



Infrastructure Sustainability

Understanding the IS rating scheme
Earning credits with BlueScope Steel



BlueScope Steel. Right for Infrastructure Sustainability.



The Australian Green Infrastructure Council (AGIC)

AGIC was formed in 2008 with the purpose of advancing sustainability in the design, construction and operation of infrastructure in Australia.

Among the Council's objectives is the delivery of a national assessment, certification and award program for sustainability in new and existing infrastructure. It also aims to promote a vision for sustainable infrastructure and provide the knowledge and communication necessary to achieve this vision.

AGIC has developed a rating system designed to assess the sustainability of infrastructure projects. This system

called, the Infrastructure Sustainability (IS) rating tool, evaluates sustainability across design, construction and operation of an infrastructure project.

As part of our commitment to sustainability, BlueScope Steel has been involved with AGIC since its inception in 2008. Our company is proud to be an organisational member of AGIC, and co-sponsor of the materials category of this rating tool.





The Infrastructure Sustainability rating scheme

The IS rating scheme supports the achievement of sustainable outcomes in infrastructure development by assessing and rating a project's sustainability performance.

The IS rating tool differs from other ratings systems such as the US Green Building Council's Leadership in Energy and Environmental Design (LEED) and the Green Building Council of Australia's Green Star system. While LEED and

Green Star have specific definitions for compliance in each category, the IS tool is less prescriptive and allows more options for evidence to prove compliance. This reflects the wide range of potential projects to which the IS rating tool can be applied.

The rating process involves self-assessment, followed by independent verification from an IS appointed verifier, then formal certification.

The rating tool addresses six broad areas, referred to as 'themes'. Within these themes are 15 categories. These are:

1 Management and Governance

- Management Systems
- Procurement & Purchasing
- Climate change Adaptation

2 Using Resources

- Energy & Carbon
- Water
- Materials

3 Emissions, Pollution and Waste

- Discharges to air, land & water
- Land
- Waste

4 Ecology

- Ecology

5 People and Place

- Community, Health, Wellbeing & Safety
- Heritage
- Stakeholder Participation
- Urban & Landscape Design

6 Innovation

- Innovation

These categories comprise a total of 51 credits, providing a detailed framework for evaluating a project's sustainability. Each credit is allocated a certain number of points and all credits are presented in the same format.

Aim – explains the purpose of the credit

Criteria – a table with 1 to 3 benchmark levels, all above the business-as-usual level

Evidence – suggests the evidence that applicants can include to demonstrate compliance. (Other evidence can also be included).

Additional Guidance – advice to help achieve the credit.

Credits earned across all 15 categories are used to determine a project's level of sustainability. This rating is expressed as a score on a 100 point scale, as follows:

Good 25 – 49 points

Excellent 50 – 74 points

Leading 75 – 100 points

Projects that score less than 25 points are not eligible to apply for a certified rating.

What types of projects are covered by the IS rating system?

The IS rating tool is designed to assess most types of infrastructure, including projects that fall into the following classes.

Transport

- Roads & bridges
- Bus & cycle ways
- Footpaths
- Ports & harbours
- Airports
- Railways

Communication

- Communication transmission & distribution

Water

- Water storage & supply
- Sewerage & drainage

Energy

- Energy transmission & distribution

At what development phase can sustainability be rated?

A project's sustainability can be rated at the Design, As Built, or Operational stages. (The initial planning process falls outside the scope of the IS rating tool).

Certification obtained at the Design stage is interim and must be converted to an As Built certification upon completion of the project.

When a project has been operating for a minimum of two years, it becomes eligible for an Operational rating. Existing infrastructure can also be rated under the Operations certification. Operation ratings must be renewed every 5 years.

Earning IS credits with BlueScope Steel

Within the IS rating tool, a number of opportunities exist to gain credits using BlueScope Steel products. Some examples are listed below.

Theme	Category	Total category point score	Indication of credits available with BlueScope Steel products	Summary of credit	Description	Aim	How steel made by BlueScope Steel can help earn credits for your project
Using resources	Materials	7	2 points	Mat-1: Materials Life Cycle Impact Measurement and Reduction	This credit uses a materials calculator to assess lifecycle impact. The applicant enters product volume and transport distance and the calculator compares the impact of a project's materials with a pre-programmed reference project for a range of raw materials.	To reward the reduction of life cycle environmental impact of materials	As an organisaitonal member of AGIC and sponsor of this credit, we can ensure that our life cycle inventory (LCI) data is accurate and conforms to the requirements of the IS materials calculator.
				Mat-2: Environmentally Labelled Products and Supply Chains	Maximum points are earned when more than 20% of materials (by value) have eco labels or are from sustainable supply chains. Responsible Steel Certification or an ISO Type 1 Ecolabel for steel products (including GECA or Ecospecifier GreenTag™) will potentially meet the requirements of this credit.	To reward the use of environmentally-labelled materials and those from sustainable supply chains. (This credit only applies to the 'As Built' and 'Operation' versions of the rating tool).	To make the right decision, it is essential that buyers can assess the total sustainability of a product or material. BlueScope Steel is a leading member of the Steel Stewardship Forum and a driver of the Responsible Steel project, which aims to develop a comprehensive certification process covering the entire steel supply chain, from mining to scrap recovery. A number of existing environmental labels cover aspects of supply chain sustainability and BlueScope Steel is also examining which of these labels are most applicable to our products.
Management and Governance	Procurement and Purchasing	5	3 points	Pro-2, Pro-3 and Pro-4: Procurement and Purchasing	Pro-2 involves identification of appropriate suppliers; Pro-3 rewards the consideration of sustainability in contract allocation; Pro-4 covers duration-of-contract and long-term initiatives.	This group of credits encourages sustainability among suppliers by rewarding the engagement of suppliers with environmental and sustainability policies and procedures.	BlueScope Steel is an industry leader in environment and sustainability. We have a dedicated sustainability team. Our sustainability credentials and our local supplier status can earn points in Pro-2, Pro-3 and Pro-4 credits. We hold ISO 14001 Environmental Management System accreditation and have documented environmental policies. Our company is an active member of the World Steel Climate Action Program, a leading member and sponsor of the Steel Stewardship Forum and a member of the Australian Certification Authority for Reinforcing Steels (ACRS). Our aspirational environmental targets have been signed off by our Board of Directors. Comprehensive life cycle inventories (LCI) of our products can be accessed through the Building Products Innovation Council LCI database. BlueScope Steel continues to develop credentials that will help meet the aims of this group of credits.
Management and Governance	Climate change adaptation	5	1 point	Cli-2: Adaptation Measures	Cli-2 involves accounting for the risks associated with climate change. Maximum points are awarded when high risk is treated and scale and timing issues are addressed.	This credit rewards the implementation of measures that help in adapting to climate change.	BlueScope Steel products offer strength, resilience and thermal qualities necessary for adapting to a range of climate change events, ie: Bushfires: Sureline® power poles, COLORBOND® steel fencing, roofing and walling and water tanks provide proven fire resistance. Heat impacts: COLORBOND® steel with Thermatech® or COLORBOND® Coolmax® offer excellent solar reflectivity and are ideal for roofing and shade structures. Hail and storm damage: roofing made from COLORBOND® steel is highly resistant to hail damage. It is also used, along with framing made from TRUECORE® steel, in houses designed to withstand 300 km/h winds. Drought: Steel water tank manufacturers have a range of rainwater harvesting and storage systems to reduce your potable water usage. With the right accessories, water tanks made with BlueScope Steel's AQUAPLATE® steel can even provide drinking-quality water for your facility.
Using Resources	Water	7	2 points	Wat-2, Wat-3: Water	Wat-2 recognises initiatives that reduce water use; Wat-3 rewards the replacement of potable water with water from other sources, across the infrastructure life cycle.	To reward water conservation and preservation of potable water.	Steel water tanks offer a wide range of rainwater harvest, storage and buffer systems, for almost any application. Pioneer Tanks, a BlueScope Steel company, offers Australian-built tanks with capacities up to 12 million litres for industrial, commercial and rural use.
Emissions, Pollution and Waste	Waste	7	2 points	Was-2: Diversion from landfill	Was-2 rewards the diversion of non-hazardous and inert waste from landfill.	To reduce present and future waste.	BlueScope Steel products have intrinsic scrap value and steel has a well-established recycling sector. Therefore, a lower percentage of steel ends up as landfill, compared with other building materials. This can assist in achieving a Was-2 credit. Steel bolted construction allows prefabricated units to be easily separated and disassembled, allowing beams and columns to be re-used in other projects, according to the project deconstruction plan, helping gain a Was-3 credit. Steel can also meet the suggested IS guidance around being reusable and recyclable, potentially modular, self-supporting and standardised.
				Was-3: Deconstruction/ Disassembly/ Adaptability	Was-3 encourages designs that can be dissembled for re-use at the end of a project's useful life.		
Community Health Wellbeing and Safety	Crime prevention	5	1 point	Hea-2: Prevention of crime	Hea-2 rewards the adoption of Crime Prevention Through Environmental Design (CPTED) principles. The credit also requires end-to-end visibility in tunnels and underpasses and CPTED-compliant temporary construction diversions.	To reward design and practice that reduces the likelihood of crime.	Tough, durable steel lighting poles, security grills, fencing and other features can be used to achieve required CPTED standards. Steel is also ideal for CPTED-compliant temporary fixtures.
Innovation	Innovation	5	1 point	Inn-1: Innovative strategies and technologies	Inn-1 rewards new technology or processes and the contribution a project makes to sustainable development at state, national or global level. This category offers an additional five points, over and above points earned in other categories.	To reward pioneering initiatives in sustainable design, process or advocacy.	BlueScope Steel products appear in some of Australia's most advanced sustainable buildings. Our products, such as COLORBOND® steel and TRUECORE® steel are favoured by engineers and architects for their capacity to meet the most innovative design requirements.



Sureline[®] power poles offer strength, quality and proven fire resistance – a necessity for adapting to a range of climate change events.

Where can I find more information?

BlueScope Steel sustainability website

sustainability.bluescopesteel.com.au

Contact BlueScope Steel Direct

1800 800 789



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Front cover image: Dampier Port Upgrade – Parker Point (car dumper).

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