

BUY (From: SELL)**TP: Bt 15.00**

(From: Bt 13.50)

Change in Recommendation

Upside : 19.0%

29 NOVEMBER 2021

BCPG Pcl (BCPG TB)**Green energy play**

We upgrade BCPG to BUY after lifting our TP to Bt15 to reflect its recent investments. BCPG is starting to spend the proceeds from its capital call last year to fuel growth with renewables as a key focus. We also see upside from more M&A and its moves into utility-based new S-curve businesses of battery for ESS and trading platforms.

**NUTTAPOP PRASITSUKSANT**662 – 483 8296
nuttapol.pra@thanachartsec.co.th**New investments propelling growth**

We lift our DCF-derived SOTP-based 12-month TP for BCPG to Bt15.0 (from Bt13.5) to reflect the value from its two recent investments. *First*, Bt1.0/share from completing its solar panel upgrade which lifts output from seven subsidized solar projects (35MW) in Thailand by 30%. *Second*, Bt0.5/share from entering the Taiwan market with a plan to develop 170MW of solar farms by 2024. We maintain Bt1.4/share in value from future M&As in our TP. We see upside risk to our valuation from a stronger policy by the Thai government to promote renewables after its recent COP26 vow, where BCPG would be a key beneficiary as a renewable operator and battery producer for energy storage. With 19% potential upside to our TP, we upgrade to BUY from Sell.

Still a 100% renewable-energy company

BCPG looks on track with its investment plan to offset expiring solar adders over 2022-24F. We project its operating capacity to double to 1.0GW in 2026F (487MW in 2021F) from the start-up of three major projects under development: 1) 72MW of solar farms in Japan in 2022-23, 2) 170MW of solar farms in Taiwan over 2023-24, and 3) a recently granted PPA for a 230MW wind farm in Laos due to launch in 2025. From this projected capacity growth, we expect BCPG to maintain its earnings base at Bt2.0bn in 2025F, even with nearly Bt2.0bn in revenue from adders gradually expiring over the next five years. Note that 1.0GW of its portfolio is purely renewable, ie, 43% solar, 28% wind, 18% geothermal, and 11% hydro, located in six countries.

More M&A in the pipeline

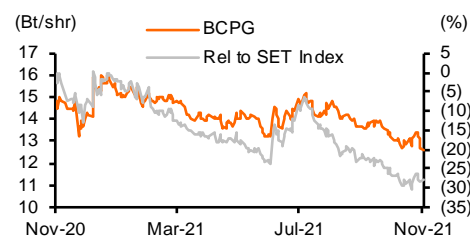
Our 21% earnings growth for BCPG in 2022F is based on its committed projects. Key drivers are solar farms in Japan starting up in 4Q21-1H22F and higher output from solar projects in Thailand after solar panel upgrades. We see potential earnings upside from BCPG's target to spend Bt30-40bn to acquire operating renewable assets in Asia over 2022-23, mostly solar and hydro projects, which would help ease the impact from its expiring adders and thus soften its earnings fall in 2023F.

Some 'hidden values'

We leave value from BCPG's moves into two new businesses as upside to our TP. 1) A Bt768m investment in convertible bonds (into a 13% equity stake) by VRB Energy, a Vanadium-based battery developer for energy storage operating two factories in China with a total annual capacity of 500MWh. 2) As we believe a carbon tax on imported goods will soon be implemented globally, we see its plan to develop a carbon credit trading platform, taking advantage of its pure-renewable business, and thus having plenty of carbon credits for sale, offering significant hidden value.

COMPANY VALUATION

Y/E Dec (Bt m)	2020A	2021F	2022F	2023F
Sales	4,231	4,707	5,719	5,245
Net profit	1,912	2,184	2,634	2,114
Consensus NP	—	2,445	2,466	1,756
Diff frm cons (%)	—	(10.7)	6.8	20.4
Norm profit	1,900	2,184	2,634	2,114
Prev. Norm profit	—	2,280	2,355	1,830
Chg frm prev (%)	—	(4.2)	11.9	15.5
Norm EPS (Bt)	0.8	0.7	0.9	0.7
Norm EPS grw (%)	3.7	(8.6)	20.6	(19.7)
Norm PE (x)	15.9	17.4	14.4	18.0
EV/EBITDA (x)	13.7	14.3	11.2	14.1
P/BV (x)	1.7	1.5	1.4	1.3
Div yield (%)	2.6	2.5	2.5	2.5
ROE (%)	10.0	9.1	10.0	7.6
Net D/E (%)	68.9	56.9	43.9	57.4

PRICE PERFORMANCE**COMPANY INFORMATION**

Price as of 29-Nov-21 (Bt)	12.60
Market Cap (US\$ m)	1,082.8
Listed Shares (m shares)	2,894.0
Free Float (%)	24.6
Avg Daily Turnover (US\$ m)	4.4
12M Price H/L (Bt)	16.00/12.70
Sector	Utilities
Major Shareholder	Bangchak Corp. Pcl 61.31%

Sources: Bloomberg, Company data, Thanachart estimates



New investments propelling growth

BUY after lifting our TP to Bt15 given two investments

We upgrade our rating on BCPG Pcl (BCPG) to BUY (from Sell) as we now see decent potential upside to our new DCF-derived SOTP-based 12-month TP of Bt15.0/share (from Bt13.5) after factoring in the value from its two recent investments and maintaining our potential value assumption from BCPG’s plan to acquire more operating renewable assets over the next few years.

1) Solar panel upgrade in Thailand

1) We estimate a higher generating yield at its subsidized solar farms after the completion of solar panel upgrades in 3Q21, increasing the value of its solar power business in Thailand by Bt1.0/share on our estimates.

2) Developing 170MW of solar farms in Taiwan

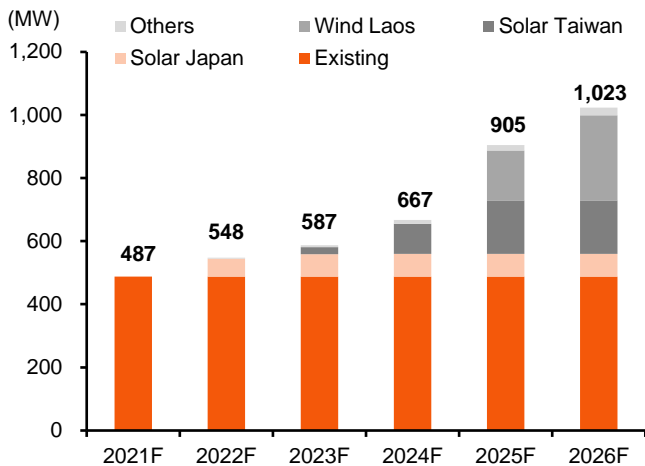
2) BCPG has set up a new entity in Taiwan to invest Bt11-12bn in 2022-23F to develop solar farms with a total capacity of 170MW. The company expects the projects to be granted 20-year power purchase contracts from Taiwan Power Company (Taipower), the state-owned sole electricity distributor in Taiwan. We estimate this to contribute a Bt0.5/share value to our TP for BCPG.

Plus potential value from more M&A

3) As BCPG plans to spend Bt30-40bn to grow its renewable portfolio through the acquisition of operating renewable power projects, likely solar farms and hydropower plants in Asia, we maintain a potential value of Bt1.4/share from those upcoming M&As in our TP.

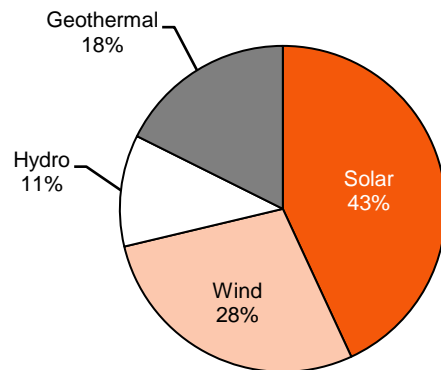
On top of the committed investments and potential acquisitions ahead, we also see more upside for BCPG from what we see as “hidden values” in the company. These are from its investment in a Vanadium-based battery for energy storage applications and net-positive carbon credits from being an electricity producer with 100% of its power sources from renewables, which could likely be sold to global carbon emitters in the near future.

Ex 1: Growing Renewable Portfolio



Sources: Company data, Thanachart estimates

Ex 2: Current Portfolio Mix (2021F)



Source: Company data

Solar panel upgrade raises output from 35MW solar farms by 23-42%

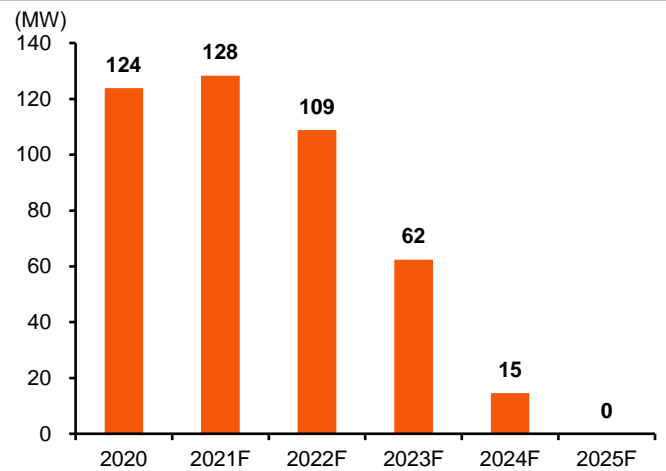
BCPG has completed its solar panel upgrade project, replacing old-technology fixed-angle solar panels with new photovoltaic modules that have a tracking system, for 35MW (from a total of 133MW) out of its subsidized solar capacity. The company expects this investment to raise production output from those plants by 23-42% from the same level of solar radiation availability. The move takes advantage of a significantly improved technological design and a much lower cost for new solar panels in order to dispose of old panels after nearly 10 years of deterioration. The payback period is likely to be less than one year since those solar plants would still be operating under Bt8.0/kWh adders into 2022-24. As the panel upgrade was completed in 3Q21, we expect the full-year contribution to be one of the key earnings growth drivers for BCPG in 2022F.

Ex 3: Completed Panel Upgrade For Plants With Adders

Projects	Contracted capacity (MW)	Upgraded capacity (MW)	Completion date	Expected yield Improvement
RPV Energy	5.0	5.0	Jun-21	+ 40%
JKR Energy	5.0	5.0	Jun-21	+ 40%
Lopburi Solar	5.0	5.0	May-21	+ 40%
BSE - BNN	16.0	2.8	Jul-21	+ 20%
BSE - BPH	16.0	4.0	Jul-21	+ 20%
BSE - BRM	8.0	7.6	Jul-21	+ 20%
BSE - PRI	16.0	5.5	Sep-21	+ 20%

Source: Company data

Ex 4: Expiring Adders' MW Over 2021-24F



Source: Company data

Expanding into Taiwan via a solar power project

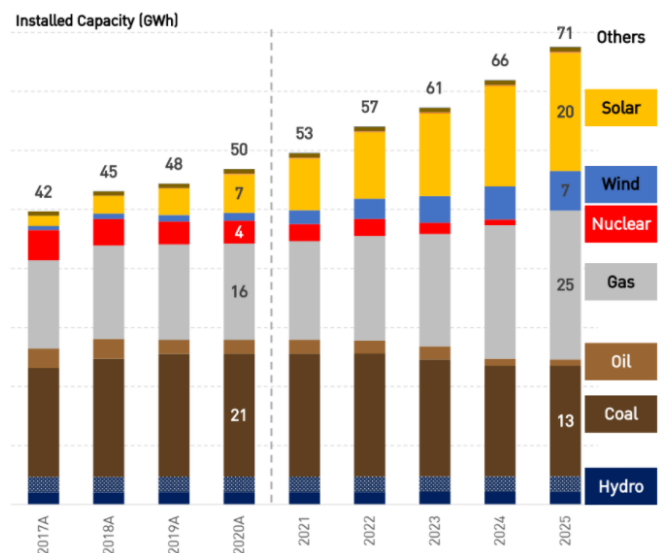
BCPG set up a new subsidiary (100%-owned), BCPG 'Formosa', in Taiwan earlier this month as a vehicle to invest in this new market. The first project under Formosa is targeted to comprise a total of 170MW of solar farms, with four to eight sites in southwestern Taiwan, using an Bt11-12bn investment budget. The projects would have Taiwan Power Company (Taipower), the state-owned national electricity distributor, as the off-taker with the tariff expected to be Bt5.2-5.6/kWh. Based on the targeted commencement of operation dates during 1H23F-2H24F for those plants, we estimate the full-potential contribution from Formosa at earnings of Bt125m in 2025F to BCPG. There is also much more potential renewable capacity in Taiwan based on the government's policy to replace coal and nuclear power plants with solar and wind-power projects (see Exhibit 6).

Ex 5: Details Of BCPG's Investment In Taiwan

Investment entity	BCPG Formosa
Holding stake	100%
Project type	4-8 solar projects
Capacity	170MW in total
Contract type	Bt5.2-5.6/kWh tariff for 20 years
Off-taker	Taipower
Expected COD	1H23 - 2H24
Investment budget	Bt11-12bn

Source: Company data

Ex 6: Strong Prospects For Renewables In Taiwan

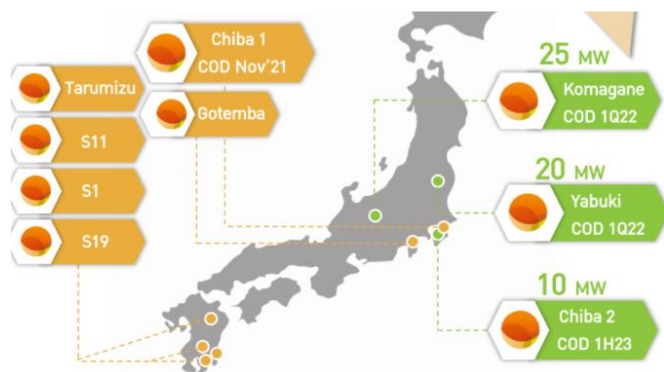


Sources: BloombergNEF, Taipower

Developing solar plants in Japan due to commence operation in 1H22F

Apart from the two new investments, our 21% earnings growth estimate for BCPG is also supported by the scheduled commencement of operations of its two solar power plants in Japan in 1H22, ie, the 25MW Komagane project and the 20MW Yabuki project, which would lift BCPG's operating capacity by 9% from 504MW as of end-2021. The 10MW solar power Chiba-2 project in Japan, which is under development, is targeted to start delivering electricity in 1H23. There is another major renewable project being developed by BCPG, the 230MW equity-owned capacity "Monsoon" wind farm located in Laos. The project was just granted a Power Purchase Agreement (PPA) by Vietnam Electricity (EVN) earlier this year. Assuming a construction period of two to three years, starting in 2H22F, we expect it to start contributing earnings to BCPG in 2025F.

Ex 7: Japan Solar Farms Starting Operations In 1H22F



Source: Company data

Ex 8: Longer Timeframe For 230MW Wind Farm in 2025F



Source: Company data

We maintain our Bt1.4 assumption for potential value from M&A

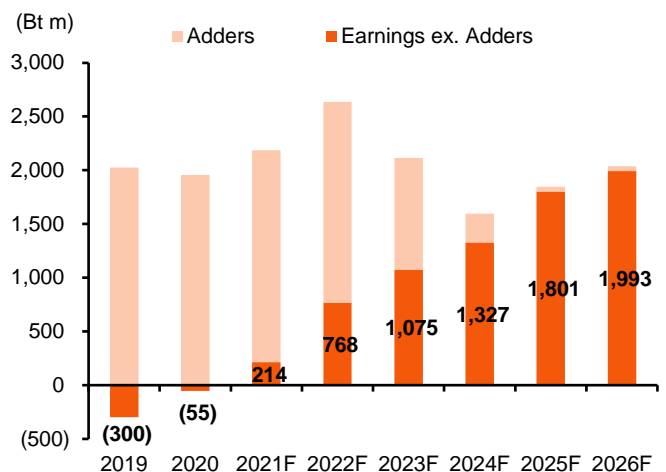
We maintain our Bt1.4/share potential value assumption from more M&As in our TP, based on its Bt30-40bn budget to acquire more operating renewable assets in 2022-23F. This is to continue growing its portfolio, which would still be 100% from renewable sources, and to sustain its earnings base by adding an immediate profit contribution to offset declining revenue from expiring adders for its 133MW of solar farms in Thailand over 2022-24. Key targets for BCPG are solar and wind projects in Asia, and hydropower plants in Laos. We have yet to factor contributions from these potential M&As into our earnings forecasts.

Ex 9: Targeted Markets For Future M&As ...



Source: Company data

Ex 10: ... Expecting Them To Offset Expiring Adders



Sources: Company data, Thanachart estimates

Some 'hidden values'

Future potential from Vanadium battery business and carbon credit sales

We see further potential upside to our valuation from BCPG expanding its footprints into two emerging businesses. The first is an indirect investment, through convertible bonds, in VRB Energy (VRB), a Vanadium-based redox flow battery developer operating two production factories with total annual capacity of 500MWh in China. The second is its plan to develop a carbon credit trading platform in Thailand, leveraging on its existing green energy business, therefore with emission credits available for sale. We have yet to include them in our TP and forecasts due to their uncertain business model and the currently low demand. Stronger global regulations to fight climate change will likely be needed to make them major drivers. We provide here a brief background of the two new markets and their growth opportunities.

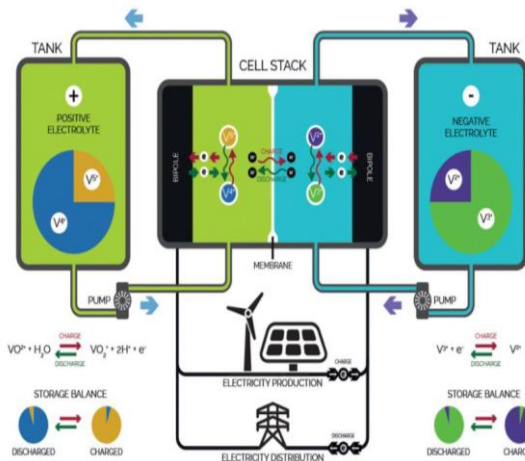
Vanadium as an alternative battery for ESS applications

Vanadium redox flow batteries: BCPG has opted for a different strategy in preparing itself for upcoming breakthroughs in the electricity market from energy storage systems (ESS) by investing Bt768m in VRB to gain exposure to Vanadium-based batteries, while we have seen its peers, namely Energy Absolute Pcl (EA TB, Bt79.00, BUY), Global Power Synergy Pcl (GPSC TB, Bt74.50, BUY), and Banpu Power Pcl (BPP TB, Bt16.80, BUY) invest in Lithium-ion batteries. This is because BCPG sees Vanadium batteries as more suitable for ESS because of the following three properties:

- 1) *Lower cost* – Vanadium batteries cost less than Li-ion batteries given that Vanadium is more widely available, ranked the 20th most found metal on Earth, while it is also a by-product of steel production. We therefore expect Vanadium to be less expensive than Nickel and Cobalt which are the main components of current Li-ion battery designs.
- 2) *Longer life cycle* – Vanadium batteries also have a longer life-cycle compared with Li-ion batteries, theoretically, given a more efficient chemical reaction in storing electricity. They are therefore likely to be more suitable for power plants or electricity grids, as they are capable of operating for more than 20-year lifespan.
- 3) *Better for long discharge times* – Li-ion battery is popular for EV applications given its rapid discharge time, and it is thus able to respond to sudden ups and downs in energy requirements. However, this property is not required in energy storage applications, where the energy discharge time is long but stable.

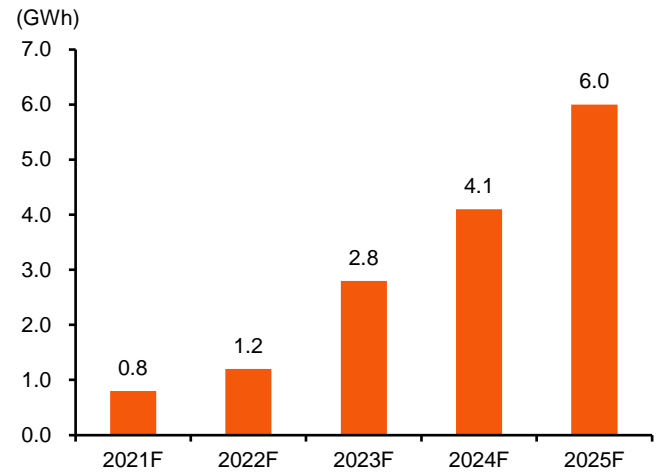
We believe Vanadium batteries are likely to take up a sizable share of the battery for ESS market along with Li-ion batteries, mainly given their lower cost and longer life. We therefore foresee success in this investment by BCPG when ESS applications become more widely used in renewable plants and transmission systems. However, we are not implying that there will be no use of Li-ion batteries in ESS applications at all, since this would be the most convenient way to recycle the batteries used in electric vehicles.

Ex 11: Vanadium Redox Flow Battery Diagram



Source: VRB Energy

Ex 12: Forecasted Redox Flow Battery Demand In China



Source: BloombergNEF

As an operator with 100% renewables, BCPG would have carbon credits for sale

Carbon credit trading platform: Following the commitment from 189 countries during the recent UN Climate Change Conference (COP26) in Glasgow, we expect a clearer direction from governments globally in moving toward green energy. As one of the countries committed to the pledge, we expect a larger renewables quota in Thailand’s electricity generation capacity to benefit BCPG as it is one of the major local renewable operators. On top of the use of more renewables to reduce greenhouse gas (GHG) emissions from electricity generation, some parts of the world are considering imposing taxes on exported goods from countries which cannot meet the net-zero carbon emission criteria to accelerate this decarbonization plan, ie, the Carbon Border Adjustment Mechanism (CBAM) of the European Union (EU).

Since BCPG’s power generation business is 100% from renewable sources, we believe the company would have carbon credits (ie, Renewable Energy Certificates, RECs) available for sale to companies whose businesses find it difficult to meet the emission requirements but have to export their products to the countries or regions that apply emission taxes. Based on a recent comment by BCPG, it estimates 1.2m tonnes of carbon credits from committed renewable projects in its portfolio. BCPG also aims to set up its own trading platform to facilitate this business and to enhance value from its available carbon credits.

Ex 13: Our DCF-derived Sum-Of-The-Parts (SOTP) 12-month TP Calculation

	Valuation method	WACC (%)	Value per BCPG's share (Bt)
Thailand solar (w/ adder)	DCF	5.8%	4.8
Thailand solar (no adders)	DCF	4.7%	0.8
Thailand wind	DCF	5.1%	0.0
Japan solar	DCF	3.8%	1.3
Indonesia geothermal	DCF	4.8%	4.9
Philippines wind	DCF	6.1%	0.1
Laos hydro	DCF	5.4%	4.0
Laos wind	DCF	6.5%	0.6
Taiwan solar	DCF	4.9%	0.5
Existing projects			17.0
+ Company's net debt			(3.5)
+ Potential projects	DCF	10.0%	1.4
Total			15.0

Source: Thanachart estimates

Valuation Comparison

Ex 14: Comparison With Regional Peers

Name	BBG code	Country	EPS growth		PE		P/BV		EV/EBITDA		Div yield	
			21F (%)	22F (%)	21F (x)	22F (x)	21F (x)	22F (x)	21F (x)	22F (x)	21F (%)	22F (%)
Datang International Power	991 HK	China	na	na	na	na	na	na	na	na	na	na
Huadian Power	1071 HK	China	(48.0)	128.8	12.5	5.5	0.4	0.4	11.9	8.4	6.0	8.9
Huaneng Power	600011 CH	China	(88.2)	na	109.3	13.7	1.1	1.0	10.9	8.5	1.5	3.6
Cheung Kong Infrastructure	1038 HK	Hong Kong	2.2	11.1	13.9	12.5	1.0	1.0	43.2	41.8	5.4	5.5
China Power Int'l	2380 HK	Hong Kong	4.0	16.0	19.4	16.7	1.2	1.1	11.8	9.6	2.4	3.1
China Resources Power	836 HK	Hong Kong	(3.8)	33.8	12.4	9.3	1.1	1.0	8.0	6.7	3.2	4.3
CLP Holdings	2 HK	Hong Kong	(0.7)	7.2	17.3	16.1	1.7	1.6	10.8	10.3	4.1	4.2
Hongkong Electric Holdings	6 HK	Hong Kong	2.9	6.5	16.0	15.0	1.2	1.2	77.7	75.1	5.9	5.9
Huaneng Power	902 HK	Hong Kong	(34.8)	38.0	11.8	8.6	0.6	0.6	10.7	8.6	3.7	5.4
Tata Power	TPWR IN	India	17.6	35.1	45.4	33.6	3.1	3.1	14.4	14.4	0.7	0.8
Tenaga Nasional	TNB MK	Malaysia	10.8	(0.1)	10.9	10.9	0.9	0.9	6.4	6.3	5.8	5.9
YTL Corp	YTL MK	Malaysia	(68.4)	na	96.7	27.6	0.5	0.5	12.0	11.4	4.5	4.3
YTL Power	YTLP MK	Malaysia	47.4	(19.6)	11.2	13.9	0.4	0.4	10.3	10.5	6.1	6.7
Manila Electric	MER PM	Philippines	12.2	4.6	13.9	13.3	3.6	3.3	8.8	8.1	5.0	5.2
Absolute Clean Energy *	ACE TB	Thailand	9.8	26.4	25.1	19.9	2.8	2.6	18.7	16.2	1.6	2.0
BCPG Pcl *	BCPG TB	Thailand	(8.6)	20.6	17.4	14.4	1.5	1.4	14.3	11.2	2.5	2.5
B.Grimm Power Pcl *	BGRIM TB	Thailand	8.0	25.3	36.4	29.0	3.6	3.4	13.5	12.9	1.4	1.7
Banpu Power Pcl *	BPP TB	Thailand	10.2	12.4	14.0	12.4	1.2	1.2	201.5	151.9	4.3	4.8
CK Power Pcl *	CKP TB	Thailand	418.6	8.2	20.1	18.6	1.6	1.5	18.3	17.8	2.0	2.7
EA Pcl*	EA TB	Thailand	13.4	26.9	50.7	40.0	9.2	7.8	30.9	25.4	0.6	0.8
Electricity Generating *	EGCO TB	Thailand	7.2	4.7	8.8	8.4	0.8	0.8	17.3	15.6	4.1	4.4
Global Power Synergy *	GPSC TB	Thailand	20.3	16.7	23.3	19.9	2.0	1.9	15.0	13.9	2.6	3.0
Gulf Energy Dev. Pcl *	GULF TB	Thailand	88.0	37.4	53.4	38.9	7.0	6.5	39.7	31.4	1.1	1.5
Gunkul Engineering *	GUNKUL TB	Thailand	66.7	26.8	18.1	14.3	3.2	2.9	18.7	15.7	3.0	4.2
RATCH Group *	RATCH TB	Thailand	25.2	2.8	9.3	9.0	1.0	1.0	17.1	15.8	5.9	6.6
TPC Power Holding *	TPCH TB	Thailand	52.4	23.3	11.1	9.0	1.3	1.2	8.7	7.5	2.7	3.3
WHA Utilities & Power *	WHAUP TB	Thailand	47.9	24.5	13.3	10.7	1.3	1.2	30.2	25.8	4.5	5.6
Average			23.5	21.6	26.6	17.0	2.0	1.9	26.2	22.3	3.5	4.1

Sources: Bloomberg, * Thanachart estimates

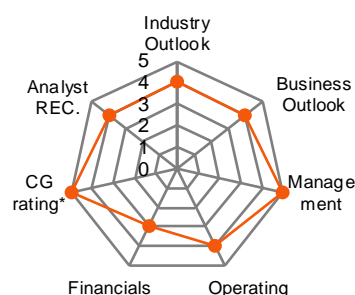
Based on 29 November 2021 closing prices

COMPANY DESCRIPTION

Established in 2015, BCPG, a 70%-owned subsidiary of Bangchak Pcl (BCP TB), is a pure green power company. BCPG now operates various renewable plants in five markets in Asia (Thailand, Laos, Indonesia, Philippines, and Japan) and is expanding to Taiwan as the sixth market. To prepare itself for upcoming disruption in electricity business, BCPG has formed up partnerships with regional players to develop peer-to-peer (P2P) blockchain technology for electricity trading, Vanadium battery for energy storage system (ESS) in smart grid and renewable plants, and carbon credit trading platform.

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

- Well-diversified business among different types of renewable energy in various renewable-promoted countries.
- Secured partnerships with regional power players to invest in more power plants overseas and digital technology for electricity market

O — Opportunity

- Expansion potential given the high need for green power in both the domestic and international markets.
- Plenty room for expansion in the IPS solar-rooftop business.

W — Weakness

- Rising net gearing to support new investments to offset declining adder revenues.
- Difficulty in finding high-return investment to replace the expiring solar adders plants in Thailand.

T — Threat

- Its Thai solar farms' adders are expiring over 2022-24F.
- Regulatory risk as the Thai government wants to buy power from the private sector at low prices as possible.
- Regulatory risk with overseas investments.

CONSENSUS COMPARISON

	Consensus	Thanachart	Diff
Target price (Bt)	16.17	15.00	-7%
Net profit 21F (Bt m)	2,445	2,184	-11%
Net profit 22F (Bt m)	2,466	2,634	7%
Consensus REC	BUY: 4	HOLD: 3	SELL: 1

HOW ARE WE DIFFERENT FROM THE STREET?

- Our 2022F earnings are 7% higher than the Bloomberg consensus, which we believe is due to our early factoring in of the benefits from BCPG's upgraded solar panels.
- However, our TP is 7% lower, likely because we are more conservative in assuming a rate of return in BCPG's further investments, compared to the street.

Sources: Bloomberg consensus, Thanachart estimates

RISKS TO OUR INVESTMENT CASE

- A lower-than-expected rate of return and a slower-than-expected pace of new investments than our expectations are the key downside risks to our call.
- Unfavourable natural conditions for its renewable plants than our assumptions would be a secondary downside risk to our call.
- An adverse change in regulations and policies, especially on tariff prices, in markets where BCPG has exposure would pose another secondary downside risk to our earnings forecasts and TP.

Source: Thanachart

INCOME STATEMENT

FY ending Dec (Bt m)	2019A	2020A	2021F	2022F	2023F
Sales	3,427	4,231	4,707	5,719	5,245
Cost of sales	961	1,436	1,602	1,987	2,164
Gross profit	2,465	2,794	3,105	3,732	3,081
% gross margin	71.9%	66.1%	66.0%	65.3%	58.7%
Selling & administration expenses	575	532	596	696	709
Operating profit	1,890	2,262	2,509	3,037	2,372
% operating margin	55.2%	53.5%	53.3%	53.1%	45.2%
Depreciation & amortization	690	1,078	1,168	1,418	1,477
EBITDA	2,580	3,340	3,676	4,455	3,848
% EBITDA margin	75.3%	79.0%	78.1%	77.9%	73.4%
Non-operating income	20	29	71	61	46
Non-operating expenses	0	0	0	0	0
Interest expense	(568)	(820)	(805)	(824)	(770)
Pre-tax profit	1,342	1,472	1,775	2,273	1,648
Income tax	(8)	33	160	234	157
After-tax profit	1,351	1,439	1,615	2,039	1,491
% net margin	39.4%	34.0%	34.3%	35.7%	28.4%
Shares in affiliates' Earnings	375	460	569	595	623
Minority interests	1	1	0	0	0
Extraordinary items	75	12	0	0	0
NET PROFIT	1,801	1,912	2,184	2,634	2,114
Normalized profit	1,726	1,900	2,184	2,634	2,114
EPS (Bt)	0.8	0.8	0.7	0.9	0.7
Normalized EPS (Bt)	0.8	0.8	0.7	0.9	0.7

Earnings upside from more M&A could help slow down the EPS drop over 2023-24F

BALANCE SHEET

FY ending Dec (Bt m)	2019A	2020A	2021F	2022F	2023F
ASSETS:					
Current assets:	2,453	12,493	9,496	6,792	4,660
Cash & cash equivalent	1,445	11,138	8,000	5,000	3,000
Account receivables	640	1,219	1,356	1,648	1,511
Inventories	0	0	0	0	0
Others	367	135	140	144	148
Investments & loans	13,624	11,723	11,923	12,123	12,997
Net fixed assets	13,676	14,668	17,407	16,465	21,571
Other assets	7,384	12,336	12,362	12,357	12,322
Total assets	37,137	51,220	51,188	47,737	51,549
LIABILITIES:					
Current liabilities:	4,987	4,046	3,618	2,926	3,554
Account payables	398	540	602	746	813
Bank overdraft & ST loans	2,570	1,771	1,129	849	967
Current LT debt	1,285	1,678	1,330	941	1,265
Others current liabilities	734	58	558	390	508
Total LT debt	16,026	23,219	20,118	15,189	17,114
Others LT liabilities	568	1,405	1,813	2,316	2,427
Total liabilities	21,581	28,671	25,549	20,431	23,095
Minority interest	49	69	69	69	69
Preferreds shares	0	0	0	0	0
Paid-up capital	9,994	13,202	15,089	15,089	15,089
Share premium	2,927	6,990	6,990	6,990	6,990
Warrants	3	2	2	2	2
Surplus	(73)	(1,641)	(1,641)	(1,641)	(1,641)
Retained earnings	2,654	3,927	5,129	6,797	7,945
Shareholders' equity	15,506	22,480	25,569	27,237	28,385
Liabilities & equity	37,137	51,220	51,188	47,737	51,549

Proceeds from capital call last year the main funding source for new investments

Sources: Company data, Thanachart estimates

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2019A	2020A	2021F	2022F	2023F
Earnings before tax	1,342	1,472	1,775	2,273	1,648
Tax paid	9	(25)	(163)	(231)	(159)
Depreciation & amortization	690	1,078	1,168	1,418	1,477
Chg In working capital	(56)	(438)	(75)	(147)	203
Chg In other CA & CL / minorities	921	104	1,068	419	740
Cash flow from operations	2,907	2,191	3,773	3,733	3,908
Capex	(1,420)	(2,070)	(3,907)	(475)	(6,582)
Right of use	0	(397)	(300)	(270)	(240)
ST loans & investments	0	0	0	0	0
LT loans & investments	(123)	1,901	(200)	(200)	(874)
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	(5,315)	(3,996)	682	777	385
Cash flow from investments	(6,858)	(4,563)	(3,725)	(168)	(7,310)
Debt financing	4,409	7,002	(4,091)	(5,599)	2,368
Capital increase	35	7,270	1,887	0	0
Dividends paid	(1,278)	(639)	(981)	(966)	(966)
Warrants & other surplus	(194)	(1,569)	(1)	(1)	(1)
Cash flow from financing	2,972	12,064	(3,186)	(6,565)	1,402
Free cash flow	1,486	121	(134)	3,258	(2,673)

Reinvesting hefty cash flows from adders to sustain earnings base

VALUATION

FY ending Dec	2019A	2020A	2021F	2022F	2023F
Normalized PE (x)	16.5	15.9	17.4	14.4	18.0
Normalized PE - at target price (x)	19.6	18.9	20.7	17.2	21.4
PE (x)	15.8	15.8	17.4	14.4	18.0
PE - at target price (x)	18.8	18.8	20.7	17.2	21.4
EV/EBITDA (x)	18.2	13.7	14.3	11.2	14.1
EV/EBITDA - at target price (x)	20.3	15.4	16.3	12.8	16.0
P/BV (x)	1.8	1.7	1.5	1.4	1.3
P/BV - at target price (x)	2.2	2.0	1.8	1.7	1.6
P/CFO (x)	9.8	13.8	10.1	10.2	9.7
Price/sales (x)	10.6	8.6	7.7	6.4	7.0
Dividend yield (%)	4.5	2.6	2.5	2.5	2.5
FCF Yield (%)	5.2	0.4	(0.4)	8.6	(7.0)
(Bt)					
Normalized EPS	0.8	0.8	0.7	0.9	0.7
EPS	0.8	0.8	0.7	0.9	0.7
DPS	0.6	0.3	0.3	0.3	0.3
BV/share	6.9	7.4	8.5	9.0	9.4
CFO/share	1.3	0.9	1.3	1.2	1.3
FCF/share	0.7	0.1	(0.0)	1.1	(0.9)

Sources: Company data, Thanachart estimates

Multiples don't look overly excessive, in our view

FINANCIAL RATIOS

FY ending Dec	2019A	2020A	2021F	2022F	2023F
Growth Rate					
Sales (%)	3.2	23.5	11.3	21.5	(8.3)
Net profit (%)	(18.8)	6.2	14.2	20.6	(19.7)
EPS (%)	(18.9)	(0.0)	(9.2)	20.6	(19.7)
Normalized profit (%)	1.8	10.1	14.9	20.6	(19.7)
Normalized EPS (%)	1.7	3.7	(8.6)	20.6	(19.7)
Dividend payout ratio (%)	71.0	52.1	44.2	36.7	45.7
Operating performance					
Gross margin (%)	71.9	66.1	66.0	65.3	58.7
Operating margin (%)	55.2	53.5	53.3	53.1	45.2
EBITDA margin (%)	75.3	79.0	78.1	77.9	73.4
Net margin (%)	39.4	34.0	34.3	35.7	28.4
D/E (incl. minor) (x)	1.3	1.2	0.9	0.6	0.7
Net D/E (incl. minor) (x)	1.2	0.7	0.6	0.4	0.6
Interest coverage - EBIT (x)	3.3	2.8	3.1	3.7	3.1
Interest coverage - EBITDA (x)	4.5	4.1	4.6	5.4	5.0
ROA - using norm profit (%)	5.0	4.3	4.3	5.3	4.3
ROE - using norm profit (%)	11.3	10.0	9.1	10.0	7.6
DuPont					
ROE - using after tax profit (%)	8.8	7.6	6.7	7.7	5.4
- asset turnover (x)	0.1	0.1	0.1	0.1	0.1
- operating margin (%)	55.7	54.2	54.8	54.2	46.1
- leverage (x)	2.2	2.3	2.1	1.9	1.8
- interest burden (%)	70.3	64.2	68.8	73.4	68.2
- tax burden (%)	100.6	97.8	91.0	89.7	90.5
WACC (%)	0.0	0.0	0.0	0.0	0.0
ROIC (%)	6.7	6.5	6.0	6.8	5.5
NOPAT (Bt m)	1,902	2,212	2,282	2,724	2,145
invested capital (Bt m)	33,942	38,010	40,146	39,215	44,731

*Better capital management
via more M&A would
improve its ROA and ROE*

Sources: Company data, Thanachart estimates

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