



Primary impact area: **Environment**

Impact area:
Sustainable Energy

Geographic location of impact: **Victoria, Australia**

Investment commencement: **2016**

SDG alignment:





Treasury Corp Victoria (TCV) Green Bond

Building and fostering sustainable communities is a critical part of preserving our natural environment and nurturing human development. Treasury Corp Victoria (TCV) Green Bond funds a portfolio of projects and assets that are creating greener, more energy efficient communities across Victoria, Australia.

TCV is the central financing authority for the State of Victoria. TVC's AUD 300m green bond funds 40 different environmental projects across the state over five years. It spans areas including low carbon building, sustainable water infrastructure, renewable energy, energy efficiency and low carbon transportation.

Examples of projects include energy efficient LED upgrades to traffic lights, public housing energy efficiency, high rise energy efficiency upgrades, construction of a large-scale renewable energy power station facility and the implementation of electrical train systems.

The projects have, and continue to, reduce the production of greenhouse gas emissions by reducing energy demand, improving energy efficiency and utilising low carbon energy sources. Ultimately these projects enable cleaner more resilient and sustainable communities.

The bond, which was the first bond in Australia issued by an Australian Government Authority to operate under the Climate Bonds standard, has also acted as a positive example for others across the country.

Case study: X'Trapolis metro trains



The expansion of the Victorian Government Melbourne metropolitan rail network is a key project supported by the TVC Green Bond, put in place to support the State's carbon reduction strategy.

The expansion project sees additional electric X'Trapolis trainsets added to Melbourne's suburban rail network. The project will see the fleet expand to include 106 trains (636 cars). The new trains, built by manufacturer Alstom, are being delivered in stages. Between 2016 and 2018 nine trains were delivered as part of the project and are currently operational. An additional five, six-car X'Trapolis trains will be delivered progressively from September 2019 as part of the next project phase, with the final train expected to enter service in February 2020.

Composed of six cars, the 145-metre-long trains have been designed to optimise capacity (1,238 passengers) whilst maximising energy efficiency as well as delivering excellent passenger experience, comfort and safety. The new trains also feature enhanced accessibility and improved automated safety features. The additional trains further enhance the network's capacity while also increasing the reliability of the entire system - transporting more passengers and taking cars off Victorian roads.

The trains have already proven to be the most reliable rolling stock on the Melbourne network, and are yielding significant environmental benefits. Offering a high-performance traction system, regenerative braking, and boasting a lightweight carbodyshell, the X'Trapolis, saves up to 30% in energy consumption compared to similar older rolling stock.

Significantly, each train equates to 525 cars off the road and 40% less CO2 emissions than road travel per Passenger Kilometre. These benefits see the network contribute significantly to the Department's carbon strategy.

About Premiums4Good

Premiums 4Good is an innovative initiative that sees QBE invest everyday premiums to make an extraordinary difference to communities across the globe.

Through Premiums4Good, we invest customers' premiums into investments that have additional social or environmental benefits at no extra cost to the customer.

These investments include social impact bonds, social bonds, green bonds and infrastructure, supporting a range of projects and programs that seek to create change.

From renewable energy initiatives and sustainable infrastructure, to social services and programs to support vulnerable people and communities - Premiums4Good helps us, together with our customers and partners, make a difference.





