

# **BCPG PUBLIC COMPANY LIMITED GREEN BOND 2020**

#### **DNV PRE-ISSUANCE ASSURANCE OPINION**

### **Scope and objectives**

BCPG Public Company Limited ("BCPG" or "Issuer") is considering the issuance of a Green Bond in THB (henceforth referred to as "BOND") and has submitted the proposed bond for verification and certification against the Climate Bond Standard (CBS).

BCPG intends to use the proceeds of the BOND to refinance nominated projects and assets falling under the following categories:

- Renewable Energy Geothermal
- Renewable Energy Solar

DNV Business Assurance Australia Pty Ltd (henceforth referred to as "DNV") has been commissioned by BCPG to provide verification of the BOND as an independent and approved verifier under the Climate Bond Standard. Our criteria and information covered to achieve this is described under 'Work Undertaken' below.

No assurance is provided regarding the financial performance of the BOND, the value of any investments in the BONDS, or the long term environmental benefits of the transaction. Our objective has been to provide an assessment that the BOND has met the criteria of the Climate Bond Standard and the associated Technical Criteria on the basis set out below.

The scope of this DNV opinion is limited to the Climate Bond Standard Version 3.0 and the following associated Sector Technical Criteria:

- Geothermal Power
- Solar Energy

# Responsibilities of the Management of BCPG and DNV

The management of BCPG has provided the information and data used by DNV during the delivery of this review. Our statement represents an independent opinion and is intended to inform BCPG management and other interested stakeholders in the BOND as to whether the established criteria have been met, based on the information provided to us. In our work, we have relied on the information and the facts presented to us by BCPG. DNV is not responsible for any aspect of the nominated assets referred to in this opinion and cannot be held liable if estimates, findings, opinions, or conclusions are incorrect. Thus, DNV shall not be held liable if any of the information or data provided by BCPG's management and used as a basis for this assessment were not correct or complete.



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#### **Basis of DNV's opinion**

DNV has conducted the verification against the CBS v3.0 and associated Sector Technical Criteria through the creation and execution of a verification protocol addressing each requirement of the CBS v3.0 and the associated Sector Technical Criteria. The detail of areas covered in the DNV verification is summarised in Schedule 2 below.

#### **Work undertaken**

Our work constituted a high-level review of the available information, based on the understanding that this information was provided to us by BCPG in good faith. We have not performed an audit or other tests to check the veracity of the information provided to us. The work undertaken to form our opinion included:

- Creation and execution of a Climate Bond Standard Protocol, adapted to include the relevant Sector Technical Criteria for the BOND nominated projects and assets, as described above and in Schedule 2 to this Assessment;
- Assessment of documentary evidence provided by BCPG on the BOND and supplemented by a high-level desktop research, documentation review and correspondence with key personnel from the issuer BCPG. These checks refer to current assessment best practices and standards methodology;
- Discussions with BCPG management, and review of relevant documentation;
- Documentation of findings against each element of the criteria. Our opinion as detailed below is a summary of these findings.



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#### Findings and DNV's opinion

DNV has performed the Pre-Issuance Verification of the BCPG Green Bond. It is DNV's responsibility to provide an independent verification statement on the compliance of the 2021 BCPG Green Bond with the Climate Bond Standard.

DNV conducted the verification in accordance with the Climate Bond Standard Version 3.0 and with International Standard on Assurance Engagements 3000 Assurance Engagements other than Audits or Reviews of Historical Information. The verification included i) checking whether the provisions of the Climate Bond Standard were consistently and appropriately applied and ii) the collection of evidence supporting the verification.

DNV's approach draws on an understanding of the risks associated with conforming to the Climate Bond Standard and the controls in place to mitigate these. DNV planned and performed the assurance engagement by obtaining evidence and other information and explanations that DNV considers necessary to give limited assurance that the BCPG Green Bond meets the requirements of the Climate Bond Standard.

Based on the limited assurance procedures conducted and with understanding of BCPG's corporate structure at the time of verification, nothing has come to our attention that causes us to believe that the BCPG Green Bond is not, in all material respects, in accordance with the Pre-Issuance requirements of the Climate Bond Standard Version 3.0 and Associated Geothermal and Solar Technical Criteria.

The listing of BCPG's Certified Issuance may be found on the CBI's website <a href="https://www.climatebonds.net/certification/certified-bonds">https://www.climatebonds.net/certification/certified-bonds</a> once the Certification is processed and available.

#### for DNV Business Assurance Australia Pty. Ltd.

Sydney, Australia / 6 September 2021

David McCann Team Leader Mark Robinson Technical Reviewer

#### **About DNV**

Driven by our purpose of safeguarding life, property and the environment, DNV enables organisations to advance the safety and sustainability of their business. Combining leading technical and operational expertise, risk methodology and in-depth industry knowledge, we empower our customers' decisions and actions with trust and confidence. We continuously invest in research and collaborative innovation to provide customers and society with operational and technological foresight. With our origins stretching back to 1864, our reach today is global. Operating in more than 100 countries, our 16,000 professionals are dedicated to helping customers make the world safer, smarter and greener.



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#### **SCHEDULE 1: DESCRIPTION OF NOMINATED ASSETS**

BCPG has provided the schedule of nominated projects and assets for the proposed issuance in THB as follows:

| Eligible<br>Projects<br>Category | Subcategory           | Projects             | CBI<br>Benchmark<br>(gCO2/<br>kWh) | Project<br>Emissions<br>Intensity<br>(gCO2/KWh) <sup>1</sup> | Exposure (M THB)  | Bond facility (M<br>THB)  |
|----------------------------------|-----------------------|----------------------|------------------------------------|--|---|---|
| Renewable<br>Energy              | Geothermal            | Salak                | 100                                | 92.93 <sup>2</sup>   | 12,276<br>[Refinancing of<br>loans for<br>Geothermal<br>Projects: 12,126<br>Related refinancing<br>expenses: 150] | 9,850   |
|                                  |                       | Darajat              |                                    | 28.97 <sup>3</sup>   |   | [Refinancing of   |
|                                  |                       | Wayang Windu         |                                    | 79.184   |   | loans for Geothermal Projects: 9,700 Related refinancing expenses: 150] |
|                                  | Solar                 | BSE-BRM, Buriram     | N/A                                | N/A  | 71.9  | 150   |
|                                  | [Improvements]        | BSE-PRI, Prachinburi | N/A                                | N/A  | 104.1   | 150   |
|                                  | Solar<br>[New Assets] |                      | N/A                                | N/A  | 2,235   | 2,000   |
| Total                            |                       |                      |                                    |  | 14,687  | 12,000  |

 $<sup>^{1}</sup>$  National average CO2 emission (g/KWh) = 877

<sup>&</sup>lt;sup>2</sup> https://www.starenergygeothermal.co.id/wp-content/uploads/2021/07/SR-SE-SALAK2020-WEB-1607.pdf

 $<sup>^3</sup> https://www.starenergygeothermal.co.id/wp-content/uploads/2021/07/SR-Star-Energy-2020-DARAJAT\_Final-Lores\_1907.pdf$ 

<sup>4</sup> https://www.starenergygeothermal.co.id/wp-content/uploads/2020/09/2020-Annual-Green-Bond-Report-of-Star-Energy-Geothermal-Wayang-Windu-Limited\_Final.pdf



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#### **SCHEDULE 2: VERIFICATION CRITERIA**

#### Summary criteria for assertions of compliance with the Climate Bond Standard v3.0

The criteria against which BCPG and its nominated projects and assets have been reviewed prior to inclusion in the Bond are grouped under the requirements as detailed within the Climate Bond Standard Version 3.0 including:

#### **Part A: Pre-Issuance Requirements**

| Area                        | Requirement   |
|-----------------------------|---|
| Use of Proceeds             | Nominated Projects & Assets which are proposed to be associated with the Bond and which have been assessed as likely to be Eligible Projects & Assets |
| Project Selection           | Establish, document and maintain a decision-making process which it uses to determine the eligibility of the Nominated Projects & Assets              |
| Management of Proceeds      | The systems, policies and processes to be used for management of the Net Proceeds shall be documented by the Issuer                                   |
| Reporting Prior to Issuance | The Issuer shall prepare a Green Bond Framework and make it publicly available prior to Issuance or at the time of Issuance                           |
| Reporting                   | Reporting on use of proceeds and nominated projects and assets  |

## **Part B: Post Issuance Requirements**



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| Use of Proceeds        | Nominated Projects & Assets which are proposed to be associated with the Loan and which have been assessed as likely to be Eligible Projects & Assets |
|------------------------|---|
| Project Selection      | Establish, document and maintain a decision-making process which it uses to determine the eligibility of the Nominated Projects & Assets              |
| Management of Proceeds | The systems, policies and processes to be used for management of the Net Proceeds shall be documented by the Issuer                                   |
| Reporting              | Reporting on use of proceeds and nominated projects and assets  |

## Part C: Eligible projects and physical assets

Nominated projects and assets include financing of or investments in equipment and systems which enable the mitigation of greenhouse gasses, as detailed in Appendix B.

| Area                         | Requirement   |
|------------------------------|---|
| Geothermal Energy Generation | Criterion 1: Emissions threshold (100 gCO <sub>2</sub> /kWh) Criterion 2: Emissions mitigation technology and/or plant design Criteria 3 & 4: Environmental, health, safety and social criteria |
| Solar Energy Generation      | Onshore solar electricity generation facilities   |



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#### Part D: Certification under the Climate Bonds Standard

| Area                        | Requirement  |
|-----------------------------|--|
| Pre-Issuance Certification  | The Borrower of a Climate Bonds Standard Certified must satisfy the Pre-Issuance Certification requirements including the completion of all forms, Pre-Issuance Verification by an approved verifier and provision of relevant information   |
| Post Issuance Certification | The Borrower of a Climate Bonds Standard Certified must satisfy the Post Issuance Certification requirements including the completion of all forms, Post Issuance Verification by an approved verifier and provision of relevant information |
| Maintaining Certification   | The Borrower shall provide annual reporting to the CBI and comply with non-conformance correction as required  |