



2023 Annual Green Bond Report - Allocation and Environment Impact

BCPG Public Company Limited

Reporting Data from Sep 2022 - Sep 2023

Introduction

BCPG Public Company Limited has committed to investing in and operating green power plants, we strive to enhance our business to fulfill consumers’ needs by diversifying into more types of renewable energy and seeking innovative products and services for more sustainable use of energy. We have developed the BCPG Green Bond Framework under which the Company intends to issue Green Bonds to finance or refinance, in whole or in part, new or existing investments in “Eligible Green Projects” of BCPG and its affiliates in the “Eligible Green Categories”.

Green Bond framework

BCPG Green Bond framework has been reviewed externally, with a Second Party Opinion and a verification by DNV Business Assurance Australia Ltd. The review concludes that “BCPG’s Green Bond Framework is credible, impactful and aligns with The International Capital Market Association Green Bond Principles (“ICMA GBP”), ASEAN Green Bond Standards (“ASEAN GBS”) and Green Loan Principles (“GLP”)”.

Green Bond Portfolio

BCPG issued Green bonds total amount of THB 12,000 million in September 2021 (see table below). These bonds have been certified that the company comply with the Climate Bonds Standard by Climate Bonds Initiative which is an international and non-profit organization working solely to mobilize the largest capital market for climate change solutions.

Total Green bonds issued by BCPG (as of Sep2023);

Green Bond Issue Date 15 September 2021	Maturity Date	ThaiBMA Symbol	ISIN	Issuer	Curr.	Coupon (p.a.)	Principal Amount (THB Million)
Debenture 3Yrs	15 Sep 24	BCPG249A	TH7411034906	BCPG	THB	1.64%	2,000
Debenture 5Yrs	15 Sep 26	BCPG269A	TH7411036901	BCPG	THB	2.14%	1,000
Debenture 7Yrs	15 Sep 28	BCPG289A	TH7411038907	BCPG	THB	2.51%	1,000
Debenture 10Yrs	15 Sep 31	BCPG319A	TH741103B907	BCPG	THB	3.31%	4,000
Debenture 12Yrs	15 Sep 33	BCPG339A	TH741103D903	BCPG	THB	3.61%	4,000
Total							12,000

Project Portfolio (Eligible Green Projects)

Use of Proceeds Allocation Report

BCPG Green Bond proceeds will be used to finance or refinance for the following eligible Green Assets.

Projects Type	Use of Funds	Name of Projects	Project Location	Original Allocation (THB Million)	Use of Proceeds as of Mar 2022 (THB Million)
Geothermal Projects	Refinancing	Salak	Indonesia	9,850	9,915
		Darajat			
		Wayang Windu			
Solar Improvements	Upgrades to existing assets	BSE-BRM, Buriram	Thailand	150	187
		BSE-PRI, Prachinburi			
Solar	New assets	Moonbear	Taiwan	2,000	881
Total				12,000	10,983

In March 2022, BCPG Public Company Limited (“BCPG”) divested 33.33% of paid-up ordinary shares in Star Energy Group Holdings Pte. Ltd. (“SEGHPL”), a holding company with subsidiaries engaging geothermal power plant business in Indonesia with a total gross capacity of 875 MW.

After the divestment of Geothermal power projects, BCPG Green Bond Allocation as of **September 2023** is as follows;

Projects Type	Use of Funds	Name of Projects	Project Location	Original Allocation (THB Million)	Use of Proceeds as of Mar 2022 (THB Million)	Geothermal Divestment in Mar 2022	Use of Proceeds as of Sep 2022 (THB Million)
Geothermal Projects	Refinancing	Salak	Indonesia	9,850	9,915	(9,915)	-
		Darajat					
		Wayang Windu					
Solar Improvements	Upgrades to existing assets	BSE-BRM, Buriram	Thailand	150	187	-	187
		BSE-PRI, Prachinburi					
Solar	New assets	Moonbear	Taiwan	2,000	881	-	881
Total				12,000	10,983	(9,915)	1,068

The proceeds from divested geothermal power projects are temporarily held in cash from March 2022 until reallocation. The reallocation is expected to be completed within December 2024.

BCPG Green Bond Planned Allocation in 2023 and 2024

BCPG plans to reallocate the proceeds of Geothermal Power Plants divestment to other Eligible Green Projects as indicated in below table.

Projects Type	Use of Funds	Name of Projects	Original Allocation (THB Million)	Use of Proceeds as of Mar 2022 (THB Million)	Geothermal Divestment in Mar 2022	Use of Proceeds as of Sep 2022 (THB Million)	Planned Allocation		Expected Allocation within Dec 2024
							Within Dec 2023	Within Dec 2024	
Geothermal Projects	Refinancing	Salak	9,850	9,915	(9,915)	-	-	-	-
		Darajat							
		Wayang Windu							
Solar Improvements	Upgrade to existing assets	BSE-BRM, Buriram (Thailand)	150	187	-	187	-	-	187
		BSE-PRI, Prachinburi (Thailand)							
Solar	New asset	Solar (Taiwan)	2,000	881	-	881	929	361	2,171
Wind	New asset	Wind (Laos)	-	-	-	-	-	2,534	2,534
Renewable (Solar, Wind)	New asset	Renewable new asset (Thailand/ Asia Pacific)	-	-	-	-	-	5,877	5,877
Renewable (Solar, Wind)	New asset	Private Equity Fund investing in Renewable projects (New Zealand/ Asia Pacific)	-	-	-	-	25	1,006	1,031
Battery	New asset	Battery (Thailand)	-	-	-	-	-	200	200
Total			12,000	10,983	(9,915)	1,068	954	9,978	12,000

Environmental Impact Report

Projects Type	Name of Projects	Project Location	Reporting Period	Impact Indicators	Project's Performance	Remarks
Solar Improvements	BSE-BRM, Buriram BSE-PRI, Prachinburi	Thailand	Sep 2022 – Sep 2023	Annual renewable energy generation in MWh/GWh (electricity) and GJ/TJ (other energy)	53,098 MWh	The environment impact is calculated from the total solar plant production due to limitation in segregating impact solely from improvements.
Solar	Solar (Taiwan)	Taiwan	Sep 2022 – Sep 2023	Annual GHG emissions reduced/avoided in tonnes of CO2 equivalent/a	N/A	Solar project in Taiwan is under construction and expected COD is in 2024-2025. Hence, environmental impact is not available as of September 2023.
				Annual renewable energy generation in MWh/GWh (electricity) and GJ/TJ (other energy)		
				Additional capacity of renewable energy plant(s) constructed or rehabilitated. in MW		
Wind	Wind (Laos)	Laos	Sep 2022 – Sep 2023	Annual GHG emissions reduced/avoided in tonnes of CO2 equivalent/a	N/A	Wind project in Laos is under construction. Hence, environmental impact is not available as of September 2023.
				Annual renewable energy generation in MWh/GWh (electricity) and GJ/TJ (other energy)		
				Additional capacity of renewable energy plant(s) constructed or rehabilitated. in MW		

Projects Type	Name of Projects	Project Location	Reporting Period	Impact Indicators	Project's Performance	Remarks
Renewable (Solar, Wind)	Renewable New Asset	Thailand / Asia Pacific	Sep 2022 – Sep 2023	Annual GHG emissions reduced/avoided in tonnes of CO2 equivalent/a	N/A	BCPG's investment in Renewable projects (New Asset) is in internal discussion. The final investment may subject to change.
				Annual renewable energy generation in MWh/GWh (electricity) and GJ/TJ (other energy)		
				Additional capacity of renewable energy plant(s) constructed or rehabilitated. in MW		
Renewable (Solar, Wind)	Private Equity Fund investing in Renewable projects	New Zealand / Asia Pacific	Sep 2022 – Sep 2023	Annual GHG emissions reduced/avoided in tonnes of CO2 equivalent/a	N/A	BCPG's investment in Private Equity Fund is in internal discussion. The final investment may subject to change.
				Annual renewable energy generation in MWh/GWh (electricity) and GJ/TJ (other energy)		
				Additional capacity of renewable energy plant(s) constructed or rehabilitated. in MW		
Battery	Battery	Thailand	Sep 2022 – Sep 2023	Annual energy savings in MWh/GWh (electricity) and GJ/TJ (other energy savings)/a	N/A	BCPG's investment in battery is in internal discussion. The final investment may subject to change.
				Annual GHG emissions reduced/avoided in tonnes of CO2 equivalent/b		