

VICTORIAN GREEN BONDS

An Australian and world first

Key Facts:

- On the 19 July 2016, Treasury Corporation Victoria (TCV) issued \$300 million in Green Bonds
- There was a strong demand for the Green Bond, with 88 per cent of the investors having specific green or Socially Responsible Investment (SRI) mandates
- Funds will be used to finance Victoria's investments in transport, low carbon buildings, renewable energy and water

What is a Green Bond?

Green Bonds are bonds that are used to finance new and existing projects that offer climate change and environmental benefits.

Victoria has become the first Government in Australia to issue Green Bonds and is also the world's first state or federal government to issue bonds with the international Climate Bond Certification.

What will the funds be used for?

Low Carbon Buildings

- Federation Square
- Museum Victoria
- TAFEs
- LED Traffic Lights
- Others

Transport

- Electrified Rolling Stock
- Infrastructure Upgrades

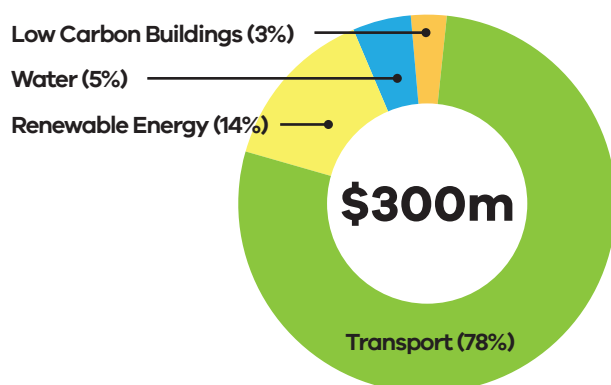
Renewable Energy

- Hydropower
- Biogas
- Solar / Wind

Water

- Treatment Plant Upgrades

Victorian Green Bonds distribution by type



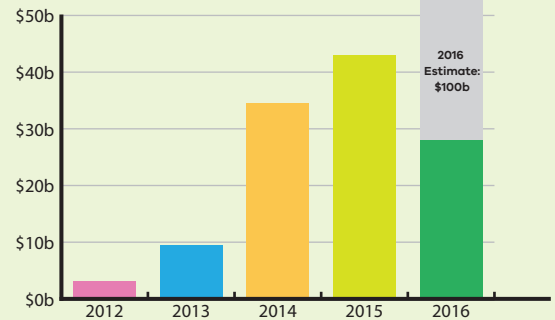
"Victorian Green Bonds offer investors the confidence of a triple-A rated government security, with the assurance that the funds will be used for ethical investments that deliver important environmental or climate change outcomes." - Treasurer Tim Pallas

How are projects verified as 'Green'?

All projects to be funded by Victoria's Green Bonds have been verified by the Climate Bonds Initiative (CBI), a London based not-for-profit organisation. The CBI has developed standards for eligible Green Bond investments across the following categories:

- Renewable Energy
- Low Carbon Buildings
- Industry and Energy Intensive Commercial
- Transport
- Waste and pollution control
- Information Technology and Communications
- Nature based assets
- Water

Green Bonds issued globally (\$b)



Source: Bonds and Climate Change, The State of the Market in 2016, Climate Bonds Initiative (2016).

Typical market participants

Investors

- Superannuation Funds
- Insurance Companies
- Fund Managers
- Other SRI Investors

Issuers

- Governments
- Municipalities
- Banks
- Corporates
- Supranationals (E.g. World Bank, EIB)

Global trends in Green Bonds

The global Green Bond market has expanded rapidly in recent years. 2015 was another record year with over \$42b issued. 2016 is set to reach new heights with \$28b issued up to the end of May. There is also an increasing number of mandates for SRI which include Green Bonds.

Examples of projects included:



The **Notting Hill mini hydropower plant** generates renewable energy by capturing falling water from the reservoir to spin its turbine. The plant powers almost 300 homes per year. It received the Victorian Engineering Excellence award, and the National Banksia Clean Technology award. Five more mini hydropower plants are currently being built.



Melbourne Water's Western Treatment Plant processes around half of Melbourne's sewage and uses biogas to meet its electricity needs. The plant generates 71,500 megawatt hours of renewable electricity every year, reducing 87,000 tonnes of carbon dioxide.



Museum Victoria is currently implementing an Energy Performance Contract across its portfolio which includes iconic buildings such as Melbourne Museum and Scienceworks. It is expected to achieve a 35% reduction in greenhouse gas emissions and 6% in water savings.



Significant investment is earmarked for **Melbourne's metropolitan rail network**, with key projects including the Metro Tunnel, extension of the South Morang line, station upgrades and procurement of five additional X'Trapolis trains.