

# **GREEN BOND ANNUAL REPORT 2025**

Supporting Queensland's pathway to climate resilience and an environmentally sustainable economy

### Acknowledgment of Country

Queensland Treasury Corporation (QTC) acknowledges Aboriginal peoples and Torres Strait Islander peoples as the Traditional Owners and Custodians of the land. We recognise their connection to land, sea and community, and pay our respects to Elders past, present and emerging.

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### About this report

Queensland Treasury Corporation (QTC) green bonds support Queensland's transition to a low carbon, climate resilient and environmentally sustainable economy. QTC's Green Bond Framework (Framework) sets out the governance and processes that underpin QTC's issuance of green bonds.

In line with the Framework's reporting commitments, this report provides information about the notional allocation of net proceeds from QTC's green bonds as at 30 April 2025 and reporting on environmental impacts where available. All proceeds have been notionally allocated against eligible projects and assets that provide environmental benefits for the State of Queensland.

### We welcome your feedback

As sustainable finance markets continue to evolve, so too will our approach as we respond to changing investor and market expectations. We strive for continuous improvement and welcome your feedback on our reporting approach and initiatives.

You can contact us at: investorrelations@qtc.com.au

## Message from the Queensland Treasurer



**The Honourable David Janetzki MP** Queensland Treasurer, Minister for Energy and Minister for Home Ownership

The Queensland Government is committed to developing achievable and practical plans to reduce emissions and reach our net zero target by 2050. Our priority is to provide an energy system that is affordable, reliable and sustainable for all Queenslanders.

We will be guided by our objective to build a strong economy that will promote market confidence and investment. Offering investors opportunities to engage in Queensland's progress toward a sustainable future is an important part of this approach.

Queensland Treasury Corporation's (QTC) Green Bond Program supports the State's pathway to an environmentally sustainable economy. This program—established in 2017—has become the largest<sup>1</sup> in Australia, with almost AUD13.1 billion of total outstandings over five green bond lines.

Qualified investors can participate in QTC's Green Bond Program to support a range of eligible projects and assets focused on decarbonising the economy and promoting better environmental and community outcomes for the State. The green bond asset pool has grown over the years to total AUD20 billion. In FY2024-2025, a new recovery and recyclables facility was added to the pool, the first in this category to be included in QTC's program.

The Queensland Government and QTC continue to work together to diversify the assets in the Green Bond Program to align with global best practice. All issued QTC green bonds comply with internationally recognised standards, including the ICMA green bond principles and Climate Bonds Initiative (CBI) standards.

Through its annual Queensland Sustainability Report, the Government continues to enhance its reporting to provide transparency to all stakeholders. The report shares detailed financial and non-financial information related to sustainability management, including how the Government measures and manages sustainability risks and opportunities.

I extend my thanks to QTC in its management of the Green Bond Program, and to Queensland Treasury for their ongoing support.

## Message from the Acting Chief Executive Officer and the Executive Director of Funding Strategy and Investor Relations





Susan Buckley Acting Chief Executive Officer

Jose Fajardo Executive Director Funding Strategy and Investor Relations

Since the inauguration of QTC's Green Bond Program in 2017, QTC has contributed to the ongoing development of Australia's sustainable finance market. Today, with approximately AUD13.1 billion total outstandings across five green bond lines, QTC remains the largest AUD green bond issuer in Australia<sup>2</sup>.

QTC's Green Bond Program enables investors to support environmental outcomes for the State of Queensland through a range of eligible projects and assets such as low carbon transport, renewable energy, land conservation and waste management.

This year, we initiated a strategic review of our program to ensure alignment with global markets and industry developments. In November 2024, we appointed Commonwealth Bank of Australia and RBC Capital Markets as joint Sustainable Finance Coordinators to support a comprehensive review of our Green Bond Framework. The last review, conducted in 2021 with minor updates, makes this year an ideal time for a reassessment. This includes gathering investor feedback to confirm our approach is well informed and aligned with their expectations and insights.

Complementing QTC's benchmark bond lines, green bonds support the diversification of our investor base and funding mix. This financial year, we increased the existing 2031 and 2032 green bond lines via a multi tranche tender. This is the first time QTC has issued green bonds in this format. Additionally, we increased the 2034 green bond line through reverse enquiry.

Continued interest from domestic and offshore investors reinforces our commitment to our Green Bond Program, and in turn, we would like to thank our investors and Fixed Income Distribution Group for their ongoing support. Investor engagement and transparency remain top priorities, and we welcome open and reciprocal communication.

QTC relies on the close partnership and support of government stakeholders to identify eligible projects and assets for inclusion in the green bond pool. The program's success is built on the strong collaboration between QTC's Sustainability team, Queensland Treasury and various government agencies. This financial year, their efforts led to the addition of a recovery and recyclables facility, bringing our green bond pool to AUD20 billion across 27 assets in six categories.

As we move forward, we will continue to work closely with our government stakeholders with the aim of further expanding and diversifying our green bond pool. We remain committed to excellence and welcome your feedback.

<sup>2</sup> Source: Bloomberg, February 2025

QUEENSLAND TREASURY CORPORATION GREEN BOND ANNUAL REPORT 2025

# QTC green bonds

QTC green bonds enable investors to support Queensland's pathway to a climate resilient and an environmentally sustainable economy.

#### QTC Green Bond outstandings as at 30 April 2025

Maturity <sup>3</sup>	Coupon	ISIN	Credit rating <sup>4</sup>	Outstandings AUD million
6 March 2029	2.50%	AU3SG0001928	AA+/Aa1	1,730
10 March 2031	1.25%	AU3SG0002371	AA+/Aa1	1,752
2 March 2032	1.50%	AU3SG0002561	AA+/Aa1	3,166
9 March 2033	4.50%	AU3CB0297547	AA+/Aa1	3,500
2 February 2034	4.75%	AU3SG0002959	AA+/Aa1	2,950
Total				13,098

At the time of this report, Queensland is rated AA+/A-1+/Negative by S&P Global and Aa1/P1/ Stable by Moody's.

At the time of this report, all QTC green bonds on issue are certified by the Climate Bonds Standard Board on behalf of the Climate Bonds Initiative (CBI).

QTC's eligible project and asset pool, as verified by Sustainalytics totals AUD20 billion as at 31 December 2024 (for more information about Sustainalytics refer to page 5).

## How the proceeds can be used

QTC may issue two different types of green bonds, which must be issued in accordance with QTC's Green Bond Framework, and either:

- the Climate Bonds Standard (CBI Certified Green Bonds), or
- the ICMA Green Bond Principles (ICMA Green Bonds).

This flexible approach enables QTC to finance and re-finance a broad range of eligible projects and assets that contribute to the mitigation of, and adaptation to, climate change. At the time of this report, QTC has only CBI Certified Green Bonds on issue.

The net proceeds of green bonds may be notionally allocated against eligible projects and assets that have an environmental benefit associated with the State of Queensland. This may include proceeds used for partially or wholly financing or re-financing new and existing eligible projects and assets.

The eligible project and asset criteria are set out in the QTC Green Bond Framework, which is available to qualified investors on QTC's website.

QTC's green bond pool is currently comprised of refinanced eligible projects and assets. To date, where an eligible asset or project in QTC's green bond pool is under development, the valuation attributed to that asset or project reflects capital expenditure already incurred. On that basis, QTC classes both its existing and new eligible projects and assets as refinanced. This approach aims to insulate QTC's Green Bond Program from external factors that may impact forecasted investment exposure.

#### QTC Green Bonds

- Are guaranteed by the Queensland Government
- Carry the same credit rating as QTC and the Queensland Government
- Are exempt from Australian interest withholding tax

Net proceeds from QTC green bonds are notionally allocated against eligible projects and assets that support Queensland's pathway to a climate resilient and an environmentally sustainable economy.

<sup>&</sup>lt;sup>3</sup> U.S. Rule 144A capability.

<sup>&</sup>lt;sup>4</sup> Ratings by S&P Global and Moody's Investors Service respectively. Credit ratings should not be taken as recommendations by a rating agency to buy, sell or hold securities (including QTC Green Bonds). They may be revised, suspended or withdrawn at any time by the rating agency.

The eligible assets and projects within QTC's green bond pool may continue to be notionally refinanced throughout their operational life subject to the ongoing delivery of their intended environmental benefits, including climate change mitigation, adaptation, and resilience.

An internal register is used to track the notional allocation of an amount equivalent to the net proceeds from a green bond issuance against eligible projects and assets.

## Governance

QTC's Green Bond Committee has representatives from across QTC and Queensland Treasury and is accountable for evaluating potential eligible projects and assets, maintaining a register of approved eligible projects and assets, approving the notional allocation of net proceeds, and ensuring ongoing compliance with all aspects of the QTC Green Bond Framework.

## Independent assurance and reporting

QTC is committed to complying with its Green Bond Framework and ensuring the use of proceeds are appropriately allocated on a notional basis. Accordingly, QTC has appointed Sustainalytics as an independent and accredited assurance provider. Sustainalytics is an accredited verifier with the Climate Bonds Standard and conducts assurance in accordance with international assurance frameworks to provide verification that QTC CBI Certified green bonds meet the CBI Standard and associated sector criteria.

In addition to the Green Bond Annual Report, QTC discloses the following to qualified investors on QTC's website:

- Annual verification statement from an external verifier.
- Assurance Opinion in relation to QTC's Green Bond Framework from an external verifier.
- CBI certification for CBI Certified green bonds.

We have maintained a consistent reporting framework and remain adaptive to investor feedback as we continue to monitor market developments in reporting.



Daisy Hill. Image courtesy of the State of Queensland.

# The evolution of QTC's green bond program

2017
<ul> <li>QTC issues inaugural AUD750 million 22 March 2024 green bond</li> <li>Largest AUD green bond on issue at the time of issuance</li> <li>Finance Asia Deal Achievement Award in Australia and New Zealand for Best Green Bond Deal</li> </ul>
2018
<ul> <li>Expanded QTC's Green Bond Framework to facilitate issuance of both CBI Certified green bonds and green bonds that accord with ICMA Green Bond Principles</li> </ul>
2019
<ul> <li>QTC issues AUD1.25 billion of a new 6 March 2029 green bond</li> <li>Second largest green bond issued in the Australian market</li> <li>Placed QTC as joint leader for the largest AUD green bond issuer by volume</li> <li>QTC achieves programmatic certification from CBI</li> <li>First Australian semi-government issuer to tap an existing green bond line</li> </ul>
2020
<ul> <li>Climate Bonds Initiative Green Bond Pioneer Awards: Largest Subnational Green Bond Deal of 2019</li> <li>QTC issues AUD1.5 billion of a new 10 March 2031 green bond</li> <li>Largest semi-government AUD CBI Certified green bond issuer by volume, with AUD3.98 billion outstanding</li> </ul>
2021
<ul> <li>QTC issues AUD3.0 billion of a new 2 March 2032 green bond</li> <li>Largest AUD green bond on issue at the time of issuance</li> <li>Finance Asia Deal Achievement Award in Australia and New Zealand for Best Local Bond Deal and Best Sustainable Finance Deal for a Financial Institution</li> <li>QTC's Green Bond Framework updated</li> </ul>
2023
<ul> <li>QTC issues AUD3.0 billion of a new 9 March 2033 green bond</li> <li>Equalled QTC's largest green bond transaction</li> </ul>
2024
<ul> <li>Climate Bonds Initiative Climate Bonds Awards: Largest Certified Climate Bond in 2023</li> <li>QTC issues AUD2.75 billion of a new 2 February 2034 green bond</li> <li>QTC's inaugural 22 March 2024 green bond matured</li> <li>14 new eligible projects and assets added to the pool</li> <li>QTC appoints Sustainable Finance Coordinators to support the update of its Green Bond Framework</li> </ul>

# Allocation of proceeds

All net proceeds from QTC's green bonds issued as at 30 April 2025 have been notionally allocated against a selection of eligible projects and assets as detailed below.

Categories of eligible projects/assets <sup>5</sup>	Sub category	Project/asset name <sup>6</sup>	Asset Valuation* (AUD M)	Allocation of green bond proceeds (AUD M)
Electrical Grids	Transmission	Queensland High-Voltage Transmission Infrastructure	58.00	0.00
		Queensland Renewable Energy Zones	30.60	0.00
		CopperString	293.60	0.00
Renewable Energy	Solar	Advancing Clean Energy Schools (ACES) Program	168.10	0.00
		Sunshine Coast Solar Farm	34.87	29.64
		Warwick Solar Farm	68.00	55.00
	Wind	Wambo Wind Farm Stage 1	394.55	0.00
		Wambo Wind Farm Stage 2	176.46	0.00
Land Conservation and Restoration	Conservation of non-forested land	The Lakes and Daisy Hill	20.62	0.00
Low carbon transport	Light rail – electrified trams	Gold Coast Light Rail Stage 1 & 2	703.20	632.88
	and supporting infrastructure	Gold Coast Light Rail Stage 3	479.76	0.00
	Electrified passenger transport and rolling stock	New generation rolling stock (electric)	949.50	854.55
		Tilt Trains rolling stock	27.10	20.00
		Citytrain rolling stock	496.80	375.00
		Queensland Train Manufacturing Program	1,181.10	0.00
	Electrified rail and supporting	Citytrain network & infrastructure	3,195.16	2,657.90
	infrastructure	Redcliffe Peninsula Line	290.80	261.72
		Beerburrum to Nambour Rail Upgrade	62.20	0.00
		Logan and Gold Coast Faster Rail (Kuraby to Beenleigh) Upgrade	302.80	0.00
	Electric vehicles	QFleet Electric Vehicle Transition Strategy	88.13	0.00
	Cycleways – multiple	Cycleways	274.04	181.78
Waste Management	Recycling	NEW ASSET Sunshine Coast Council Materials Recycling Facility	45.70	0.00
Water infrastructure	Water – drought defence,	Gold Coast Desalination Plant	780.20	684.00
	storage, treatment, desalination, and flood defence	Water Treatment Plants	1,719.30	1,547.37
<b>V</b>	,	Pipelines and Other	2,983.80	2,685.42
		Dams and Weirs	3,479.90	3,056.22
ABBE		Western Corridor Recycled Water Scheme <sup>7</sup>	1,907.40	0.00
Total			AUD 20,211.68	AUD 13,041.48

Total

\*QTC green bond pool valuations as at 31 December 2024. For assets under development, valuations are based on expenditure incurred as at 31 December 2024 and not forecasted project costs.

All assets designated as 'new' were added to QTC's green bond pool in 2024. Any future allocation of green bond net proceeds to the Scheme may be deferred until it is substantially recommissioned to a 'ready to use' state. 7

<sup>&</sup>lt;sup>5</sup> The icons depict alignment with the United Nations Sustainable Development Goals (SDG). 6

# **Electrical grid**

## Queensland High-Voltage Transmission Infrastructure

Powerlink is a Queensland Government Owned Corporation that owns, develops, operates, and maintains the high voltage electricity transmission network in Queensland. The transmission network will enable the connection of new generation and storage to ensure customer electricity demand is met. *The Energy (Renewable Transformation and Jobs) Act*  2024 creates a framework through which the state will develop high-voltage, high-capacity transmission infrastructure to meet Queensland's growing energy needs. The Queensland Government is developing a five-year Energy Roadmap that will include new transmission investments, to be delivered by the end of 2025.

Further information can be found on the Queensland Treasury and Powerlink websites.



Image courtesy of Powerlink.

## Queensland Renewable Energy Zones

The Queensland Government – working with Powerlink – is identifying potential Renewable Energy Zones (REZs) across Southern, Central and Northern Queensland regions.

A REZ is an area that is strategically planned to connect multiple clean energy generators and deliver better outcomes for Queensland communities and industries. REZs connect electricity generators such as wind and solar projects, in a coordinated way to optimise renewable development and network infrastructure. REZs consider factors like natural resource availability, existing grid infrastructure, and environmental, community and economic implications.

A REZ uses shared infrastructure to reduce costs and take advantage of economies of scale. REZ development includes integrated infrastructure planning.

Powerlink, in its nominated capacity as a REZ Delivery Body in Queensland, will assist in the planning, declaration and operation of Queensland REZs.

In addition to this, as the Transmission Network Service Provider (TNSP), Powerlink will build, own, operate and maintain the REZ transmission network. In delivering REZs, Powerlink also coordinate engagement activities with the Queensland Government and renewable energy companies to ensure landholders, communities and other stakeholders can provide input and feedback. Coordinating network connections within a REZ will facilitate better outcomes for communities, the environment, and industry in the region.

Further information can be found on the Powerlink website.



Image courtesy of Powerlink.

## CopperString

The CopperString project is a high-voltage electricity transmission line that will connect Queensland's North West Minerals Province (NWMP) to the national electricity grid. Due to its remoteness, the NWMP is not currently connected to the National Electricity Market (NEM). Most electricity in the region is supplied through the separate and only power transmission and distribution network available in the region known as the North West Power System (NWPS). The NWPS is predominantly sourced from gas-fired generation, resulting in more expensive energy costs for users compared to those connected to the NEM.

CopperString will:

- Enable additional energy providers and generation infrastructure for the region's critical minerals, mining, processing and manufacturing sector, delivering reliable and affordable power to the people, businesses and communities in the region.
- Make possible development of new generators by enabling their connection to the Queensland grid, where they can sell their power in the NEM.

Further information can be found on the Powerlink website.



Image courtesy of Powerlink.

# Renewable energy

### Renewable energy impact reporting (1 Jan-31 Dec 2024)

Year	Subcategory	Project/asset name	Renewable electricity generation (MWh/a)ª	GHG emissions avoided (kt/a) <sup>b</sup>	
2024	Solar	Operational			
	Advanced Clean Energy Schools (ACES) Program <sup>c</sup>	76,737	54,483		
		Sunshine Coast Solar Farm <sup>d</sup>	25,440	18,062	
		Warwick Solar Farm <sup>e</sup>	87,398	62,053	
	Wind	Under Development			
		Wambo Wind Farm Stage 1 & 2			

a MWh/a – megawatt hours per annum.

b "GHG emissions avoided" refers to a baseline/alternative reference scenario using Queensland Scope 2 Emissions Factors. Source: 2024 Australian National Greenhouse Accounts Factors Workbook, Australian Government Department of Climate Change, Energy, the Environment and Water. Amounts are expressed as thousands of tons per annum (kt/a).

c Figures sourced directly from the Department of Education. d Figures sourced directly from Sunshine Coast Regional Council.

e Figures sourced directly from the University of Queensland.

## Wambo Wind Farm

Expected capital cost (Stanwell share)

Wambo Stage 1: \$488,728,000 Wambo Stage 2: \$462,206,000

#### Expected completion date

Stage 1 commercial operations commence in late 2025 Stage 2 commercial operations commence in late 2026

Wambo Wind Farm is a 50:50 joint venture project with Stanwell Corporation (Stanwell) and Cubico Sustainable Investments (Cubico) with two stages currently under construction. The wind farm, located near Jandowae in the Western Downs region, consists of 83 wind turbines across stages 1 and 2, which will add more than 500MW of renewable energy to Queensland's energy system. Wambo Wind Farm, along with the associated Powerlink connection works, is supporting up to 400 jobs during construction and nine ongoing maintenance jobs planned during operations.

During 2024, the following activities were completed at Wambo Wind Farm:

- Stage 1 foundation works, including the delivery of the turbine components to site.
- Erection of the wind turbines in Stage 1 commenced.
- Commencement of Stage 2 civil and foundation works.
- Construction of the building used for operational and maintenance activities.

Each year during construction, Stanwell and Cubico provide funding of up to \$200,000 to support local community groups

and organisations which are making a meaningful, long-term impact in the Western Down region.

Further information about the project can be found on the project website: www.wambowindfarm.com.au



Image courtesy of Stanwell.

# Advanced Clean Energy Schools (ACES) program

The Advancing Clean Energy Schools (ACES) program has reduced energy costs across Queensland public schools through solar and energy efficiency measures since its inception in 2023. The initiative has seen approximately 200,000 solar panels installed and a range of other power and energy efficiency measures delivered across 932 existing schools. This project has led to a reduction in the Department of Education's electricity costs and emissions while supporting approximately 1,000 jobs as part of the project's implementation.

In 2024, an additional 20 sites were chosen to receive solar installations. This resulted in the installation of over 1,565 solar panels and an additional 625.74KW of solar inverters at



Numinbah Valley Environmental Education Centre - Solar Upgrade Installation. Image courtesy of the Queensland Government.



Malanda State High School. Image courtesy of the Queensland Government.



Redcliffe Special School. Image courtesy of the Queensland Government.

<sup>8</sup> Tonne of Carbon Dioxide Equivalent (TCO2e).

eligible outdoor and environmental education centres. The estimated emissions expected to be avoided with this system is approximately  $456.16 \times TCO2e^8$  and a total of 104.27KW of renewable energy generated annually.

Further information can be found on the Department of Education website.

ACES program overview	
Cost to acquire and install the solar panels	\$168.1m
Average operational life of assets	20 years for solar panels 10 years for inverters
Number of schools included in the program	932



Elanora State School. Image courtesy of the Queensland Government.



Boyne Island State School. Image courtesy of the Queensland Government.



Yarrabah State School. Image courtesy of the Queensland Government.

## Sunshine Coast Solar Farm

The Sunshine Coast Regional Council was Australia's first local government to offset its entire electricity consumption across all its facilities and operations from renewable energy generated at the 15 MW Sunshine Coast Solar Farm.

Since the Sunshine Coast Solar Farm began generating power in July 2017, it has avoided 159,990 tonnes of carbon dioxide (CO2) emissions. From July 2017 to 31 December 2024, the Sunshine Coast Solar Farm has generated 204,876 MWh of electricity, more than offsetting the 194,692 MWh of energy used by Council. Through the Sunshine Coast Solar Farm, the Council has successfully insulated the cost of its operations from rising electricity costs.

Current site management practices include regular vegetation management to minimise bushfire risks and maintenance of stormwater runoff.

Further information can be found on the Sunshine Coast Council website.



Image courtesy of the Sunshine Coast Council.

## Warwick Solar Farm

Warwick Solar Farm is a 64 megawatt of alternating current (MWac) renewable energy facility in the Southern Downs Region of Queensland. The project was acquired by the University of Queensland (UQ) in 2018 and moved to 100% operating capacity in April 2023. Warwick Solar Farm uses low impact solar photovoltaic technology, and the farm is expected to generate up to a maximum of 160,000 MWh of clean energy every year. Vegetation control occurs via an agreement with a local grazier, enabling dual energy and agriculture purpose of the land.

Further information can be found on the University of Queensland website.



Image courtesy of the University of Queensland.

# Land conservation

## The Lakes

As part of growing the State's Protected Area Estate (PAE), 'The Lakes' acquisition secured 43,260-hectares of pastoral land across two lots approximately 260km west of Townsville (110km north of Hughenden).

The transition from a grazing property into a Queensland national park involved the following activities:

- Removal of pastoral operations.
- Engagement with Traditional Owners and First Nations groups to discuss future management and aspirations.
- The construction and completion of new firebreaks and boundary fences.
- Substantial investment in cultural heritage surveys and cultural clearances of the construction of new park infrastructure.

The property, partly located on the traditional Country of the Gudjala People, consists of forests and woodlands combined with large refugia areas and riparian corridors and provides significant habitat connectivity across the bioregion. The four hypersaline lakes from which the property takes its name are classed as wetlands of high ecological significance. The acquisition ensures the future preservation of relatively undisturbed ecosystems and habitat.

As part of obtaining national park status through the Queensland Parks and Wildlife Service (QPWS) the condition of the key values listed below will be monitored by regular health checks, including:

- Threatened species monitoring surveys.
- The effectiveness of fire and pest management and strategies.
- Protection of significant physical Indigenous cultural heritage sites.



Image courtesy of the State of Queensland.

## Daisy Hill

Daisy Hill Conservation Park's 213-hectare expansion protects bushland around the Kimberley Plateau and consolidates the forests between Daisy Hill Conservation Park and Venman Bushland National Park, southeast of Brisbane City. The new area of park contains significant habitat for koalas and other wildlife and links to the existing parks' extensive trail network, barbecue and picnic facilities, which caters for a variety of recreational activities including horse riding, mountain biking and bush walking.

Further information can be found on the Department of the Environment, Tourism, Science and Innovation website.



Image courtesy of the State of Queensland

# Low carbon transport

## Low Carbon Transport Impact Reporting (1 Jan-31 Dec 2024)

Year	Sub-category	Project/asset name	Passenger trips (count)	Passenger distance travelled (km)	Emissions (tCO2e)ª
2024	Rail	Operational			
		Citytrain Network <sup>b</sup>	48,557,437	995,022,122	190,766
		Electric Tilt Train Rollingstock <sup>b</sup>	153,752	57,125,181	4,013
	Gold Coast Light Rail (Stage 1 and 2) $^{\circ}$	12,459,785	69,116,271	9,876	
		Under Development			
		Queensland Train Manufacturing Program			
		Gold Coast Light Rail (Stage 3)			
		Beerburrum to Nambour Rail Upgrade			
		Logan and Gold Coast Faster Rail (Kuraby to Beenleigh) upgrade			

Emissions from electricity purchased. Figures sourced directly from Queensland Rail. Figures sourced directly from Translink. b



Image courtesy of the State of Queensland.

## Queensland Train Manufacturing Program

### Expected capital cost (Queensland Government share) \$4.869 billion

### Expected completion dates

- First train expected to be completed and begin testing in 2026.
- Ormeau rail facility construction expected to be operational in 2027.

The Queensland Train Manufacturing Program (QTMP) aims to enhance the State's rail network by manufacturing 65 new six-car electric passenger trains to improve reliability and comfort. QTMP will support South East Queensland's growing population and economic growth, as well as support Cross River Rail<sup>9</sup> and the 2032 Brisbane Olympic and Paralympic Games.



The new trains are expected to use less energy compared to the existing fleet, arising from more efficient lighting, improved efficiency in the traction and power systems, and the potential for trains to be switched into lower power use modes at night and when not in use.

The QTMP includes construction of a purpose-built manufacturing facility in the Fraser Coast region, and construction of a new rail facility for train maintenance and stabling in Ormeau.

Further information can be found on the Queensland Department of Transport and Main Roads website.



Images courtesy of the State of Queensland.

<sup>9</sup> Cross River Rail is a new 10.2km rail line that includes 5.9km of twin tunnels running under the Brisbane River and CBD.

## Beerburrum to Nambour Rail Upgrade Stage 1

Expected capital cost (Queensland Government share) \$387.5 million

#### Expected completion

2027 (subject to weather and construction conditions)

The Beerburrum to Nambour Rail Upgrade (Stage 1) is a cofunded project between the Queensland Government (39% share) and the Australian Federal Government (61% share) to duplicate and straighten approximately 13km of track between Beerwah and Beerburrum. The upgrade will provide additional track capacity for freight and passenger services, delivering greater efficiency and reliability to the growing Sunshine Coast region.

Further information can be found on the Queensland Department of Transport and Main Roads website.

Further information can be found on the Queensland Department of Transport and Main Roads website.



Image courtesy of the State of Queensland.

## Logan and Gold Coast Faster Rail (Kuraby to Beenleigh) Upgrade

#### Expected capital cost (Queensland Government share) \$2.875 billion

# Expected start of construction 2025

The Logan and Gold Coast Faster Rail is a co-funded project between the Queensland Government (50% share) and the Australian Federal Government (50% share) designed to enhance the rail transport connectivity between South East Queensland's two largest population centres, Brisbane and the Gold Coast.

The project will deliver:

- double the capacity of the Gold Coast rail line and reduce waiting times at stations between Brisbane, Logan and the Gold Coast;
- approximately 20km of new tracks and rail systems between Kuraby station and Beenleigh station, increasing the corridor from two to four tracks;
- better connected communities through accessible upgrades at stations; and
- new train signalling technology between Salisbury and Varsity Lakes.

Further information can be found on the Queensland Department of Transport and Main Roads website.



Image courtesy of the State of Queensland.

## Gold Coast Light Rail

Year	Subcategory	Project/asset nameª	Passenger trips (count)	Passenger distance travelled (km)	Emissions (tCO2e)
2024	Clean Transportation - Rail	Gold Coast Light Rail (Stages 1 & 2)	12,459,785	69,116,271	9,876
2023	Clean Transportation - Rail	Gold Coast Light Rail (Stages 1 & 2)	11,079,625	53,864,613	9,331
2022	Clean Transportation - Rail	Gold Coast Light Rail (Stages 1 & 2)	8,581,279	44,913,263	8,933

<sup>a</sup> Figures sourced directly from Translink.

Gold Coast Light Rail is the largest transport project undertaken on the Gold Coast in Queensland co-funded by the Queensland Government, the Federal Government and Local Governments.

The Gold Coast Light Rail network eases traffic congestion and reduces emissions by taking cars off the road. Furthermore, light rail vehicles produce less noise than diesel or other fuelburning buses and much less noise than the equivalent volume of automobile traffic. A single 43.5-metre tram can carry up to 309 passengers, equivalent to six standard buses, and has the potential to remove up to 235 cars from the road during peak periods.

## Gold Coast Light Rail Stages 1 and 2

The completed Stages 1 and 2 of the Gold Coast Light Rail includes 20.3km of rail lines, 19 tram stations and 18 electric trams. In addition, 1,400 'Park and Ride' spaces have been provided.

## Gold Coast Light Rail Stage 3

Expected capital cost (Queensland Government share) \$1.04 billion

#### Expected completion

2026

Gold Coast Light Rail Stage 3 is a 6.7km extension of the light rail network from Broadbeach to Burleigh Heads and is funded by the Queensland and Federal governments in partnership with City of Gold Coast. Stage 3 will add 6.7km of dual light rail track, eight new light rail stations, and five electric trams to the existing 20.3km light rail network (Stages 1 and 2).

During 2024, groundwork was undertaken for track installation, platform and station construction. Testing and commissioning is expected to start from the northern end of Stage 3 by late 2025, and the light rail system is expected to be open for passenger services in mid-2026.

Stage 3 continues to invest in green initiatives, such as the electrification of the contractor's fleet, using biodiesel for eligible equipment and encouraging construction crew to reduce emissions by using public transport, carpool or use forms of active transport to travel to work. These initiatives are designed to accelerate project sustainability.

Further information can be found on the Gold Coast Light Rail Stage 3 website.



Image courtesy of the City of Gold Coast.



Image courtesy of the City of Gold Coast.

## **Citytrain Network**

Queensland Rail's Citytrain Network is an integrated passenger rail service connecting South East Queensland's population centres. It provides a sustainable transport option in the South East Queensland region, which is home to around 70 per cent of the state's population.

The Citytrain Network incorporates 152 stations, 880km of track, extensive signalling systems and other infrastructure crucial to support its safe and reliable operation. It supports the operation of 139 three-car Citytrain units (Citytrain Rollingstock) and 75 six-car New Generation Rollingstock (NGR) units. The network includes the Redcliffe Peninsula Line. The Citytrain Network is entirely electric powered and operates on a high voltage traction network.

Further information can be found on the Queensland Rail website.

### New Generation Rollingstock

New Generation Rollingstock (NGR) are fitted with technologies designed to improve operational efficiency. These modern and more powerful trains are supporting the provision of increased capacity to cater for South East Queensland's growing population.





Image courtesy of the State of Queensland.

## **Electric Tilt Train Rollingstock**

Queensland Rail operates and owns two electric powered tilt trains for long distance travel between Brisbane, Bundaberg, and Rockhampton. The trains each consist of six cars and operate on the electrified portion of the North Coast Rail Line, servicing both tourists and commuters, with services running most days of the week<sup>10</sup>.



Image courtesy of the State of Queensland.

<sup>10</sup> The Electric Tilt Trains were operating on a reduced timetable for part of the reporting period, due to scheduled maintenance works, and returned to full service in September 2024.

### Performance summary

Below is a summary of Queensland Rail's annual performance across several impact- over the past four years.

#### Provision of sustainable transport capacity

		2021	2022	2023	2024
Citytrain Network	Total services	408,276	396,898	418,474	424,661
	Total passenger kilometres	665.6 M	689.6 M	901.8 M	995.0 M
	Total train kilometres	16.9 M	16.4 M	17 M	16.7 M
Total seat kilometres pro Total capacity (seat + sta	Total seat kilometres provided	6,769 M	6,462 M	6,394 M	6,301 M
	Total capacity (seat + standing) kilometres	14,011.3 M	13,585.0 M	13,655.5 M	13,468.0 M
Electric Tilt Train	Total services	1,186	1,136	822	706
	Total passenger kilometres	49.9 M	68.2 M	65.1 M	57.1 M
	Total train kilometres	0.6 M	0.6 M	0.5 M	0.4 M
	Total seat kilometres provided	190 M	183 M	140 M	123 M

#### Emissions (CO2e) - Citytrain Network (from electricity purchased)

		2021	2022	2023	2024
Citytrain Network	Emissions (tCO2e)	223,947	197,944	190,865	190,766
	Emissions (kgCO2e) per passenger kilometre	0.336	0.287	0.212	0.192
	Emissions (kgC02e) per seat kilometre	0.033	0.031	0.030	0.030
	Emissions (kgCO2e) per capacity kilometre	0.016	0.015	0.014	0.014

#### Emissions (CO2e) - Electric Tilt Trains (from electricity purchased)

		2021	2022	2023	2024
Electric Tilt Trains	Emissions (tCO2e) from the Traction Network	6,437	6,189	4,907	4,013
	Emissions (kgCO2e) per passenger kilometre	0.129	0.091	0.075	0.070
	Emissions (kgC02e) per seat kilometre	0.034	0.034	0.035	0.033

#### Data Sources

• Electricity usage data is collated from traction substation billing. The carbon equivalent emissions are calculated as per the National Greenhouse and Energy Reporting (Measurement) Determination 2008.

• Train and seat kilometre data have been obtained from Queensland Rail's internal monthly capacity reporting, with data drawn from electronic train scheduling and monitoring systems.

• Total services and total passenger kilometre data is supplied to Queensland Rail by Translink.

• Electricity consumption for the Electric Tilt Trains while travelling on third party managed and SEQ Citytrain networks (amongst Citytrain services) is estimated based on train modelling outputs.

## **QFleet Electric Vehicle Transition Strategy**

Motor vehicles are essential to delivering government programs to Queenslanders and supporting critical frontline services. QFleet is the Queensland Government's fleet manager overseeing approximately 11,200 vehicles, with the aim of transitioning 100 per cent of its eligible fleet passenger vehicles, including SUVs, to be zero emission vehicles (ZEVs).<sup>11</sup>

Beyond actively reducing vehicle emissions in line with government targets, this accelerated transition provides additional benefits including:

- operational savings from lower fuel and maintenance costs;
- assisting the broader community to transition their own vehicles to ZEVs as QFleet will make them available to the public to purchase when they reach their end-of-lease;
- a commitment to purchase volumes, providing manufacturers with certainty and increase ZEV supply to the market; and
- promoting broader ZEV technology and adoption.



Images courtesy of QFleet

### Performance summary

Below is a summary of QFleet's performance across several metrics over the past three years, including estimated emissions reductions resulting from the transition of eligible passenger vehicles to ZEVs.

#### Vehicle replacement and emission reduction kilotonnes



Source: Department of Housing and Public Works.

#### QFleet Battery Electric Vehicle (BEV) Profile vs Internal Combustion Engine (ICE) and Total Fleet Emissions kilotonnes



Source: Department of Housing and Public Works.

## **Key Metrics**

Percentage of QFleet eligible passenger vehicles transitioned to ZEV	63% as at 31 December 2024ª
Overall emission reductions achieved by the strategy	2.95 kilotonnes reduction as at 31 Dec 2024 <sup>b</sup>
Number of second hand EVs presented for auction	69 vehicles sold as of 31 December 2024

<sup>a</sup> Based on actual ICE vehicles replaced by Battery Electric Vehicles. <sup>b</sup> Based on Battery Electric Vehicles active in the fleet.

For more information on the methodology used to calculate estimated emissions reduction, see page 3 of the QFleet Electric Vehicle Transition Strategy 2023-2026.

For more information on the initiative please see QFleet Electric Vehicle Transition Strategy 2023–2026.

<sup>11</sup> This report is as the end of December 2024. A new QFleet Vehicle Reduction Strategy 2025-2030 has since replaced the EV Transition Strategy. The focus remains on emission reduction and will be explained in the next Annual Report.

## Cycleways

The Queensland Government continues to encourage cycling as part of an integrated land use and transport system for Queensland. The Department of Transport and Main Road's Active Transport Investment Program (ATIP) funds projects which deliver infrastructure that supports a safe, direct and connected cycling network. The number of kilometres of cycle network built as part of the ATIP was 667km as of mid-2024.

These projects support the Queensland Government's vision for more cycling, more often as set out in the *Queensland Cycling Strategy 2017-2027*.

The graph shows that the percentage of all trips undertaken by bicycle in South East Queensland (SEQ).

Trips undertaken by bicycle in South East Queensland (SEQ)



Source: Department of Transport and Main Roads 2023 Household Travel Survey Brisbane.



Image courtesy of the State of Queensland.



# Waste management

### **NEW ASSET**

## Sunshine Coast Materials Recycling Facility

In line with the Queensland Government's *Waste Management* and *Resource Recovery Strategy*, and the *Sunshine Coast Resource Recovery Strategy 2023*, the Nambour Waste Precinct (the Precinct) has undergone a major transformation to improve services to the community and facilitate a circular economy approach to waste management. The Precinct includes a new state-of-the art Materials Recovery Facility (MRF), where kerbside collected recyclables are received and processed. It represents a strategic investment in new recycling capacity for South East Queensland.

The MRF contributes to transitioning Queensland towards a circular economy by:

- Improving the critical first step of recovering single-stream materials from recyclable commingled household bins, and presenting those materials in a clean form, ready for use in secondary reprocessing.
- Optimising resource recovery through technology including advanced screening, robotics and optical sorting to produce three fibre grades at quality levels that are in global demand. The MRF also deploys optical sorting to:
  - Recover five grades of single-stream plastic polymers, with the plastic and fibre products at 98% purity levels.
  - Recover glass cullet, enabling a portion of the kerbside glass to be recovered for "bottle-to-bottle" applications, while glass unsuitable for cullet markets is converted to quality washed sand products for use within local civil works and road projects.
- Encouraging neighbouring Councils to expand kerbside recycling services by diverting more waste from landfill for beneficial reuse.
- As part of supporting the operation of the facility, a 432kw solar power system has been installed.

The project created 81 local jobs during construction, and 18 full-time positions through the long-term operation. Further information can be found on the Sunshine Coast Council website. The Sunshine Coast Council MRF:

Can process 60,000 tonnes of kerbside collected recyclables per annum.

Crushed glass aggregate is processed in a 10 tonnes per hour wash plant with a wastewater treatment unit.

Currently accepts kerbside recyclables for processing from surrounding local councils. The MRF includes:

- five optical sorters for paper processing
- three optical sorters for plastics processing
- four optical sorters for glass processing;
- two artificial intelligence robotics sorters for contamination control:
- 432kw solar power system; and
- multi-level fire protection system.



Images courtesy of Sunshine Coast Council

# Water infrastructure

## Water infrastructure impact reporting (1 Jan-31 Dec 2024)

Year	Subcategory	Project/asset nameª	Installed capacity	Absolute gross water savings (M3/a) (potential)	Absolute gross water savings (M3/a) (realised)
2024	Treatment Plant	Gold Coast Desalination Plant	133ML/day	45,632,300	9,677,407
	Treatment Plants	The Seqwater Drought Resilient Network	1,490ML/day		
	Pipelines and other	The Seqwater Drought Resilient Network	600kms		
	Dams and Weirs	The Seqwater Drought Resilient Network	2,192,849ML		
	Treatment Plants (water recycling)	Western Corridor Recycled Water Scheme	180ML/day	65,700,000	4,615,215

a Figures sourced directly from Seqwater



Image courtesy of Seqwater.

## The Seqwater Climate Resilient Network

The Seqwater Climate Resilient Network (the Network) is an innovative water supply that connects diverse sources to facilitate the availability of drinking water around the South East Queensland (SEQ) region and supplement water from local sources. It delivers on service obligations with the sustainability variables of drought, wet weather impacts on source water and a growing population.

The Network's bulk water supply pipelines connect the region's major water treatment plants and water sources—providing sustainable water security for SEQ. The Network was created in response to the water supply crisis following the SEQ Millennium Drought (2001–09) and was the largest urban drought response in Australia at the time. The Network also included drought resilient assets to improve the diversity and security of water supply – the Gold Coast Desalination Plant (Desalination Plant) and the Western Corridor Recycled Water Scheme (the Scheme). The Network is now owned by South East Queensland's single bulk water supplier, Seqwater.

Further information can be found on the Seqwater website.

### The Network:

- supplied 330,353 million litres of drinking water to more than 3.7 million people living in SEQ for the period 1 July 2023 to 30 June 2024;
- enables a coordinated drought response to minimise its impact and maintain supplies during weather events that impact local sources; and
- supplies bulk treated drinking water to five retailers; Unitywater, Urban Utilities; and the water businesses of the Logan, Redland and Gold Coast Councils.

The Network is a bulk water supply network of:

- 36 water treatment plants including:
  - 32 conventional water treatment plants;
  - a desalination water treatment plant;
  - 3 purified recycled water treatment plants (part of the Scheme).
- 12 key dams that make up nearly 85 per cent of SEQ's total water storage volume
- 28 bulk water reservoirs
- 22 pump stations
- 600 km+ of pipeline



Image courtesy of Seqwater.

## **Gold Coast Desalination Plant**

The Gold Coast Desalination Plant (the Desalination Plant) turns sea water into drinking water and is a critical, climateresilient water source. The Desalination Plant regularly supplies drinking water to the Network and use increases in times of flood or drought, or when conventional water treatment plants are offline.

Located in Tugun on the southern part of the Gold Coast, the plant uses an advanced technology called reverse osmosis to remove the salt and produce drinking water for the Gold Coast, Logan and southern Brisbane regions.

The plant is designed to operate in standby mode, and if required, can reach 100 per cent capacity in 72 hours to supply up to 600,000 people with drinking water. The plant uses energy recovery devices to improve the energy efficiency of producing drinking water. Energy recovery is achieved by reusing the high-pressured salty water, or brine, produced in the first pass of the reverse osmosis process, to continue to force water through the reverse osmosis membranes. This process recovers about 97 per cent of energy that would otherwise be lost.

The plant's intake and outlet structures are located out to sea and have become artificial reefs, which are home to a variety of small plants and sea animals.

Further information can be found on the Seqwater website.



Image courtesy of Seqwater.

## Western Corridor Recycled Water Scheme

The Western Corridor Recycled Water Scheme (the Scheme) includes three advanced water treatment plants which convert wastewater into quality drinking water that can be pumped into Wivenhoe Dam during severe drought. More than 200km of pipelines connect the advanced water treatment plants to the treated wastewater and Wivenhoe Dam, as well as industrial customer supply points.

The Scheme was put into care and maintenance mode in 2013 to minimise both costs and wear and tear on the Scheme assets when not required due to drought. When fully operational, the Scheme can deliver up to 180 million litres of purified recycled water per day, or around 15 to 20 per cent of the region's daily urban water demand. Seqwater will consider recommissioning the entire Scheme to be operable when the combined level of SEQ Water Grid storages reach 40 per cent.

Any future allocation of green bond proceeds to the Scheme may be deferred until it is substantially recommissioned to a 'ready to use' state.

Further information can be found on the Seqwater website.



Images courtesy of Seqwater.

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- advance the financial interest and development of Queensland – partnering to deliver financial, economic and social outcomes; and
- protect Queensland's financial interests and delivering better financial outcomes – helping identify opportunities for clients to minimise costs and risks by centralising the management of our clients' borrowings, cash investments and financial risks.

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GPO Box 1096 Brisbane QLD Australia 4001 T: +61 7 3842 4600 E: investorrelations@qtc.com.au www.qtc.qld.gov.au

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