

# The Environmental Sustainability Charter (ESC)

## Beginnings

Steel has always been recognised as a sustainable material, however, there was a need to establish mechanisms for companies looking to reinforce environmental credentials for their projects, to determine what a sustainable steelwork supplier is and how to identify one. The Green Building Council of Australia challenged the ASI to design a scheme to encourage the steel industry chain to operate in a more environmentally responsible way and to develop a means of accrediting committed downstream enterprises associated with steel manufacturing, fabrication or services. After meetings of a task force of building environmental scientists, academia and industry stakeholders in 2010 and a public review period, the Environmental Sustainability Charter came into being and achieved its first signatories.

## Who becomes a Charter member and what does the Charter stand for?

The Charter is designed for steelwork fabricators, steelwork processors and contractors that can demonstrate a company's commitment to environmental improvement through their in-house factory processing of steel. An ESC Charter member is able to fulfil the steelwork sustainability requirements where a project specifies this commitment as a contractual requirement. The scheme is designed to be used by regulators, environmental rating agencies and bodies such as the Green Building Council of Australia, State authorities such rail and road, and any other contracting body that wants to demonstrate environmental improvement through their contracting process.



## How is a Green Star credit point obtained via the Environmental Sustainability Charter?

In the GBCA criterion Mat 5, there are two Green Star credit points that may be earned for steel on a project. The ESC provides for one of these points. Where at least 60% of the fabricated structural steelwork on the project is supplied by a steel fabricator or contractor accredited to the ESC, this Green Star credit point can be gained. This point is provided to the builder for using an ESC accredited fabricator for the fabrication/manufacturing work on the steel used in the project.

**Additionally**, for a project to be covered by the Environmental Sustainability Charter, 95% of the steel (by mass) used in the project must be supplied from an environmentally responsible steelmaker as follows:

As determined by the GBCA and other contracting bodies, the steel used in projects requiring ESC membership and therefore being eligible for green credits must be supplied by steel maker/s or manufacturer/s who have:

- A valid ISO 14001 Environmental Management System (EMS) in place
- Membership of the World Steel Association's Climate Action Program (WSA CAP). Ref. Steel Credit [www.gbca.org.au](http://www.gbca.org.au)



This criterion does not attract a point but is a prerequisite for qualification of the project.

Criterion	Provider	Requirements
<b>Green Star credit or contract requirement for environmentally fabricated steelwork</b>	The fabricator/contractor for the steelwork	Continuous environmental improvement and commitment to sustainability, environmental responsibility and communication of this commitment through operation of a management system audited by the ESC
<b>Prerequisite: Responsible sourcing of the steel</b>	The steelmaker	The steelmaker must operate to an ISO 14001 Environmental Management System and be a member of the World Steel Association's Climate Action Programme

## What is the second Green Star credit point for steel?

There is a second credit point called a steel efficiency credit point and relates to the **engineering design of the project** using high tensile grade steel material to improve steel efficiency and a reduction in mass of steel used in the project.

This second point is awarded if the building utilizes:

1.  $\geq 95\%$  "Category A" product and
2.  $\geq 25\%$  "Category B" product

<b>Category A -</b> ≥ 95% by weight	<b>Minimum strength Grade</b> <b>MPa</b>
Roof and wall sheeting	550
Profiled steel decking	550
Purlins and girts	450
Light steel framing	450
<b>Category B -</b> ≥ 25% by weight	<b>Minimum strength Grade</b> <b>MPa</b>
Hot rolled structurals	350
Hot rolled plate	350
Cold-formed and hollow sections	450
Welded sections	400

## How does a company become a member of the ESC?

To become a ESC member, it is necessary to sign the Charter declaration committing the company to operating its business to reduce its environmental footprint, to increasing the efficiency of its resource use, to demonstrating environmental responsibility and sharing its knowledge of sustainability with others and to seeking this in its choice of sub-contractors and suppliers. There is a joining fee and an annual fee payable which cover the introductory mentoring session, an annual audit and administration costs. During the annual audit, the environmental improvement of the company is measured and evaluated.

## What is required?

1. The fabricator / steelwork contractor is required to be a member of the ASI Environmental Sustainability Charter and maintain an environmental management scheme. The ASI provides a mentoring scheme to BS 8555 through a web-based EMS which is designed for small to medium enterprises. Fabricators with ISO 14001 can use this to fulfil their obligations but must provide evidence through the web-based mentor and be working on an environmental improvement project.
2. Steel used in the project must meet the criterion of coming from an environmentally responsible steelmaker (see above).

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