

19 NOVEMBER 2021

THAILAND / UTILITIES - RENEWABLES

BCPG BCPG TB

BUY

UNCHANGED

TARGET PRICE	THB17.00
CLOSE	THB13.10
UP/DOWNSIDE	+29.8%
PRIOR TP	THB17.00
CHANGE IN TP	UNCHANGED
TP vs CONSENSUS	+5.5%

No more earnings hiccups in 2023?

Clear strategic growth roadmap into 2022-23

From BCPG's conference call post-3Q21 results, we have identified three key drivers that should not only boost its net profit growth in 2021-23 but also make it more sustainable. First, we believe BCPG has secured sufficient growth projects to generate the earnings required to offset the net profit decline from the expiration of the adders for its 118MW solar farms in 2021-24. Second, BCPG is well positioned for the growth in the EV, energy storage system (ESS) and energy trading markets, ahead of the market liberalisation in Thailand. Finally, BCPG has a hidden asset in its accumulated carbon credit of 2mt, which could be worth USD100m, based on the current carbon credit market price of USD50/t.

NP growth to fully offset the adder-based earnings downside

After its 65% capital increase to raise THB11.4b via one RO, two PPs, and one ESOP, and with three warrants still outstanding (BCPG-W1, W2, and W3), BCPG has now secured an adequate number of growth projects to generate annual EBITDA of over THB3b, based on our estimate, to offset the EBITDA decline from the adder expiration of its solar farms in 2021-24. The growth projects include 1) two large-scale growth projects in the 600MW Monsoon wind farm (38% stake, COD in 2025); 2) a 14% stake in VRB Energy (VRB); and 3) 170MW solar farms in Taiwan (100%, COD in 2023-24). We estimate these projects will require a THB7.5b equity investment, thereby leaving BCPG with THB3.9b from the capital increase to fund additional growth projects.

Preparing for a future "smart world" and ESS growth

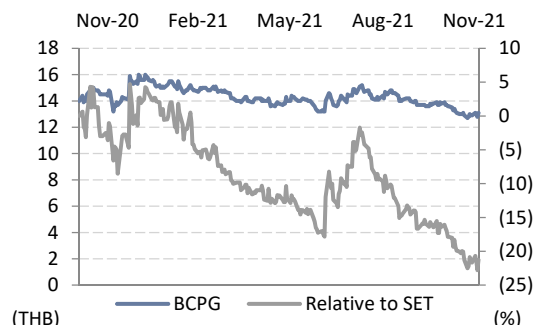
With its 14% share in VRB to grow its vanadium-based battery (VRFB) capacity from the current 50MW (200MWh) annually to 1.05GW (5GWh) by 2025, BCPG is ready to capture the projected exponential demand growth of ESS via its VRFB, which competitively fits with large-scale, grid-based, hybrid renewable and ESS power plants to serve the explosive demand for EVs.

No more growth gap

We maintain BUY and our SOTP-based TP of THB17. We believe BCPG has not only succeeded in filling its earnings gap from the adder-based solar farms but in also strengthening its net profit growth post-2022, with a clear strategic roadmap to add earnings from new projects using the cash raised from its capital increase.

KEY STOCK DATA

YE Dec (THB m)	2020	2021E	2022E	2023E
Revenue	4,231	4,637	5,440	4,693
Net profit	1,700	2,580	2,562	1,725
EPS (THB)	0.64	0.90	0.88	0.59
vs Consensus (%)	-	9.2	7.8	1.7
EBITDA	3,338	3,390	3,894	3,194
Core net profit	1,912	2,580	2,562	1,725
Core EPS (THB)	0.72	0.90	0.88	0.59
Chg. In EPS est. (%)	-	-	-	-
EPS growth (%)	(19.6)	24.4	(2.2)	(32.7)
Core P/E (x)	18.1	14.5	14.9	22.1
Dividend yield (%)	2.5	5.3	5.3	5.3
EV/EBITDA (x)	15.0	17.7	17.7	24.7
Price/book (x)	1.5	1.5	1.4	1.4
Net debt/Equity (%)	68.9	89.0	113.3	152.4
ROE (%)	10.1	10.8	9.8	6.5



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	(5.8)	(8.4)	(4.4)
Relative to country (%)	(6.2)	(13.9)	(21.0)
Mkt cap (USD m)	1,163		
3m avg. daily turnover (USD m)	3.7		
Free float (%)	30		
Major shareholder	Bangchak Corporation Plc (70%)		
12m high/low (THB)	16.60/12.60		
Issued shares (m)	2,894.00		

Sources: Bloomberg consensus; FSSIA estimates



Suwat Sinsadok
 suwat.sin@fssia.com
 +66 2611 3558

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

Investment thesis

Bangchak Power (BCPG), a subsidiary of Bangchak Corporation (BCP TB, BUY), is a low-risk renewable power operator with a proven track record in solar farm development and operations in high-growth renewable power markets, including Thailand and Japan. BCPG currently has two main business operations: 1) solar farms in Thailand and Japan; and 2) subsidiaries that are exploring opportunities in the biomass business. BCPG's venture into geothermal power plants in Indonesia and hydropower plants and wind farms in Laos have been successful, and these strategic moves should sustain its earnings post-2022 when earnings from its high-margin solar farms in Thailand should start declining substantially due to the expiration of its electricity tariff adders. BCPG's geothermal assets should: 1) bolster its earnings; and 2) allow it to capture future growth opportunities in Indonesia's fast-growing power industry, given the low-cost and renewable nature of geothermal power plants.

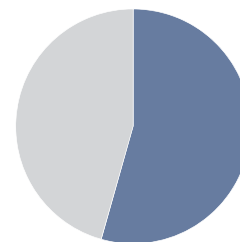
Company profile

BCPG is the flagship of the Bangchak Group, operating power plants at solar farms, wind farms and geothermal farms in Thailand, Indonesia and the Philippines, respectively.

www.bcpgroup.com

Principal activities (revenue, 2020)

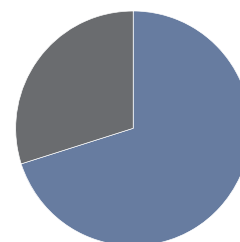
- Revenue from sale of electricity - 54.4 %
- Revenue from adder - 45.6 %



Source: BCPG

Major shareholders

- Bangchak Corporation Plc - 70.1 %
- Others - 29.9 %



Source: BCPG

Catalysts

Higher utilisation rates of power plants and rising demand for electricity in Thailand and China are key potential growth drivers.

Risks to our call

The downside risks to our SoTP-based TP include: 1) lower-than-expected demand for electricity in Thailand, the Philippines and Indonesia; and 2) government intervention by way of electricity tariff subsidies.

Event calendar

Date	Event
Feb 2022	4Q21/2021 results announcement

Key assumptions

	2021E	2022E	2023E
Dispatched power (GWh)	7,785	8,403	8,403
Capacity factor - wind farms (%)	38	38	38
Capacity factor - solar farms (%)	18	18	18
Capacity factor - geothermal (%)	93	94	95
Number of shares (m shares)	2,864	2,908	2,910

Source: FSSIA estimates

Earnings sensitivity

- For every 1% increase in gas price, we estimate 2021 earnings would decline 1.1%, and vice versa, all else being equal.
- For every 1% increase in interest expense, we estimate 2021 earnings would decline 1.5%, and vice versa, all else being equal.

Source: FSSIA estimates

Clearer and better strategic growth roadmap

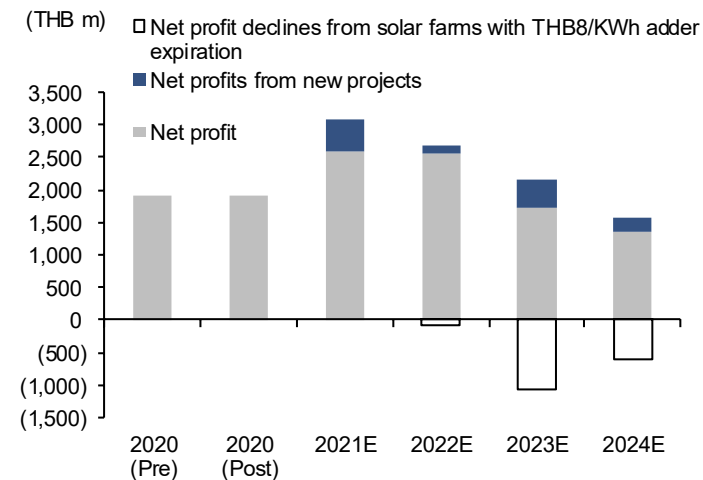
From BCPG's conference call post-3Q21 results, we have identified three key drivers that should not only boost its net profit growth in 2021-23 but also make it more sustainable.

First, we believe BCPG has secured sufficient growth projects to generate the earnings required to offset the net profit decline from the expiration of the adder for its 118MW solar farms in 2021-24.

Second, BCPG is well positioned for the growth in the EV, ESS and energy trading markets, ahead of the market liberalisation in Thailand.

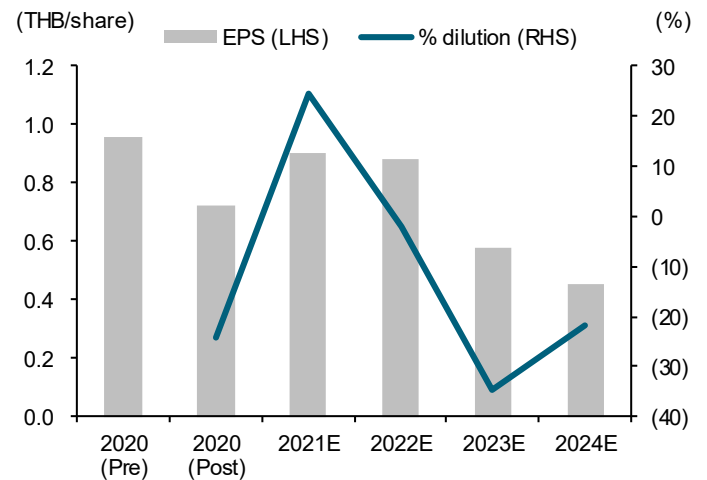
Finally, BCPG has a hidden asset in its accumulated carbon credit of 2mt, which could be worth USD100m, based on the current market price for carbon at USD50/t.

Exhibit 1: Net profit breakdown



Sources: BCPG; FSSIA estimates

Exhibit 2: EPS and % dilution



Sources: BCPG; FSSIA estimates

Sufficient earnings growth to offset declines in adder-based solar farms

The guidance BCPG provided in its conference call is the most positive development from the company since its announcement of a capital increase in Aug-21, which has raised two key questions for investors:

“Which new growth projects will BCPG invest in using the cash raised from the capital increase?”

“How will BCPG be able to fill in the large earnings sinkhole caused by the expiration of the adder subsidies from the government for its 118MW solar farms during 2021-24?”

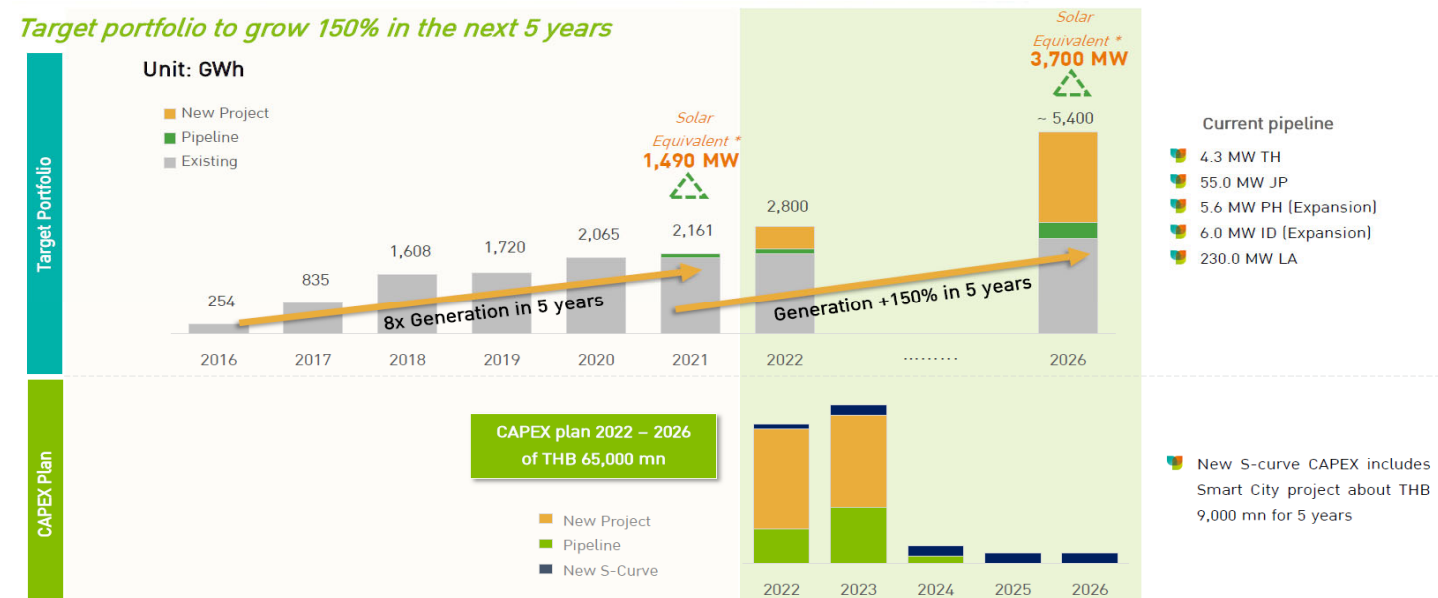
Exhibit 3: Project pipeline

Project	Location	Equity capacity (MW)	Net profit (THB m)	Value (THB/share)	COD
Nam San 3A & B	Laos	114	382	2.0	2021E
Solar farm (Peony)	Thailand	20	112	0.2	2021E
Wind farm (tariff hike)	Philippines	14	5	0.1	2021E
Solar rooftop	Thailand	15	10	0.0	2021E
Komagane	Japan	25	40	0.6	2022E
Yabuki	Japan	20	40	0.5	2022E
Chiba 1	Japan	20	18	0.6	2022E
Chiba 2	Japan	10	23	0.3	2022E
Wind farm (Monsoon)	Laos	228	410	5.7	2023E
Wind farm (Nabas)	Philippines	6	22	0.2	2023E
Geothermal Wayung #3	Indonesia	24	0	0.5	2024E
Geothermal (cost saving & tariff escalation)	Indonesia	158	230	2.2	2024E
Solar farms	Taiwan	170	510	4.0	2023-2H24E
Total		654	1,802	13.0	

Sources: BCPG; FSSIA estimates

We believe the answer is clear. BCPG has secured sufficient growth projects to generate the earnings required to offset the net profit decline from the expiration of the adders for its 118MW solar farms in 2021-24, in our estimation. BCPG now plans to spend capex totalling THB65b in 2022-26 to secure growth projects that will increase its capacity from 2,161MW in 2021 to 5.4GW by 2026, potentially driving its net profit up to THB4b-5b from our estimate of THB2.6b in 2021.

Exhibit 4: Capacity growth plan vs capex plan in 2022-26



Source: BCPG

We estimate that the net profit declines from the solar farm adder expirations will amount to THB0.2b in 2021, THB0.3b in 2022, THB0.7b in 2023, and THB0.6b in 2024, altogether totalling a THB1.8b net profit drop in four years.

However, we project BCPG’s committed growth projects, except the solar farms in Taiwan which are in the acquisition process, to generate EBITDA which would more than offset the EBITDA decline from the adder expirations in 2021-22. In addition, according to management, BCPG plans to further grow its EBITDA in 2022 by 30-50% y-y, likely from the 100% acquisition of the solar farms in Taiwan (170MW) and other M&A that remain undisclosed by BCPG.

Exhibit 5: EBITDA changes from adder expirations and new growth projects

Guidance	Actual	Plan	
	2020	2021	2022
EBITDA *			
CAPEX	THB 6,000 mn	THB 6,000 mn	THB 27,000 – 44,000 mn
Dividend policy	Not less than 40% of the Company’s net profit		
Financial covenant	<ul style="list-style-type: none"> Liability/Equity ≤ 3x DSCR ≥ 1.15x 		

Source: BCPG

After its 65% capital increase to raise THB11.4b via one rights offering (RO), two private placements (PPs), and one employee stock ownership plan (ESOP), and with three warrants still outstanding (BCPG-W1, W2, and W3), BCPG has now secured an adequate number of growth projects to generate annual EBITDA of over THB3b, based on our estimate, to offset the EBITDA decline from the adder expiration of its solar farms in 2021-24.

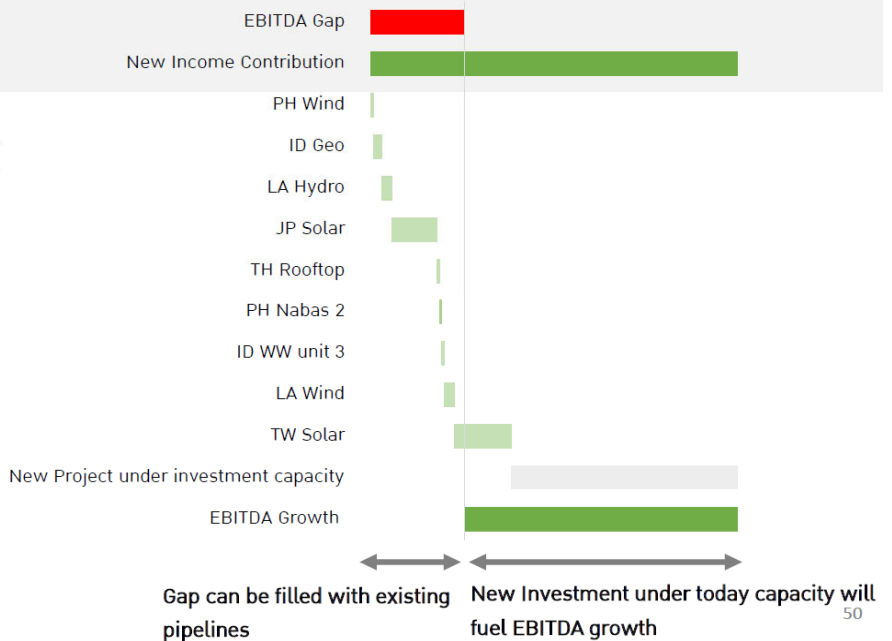
Exhibit 6: Growth projects to fill the EBITDA gap from the 118MW solar farms with adder expirations

EBITDA gap from adder expired can be filled with existing pipelines

Gap from adder expired →

Income contribution from existing pipelines

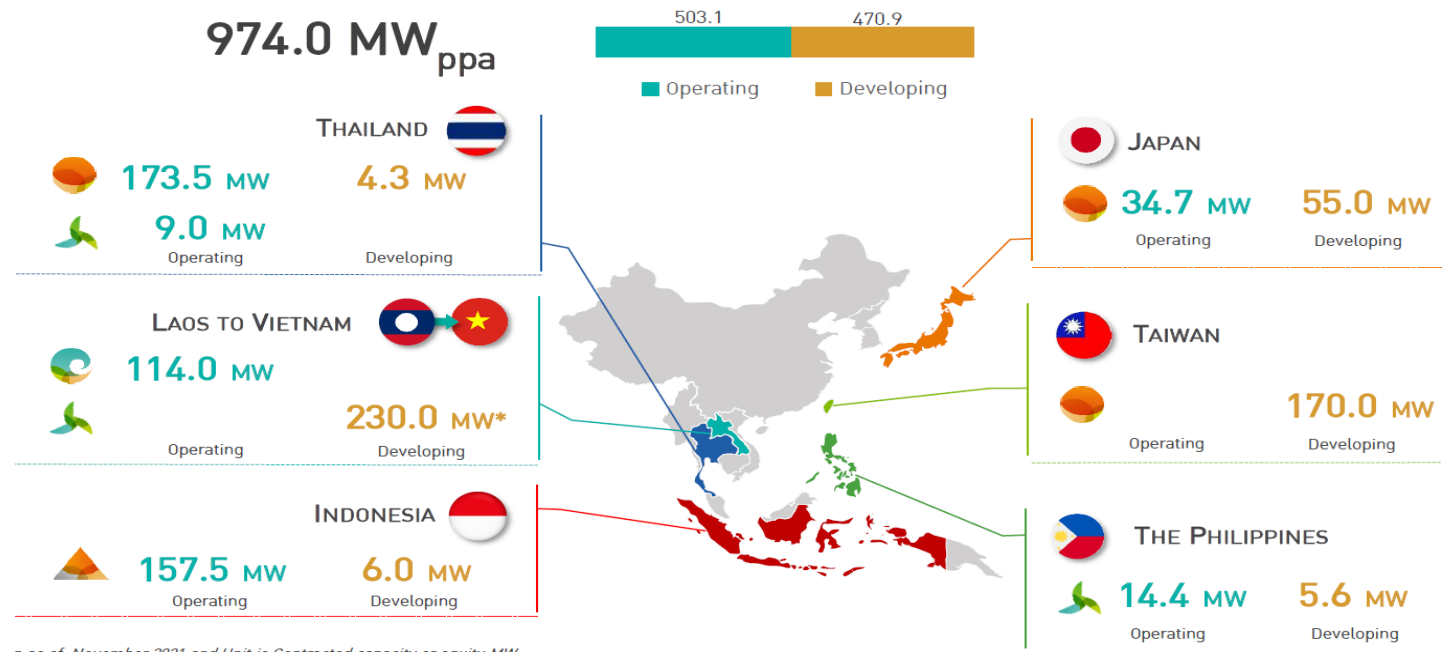
- PH Share Profit growth from price escalation & wind performance
- ID Share Profit growth from price escalation, interest exp. reduction.
- LA growth due to increase capacity factor and price adjustments on EVN COD in 2023
- Turning all JP pipeline (75 MW) into operation. COD Y2021 to Y2023
- Gradually COD of developing solar rooftop in pipelines 17 MW
- PH Nabas 2 COD 2023
- Share Profit from WW unit 3, The amortization decreased due to the extension of the PPA period.
- Monsoon 600 MW* Hold 38% COD 2025
- TW Solar 170 MW COD 2023, 2024



Source: BCPG

The growth projects include 1) two large-scale growth projects in the 600MW Monsoon wind farm (38% stake, COD in 2025); 2) a 14% stake in VRB Energy (VRB); and 3) 170MW solar farms in Taiwan (100%, COD in 2023-24). We estimate these projects will require a THB7.5b equity investment, thereby leaving BCPG with THB3.9b from the capital increase to fund additional growth projects.

Exhibit 7: Project locations by country



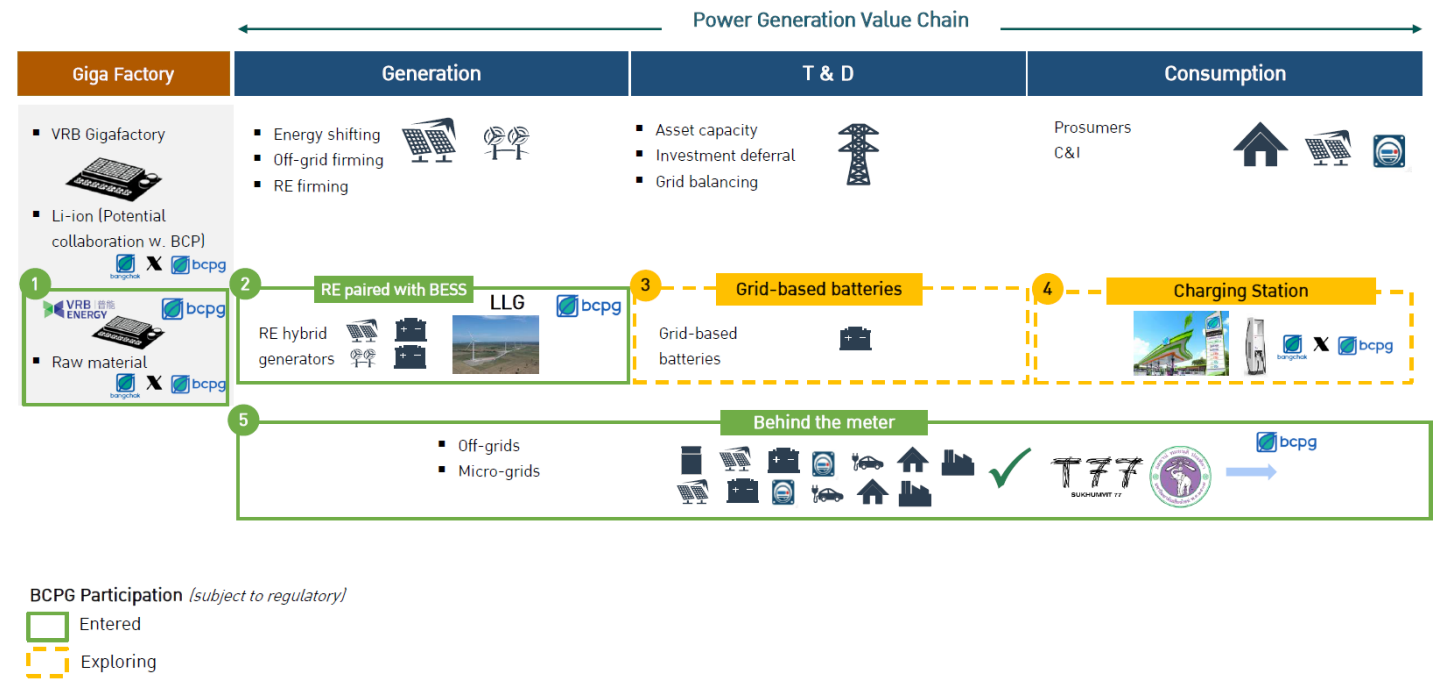
Source: BCPG

Preparing for a future “smart world” and ESS growth

Armed with its stake in VRB and its growing portfolio of renewable assets, both in type and geography, BCPG now aims to grow its business into downstream grid-based ESS for power plants, which are projected to grow exponentially in the next ten years, based on the projection by the US Energy Information Administration (EIA).

In addition, BCPG, via its parent company Bangchak Corporation (BCP TB, BUY), plans to install a number of EV charging stations at BCP’s oil stations located throughout Thailand. This should further enhance BCPG’s presence in the ESS and EV business value chain and adequately position BCPG to grow its earnings from the EV businesses in the next five years, according to management.

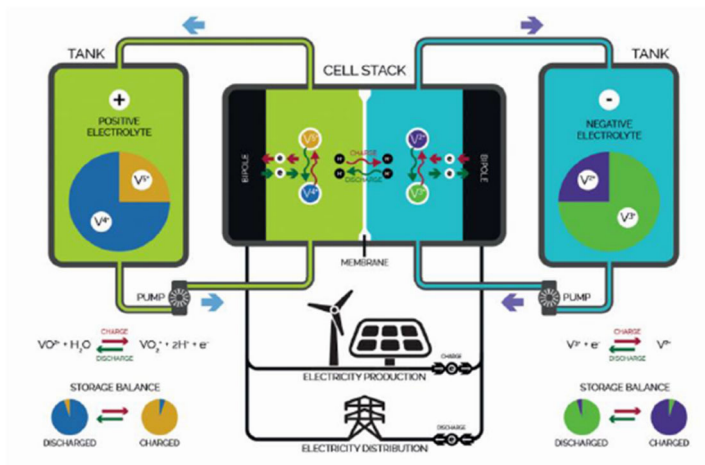
Exhibit 8: BCPG’s plan to enter the battery energy storage system value chain



Source: BCPG

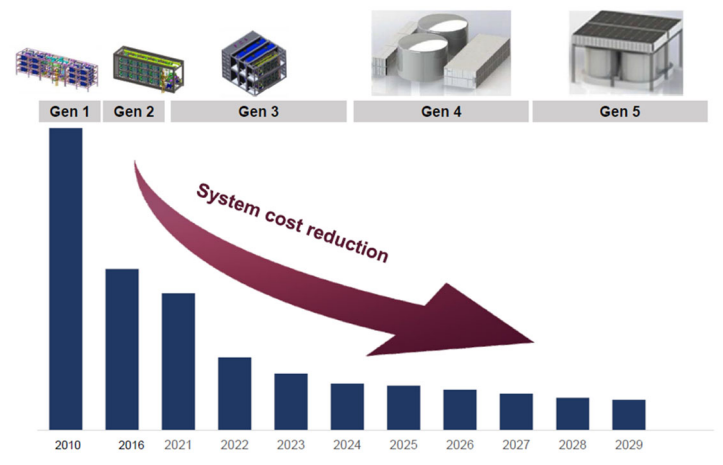
Strategic entry into a vanadium-based battery venture. With its 14% share in VRB to grow its VRFB capacity from the current 50MW (200MWh) annually to 1.05GW (5GWh) by 2025, BCPG is ready to capture the projected exponential demand growth of ESS via its VRFB, which competitively fits with large-scale, grid-based, hybrid renewable and ESS power plants to serve the explosive demand for EVs.

Exhibit 9: Vanadium redox battery



Source: BCPG

Exhibit 10: Battery cost trend



Source: BCPG

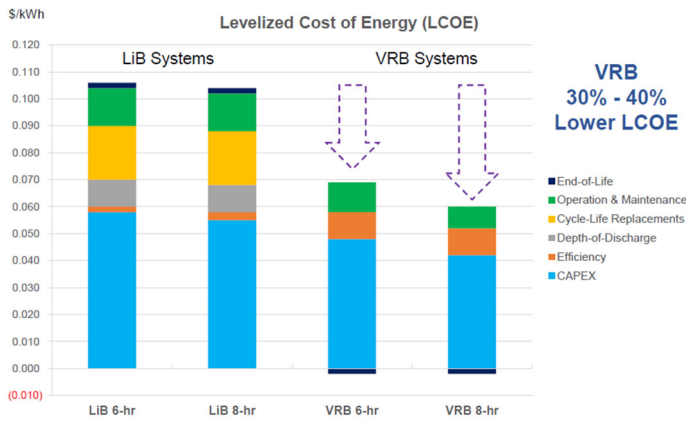
BCPG acquired a 14% share in VRB, which it announced on 2 Jul-21. We see three key positives from the acquisition that could boost BCPG's net profit growth outlook.

First, BCPG expects VRB, one of the world's largest and leading producers of vanadium redox flow batteries (VRFB), to grow its capacity from its current 50MW (200MWh) annually to 1.05GW (5GWh) by 2025.

Second, we think VRB is now at an inflection point to capture the projected exponential demand growth of VRFB in the next five years, potentially capturing up to 1/6 of the market share in China's fast-growing flow battery market that we project at 6GW by 2025.

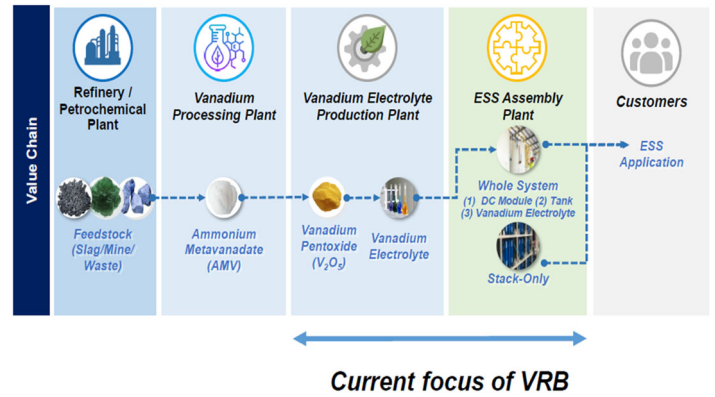
Third, BCPG could gain up to a THB0.7b net profit contribution from VRB in 2025, based on a 5GWh sales volume to generate USD0.2b in revenue and a USD70m net profit on a 35% net margin, as guided by management.

Exhibit 11: VRB – battery cost



Source: BCPG

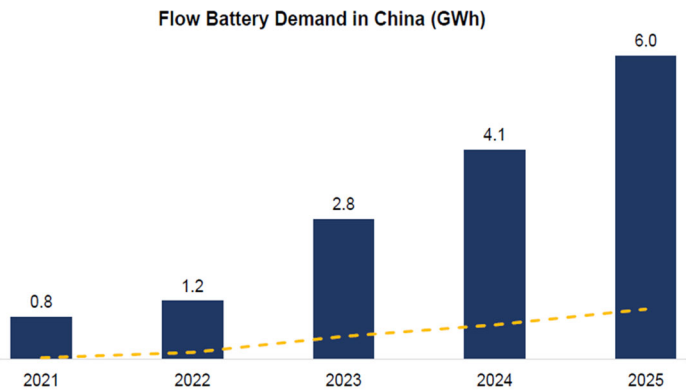
Exhibit 12: VRB – value chain



Source: BCPG

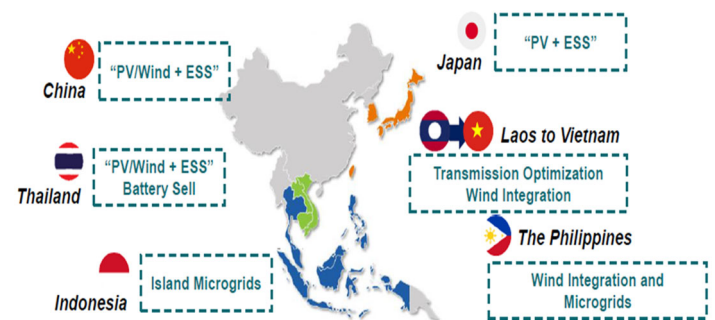
After the USD24m investment for its 14% stake in VRB post bond conversion into equity by mid-2022, BCPG indicated that VRB plans to accelerate its VRFB plant capacity from 50MW (a plant located in Shanghai) to 150MW (Hubei) in 2022, rising to 300MW in 2023 and eventually reaching its long-term target of 1.05GW capacity by 2025. BCPG expects to inject an additional USD10m for the new 100MW plant in Hubei, and VRB is planning to be listed to raise capital to fund its 300MW and 800MW VRFB plants in 2023-24, according to management

Exhibit 13: Battery demand in China



Source: BCPG

Exhibit 14: VRFB opportunities in BCPG's active markets



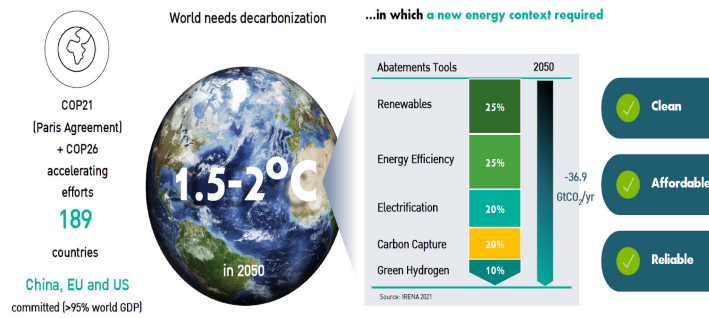
Source: BCPG

Hidden asset in carbon credit

According to management, BCPG has a hidden asset in its accumulated carbon credit of 2mt from its renewable power plants, which could be worth USD100m based on a USD50/t carbon credit price.

COP26 agreement. Although not legally binding, the COP26 pact will set the global agenda on climate change for the next decade to limit global warming to within 1.5C. However, the COP26 pact would likely only limit global warming to 2.4C, according to the EIA.

Exhibit 15: COP26 agreement



Sources: International Monetary Fund (IMF); World Economic Forum; EIA; International Organisation for Migration

Management believes that the carbon credit will translate into additional earnings for BCPG, given the tightening global carbon emissions policy agreed upon by 197 countries, including Thailand, China, the US, and India, during the COP26 climate conference in Glasgow, Scotland.

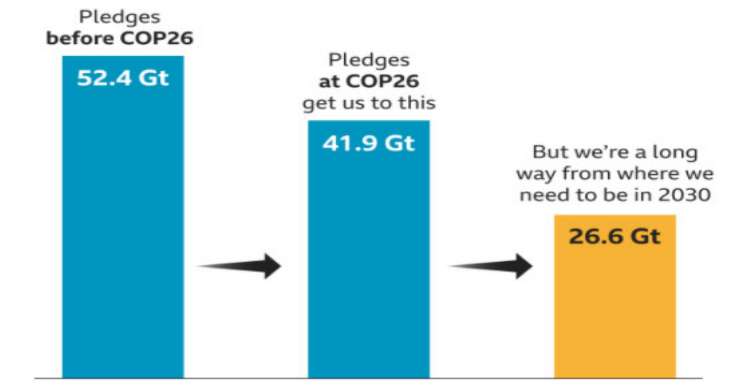
China and India have only agreed to the commitment to reduce carbon emissions while insisting on “phasing down” rather than “phasing out” coal-fired power plants and coal consumption – the key sources of global carbon emissions.

Exhibit 17: Wind farms



Source: [Energy Transitions Commission](#)

Exhibit 16: Carbon emission cuts needed to limit global warming to 1.5C



Source: [Energy Transitions Commission](#)

Exhibit 18: Solar farms

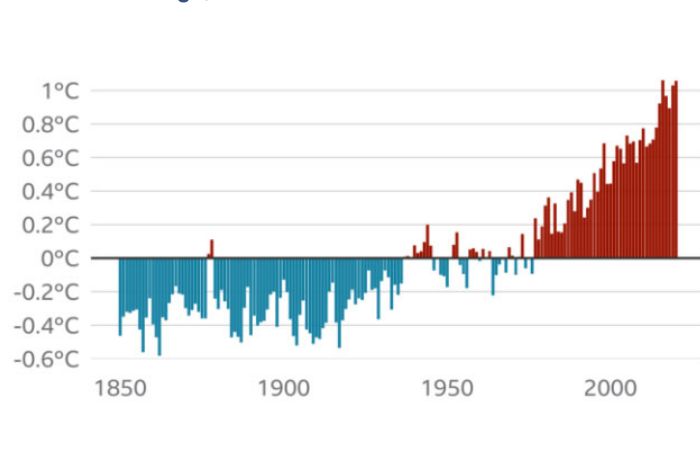


Source: [Energy Transitions Commission](#)

The key takeaways from the COP26 climate summit to limit global warming to 1.5C includes seven key ways to tackle climate change.

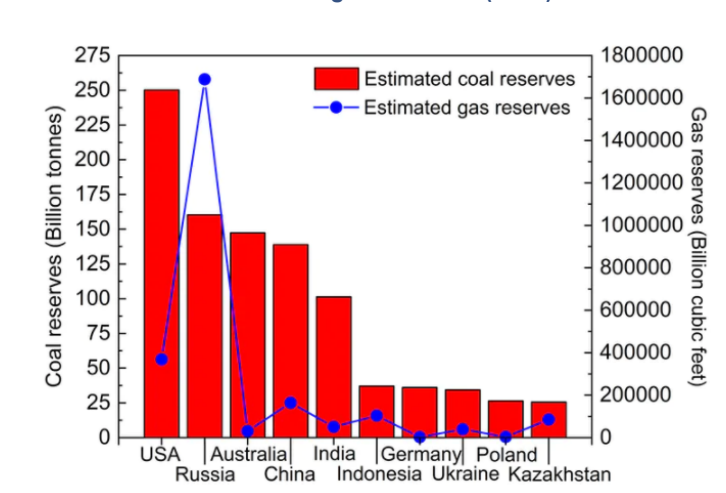
- **Keep fossil fuels in the ground.** This essentially prohibits coal mining and using fossil fuels such as oil, gas, and coal that release carbon dioxide into the atmosphere when burnt for their energy. Australia, the world’s leading coal exporter, has declined to sign a deal at the COP26 summit aimed at phasing out coal consumption.
- **Curb methane emissions,** mainly from “flaring” – the burning of natural gas during the oil extraction process. At COP26, nearly 100 countries agreed to cut methane emissions in a deal led by the US and EU, which aims to limit methane emissions by 30% from 2020 levels within 2030.
- **Higher renewable power.** The process called decarbonization, switching from fossil-based coal, gas, and oil for power generation to renewable energy, is critical for the reduction of carbon emissions. This is where ESS can play a significant role in stabilising the power generated from solar and wind farms by storing the excess power in ESS and releasing it when needed.
- **Reduce coal consumption,** which accounts for 40% of global CO2 emissions. However, China and India are still reluctant to fully commit to the coal consumption cuts and only agreed to a weaker commitment to “phase down”, not “phase out” coal consumption.
- **Phase out or abandon petroleum fuel consumption** and replace internal combustion engine vehicles with EVs. The idea remains highly challenging to achieve. Switching from the current internal combustion engine (ICE) vehicles using the refined oil products of diesel, gasoline, jet, and fuel oil, to EVs that predominantly use power generated from renewable and ESS sources will be key.
- **Plant more trees.** Leaders from over 100 countries, with about 85% of the world’s forests, promised to curb deforestation and plant more trees by 2030 to expand forest growth, the best method of soaking up carbon from the atmosphere.
- **Remove greenhouse gases from the air.** The emerging technologies that artificially remove CO2 from the atmosphere, called “carbon capture utilisation and storage” (CCUS) technology is becoming more prevalent worldwide.
- **Provide financial aid to poorer countries.** Many coal-dependent countries are facing severe energy and power shortages that could affect the poor. The agreement pledged to significantly increase financial support to help poorer countries cope with the impact of climate change and make the switch to clean energy. The prospective amount was raised to USD1tr by 2025 for developed countries to help poorer countries, up from the USD100b pledged by 2020, which was missed.

Exhibit 19: Annual mean land and ocean temperature above or below average, 1850 to 2020



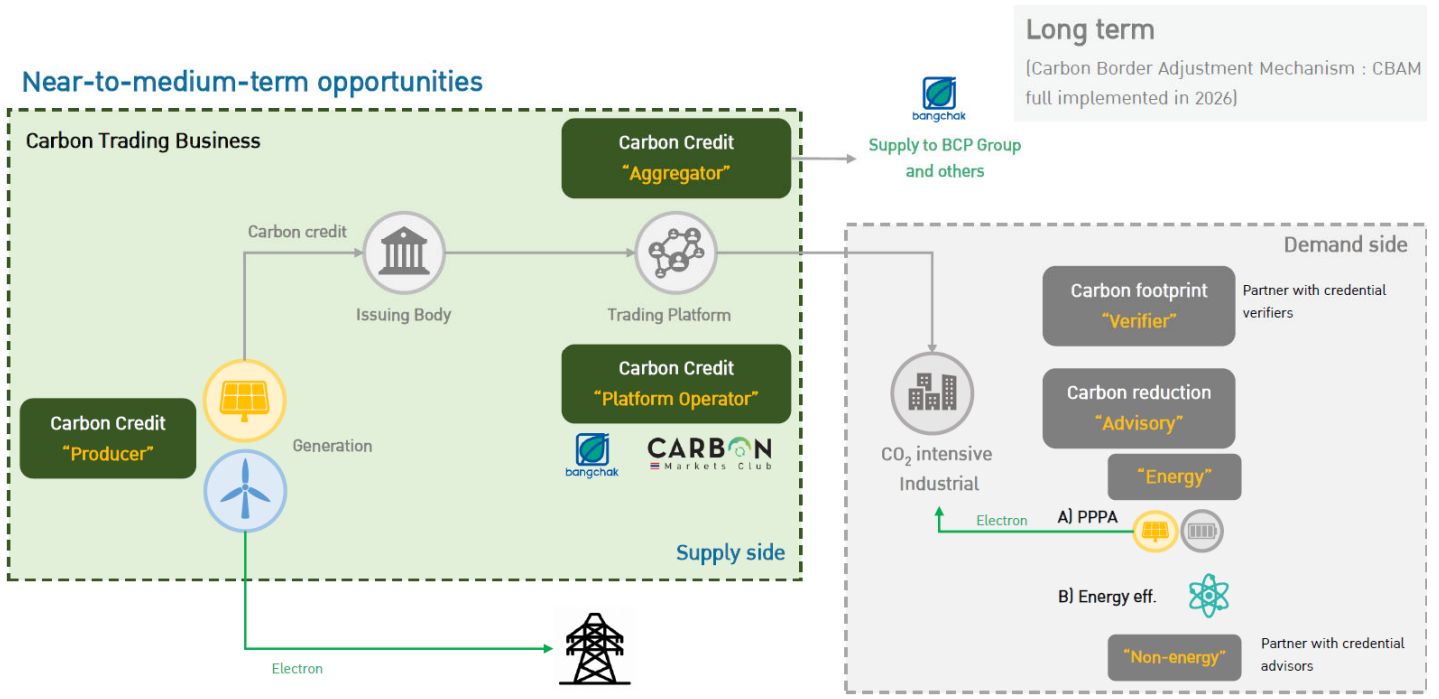
Note: Average calculated from 1951 to 1980
Sources: University of California, Berkeley

Exhibit 20: Global coal and gas reserves (2020)



Source: EIA

Exhibit 21: Potential carbon credit trading



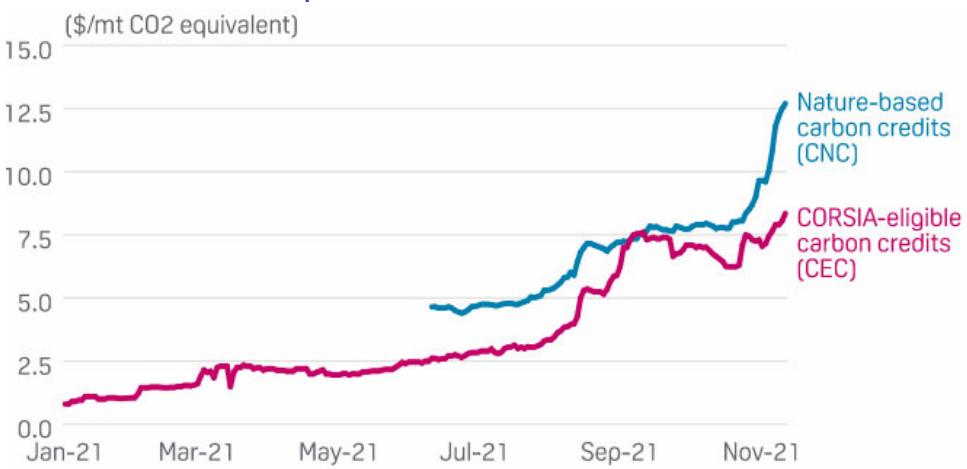
Source: BCPG

Under the COP26 pact, representatives struck a deal on Article 6 of the 2015 Paris Agreement, which gives any country hosting an emissions reduction project the tools to decide if the reductions will be counted toward its own target or sold elsewhere for other purposes, allowing for more transparent trading on carbon credits.

In 2021, there has been significant growth in every carbon market, with a near doubling of voluntary market transactions and the launch of China's national Emission Trading System (ETS), which accounts for 40% of China's carbon emissions. Markets in Europe, California, Quebec, New Zealand, Australia and the Regional Greenhouse Gas Initiative (RGGI) – the first mandatory market-based program in the US to reduce greenhouse gas emissions – have seen record prices in Nov-21 after the COP26 summit.

For BCPG, we think its accumulated carbon credit of 2mt could be worth worth USD100m based on a USD50/t carbon credit price.

Exhibit 22: Carbon credit prices



Source: Bloomberg

No more concerns over earnings hiccups in 2021-24

We maintain BUY and our SOTP-based TP of THB17. We believe BCPG has not only succeeded in filling its earnings gap from the adder-based solar farms but in also strengthening its net profit growth post-2022, with a clear strategic roadmap to add earnings from new projects using the cash raised from its capital increase.

While we maintain our net profit and EPS forecasts in 2021-23, pending the completion of the acquisition of the solar farms in Taiwan, we think the earnings upside from the large-scale solar farms potentially growing to over 1GW in size, expanded from the 170MW current capacity, should be a key earnings catalyst for BCPG post-2022 when we still expect its earnings to decline without any new committed growth projects.

Investors have been concerned over BCPG's net profit outlook post-2022 when the adder revenue from its solar farms expires. We believe BCPG's clearer strategic roadmap to add earnings from new growth projects using the cash raised from its capital increase should gradually reduce the combined 65% EPS dilution impact and alleviate concerns.

We expect BCPG to acquire or announce additional new growth projects in 4Q21-2023, backed by the funding from its capital increase to secure additional earnings from operating projects that we expect to be acquired in Vietnam and other Asian countries.

Exhibit 23: SOTP valuation

Cost of equity assumptions	(%)	Cost of debt assumptions (%)	(%)
Risk-free rate	2.3	Pretax cost of debt	3.5
Market risk premium	8.5	Marginal tax rate	20.0
Stock beta	0.80		
Cost of equity, Ke	9.1	Net cost of debt, Kd	2.8
Weight applied	20.0	Weight applied	80.0
WACC (%)	4.1		

SOP valuation estimate	(THB m)	(THB/share)	Comments
Solar			
Thailand	14,125	4.9	WACC 4.1%, Risk-free rate 2.3%, Risk premium 8.5%, zero terminal growth
Japan	12,192	4.2	WACC 2%, Risk-free rate 1%, Risk premium 2%, zero terminal growth
Total solar	26,317	9.0	
Wind - Philippines	3,146	1.1	WACC 5.0%, Risk-free rate 4%, Risk premium 5.5%, zero terminal growth
Geothermal - Indonesia	28,730	9.9	WACC 5.0%, Risk-free rate 4%, Risk premium 5.5%, zero terminal growth
Hydro - Laos (Nam San 3A & B)	5,732	2.0	WACC 4.1%, Risk-free rate 2.3%, Risk premium 8.5%, zero terminal growth
Wind -Laos (Monsoon)	16,261	5.6	WACC 4.1%, Risk-free rate 2.3%, Risk premium 8.5%, zero terminal growth
Net debt	(30,564)	(10.5)	At end-2022E
Minorities	(112)	(0.0)	At end-2022E
Residual ordinary equity	49,510	17.0	

Sources: BCPG; FSSIA estimates

Financial Statements

BCPG

Profit and Loss (THB m) Year Ending Dec	2019	2020	2021E	2022E	2023E
Revenue	3,427	4,231	4,637	5,440	4,693
Cost of goods sold	(271)	(358)	(567)	(754)	(973)
Gross profit	3,155	3,873	4,070	4,685	3,720
Other operating income	14	11	16	24	37
Operating costs	(575)	(546)	(696)	(816)	(563)
Operating EBITDA	2,594	3,338	3,390	3,894	3,194
Depreciation	(690)	(1,078)	(757)	(1,030)	(913)
Goodwill amortisation	0	0	0	0	0
Operating EBIT	1,904	2,260	2,634	2,864	2,281
Net financing costs	(466)	(586)	(541)	(800)	(1,098)
Associates	355	270	569	592	605
Recurring non-operating income	355	270	569	592	605
Non-recurring items	(96)	(212)	0	0	0
Profit before tax	1,697	1,732	2,662	2,656	1,787
Tax	8	(33)	(58)	(75)	(46)
Profit after tax	1,705	1,700	2,604	2,581	1,741
Minority interests	1	1	(23)	(19)	(16)
Preferred dividends	0	0	0	0	0
Other items	-	-	-	-	-
Reported net profit	1,706	1,700	2,580	2,562	1,725
Non-recurring items & goodwill (net)	96	212	0	0	0
Recurring net profit	1,801	1,912	2,580	2,562	1,725
Per share (THB)					
Recurring EPS *	0.90	0.72	0.90	0.88	0.59
Reported EPS	0.85	0.64	0.90	0.88	0.59
DPS	0.60	0.33	0.70	0.70	0.70
Diluted shares (used to calculate per share data)	1,999	2,640	2,864	2,908	2,908
Growth					
Revenue (%)	3.2	23.5	9.6	17.3	(13.7)
Operating EBITDA (%)	(22.7)	28.7	1.6	14.8	(18.0)
Operating EBIT (%)	(28.5)	18.7	16.5	8.7	(20.4)
Recurring EPS (%)	(18.9)	(19.6)	24.4	(2.2)	(32.7)
Reported EPS (%)	0.8	(24.5)	39.9	(2.2)	(32.7)
Operating performance					
Gross margin inc. depreciation (%)	71.9	66.1	71.4	67.2	59.8
Gross margin of key business (%)	71.9	66.1	71.4	67.2	59.8
Operating EBITDA margin (%)	75.7	78.9	73.1	71.6	68.0
Operating EBIT margin (%)	55.6	53.4	56.8	52.6	48.6
Net margin (%)	52.6	45.2	55.6	47.1	36.8
Effective tax rate (%)	-0.6	1.9	2.8	3.6	3.9
Dividend payout on recurring profit (%)	66.6	45.6	77.7	79.5	118.1
Interest cover (X)	4.8	4.3	5.9	4.3	2.6
Inventory days	-	-	-	-	-
Debtor days	73.9	80.2	120.9	149.3	227.0
Creditor days	1,053.9	577.0	-	-	-
Operating ROIC (%)	11.4	12.5	10.4	7.6	4.6
ROIC (%)	5.7	5.5	5.8	5.1	3.6
ROE (%)	11.8	10.1	10.8	9.8	6.5
ROA (%)	6.3	5.4	5.9	5.7	4.0
* Pre-exceptional, pre-goodwill and fully diluted					
Revenue by Division (THB m)					
Revenue from sale of electricity	1,437	2,301	2,765	3,624	2,932
Revenue from adder	1,990	1,930	1,872	1,816	1,761
Rendering of service					

Sources: BCPG; FSSIA estimates

Financial Statements

BCPG

Cash Flow (THB m) Year Ending Dec	2019	2020	2021E	2022E	2023E
Recurring net profit	1,801	1,912	2,580	2,562	1,725
Depreciation	690	1,078	757	1,030	913
Associates & minorities	355	270	569	592	605
Other non-cash items	-	-	-	-	-
Change in working capital	441	(881)	(590)	(656)	(724)
Cash flow from operations	3,287	2,379	3,316	3,527	2,519
Capex - maintenance	(690)	(1,078)	(757)	(1,030)	(913)
Capex - new investment	(730)	(992)	(9,243)	(8,970)	(9,087)
Net acquisitions & disposals	(123)	1,901	0	0	0
Other investments (net)	(5,073)	(3,613)	569	592	605
Cash flow from investing	(6,617)	(3,783)	(9,431)	(9,408)	(9,395)
Dividends paid	(1,199)	(871)	(1,594)	(2,022)	(2,037)
Equity finance	0	0	0	0	0
Debt finance	4,314	6,787	(2,435)	7,080	11,591
Other financing cash flows	(764)	5,182	671	(93)	(1,193)
Cash flow from financing	2,350	11,097	(3,358)	4,965	8,361
Non-recurring cash flows	-	-	-	-	-
Other adjustments	0	0	0	0	0
Net other adjustments	0	0	0	0	0
Movement in cash	(980)	9,693	(9,474)	(916)	1,485
Free cash flow to firm (FCFF)	(2,762.08)	(583.92)	(5,352.09)	(5,047.80)	(5,763.11)
Free cash flow to equity (FCFE)	219.65	10,564.49	(7,879.77)	1,105.95	3,521.58

Per share (THB)

FCFF per share	(0.95)	(0.20)	(1.85)	(1.74)	(1.99)
FCFE per share	0.08	3.65	(2.72)	0.38	1.22
Recurring cash flow per share	1.42	1.23	1.36	1.44	1.11

Balance Sheet (THB m) Year Ending Dec	2019	2020	2021E	2022E	2023E
Tangible fixed assets (gross)	16,643	18,313	28,313	38,313	48,313
Less: Accumulated depreciation	(2,967)	(3,645)	(4,402)	(5,432)	(6,345)
Tangible fixed assets (net)	13,676	14,668	23,911	32,881	41,968
Intangible fixed assets (net)	7,002	11,314	11,314	11,314	11,314
Long-term financial assets	-	-	-	-	-
Invest. in associates & subsidiaries	13,624	11,723	11,723	11,723	11,723
Cash & equivalents	1,445	11,138	1,665	748	2,233
A/C receivable	640	1,219	1,854	2,598	3,240
Inventories	0	0	0	0	0
Other current assets	367	135	148	174	150
Current assets	2,453	12,493	3,667	3,520	5,623
Other assets	382	1,022	1,022	1,022	1,022
Total assets	37,137	51,220	51,637	60,460	71,650
Common equity	15,506	22,480	25,252	26,862	26,551
Minorities etc.	49	69	92	112	128
Total shareholders' equity	15,555	22,549	25,344	26,974	26,679
Long term debt	16,026	23,219	20,439	27,140	38,313
Other long-term liabilities	568	1,405	1,405	1,405	1,405
Long-term liabilities	16,594	24,625	21,844	28,545	39,719
A/C payable	1,132	0	0	0	0
Short term debt	3,855	3,448	3,793	4,172	4,590
Other current liabilities	0	598	655	769	663
Current liabilities	4,987	4,046	4,448	4,941	5,253
Total liabilities and shareholders' equity	37,137	51,220	51,637	60,460	71,650
Net working capital	(124)	757	1,347	2,003	2,727
Invested capital	34,559	39,484	49,317	58,943	68,754

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

Per share (THB)

Book value per share	7.76	8.51	8.82	9.24	9.13
Tangible book value per share	4.25	4.23	4.87	5.35	5.24

Financial strength

Net debt/equity (%)	118.5	68.9	89.0	113.3	152.4
Net debt/total assets (%)	49.6	30.3	43.7	50.6	56.8
Current ratio (x)	0.5	3.1	0.8	0.7	1.1
CF interest cover (x)	3.0	20.7	3.5	13.6	12.5

Valuation	2019	2020	2021E	2022E	2023E
Recurring P/E (x) *	14.5	18.1	14.5	14.9	22.1
Recurring P/E @ target price (x) *	18.9	23.5	18.9	19.3	28.7
Reported P/E (x)	15.4	20.3	14.5	14.9	22.1
Dividend yield (%)	4.6	2.5	5.3	5.3	5.3
Price/book (x)	1.7	1.5	1.5	1.4	1.4
Price/tangible book (x)	3.1	3.1	2.7	2.5	2.5
EV/EBITDA (x) **	17.2	15.0	17.7	17.7	24.7
EV/EBITDA @ target price (x) **	20.2	18.1	21.0	20.6	28.3
EV/invested capital (x)	1.3	1.3	1.2	1.2	1.1

* Pre-exceptional, pre-goodwill and fully diluted ** EBITDA includes associate income and recurring non-operating income

Sources: BCPG; FSSIA estimates

Corporate Governance report of Thai listed companies 2020

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

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

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

Description

Score Range

Excellent

90-100

Very Good

80-89

Good

70-79

Disclaimer:

The disclosure of the survey results of the Thai Institute of Directors Association ("IOD") regarding corporate governance is made pursuant to the policy of the Office of the Securities and Exchange Commission. The survey of the IOD is based on the information of a company listed on the Stock Exchange of Thailand and the Market for Alternative Investment disclosed to the public and able to be accessed by a general public investor. The result, therefore, is from the perspective of a third party. It is not an evaluation of operation and is not based on inside information.

The survey result is as of the date appearing in the Corporate Governance Report of Thai Listed Companies. As a result, the survey results may be changed after that date. FSS International Investment Advisory Company Limited does not confirm nor certify the accuracy of such survey results.

* CGR scoring should be considered with news regarding wrong doing of the company or director or executive of the company such unfair practice on securities trading, fraud, and corruption SEC imposed a civil sanction against insider trading of director and executive; ** delisted

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

Anti-corruption Progress Indicator 2020

CERTIFIED										
2S	ADVANC	AI	AIE	AIRA	AKP	AMA	AMANAHA	AP	AQUA	ARROW
ASK	ASP	AYUD	B	BAFS	BANPU	BAY	BBL	BCH	BCP	BCPG
BGC	BGRIM	BJCHI	BKI	BLA	BPP	BROOK	BRR	BSBM	BTS	BWG
CEN	CENTEL	CFRESH	CGH	CHEWA	CHOTI	CHOW	CIG	CIMBT	CM	CMC
COL	COM7	CPALL	CPF	CPI	CPN	CSC	DCC	DELTA	DEMCO	DIMET
DRT	DTAC	DTC	EASTW	ECL	EGCO	FE	FNS	FPI	FPT	FSS
FTE	GBX	GC	GCAP	GEL	GFPT	GGC	GJS	GPSC	GSTEEL	GUNKUL
HANA	HARN	HMPRO	HTC	ICC	ICHI	IFS	INET	INSURE	INTUCH	IRPC
ITEL	IVL	K	KASET	KBANK	KBS	KCAR	KCE	KGI	KKP	KSL
KTB	KTC	KWC	L&E	LANNA	LHFG	LHK	LPN	LRH	M	MAKRO
MALEE	MBAX	MBK	MBKET	MC	MCOT	MFC	MFEC	MINT	MONO	MOONG
MPG	MSC	MTC	MTI	NBC	NEP	NINE	NKI	NMG	NNCL	NSI
NWR	OCC	OCEAN	OGC	ORI	PAP	PATO	PB	PCSGH	PDG	PDI
PDJ	PE	PG	PHOL	PL	PLANB	PLANET	PLAT	PM	PPP	PPPM
PPS	PREB	PRG	PRINC	PRM	PSH	PSL	PSTC	PT	PTG	PTT
PTTEP	PTTGC	PYLON	Q-CON	QH	QLT	QTC	RATCH	RML	RWI	S & J
SABINA	SAT	SC	SCB	SCC	SCCC	SCG	SCN	SEAOIL	SE-ED	SELIC
SENA	SGP	SIRI	SITHAI	SMIT	SMK	SMPC	SNC	SNP	SORKON	SPACK
SPC	SPI	SPRC	SRICHA	SSF	SSSC	SST	STA	SUSCO	SVI	SYNTEC
TAE	TAKUNI	TASCO	TBSP	TCAP	TCMC	TFG	TFI	TFMAMA	THANI	THCOM
THIP	THRE	THREL	TIP	TIPCO	TISCO	TKT	TTB	TMD	TMILL	TMT
TNITY	TNL	TNP	TNR	TOG	TOP	TPA	TPCORP	TPP	TRU	TSC
TSTH	TTCL	TU	TVD	TVI	TVO	TWPC	U	UBIS	UEC	UKEM
UOBKH	UWC	VGI	VIH	VNT	WACOAL	WHA	WHAUP	WICE	WIJK	XO
ZEN	TRUE									
DECLARED										
7UP	ABICO	AF	ALT	AMARIN	AMATA	AMATAV	ANAN	APURE	B52	BKD
BM	BROCK	BUI	CHO	CI	COTTO	DDD	EA	EFORL	EP	ERW
ESTAR	ETE	EVER	FSMART	GPI	ILINK	IRC	J	JKN	JMART	JMT
JSP	JTS	KWG	LDC	MAJOR	META	NCL	NOBLE	NOK	PK	PLE
ROJNA	SAAM	SAPPE	SCI	SE	SHANG	SINGER	SKR	SPALI	SSP	STANLY
SUPER	SYNEX	THAI	TKS	TOPP	TRITN	TTA	UPF	UV	WIN	ZIGA

Level	
Certified	This level indicates practical participation with thoroughly examination in relation to the recommended procedures from the audit committee or the SEC's certified auditor, being a certified member of Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) or already passed examination to ensure independence from external parties.
Declared	This level indicates determination to participate in the Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC)

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Note: Companies participating in Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) under Thai Institute of Directors (as of June 24, 2019) are categorised into: 1) companies that have declared their intention to join CAC, and; 2) companies certified by CAC.

Source: The Securities and Exchange Commission, Thailand; * FSSIA's compilation

GENERAL DISCLAIMER

ANALYST(S) CERTIFICATION

Suwat Sinsadok FSS International Investment Advisory Securities Co., Ltd

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

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History of change in investment rating and/or target price

BCPG (BCPG TB)



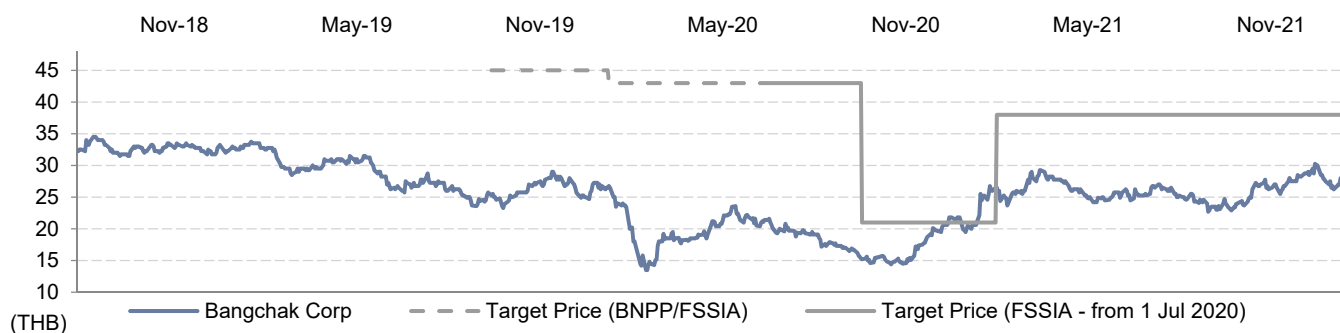
Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
10-Mar-2020	BUY	24.00	01-Sep-2020	BUY	17.40	21-Jul-2021	BUY	23.00
12-May-2020	BUY	24.00	18-Feb-2021	BUY	17.40	31-Aug-2021	BUY	17.00
21-Aug-2020	BUY	24.00	13-Jul-2021	BUY	23.00			

Suwat Sinsadok started covering this stock from 15-Nov-2018

Price and TP are in local currency

Source: FSSIA estimates

Bangchak Corp (BCP TB)



Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
08-Nov-2019	BUY	45.00	24-Sep-2020	BUY	21.00	-	-	-
20-Feb-2020	BUY	43.00	18-Jan-2021	BUY	38.00			

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

Price and TP are in local currency

Source: FSSIA estimates

Company	Ticker	Price	Rating	Valuation & Risks
BCPG	BCPG TB	THB 13.10	BUY	The downside risks to our SoTP-based TP include: 1) lower-than-expected demand for electricity in Thailand, the Philippines and Indonesia; and 2) government intervention by way of electricity tariff subsidies.
Bangchak Corp	BCP TB	THB 26.25	BUY	The downside risks to our SoTP-based TP include: 1) lower-than-expected demand for petroleum products; 2) higher crude premiums; and 3) unplanned shutdowns of the company's refinery plants.

Source: FSSIA estimates

Additional Disclosures

Target price history, stock price charts, valuation and risk details, and equity rating histories applicable to each company rated in this report is available in our most recently published reports. You can contact the analyst named on the front of this note or your representative at Finansia Syrus Securities Public Company Limited

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All share prices are as at market close on 18-Nov-2021 unless otherwise stated.

RECOMMENDATION STRUCTURE

Stock ratings

Stock ratings are based on absolute upside or downside, which we define as $(\text{target price}^* - \text{current price}) / \text{current price}$.

BUY (B). The upside is 10% or more.

HOLD (H). The upside or downside is less than 10%.

REDUCE (R). The downside is 10% or more.

Unless otherwise specified, these recommendations are set with a 12-month horizon. Thus, it is possible that future price volatility may cause a temporary mismatch between upside/downside for a stock based on market price and the formal recommendation.

* In most cases, the target price will equal the analyst's assessment of the current fair value of the stock. However, if the analyst doesn't think the market will reassess the stock over the specified time horizon due to a lack of events or catalysts, then the target price may differ from fair value. In most cases, therefore, our recommendation is an assessment of the mismatch between current market price and our assessment of current fair value.

Industry Recommendations

Overweight. The analyst expects the fundamental conditions of the sector to be positive over the next 12 months.

Neutral. The analyst expects the fundamental conditions of the sector to be maintained over the next 12 months.

Underweight. The analyst expects the fundamental conditions of the sector to be negative over the next 12 months.

Country (Strategy) Recommendations

Overweight (O). Over the next 12 months, the analyst expects the market to score positively on two or more of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.

Neutral (N). Over the next 12 months, the analyst expects the market to score positively on one of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.

Underweight (U). Over the next 12 months, the analyst does not expect the market to score positively on any of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.