

## PTT GREEN BOND

### DNV GL PRE ISSUANCE VERIFICATION ASSURANCE OPINION

#### Scope and objectives

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

PTT intends to use the proceeds of the BOND to finance and/or refinance a nominated project falling under the following categories:

- Forestry – Reforestation and Conservation

DNV GL Business Assurance Australia Pty Ltd (henceforth referred to as "DNV GL") has been commissioned by PTT 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 BOND, 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 GL opinion is limited to the Climate Bond Standard Version 2.1 and the following associated Sector Technical Criteria:

- Forestry

#### Responsibilities of the Issuer PTT and Verifier DNV GL

PTT has provided the information and data used by DNV GL during the delivery of this review. Our statement represents an independent opinion and is intended to inform PTT 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 PTT. DNV GL 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 GL shall not be held liable if any of the information or data provided by PTT and used as a basis for this assessment were not correct or complete.

#### Basis of DNV GL's opinion

DNV GL has conducted the verification against the CBS v2.1 and associated Sector Technical Criteria through the creation and execution of a verification protocol addressing each requirements of the CBS v2.1 and the Forestry Technical Criteria. The detail of areas covered in the DNV GL 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 PTT 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 PTT on the BOND and supplemented by a high-level desktop research, documentation review and interviews with KASIKORNBANK PLC and PTT Representatives. These checks refer to current assessment best practices and standards methodology;
- Discussions with PTT, and review of relevant documentation;
- Remote inspection/review of a sample of nominated project sites;
- Documentation of findings against each element of the criteria. Our opinion as detailed below is a summary of these findings.

## Findings and DNV GL's opinion

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

DNV GL conducted the verification in accordance with the Climate Bond Standard Version 2.1 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 GL's verification 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 GL planned and performed the verification by obtaining evidence and other information and explanations that DNV GL considers necessary to give limited assurance that the PTT Green Bond meets the requirements of the Climate Bond Standard.

Based on the limited assurance procedures conducted, nothing has come to our attention that causes us to believe that the PTT Green Bond is not, in all material respects, in accordance with the Pre Issuance requirements of the Climate Bond Standard Version 2.1 and Associated Forestry Technical Criteria.

**for DNV GL Business Assurance Australia Pty Ltd**

Sydney, 21 June 2020



**Mark Robinson**

Manager, Sustainability Services  
DNV GL – Business Assurance

### About DNV GL

Driven by our purpose of safeguarding life, property and the environment, DNV GL 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.

**SCHEDULE 1: DESCRIPTION OF NOMINATED ASSETS**

Eligible Projects & Assets Category	Sub category	Projects	Project Location
Forestry	Reforestation and Conservation	PTT Reforestation Project (Long-term forest conservation project and associated learning centres)	Thailand

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## SCHEDULE 2: VERIFICATION CRITERIA

### Summary criteria for assertions of compliance with the Climate Bond Standard v2.1

The criteria against which PTT 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 2.1 including:

#### Part A: General Requirements

Area	Requirement
Project Nomination	The Climate Bond issued must specify the project collateral or physical assets with which it is associated
Use of Proceeds	Proceeds must be allocated to Nominated Project(s)
Non-Contamination	Issuers are permitted a grace period to allocate or re-allocate funds to Nominated Project(s)
Confidentiality	The information disclosed to the Verifier and the Climate Bond Standards Board may be subject to confidentiality arrangements
Reporting	Reporting on use of proceeds and nominated projects and assets

#### Part B: Low Carbon Contribution - Eligible projects and physical assets

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

Area	Requirement
Forestry - Conservation and Restoration	Mitigation – Carbon stocks of forests are maintained through good management practice

	Resilience – Impacts that climate change may cause to the resilience of the forest are understood and mitigated.
	Resilience – General health of forests is maintained through good management practice.
	Free Prior and Informed Consent – FPIC must be sought when property rights are potentially affected.

**Part C: Bond structures**

Area	Requirement
Project Holding	The issuer of a Corporate Climate BOND with Nominated Projects linked to a portfolio of assets must continue to hold eligible assets at least equal to the Fair Market Value at the time of issuance of the original principal
Settlement Period	Climate Bond issuing entities must demonstrate that the proceeds of a Climate Bond have been allocated to the Nominated Project(s) within 24 months after the BOND is issued
Earmarking	The issuer of the BOND shall maintain the earmarking process to manage and account for funding to the nominated projects and assets.