

# BOOST YOUR PROJECT'S SUSTAINABILITY RATING





With the release of Liberty OneSteel's Environmental Product Declarations, construction projects throughout Australia can enhance their sustainability rating tool points.

This guide provides a framework for how designers, specifiers and procurers can utilise the environmental credentials of Liberty OneSteel products.

You can boost your project's sustainability rating by leveraging Liberty OneSteel products and services. With the release of Liberty OneSteel's Environmental Product Declarations (EPDs) there is now transparent information available about the environmental impacts of these products throughout their life cycle. Rating tools reward products with EPDs because they allow companies to make an informed choice about what materials they can use to improve the sustainability of their projects.

EPDs are recognised by the Infrastructure Sustainability Council of Australia (ISCA) and the Green Building Council of Australia (GBCA). Both ISCA and the GBCA rate Liberty OneSteel's EPDs higher than industry-wide EPDs because Liberty OneSteel's EPDs are product-specific.

Liberty OneSteel products were previously eligible for up to three credit points as part of ISCA's IS Rating Scheme and two material credit points as part of the GBCA's Green Star rating tool. An additional three IS rating tool points are now available by choosing to use Liberty OneSteel products for your project.

Liberty OneSteel has five EPDs in total, all of which have been independently verified and registered:

- Hot Rolled Structural and Rail
- Reinforcing Rod, Bar and Wire
- Reinforcing Bar and Mesh (Liberty OneSteel Reinforcing)
- Reinforcing Bar and Mesh (ARC)
- Hot Rolled Structural Products (Liberty OneSteel Metalcentre)



"Liberty OneSteel has demonstrated its commitment to a sustainable built environment with the development of EPDs for its construction products. EPDs are recognised and rewarded in the IS<sup>®</sup> rating scheme as a means of transparently reporting the environmental impacts of construction materials. ISCA is committed to working with all parts of the supply chain to improve the sustainability outcomes of infrastructure in Australasia. We continue to drive the adoption of integrated outcomes based on social, economic and environmental practices – it's about more than just carbon emissions."

**Antony Sprigg, CEO Infrastructure Sustainability Council of Australia**



## What is ISCA and the IS Rating Scheme?

ISCA is the peak body for advancing sustainability in national infrastructure projects. The Council developed and now administers the Infrastructure Sustainability (IS) rating scheme, which evaluates sustainability across infrastructure design, construction and operation. ISCA also looks at the environmental, social, economic and governance aspects of infrastructure projects and assets.

## How can you acquire more IS Rating Scheme points?

It's now possible to secure up to six points in the material category of the IS Rating Scheme.

Up to three points are awarded for reducing the life cycle environmental impact of materials used. Liberty OneSteel has a range of products and services that are designed to minimise the impact on the environment. These include:

- Design guides and design advice on optimising designs to minimise the quantities of material consumed
- Designs and products that reduce wastage such as prefabricated reinforcing cages and mats
- Material-efficient products such as high-strength and ductile steels. Further points are available to encourage the procurement of materials with environmental product labels, such as an EPD. ISCA recognises that Liberty OneSteel's EPDs provide valuable impact data that are third-party verified and are compliant with EN15804.

The use of Liberty OneSteel structural steel or reinforcing products with EPDs on an infrastructure project will entitle the project to be rewarded with at least one point. The IS Rating Scheme may award additional points if there are sufficient materials used that have a recognised EPD, such as those associated with Liberty OneSteel products.



green building council australia



"Environmental Product Declarations are important as we strive to create sustainable places for people. By providing the market with EPDs, Liberty OneSteel is leading the way in the building materials sector and providing great value to sustainability professionals through accurate and reliable data."

Romilly Madew, CEO,  
Green Building Council of Australia

## What is the GBCA and the Green Star tool?

The GBCA drives the adoption of sustainable practices in the Australian property industry. The GBCA's four Green Star Rating tools include the 'Design & As Built' tool, which covers a building's design and construction. This tool assesses 'building materials', one of nine categories contributing to points.

## How can you acquire points in the Green Star tool?

The material category in the Green Star tool aims to address consumption of resources by lowering the impact of the materials used and reducing waste. The tool consists of four material sub categories.

Liberty OneSteel's products and services can facilitate the rewarding of points through:

- 1) Life Cycle impacts
- 2) Responsible building materials
- 3) Sustainable products
- 4) Construction and demolition waste

## Life cycle impacts

There are two pathways for life cycle impacts assessment:

- I. Performance Pathway – This requires a comparative full life cycle assessment of all the material used in the building, using a reference building and the actual building.
- II. Life Cycle Impacts – Steel – This relates directly to steel and is simpler to implement and claim points. One point is available for reducing the mass of steel in a building.



**For reinforcing steels** – a point can be achieved by demonstrating a reduction of 5 per cent in the steel used when compared to a reference case, as defined in the Green Star tool.

**For structural steels** – a point can be achieved by demonstrating a reduction of 5 per cent in the steel used when compared to a reference case, as defined in the Green Star tool. The alternative to this is using 95 per cent of Category A High Strength Steels and at least 25 per cent Category B High Strength Steels.

CATEGORY A		CATEGORY B	
Type	Minimum Strength	Type	Minimum Strength
Roof Sheeting	550MPa	Hot-rolled steel sections	350MPa
Wall Sheeting	550MPa	Hot-rolled plate	350MPa
Profiled Steel Decking	550MPa	Cold-formed hollow sections	450MPa
Purlins	450MPa	Welded sections	400MPa
Girts	450MPa		
Light Steel Framing Systems	450MPa	Liberty OneSteel has a range of products and guides to facilitate designers optimising the quantity of both reinforcing and structural steels.	

## Responsible building materials

The Green Star tool rewards projects where the steel used has come via a responsible and sustainable supply chain. Liberty OneSteel products meet the mandatory compliance requirement of a responsible steelmaker by complying with the following:

- A current valid and certified ISO 14001 Environmental Management System (EMS) in place for the manufacturing facility where the steel is produced
- A current member of the World Steel Association’s (WSA) Climate Action Programme (CAP).

For concrete framed buildings, the use of Liberty OneSteel’s reinforcing steel and mesh products is awarded one point in this sub category, due to Liberty OneSteel’s use of Polymer Injection Technology (PIT) to produce its reinforcing steels. PIT is acknowledged by the GBCA as an energy reducing process for the manufacture of steel.

One point is awarded for steel framed buildings which have at least 60 per cent of the structural steel supplied by a steel fabricator or steel contractor who uses Liberty OneSteel’s products and is accredited to the Environmental Sustainability Charter of the Australian Steel Institute.

## Sustainable Products

The Green Star tool rewards sustainability and transparency initiatives including specification and procurement of products that have EPDs. Using Liberty OneSteel’s range of products, which have EPDs, contributes to the three points available in the Green Star ‘Sustainable Products’ sub category.

## Construction and demolition waste

The Green Star tool rewards projects that reduce construction waste going to landfill by recycling building materials. Liberty OneSteel’s recycling business, Liberty OneSteel Recycling, can help with this by accepting a range of structural and reinforcing steels from building sites.

**If you require any further information on how Liberty OneSteel’s steel products and services can help you achieve greater sustainability credits for your projects, visit [www.libertyonesteel.com](http://www.libertyonesteel.com)**

