

# QUEENSLAND TREASURY CORPORATION GREEN BONDS

## DNV 2023 ANNUAL PROGRAMMATIC ASSURANCE STATEMENT

### Scope and objectives

Queensland Treasury Corporation (“QTC” or “Issuer”) has issued multiple Green Bond issuances against its pool of eligible projects and assets. From 2018 QTC has elected to conduct its Certified Green Bond Issuance in a Programmatic format as facilitated by the Climate Bonds Standard (“CBS”) v2.1, v3.0 and v4.0.

QTC Green Bonds that have been issued and are outstanding at the time of verification include:

- QTC Climate Bond AUD 750 million ISIN: AU000XQLQAD1
- QTC Climate Bond AUD 1.73 billion ISIN: AU3SG0001928
- QTC Climate Bond AUD 1.50 billion ISIN: AU3SG0002371
- QTC Climate Bond AUD 3.065 billion ISIN: AU3SG0002561
- QTC Climate Bond AUD 3.50 billion ISIN: AU3CB0297547 (DNV confirms that this instrument will be subject to the 2023 period Programmatic Verification)

QTC has used the proceeds of the BONDS to finance the nominated projects and assets falling under the following categories:

- Low Carbon Transport
- Solar Energy
- Water Infrastructure

DNV Business Assurance Australia Pty Ltd (henceforth referred to as “DNV”) has been commissioned by QTC to provide the Annual Programmatic Verification of the BONDS as an independent and approved verifier under the Climate Bonds 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 BONDS, 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 BONDS have met the criteria of the Climate Bonds Standard Version 4.0 and the associated Technical Criteria on the basis set out below.

The scope of this DNV opinion is limited to the Climate Bonds Standard Version 4.0 and the following associated Sector Technical Criteria:

- Land Transport (v2.0)
- Solar Energy (v2.3)
- Water Infrastructure (v2.1)

The nominated projects and assets which fall under the Water Infrastructure category have been certified in the Pre-Issuance verification under the Water Infrastructure Sector Criteria v2.1, which was updated to v3.2 in August 2022. As confirmed through discussion with CBI, these assets were certified, have been earmarked, and continue to be recognised as eligible by CBI. Any new assets introduced into the pool will have to align with the criteria applicable at the time of being admitted.

## Responsibilities of the Management of QTC and DNV

The management of QTC 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 QTC management and other interested stakeholders in the BONDS 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 QTC. 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 QTC's management and used as a basis for this assessment were not correct or complete.

## Basis of DNV's opinion

DNV has conducted the verification against the CBS v4.0 and associated Sector Technical Criteria through the creation and execution of a verification protocol addressing each requirement of the CBS v4.0 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 QTC 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 date to form our opinion included:

### Programmatic Verification

- Creation and execution of a Climate Bond Standard Protocol, adapted to include the relevant Sector Technical Criteria for the BONDS nominated projects and assets, as described above and in Schedule 2 to this Assessment;
  - Assessment of documentary evidence provided by QTC on the BONDS and supplemented by high-level desktop research, onsite visit for documentation review and interviews with key personnel from the issuer QTC. These checks refer to current assessment best practices and standards methodology;
  - Review and testing of impact reporting data where possible;
  - Discussions with QTC management, and review of relevant documentation;
  - Documentation of findings against each element of the criteria.
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## Findings and DNV's opinion

DNV has performed the Annual Programmatic Verification of the Queensland Treasury Corporation Green Bonds for 2022. It is DNV's responsibility to provide an independent verification statement on the compliance of the Queensland Treasury Corporation Green Bonds with the Climate Bond Standard.

DNV conducted the verification in accordance with the Climate Bond Standard Version 4.0 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 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 planned and performed the verification by obtaining evidence and other information and explanations that DNV considers necessary to give limited assurance that the Queensland Treasury Corporation Green Bonds continue to meet 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 Queensland Treasury Corporation Green Bonds for the data period ending 31 December 2022 are not, in all material respects, in accordance with the requirements of the Climate Bond Standard Version 4.0 and associated Sector Criteria including Land Transport, Solar Energy and Water Infrastructure.

DNV has also reviewed the impact reporting associated with QTC's Low Carbon Transport, Renewable Energy and Water and Wastewater projects for the calendar year 2022. DNV confirmed that the reported impacts were consistent with the data provided.

### **For DNV Business Assurance Australia Pty. Ltd.**

Sydney, Australia / 16 May 2023



Mark Robinson  
Team Leader



David McCann  
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.

## SCHEDULE 1: QTC PORTFOLIO OF NOMINATED ASSETS VALUED AS AT 31 DECEMBER 2022

QTC Green Bond Portfolio Summary for the 2023 Climate Bonds Standard Programmatic Annual Verification.

Categories of eligible projects	Sub category	Project name	Asset Valuation (AUDm)	Total allocations from issues i, ii, iii, iv, v, vi (AUDm)
Low Carbon Transport	Light rail – electrified trams and supporting infrastructure	Gold Coast Light Rail Stage 1	492.20	363.71
		Gold Coast Light Rail Stage 2	211.00	153.20
	Electrified passenger transport rolling stock	New Generation rolling stock (electric)	949.50	697.81
		Tilt Trains rolling stock	27.10	20.00
		Citytrain rolling stock	496.80	375.00
	Electrified rail and supporting infrastructure	Citytrain network and infrastructure	3,195.16	2,162.45
		Redcliffe Peninsula Line	290.80	217.30
Cycleways - multiple	Cycleways	197.20	137.00	
Renewable Energy	Solar	Sunshine Coast Solar Farm	34.87	30.00
		Warwick Solar Farm	68.00	55.00
Water Infrastructure	Water - Drought Defence, Storage, Treatment, Desalination, Flood Defence	Gold Coast Desalination Plant	780.20	684.00
		Water Treatment Plants	1,719.30	1,250.00
		Pipelines and Other	2,983.80	2,091.35
		Dams and Weirs	3,479.90	2,317.66
		Western Corridor Recycled Water Scheme	1,907.40	-
<b>Total</b>			16,833.23	10,554.48

i Net proceeds from QTC March 2024 Green Bond were \$748,710,000 from \$750,000,000 Face Value of bonds issued

ii Net proceeds from QTC March 2029 Green Bond were \$1,756,982,800 from \$1,730,000,000 Face Value of bonds issued

iii Net proceeds from QTC March 2031 Green Bond were \$1,523,925,000 from \$1,500,000,000 Face Value of bonds issued

iv Net proceeds from QTC March 2032 Green Bond were \$2,993,007,450 from \$3,065,000,000 Face Value of bonds issued

v Net proceeds from QTC March 2033 Green Bond were \$3,531,846,000 from \$3,500,000,000 Face Value of bonds issued

vi Any future allocation of Green Bond proceeds to the Scheme may be deferred until it is recommissioned to a 'ready to use' state.

## SCHEDULE 2: VERIFICATION CRITERIA

### Summary criteria for assertions of compliance with the Climate Bond Standard v2.1, v3.0 and v4.0

The criteria against which QTC and its nominated projects and assets have been reviewed prior to inclusion in the Bonds are grouped under the requirements as detailed within the Climate Bond Standard Version 2.1, 3.0, and 4.0 including:

#### Part A: Pre-Issuance Requirements

Area	Requirement
Use of Proceeds	Nominated Projects & Assets which are proposed to be associated with the Bonds 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

Use of Proceeds	Nominated Projects & Assets which are proposed to be associated with the Bonds 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 assets**

Nominated projects and assets include financing of or investments in the mitigation and abatement of greenhouse gasses and adaptation and resilience to climate change as detailed in Schedule 1.

Area	Requirement
Solar Energy Generation	Solar electricity generation facilities
Low Carbon Transport	Electrified Rail and Associated Infrastructure Cycle Ways
Water Infrastructure	Water Infrastructure for Adaptation and Resilience Flood Protection and Climate Change Adaptation and resilience

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

<b>Area</b>	<b>Requirement</b>
Pre-Issuance Certification	The Borrower of a Climate Bonds Standard Certified Bond 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 Bond 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

### SCHEDULE 3: ALIGNMENT WITH UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

**Alignment of the Use of Proceeds against the United Nations Sustainable Development Goals (UN SDG)**

In addition to the Programmatic verification, DNV has reviewed the Use of Proceeds and nominated assets associated with the QTC Green Bonds for alignment with the UN SDGs in the following table.

Use of Proceeds	UN SDG	UN SDG Target		Assessment of Contribution to Achieving the SDG
Water Infrastructure	6. Clean Water and Sanitation	6.1	By 2030, achieve universal and equitable access to safe and affordable drinking water for all	<p>Compliance with CBI Water Infrastructure criteria v2.1.</p> <p>This includes a mitigation component to confirm any claims of GHG abatement or avoidance and an adaptation and resilience component that evaluates the planning, design, risks and impacts of the asset.</p> <p>It is noted that water infrastructure assets have become a piece of critical infrastructure in Australian cities due to the frequency, duration and impact of drought events that are influenced by climate change.</p> <p>Compliance with the CBI Water criteria demonstrates a contribution towards UN SDG 6, Target 6.1.</p>
	9. Industry, Innovation and Infrastructure	9.4	By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking	<p>Compliance with CBI Water Infrastructure Criteria is consistent with the development of and investment in critical water infrastructure providing climate adaptation and resilience benefits. DNV confirms that this demonstrates a contribution towards UN SDG 9, Target 9.4.</p>

			action in accordance with their respective capabilities	
	11. Sustainable Cities and Communities	11.B	By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels	<p>Compliance with CBI Water Infrastructure criteria.</p> <p>This includes a mitigation component to confirm any claims of GHG abatement or avoidance and an adaptation and resilience component that evaluates the planning, design, risks and impacts of the asset.</p> <p>The water infrastructure assets are part of the Queensland Governments strategic investment plans to support adaptation and resilience in the State.</p> <p>Compliance with the CBI Water criteria demonstrates a contribution towards UN SDG11, Target 11.B.</p>
Land Transport	11. Sustainable Cities and Communities	11.6	By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	<p>Compliance with CBI Land Transport Criteria.</p> <p>These benchmarks address the contribution of transport system to National GHG and Air Pollution emissions through energy consumption, associated energy generation and direct emissions to atmosphere.</p> <p>Compliance with the CBI Land Transport Criteria demonstrates a contribution towards UN SDG 11, Target 11.6.</p>
		11.a	Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning	Compliance with CBI Land Transport Criteria represents the leveraging and implementation of regional development planning and demonstrates a contribution towards UN SDG 11, Target 11.a.

	9. Industry, Innovation and Infrastructure	9.4	By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	Compliance with CBI Land Transport Criteria represents the upgrade and evolution of transport infrastructure to be more sustainable and includes the adoption of electrified rail, which is consistent with taking action to address climate change. DNV confirms that this demonstrates a contribution towards UN SDG 9, Target 9.4.
Renewable Energy	7. Affordable and Clean Energy	7.2	By 2030, increase substantially the share of renewable energy in the global energy mix.	Compliance with CBI Solar and Wind Criteria. The Criteria have been established to ensure alignment with the Paris Agreement 2°C target. Renewable energy generation from terrestrial Solar and Wind assets fall within this Criteria.  Compliance with the CBI Solar and Wind Criteria demonstrates a contribution towards UN SDG 7, Target 7.2.
	11. Sustainable Cities and Communities	11.6	By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	Compliance with CBI Solar and Wind Criteria.  These benchmarks address the contribution of renewable energy generation to National GHG and Air Pollution emissions through energy generation and direct emissions to atmosphere.  Compliance with the CBI Solar and Wind Criteria demonstrates a contribution towards UN SDG 11, Target 11.6.
		11.a	Support positive economic, social and environmental links between urban, peri-urban and rural areas	Compliance with CBI Solar and Wind Criteria represents the leveraging and implementation of regional development planning and demonstrates a contribution towards UN SDG 11, Target 11.a.

			by strengthening national and regional development planning	
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