



# 2024 Annual Green Bond Report - Allocation and Environment Impact

BCPG Public Company Limited

Reporting Data from Sep 2023- Sep 2024

## 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
<b>Total</b>							<b>12,000</b>

## 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
<b>Total</b>				<b>12,000</b>	<b>10,983</b>

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
<b>Total</b>				<b>12,000</b>	<b>10,983</b>	<b>(9,915)</b>	<b>1,068</b>

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 2025.

### BCPG Green Bond Planned Allocation in 2024 and 2025

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 2024 (THB Million)	Planned Allocation		Expected Allocation within Dec 2025
							Within Dec 2024	Within Dec 2025	
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	-	250	-	260	510
		BSE-PRI, Prachinburi (Thailand)							
		BPI, BNN, BPH Ayutthaya, Chaiyaphum (Thailand)							
Solar	New asset	Solar (Taiwan)	2,000	881	-	1,810	-	2,159	3,969
Wind	New asset	Wind (Laos)	-	-	-	522	-	1,407	1,929
Renewable (Solar, Wind)	New asset	Renewable new asset (Thailand/ Asia Pacific)	-	-	-	289	-	5,278	5,567
Renewable (Solar, Wind)	New asset	Private Equity Fund investing in Renewable projects (New Zealand/ Asia Pacific)	-	-	-	25	-	-	25
<b>Total</b>			<b>12,000</b>	<b>10,983</b>	<b>(9,915)</b>	<b>2,896</b>	<b>-</b>	<b>9,104</b>	<b>12,000</b>

\*The debt instrument and associated projects and assets continue to meet the eligibility requirements as specified in Part C of the Climate Bond Standard v3.0

## Environmental Impact Report

Projects Type	Name of Projects	Project Location	Reporting Period	Impact Indicators	Project's Performance	Remarks
<b>Solar Improvements</b>	BSE-BRM, Buriram BSE-PRI, Prachinburi, BPI, BNN, BPH Ayutthaya, Chaiyaphum (Thailand)	Thailand	Sep 2023 – Sep 2024	<b>Annual renewable energy generation</b> in MWh/GWh (electricity) and GJ/TJ (other energy)	55,974 MWh (BRM, PRI)	The environment impact is calculated from the total solar plant production due to limitation in segregating impact solely from improvements. According to planned allocation, improvement of BPI, BNN and BPH will be in 2025.
<b>Solar</b>	Solar (Taiwan)	Taiwan	Sep 2023 – Sep 2024	<b>Annual GHG emissions reduced/avoided</b> in tonnes of CO2 equivalent/a	N/A	Solar project in Taiwan is under construction and expected COD is in 2025. Hence, environmental impact is not available as of September 2024.
				<b>Annual renewable energy generation</b> in MWh/GWh (electricity) and GJ/TJ (other energy)		
				<b>Additional capacity of renewable energy plant(s) constructed or rehabilitated.</b> in MW		
<b>Wind</b>	Wind (Laos)	Laos	Sep 2023 – Sep 2024	<b>Annual GHG emissions reduced/avoided</b> in tonnes of CO2 equivalent/a	N/A	Wind project in Laos is under construction. Hence, environmental impact is not available as of September 2024.
				<b>Annual renewable energy generation</b> in MWh/GWh (electricity) and GJ/TJ (other energy)		
				<b>Additional capacity of renewable energy plant(s) constructed or rehabilitated.</b> 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 2023 – Sep 2024	<b>Annual GHG emissions reduced/avoided</b> in tonnes of CO2 equivalent/a	N/A	BCPG has announced investment in Wind projects in Vietnam on November 2024 which target to complete within Q1'2025 amounting of THB 1,731 million.  Other investment in Renewable projects (New Asset) is in internal discussion. The final investment may subject to change.
				<b>Annual renewable energy generation</b> in MWh/GWh (electricity) and GJ/TJ (other energy)		
				<b>Additional capacity of renewable energy plant(s) constructed or rehabilitated.</b> in MW		
Renewable (Solar, Wind)	Private Equity Fund investing in Renewable projects	New Zealand / Asia Pacific	Sep 2023 – Sep 2024	<b>Annual GHG emissions reduced/avoided</b> in tonnes of CO2 equivalent/a	-	No environmental impact from the project since BCPG has no longer participate in this Fund in 2025.
				<b>Annual renewable energy generation</b> in MWh/GWh (electricity) and GJ/TJ (other energy)		
				<b>Additional capacity of renewable energy plant(s) constructed or rehabilitated.</b> in MW		