,388
Others current liabilities	530	2,558	2,757	2,701	2,559
Total LT debt	**40,106**	**49,097**	**65,277**	**35,319**	**30,494**
Others LT liabilities	2,597	5,504	6,933	6,873	6,474
Total liabilities	**49,581**	**74,871**	**95,288**	**58,529**	**51,793**
Minority interest	1	7,520	7,937	8,384	8,668
Preferreds shares	0	0	0	0	0
Paid-up capital	14,500	14,500	14,500	22,192	22,192
Share premium	1,532	1,532	1,532	24,609	24,609
Warrants	0	0	0	0	0
Surplus	(10,547)	(5,070)	(5,070)	(5,070)	(5,070)
Retained earnings	**55,036**	**59,328**	**64,752**	**70,590**	**78,027**
Shareholders' equity	60,521	70,290	75,714	112,321	119,759
Liabilities & equity	**110,103**	**152,681**	**178,939**	**179,234**	**180,219**

Sources: Company data, Thanachart estimates

Ratchaburi Electricity Generating

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Earnings before tax	1,706	1,527	3,398	3,392	3,712
Tax paid	(532)	(167)	(1,024)	(1,015)	(1,115)
Depreciation & amortization	1,833	2,144	2,129	2,058	1,990
Chg In w orking capital	(420)	(1,195)	1,304	26	133
Chg In other CA & CL / minorities	3,996	13,066	7,892	8,708	9,615
Cash flow from operations	**6,583**	**15,375**	**13,699**	**13,169**	**14,333**
Capex	(6,876)	(8,558)	(1,713)	(2,400)	(1,713)
Right of use	0	0	0	0	0
ST loans & investments	693	(471)	0	0	0
LT loans & investments	(7,305)	(8,337)	(29,874)	(1,874)	(625)
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	3,537	(16,301)	(1,864)	(1,214)	(1,570)
Cash flow from investments	**(9,951)**	**(33,666)**	**(33,451)**	**(5,488)**	**(3,907)**
Debt financing	9,821	17,686	20,634	(36,608)	(5,896)
Capital increase	0	0	0	30,769	0
Dividends paid	(3,480)	(3,480)	(4,417)	(4,843)	(4,529)
Warrants & other surplus	(1,699)	5,477	0	0	0
Cash flow from financing	**4,642**	**19,683**	**16,217**	**(10,681)**	**(10,426)**
Free cash flow	**(292)**	**6,817**	**11,987**	**10,769**	**12,621**

VALUATION

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Normalized PE (x)	12.3	10.2	6.8	8.5	8.1
Normalized PE - at target price (x)	13.0	10.7	7.2	9.0	8.5
PE (x)	10.7	8.6	6.8	8.5	8.1
PE - at target price (x)	11.2	9.1	7.2	9.0	8.5
EV/EBITDA (x)	22.9	25.0	20.1	19.5	21.9
EV/EBITDA - at target price (x)	23.7	25.8	20.6	20.2	22.7
P/BV (x)	1.1	1.0	0.9	0.9	0.8
P/BV - at target price (x)	1.2	1.0	0.9	0.9	0.9
P/CFO (x)	10.2	4.4	4.9	6.9	6.8
Price/sales (x)	2.8	2.5	2.3	2.3	2.4
Dividend yield (%)	5.2	5.1	8.1	4.4	4.9
FCF Yield (%)	(0.4)	10.1	17.8	11.8	13.0
(Bt)					
Normalized EPS	3.5	4.3	6.4	5.1	5.4
EPS	4.1	5.1	6.4	5.1	5.4
DPS	2.3	2.2	3.5	1.9	2.2
BV/share	39.4	45.8	49.3	50.6	54.0
CFO/share	4.3	10.0	8.9	6.3	6.5
FCF/share	(0.2)	4.4	7.8	5.2	5.7

Sources: Company data, Thanachart estimates

Ratchaburi Electricity Generating

FINANCIAL RATIOS

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Growth Rate					
Sales (%)	(10.8)	9.1	12.3	(0.9)	(5.8)
Net profit (%)	5.4	23.6	26.6	8.5	12.0
EPS (%)	5.4	23.6	26.6	(19.9)	5.1
Normalized profit (%)	(9.7)	20.6	49.7	8.5	12.0
Normalized EPS (%)	(9.7)	20.6	49.7	(19.9)	5.1
Dividend payout ratio (%)	55.4	44.0	55.0	40.0	40.0
Operating performance					
Gross margin (%)	12.1	11.3	15.4	15.2	14.6
Operating margin (%)	7.4	6.7	11.3	10.9	10.0
EBITDA margin (%)	12.8	12.5	16.4	15.9	15.0
Net margin (%)	3.4	3.6	5.7	5.7	6.6
D/E (incl. minor) (x)	0.7	0.8	1.0	0.4	0.3
Net D/E (incl. minor) (x)	0.5	0.6	0.9	0.3	0.2
Interest coverage - EBIT (x)	1.6	1.3	2.0	2.2	2.9
Interest coverage - EBITDA (x)	2.8	2.5	2.9	3.2	4.3
ROA - using norm profit (%)	5.2	5.0	5.9	6.0	6.7
ROE - using norm profit (%)	9.1	10.0	13.5	11.4	10.3
DuPont					
ROE - using after tax profit (%)	2.0	2.1	3.3	2.5	2.2
- asset turnover (x)	0.3	0.3	0.3	0.2	0.2
- operating margin (%)	9.5	9.1	13.8	13.2	13.0
- leverage (x)	1.8	2.0	2.3	1.9	1.5
- interest burden (%)	52.4	45.0	58.7	61.9	73.1
- tax burden (%)	69.0	88.3	70.0	70.0	70.0
WACC (%)	6.2	6.2	6.2	6.2	6.2
ROIC (%)	2.1	2.4	2.8	2.2	1.8
NOPAT (Bt m)	1,755	2,216	3,329	3,177	2,730
invested capital (Bt m)	93,560	119,561	146,981	149,980	151,521

Sources: Company data, Thanachart estimates

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