# TREASURY CORPORATION VICTORIA GREEN BOND

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### **DNV GL ASSURANCE OPINION**

### **Scope and objectives**

Treasury Corporation Victoria ("TCV" or "Issuer") has issued a bond in AUD (henceforth referred to as "BOND") and has achieved Pre Issuance Certification against the Climate Bond Standard (CBS). TCV has submitted the BOND to DNV GL Business Assurance Pty Ltd ("DNV GL") for Post Issuance Verification.

TCV intends used the proceeds of the BOND to finance a nominated projects and assets falling under the following categories:

- Renewable Energy Solar and Wind
- Low Carbon Buildings Energy Efficiency Improvements
- Low Carbon Transport Electrified Rail Infrastructure
- Water Wastewater Biogas Recovery
- Hydropower (Sector Criteria Pending Release)

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

- Solar
- Wind
- Low Carbon Transport
- Low Carbon Buildings
- Water (DRAFT)

### **Responsibilities of the Management of TCV and DNV GL**

The management of TCV 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 TCV management and other interested stakeholders in the BOND as to whether the established criteria have

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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 TCV. 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 TCV's management 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 associated Sector Technical Criteria. The detail of areas covered in the DNV GL verification is summarised in Schedule 2 below.

### Work undertaken

Our work constituted a level review of the available information, based on the understanding that this information was provided to us by TCV 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 TCV on the BOND and supplemented by a high-level desktop research, onsite visit for documentation review and interviews with key personnel from the issuer TCV and their deal arranger, National Australia Bank. These checks refer to current assessment best practices and standards methodology;
- Discussions with TCV 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 GL's opinion

DNV GL has performed the Post Issuance Verification of the TCV Green Bond. It is DNV GL's responsibility to provide an independent verification statement on the compliance of the TCV 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 TCV 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 TCV Green Bond is not, in all material respects, in accordance with the Post Issuance requirements of the Climate Bond Standard Version 2.1 and Associated Solar, Wind, Low Carbon Transport, Low Carbon Buildings and Draft Water Technical Criteria.

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

Sydney, 15 December 2016

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.



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

Eligible Projects & Assets Category	Sub category	Project name	Amount Funded (\$)	Amount Expended to 30 September 2016
Low Carbon Buildings	Energy Efficiency	Traffic lights (statewide) replacement with LED lamps	\$25,000,000.00	\$25,000,000.00
Low Carbon Buildings	Energy Efficiency	Federation Square	\$6,815,528.00	\$6,815,528.00
Low Carbon Buildings	Energy Efficiency	Holmesglen TAFE (all campuses)	\$5,703,470.00	\$5,532,846.29
Low Carbon Buildings	Energy Efficiency	East Gippsland Water	\$1,230,000.00	\$1,230,000.00
Low Carbon Buildings	Energy Efficiency	Museum Victoria (all facilities, including Melb Museum, REB, Scienceworks, storage)	\$11,347,943.00	\$4,811,508.00
Low Carbon Buildings	Energy Efficiency	Public Housing (28 high-rise towers)	\$13,385,500.00	-
Low Carbon Buildings	Energy Efficiency	Melbourne Polytechnic (all campuses)	\$1,917,000.00	\$1,887,080.80
Low Carbon Transport	Electrified Rolling Stock	5 X'Trapolis Train Sets	\$97,870,000.00	\$24,314,000
Low Carbon Transport	Supporting Infrastructure and Station &/or Platform Improvements	Melbourne Metro Tunnel State funded works, excluding PPP scope funded to June 2017	\$1,026,500,000.00	\$291,109,000.00
Low Carbon Transport	Supporting Infrastructure and Station &/or Platform Improvements	Mernda Rail Extension	\$587,714,000.00	\$17,440,000.00
Renewable Energy	Hydropower	Mini Hydroelectric Power Stations - T3	\$15,250,000.00	\$-
Renewable Energy	Hydropower	Tranche 2 Mini Hydros	\$7,360,991.00	\$3,176,484.00
Renewable Energy	Biogas	ETP Solids Handling - Stage 2	\$43,715,895.00	\$-
Renewable Energy	Biogas	ETP Solids Handling - Stage 1A	\$7,658,900.00	\$-
Renewable Energy	Biogas	ETP Solids Handling - Stage 1B	\$8,029,875.00	\$-
Renewable Energy	Biogas	Expansion of Power Station at WTP	\$11,355,000.00	\$-
Water	Greenhouse Gas Mitigation	WTP 55E ASP Upgrade / Renewal	\$111,908,534.65	\$4.451.00
Renewable Energy	Biogas	Buy out residual balloon value of AGL power plant at WTP	\$3,500,000.00	\$-
Renewable Energy	Biogas	WTP 25W Biogas Cover Upgrade	\$42,155,956.15	\$22,796,059.00
Renewable Energy	Solar or Wind	Large scale renewable energy power station at ETP	\$55,000,000.00	\$-
Total			\$2,083,418,593	\$404,112,506

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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 TCV 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 of or investments in equipment and systems which enable the mitigation of greenhouse gasses, as detailed in Appendix B.

Area	Requirement
Solar Energy Generation	Solar electricity generation facilities
Wind Energy Generation	Wind Energy generation facilities

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Low Carbon Transport	All infrastructure, infrastructure upgrades, rolling stock and vehicles for electrified public transport pass this criterion, including electrified rail, trams, trolleybuses and cable cars	
Low Carbon Buildings	For a 5-year bond, a 30% carbon reduction as quantified in property upgrade contracts	
Water	Engineered assets to capture, treat and deliver water, and to protect against flooding.	
	Under the requirements of the methodology selected, the issuer must describe	
	The calculations and assumptions used to arrive at the baseline	
	Projected emissions over the life of the project and associated estimated GHG mitigation impact	
	<ul> <li>A credible, independently verifiable, method of tracking actual emissions and mitigation impact over the life of the bond</li> </ul>	

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#### Part C: Bond structures

Area	Requirement
Traceability	The financial flows of the bond principal must verifiably remain between the Climate Bond and the linked Nominated Project(s)
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
Confidentiality	The information disclosed to the Verifier and the Climate Bond Standards Board may be subject to confidentiality arrangements
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