

Sydney Light Rail

Primary impact area:
Environment

Impact sector:
Sustainable Energy, Urban Development

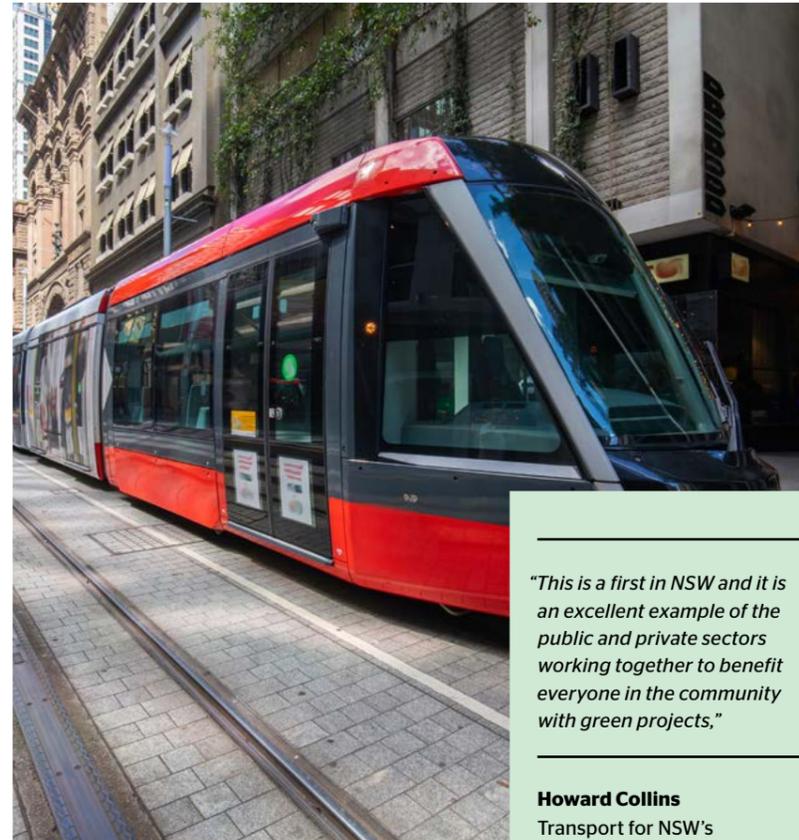
Impact category:
Moderate Impact

Geographic location of impact:
Sydney, Australia

Date of Investment:
2016

SDG alignment:





"This is a first in NSW and it is an excellent example of the public and private sectors working together to benefit everyone in the community with green projects."

Howard Collins
Transport for NSW's Acting Deputy Secretary of Greater Sydney

Transport currently accounts for a quarter of the world's energy-related greenhouse gas emissions, and the trend is not encouraging. By 2030, annual passenger traffic will exceed 80 trillion passenger-kilometres—a 50% increase compared to 2015; global freight volumes will grow by 70% and 1.2 billion more cars will be on the road—double today's total!

Cars are a major source of greenhouse gas pollution in Australian cities. Transport is the source of 17% of Australia's greenhouse gas emissions (Australian Government 2020).¹

Light Rail infrastructure has a low impact on the environment and supports a more sustainable city through reducing greenhouse gas emissions.

As a low-carbon transport alternative, electric powered light rail is an inherently sustainable form of transport. Encouraging people to transition from using cars and buses to light rail can significantly reduce

traffic congestion, noise and air pollution, and greenhouse gas emissions.

Major construction on the 12km electric powered light rail began in 2015 and was completed in 2020.

The NSW Government expanded Sydney's public transport offering through the Sydney Light Rail network and has transformed the city with more sustainable transport options. It has been designed to coincide with other major public transport options across the CBD, to include interchanges at ferry, rail, and bus stations along the route.

The project supports significant social benefits to Sydney by improving equitable access to services in local communities.

The planning, infrastructure delivery and operation of the Light Rail has also benefited the NSW economy by supporting the construction sector and allied industries through the creation of local jobs, skills development, and workforce diversity.

The project has increased transport capacity, provided more reliable travel times, supported economic prosperity and broader economic benefits, all while contributing to reducing the cost of congestion in the Sydney CBD.

The Sydney Light Rail was delivered and is operating in partnership between Transport for NSW and ALTRAC, with project financing provided by the private sector.

Subsequent to the project development financing, Sydney Light Rail has continued to

lead in sustainable financing. It will be the first operational public private partnership to be financed with a certified Green Loan certificate in NSW³ consistent with the NSW Government's target of net zero emissions by 2050.

The Infrastructure Sustainability Council (ISC) rated the Design of the Sydney Light Rail project as 'Excellent', and 'Leading' in the As-Built phase, and noted its innovation to the regenerative braking system. 99% of the energy produced during braking is recoverable.

The recovered energy can be re-used to power other vehicles running on the same line, or injected back into the network.

Transdev Sydney Light Rail are the first light rail operator in Australia to register with ISC for an Operational Sustainability rating. Sydney Light Rail is the first project in NSW and the third in Australia to be registered with ISC for an Operational Sustainability rating. Transdev's efforts over a three-year period in areas as diverse as climate change adaptation, enhancing ecological values and habitat connectivity, and community wellbeing, will go towards the rating assessment.

- Sydney Light Rail is projected to reduce greenhouse gas emissions by 663,000 tonnes of CO2 over 30 years
- 99% recyclable light rail vehicles
- One light rail vehicle can carry as many people as 7 standard buses or 88 cars
- Over 8,600 square meters of new pedestrian space in the CBD
- Approximately 220 fewer buses per hour in the CBD during the morning peak.

Benefits associated with construction of the project include:

- Approximately 95% of construction waste diverted from landfill
- Over 20% of jobs sourced from the local community

Case study

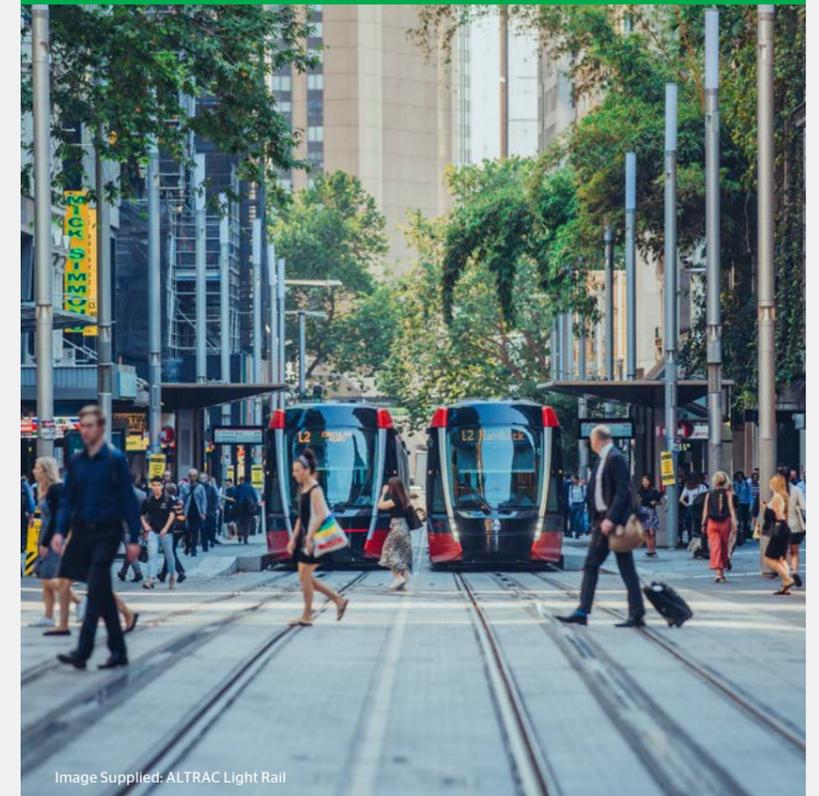


Image Supplied: ALTRAC Light Rail

"The environmental benefits of public transport are widely known. Green credentials alone won't do the job...For Transdev, sustainability is entwined with our social licence," said Ajenta Conrad, Sustainability Manager with Sydney Light Rail. "Rather than being separate, we are part of the community in which we serve, with our people living, commuting and working within our contracted service area."

With local council and community groups, Sydney Light Rail introduced several initiatives to create greater employment opportunities for residents living near the network. Since 2017, partnering with the Asylum Seeker Centre at Newtown in Sydney's Inner West, to mentor and coach job seekers and get them job ready. Under the partnership, more than 100 people have been supported with mentoring sessions, and between July 2019 and June 2021 Transdev Sydney employed 31 individuals from the Asylum Seeker Centre. In addition, they work with local schools and First Nations groups to engage in training, knowledge sharing, and mentoring opportunities. In 2020 Sydney Light Rail launched the Sustainable Procurement Action Plan which aligns with the Australian Modern Slavery Act 2018. The Plan focuses on three areas, the social, environmental, and economic impact of procuring goods and services. In practice, this means working with specialised social procurement organisations such as Supply Nation, Social Traders and others.

"Over the last three years Transdev's businesses have tripled the number of First Nations goods and services suppliers we work with. There is still much more that we can do in our business and community to achieving more sustainable operations, but through the initiatives, partnerships and actions already in place we at Sydney Light Rail are on the right track." Ajenta Conrad, Sustainability Manager with Sydney Light Rail.

About Premiums4Good

Premiums4Good 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.