



The ASI Environmental Sustainability Charter (ESC) is designed for steelwork fabricators, steelwork processors and contractors who can demonstrate a company's commitment to environmental improvement through their in-house factory processing of steel.

An ESC Charter member company is able to fulfil the steelwork sustainability requirements where a project specifies this commitment as a contractual requirement. Where projects utilise an Environmental Sustainability Charter certified fabricator, a point can be earned towards their Green Star total. Certified companies use the online Environmental Management System (EMS) to plan and record their progress and are audited annually to monitor the commitment they have made towards the Charter.

The ESC has grown to 48 companies this year and we have seen some excellent projects in the course of our annual audit. Five companies achieved Platinum status and 22 attained Gold – an outstanding result for these companies.

As always, the audits were conducted along the lines of the commitment the ESC member companies made to the goals of the Charter:

1. To develop and promote steel as an environmentally sustainable form of construction.
2. To operate so as to optimize the eco-efficiency of steel manufacturing, processing, treatment and construction throughout the full product life cycle.
3. To embrace the environmental hierarchy of 'reduce, reuse and recycle', so as to minimise impacts on resources and energy, in steel manufacturing, processing, treatment and construction.
4. To continue to build their environmental awareness and to share this knowledge with suppliers and subcontractors so as to encourage the full supply chain to embrace and implement sustainable policies.

5. To engage with the local community on environmental issues as appropriate.
6. To show commitment to the ESC by updating the EMS as appropriate and completing a progress audit once a year with the ESC nominated auditor.

Some of the comments made by the auditor this year were:

"A continuing excellent result to maintain Platinum. All the requirements of the ESC were met. The company is a leader in the field of environmentally sustainable fabrication."

"This company has a great understanding of the data collection and operations review process. Energy reduction projects were completed and new projects initiated investigating gas leaks and solar energy."

"The company continues to be a leader in the ESC. Its project completed in 2018 was 'Clean up our own backyard' and this had waste recovery as its focus."

"The company again demonstrates commitment to environmental improvement projects and is a leader in this field. It embarked on a new VOC savings project by trialling water-based primers for its output. This is a significant environmental project. In addition, efficiency gains on workshop productivity have been quantified in savings of approximately 500 tonnes per annum of scrap steel."

"This company continues to impress with their systematic approach to business and environmental improvement projects."

"A continuing solid use of the ESC to benefit the company and employees in both productivity and environmental improvement."

"This company demonstrates an innovative and collective approach to environmental projects, strongly supported by management"

"An excellent report on very good outcomes of the solar project."

“Certified companies use the online Environmental Management System to plan and record their progress and are audited annually to monitor the commitment they have made towards the Charter.”

There was a large range of beneficial sustainability projects undertaken by ESC Group members this year. Some of these included:

Energy reduction:

- Change to inverter welders
- LED lighting and lighting sensors
- High efficiency high bay lighting
- Clear roof panelling to utilise daylight more efficiently
- Solar energy system with real time monitoring system
- Research on the energy efficiency of forklifts, LPG versus electric
- Investigation of standby power consumption of office, workshop and specific equipment
- New energy-saving pump and blower system for sewage system
- Workshop lights operation policy
- Gas usage reduction and leak investigation
- Quantification of the reduction in electricity and diesel usage

Waste reduction and recycling:

- Waste recycling projects
- Cutting efficiencies, scrap management, steel waste improvement
- Reduction of waste paper
- Cardboard and plastic spools recycling system
- Spill kit and procedure implementation
- Waste sorting for timber plastic and paper
- Non-ferrous and steel recovery
- Quantified waste reduction on machine productivity improvements
- Fully implemented FABTROL to STRUMIS project – efficiencies in nesting, reduction in waste and better traceability

Water usage reduction:

- Improved stormwater quality
- Collection of rain water
- Reduction of water use through use of steel cold press
- Quantified reductions in water usage

Air quality improvement:

- Blaster dust emissions reduction
- VOC reduction for steelwork primer application by changing to water-based paint

Environment and community:

- Native planting with Greening Australia
- Clean-up Australia Day campaign
- Solar Renewables Community power project

A tip on sustained progress on your environmental projects:

Access the Environmental Management System regularly to chart your progress.

Keep measuring gains to see if they are being met over time.

These projects demonstrate that good environmental practice is also good business practice where environmental sustainability equates to business sustainability.

WHAT IS THE ENVIRONMENTAL SUSTAINABILITY CHARTER?

Established in collaboration with the Green Building Council Australia (GBCA), the ASI Environmental Sustainability Charter (ESC) has been able to drive meaningful improvement in the environmental footprint of its certified steelwork fabrication companies.

The ESC was set up by the ASI in 2011 to fulfil the need to create a mechanism for construction companies to determine and identify a sustainable steelwork supplier. It also provides a tool for fabrication companies to demonstrate their commitment to reducing their environmental footprint, and to work towards this in a continuous and structured way.

Charter-certified fabricators can be used in projects by regulators, environmental rating bodies like the GBCA (Green Star), state authorities such as rail and road, and any other body wanting to demonstrate environmental improvement in their project through their contracting process.

Charter membership is designed for downstream steel enterprises associated with steelwork fabrication or processing. This membership demonstrates a company's commitment to environmental improvement and is of particular importance where a company is required to achieve an accreditation as a contractual requirement. This commitment is audited and certified once a year by an independent auditor.

Any company applying for ESC certification must operate a structural steelwork fabrication or processing facility in Australia.

HOW DOES A COMPANY BECOME A MEMBER OF THE ESC?

To become an 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, 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. The ASI reserves the right to conduct the ESC audit on-site to ensure that the projects listed on the ESC online Environmental Management System (EMS) Mentor are operational.

WHAT IS REQUIRED?

1. The fabricator or 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 EMS 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.

For further information about the ESC contact the ASI on esc@steel.org.au.