

## Case study: Sustainable timber procurement

2019



Station canopy at Bella Vista Station.

### Project: Sydney Metro Northwest

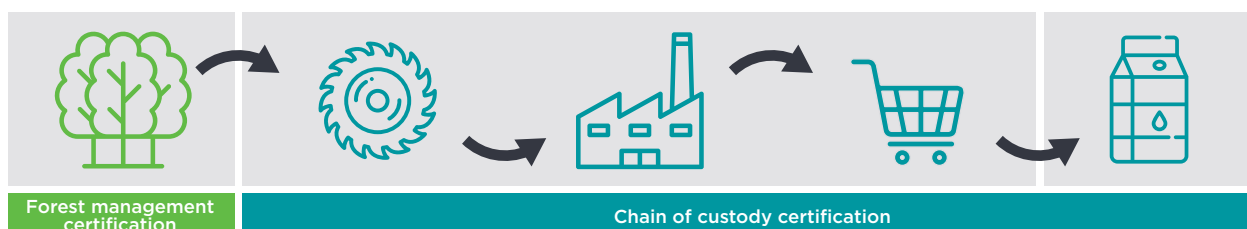
Sydney Metro is Australia's biggest public transport project. Services started in May 2019 in the city's North West with a train every four minutes in the peak. Northwest Rapid Transit (NRT) is delivering the Operations, Trains and Systems contract for Sydney Metro Northwest, and is the first infrastructure project to have secured a Forest Stewardship Council (FSC) project certification in Australia. NRT is also seeking a Program for the Endorsement of Forest Certification (PEFC) project certification, another first for an infrastructure project in Australia.

### Drivers

NRT developed a timber procurement strategy to secure the supply needed for the new Sydney Metro Northwest station canopies and multi-storey car park facade, which went beyond business as usual. This was in response to the requirement that 100 per cent of all timber used on Sydney Metro projects must be re-used, post-consumer recycled or ethically certified timber where practicable.

The contractor investigated and identified sustainable supply options either from the FSC or PEFC certification programs.

To be certified FSC or PEFC the timber sourced must meet best practice standards, which ensure forest management is conducted in a way that is environmentally appropriate, socially beneficial, and economically viable.



## What are best practice standards for sustainable timber?

To meet the requirements, timber must meet best practice standards, which ensures that forests are conserved and managed responsibly to ensure they deliver social, environmental and economic benefits now and in the future, balancing people, planet and profit. These high standards include requirements to:

- Safeguard ecologically important forest areas
- Protect and enhance biological diversity
- Prohibit deforestation
- Prohibit forest conversions
- Prohibit the most dangerous chemicals
- Prohibit genetically modified trees
- Respect rights of workers and indigenous peoples'
- Encourage local employment
- Provide consultation with local people and stakeholders
- Respect traditional land rights and local customs
- Provide a voice for those who depend on forest for their livelihood.

FSC and PEFC project certifications provide an end-to-end chain of custody to ensure a robust process is in place to remove any non-certified timber from the supply chain. This initiative sends a strong market signal to drive market transformation and enables the project to make a validated and certified claim around FSC and PEFC.

A key component of the architectural design was the use of Cumberland Plain elements throughout the landscaping and design of the new station precincts. The station roof canopy design was inspired by the local blue gum leaf and the underside lined in timber commonly found in the Cumberland Plain forests. This was done to further mirror the natural environment of the area. Securing these species (i.e. Spotted Gum or Black Butt) with the necessary colour, texture and durability was a challenge to source from sustainably managed forests certified under the FSC scheme in NSW. One plantation on the NSW Central Coast was able to provide the timber species specified for use in the station canopies and the multi-storey car park.

## Process

The contractor took a unique approach to manage the required variables. A limited FSC certified supply was available from a small sustainably managed forest in the Hunter Valley. Because of the lead time required for cutting, moulding and dressing the timber, the contractor took an innovative approach, securing the timber directly from the forest owner. Timber procurement was also presented as a priority item to tendering subcontractors, and early engagement with the installation and manufacturing contractors ensured the remaining timber could be sourced effectively.

The success of this procurement was due to a collaborative approach between the contractor's sustainability team and procurement team. As well as a high level of understanding and expertise brought by subcontractors who partnered with a timber specialist to help satisfy design and contractual requirements

During the construction phase, the project applied the FSC and PEFC Chain of Custody for Project Certification standards through the implementation of a project timber procedure which covered the robust management of the following:

1. Chain of custody documentation and records
2. Delivery, receipt and storage of timber
3. Completion documentation and certification.

The implementation and the enforcement of the sustainable timber supply procedure was further supported through:

1. The appointment of an independent FSC and PEFC verifier to audit the implementation of the procedure and any associated processes to demonstrate that the timber complies with the requirements of the relevant standards
2. The identification, training and capacity building of key personnel and subcontractors through the roll out of the "Good Wood" training, the people who have responsibilities for purchasing, transformation and/or installing wood materials or products
3. The inclusion of FSC and PEFC specifications and requirements into relevant contracts
4. The inclusion of Hold and Witness Points in relevant project Inspection and Test Plans
5. The Chain of Custody documentation from the relevant subcontractors and vendors
6. A comprehensive due diligence system
7. The robust checks and control on the relevant station sites.

The subcontractors of the station canopies and the multi-storey car park facades have now been certified under the PEFC Scheme (with one under the FSC scheme as well) and have in place valid Chain of Custody licences as a direct result of working on the Sydney Metro Northwest project.

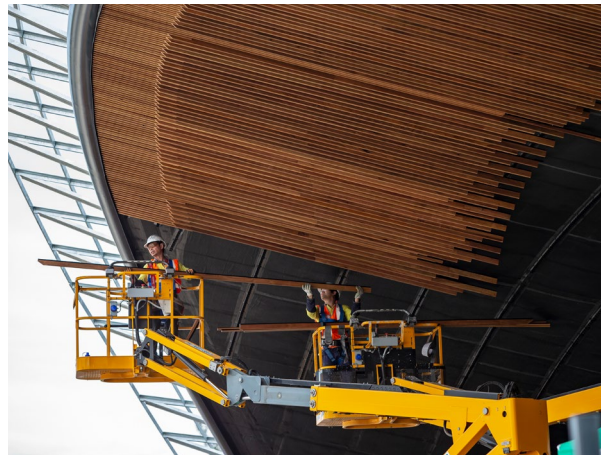
The contractor in collaboration with post-graduate students at the University of NSW and ISCA also investigated certified timber supply chain practices, and identified structural issues regarding the certification approach, which assisted in informing the application of FSC and PEFC on the project.

## Outcomes

With approximately 180 linear kilometres of certified timber, Sydney Metro Northwest is the largest applicant of this process within Australia, representing a rare and innovative approach to ensuring certified timber is procured.

Supplying sufficient FSC timber with the required architectural properties for all eight station canopies was not possible, so Programme for the Endorsement of Forest Certification (PEFC) timber was selected for seven of the station canopy soffits, with sufficient FSC timber available for one station canopy. The most visible timber on the project will be in the canopy soffits and the multi-storey car parks, all of which has been certified.

PEFC is the world's largest forest certification system and is represented in 49 countries through national organisations. The project will be the first infrastructure project in Australia to apply for PEFC Project certification. Sydney Metro Northwest is the first infrastructure project in Australia that has received an FSC Project certification.



Certified timber being installed at Cherrybrook Station.



The station canopy at Norwest Station.