



Standard Guide

Choose GECA for better steel

Steel is a vital material not only for the built environment but also for vehicles, art, medicine and information technology. The unique physical properties of steel allow it to be reused or recycled without loss of quality.

However, like all materials, steel can pose a significant environmental, health and social burden during its manufacture, use and disposal. So, GECA has developed the **Steel & Steel Products standard** to define sustainable performance benchmarks for steel and steel products throughout their entire lifecycle.

Benefits for manufacturers

Once a steel product has been certified, your company can use the GECA ecolabel to show consumers and procurement teams that you are a sustainability leader in the steel sector. Sustainability is becoming an increasingly important driver, particularly for the public sector, and GECA's ecolabel makes it easier to identify your leadership. You will be ahead of the game to win over more business!

Benefits for procurement

Procurement teams have a significant role to play in shifting the steel market toward sustainability practices. When creating requests for tenders and in developing contracts, specifying GECA certification is an easy way to prompt the steel market to reassess its manufacturing methods and work towards best practice. Purchasing GECA ecolabelled steel means that you can rest assured you are purchasing a third-party verified sustainable product!

Green Building Scheme Recognition



Green Building Council of
Australia's Green Star at
Level A



The Infrastructure
Sustainability Council's IS
Rating Scheme





What does the standard cover?

Products covered by the standard include slabs, plates, hot rolled coil plates, cold rolled coil, billets, structural beams and columns, hollow pipes, rolled hollow sections, flat angles and channels, reinforcement bars, hot rolled coil round bar, steel wire, rails, galvanised steel products, coated steel products, assembled steel products.

Other environmentally innovative steel products that do not fit the above categories may be considered for certification.

GECA certified is better for people and planet

When a product is certified against a GECA standard, you can be sure that it has been independently assessed to meet **environmental**, **human health** and **social impact** criteria, and has proven to be **fit for purpose**.



* Steel contributes **\$11 billion** to Australia's GDP

* The steel industry employs over **100,000** people

One ecolabel says it all



Environment

Recycled Content

Unsustainable practices in the extraction of raw materials can result in a wide range of environmental issues, for example, threatening of biodiversity in adjacent areas, erosion in coastal areas and riverbanks, or pollution of waterways.

GECA Standard: Virgin mined and quarried raw materials must come from operations with environmental management plans, which must be implemented. Manufacturers using post-consumer scrap must implement procedures to exclude feedstocks containing undesirable materials, including radioactive materials and Polychlorinated Biphenyls (PCBs).

Emissions to Air

Steel manufacturing is a major contributor to worldwide carbon emissions. On average for 2018, 1.85 tonnes of carbon were emitted for every tonne of steel produced. The steel industry contributes [6-9% of total global emissions](#) from fossil fuel.

GECA Standard: Clear restrictions are placed on carbon emissions, helping the industry to reduce its impact. The steelmaker must also be a member of the World Steel Association's [Climate Action Programme](#). Our standard also recognises certification under the current version of the [Responsible Steel standard](#).



Environment

Emissions to Air

Steel manufacturing processes can result in the emission of significant amounts of pollutants. High levels of nitrogen oxides are [harmful to vegetation](#), damaging foliage, decreasing growth or reducing crop yields. Nitrogen oxides and sulphur oxides can react with substances in the atmosphere to form acid rain. [PCBs](#) are a group of harmful persistent organic pollutants that are toxic, persist in the environment and animals and bioaccumulate through the food chain.

GECA Standard: Off-gases must be captured to the maximum extent practicable and directed to a treatment system to control particulate matter. Emissions of dioxins, PCBs, nitrogen and sulphur oxides, must be measured and reported at least annually. The steel manufacturer must also implement a dust management plan covering all areas of the mill operation.

Waste Management

Overconsumption of resources and generation of waste can have a significant impact on the environment. Discharge of wastewater and damaging substances can threaten the health of aquatic ecosystems.

GECA Standard: Manufacturers must calculate and report on the overall material efficiency of the steelmaking site. This aligns with the *World Steel Association's* goal for all raw materials to be used to their full capacity, ensuring zero waste from steelmaking. Manufacturers must implement systems to recover process wastewater sludges and sediments and have systems in place to recycle and reuse water, including stormwater. The Electric Arc Furnace must use a closed-loop cooling water system.

Packaging and End of Life

Inefficient use of packaging can result in greater transportation needs, natural resource depletion and increased burden on landfills. Product packaging should be as efficient and recyclable as possible across the product's lifecycle. It is also important that the coating used on the steel does not make the product unsuitable for recycling in steel mills.

GECA Standard: We require that packaging must contain recycled material or be derived from plant-based materials. The manufacturer must also supply evidence that a steel mill can take back and recycle this steel product.



Health

Hazardous Substances

Certain substances or compound classes, including carcinogens, have been identified as particularly harmful to human health. Toxic heavy metals and their compounds such as mercury, arsenic, selenium, cobalt, tin and antimony are also detrimental to the health of manufacturing staff and users of the finished product. Volatile organic compounds (VOCs) are also present in the coatings of many products. They can trigger allergic reactions, headaches, eye irritation, and asthma problems.

GECA Standard: No known endocrine disruptors, carcinogens, mutagens or teratogens are allowed. All substances of Very High Concern listed on the [REACH Candidate List](#) are banned. Minimum VOC content allowed in coatings.



Social

Human Rights and Modern Slavery Reporting

Nothing is truly sustainable if it only looks at the impacts on the environment and ignores the treatment of people. Exploitation can occur in many ways, such as unsafe work conditions or little to no pay. Modern slavery is a term used to cover a range of exploitative practices, including slavery, human trafficking, child labour and forced labour. The construction, manufacturing and mining sectors appear to be modern slavery hotspots.

GECA Standard: An annual Modern Slavery Statement in alignment with the [Australian Modern Slavery Act \(2018\)](#) must be published. This includes manufacturers of any size and is not restricted to any annual revenue threshold. If risks are identified in the report, they will have to be addressed in the next annual report and improvements will have to be documented. We also require evidence of workplace safety, fair pay and equal opportunity. The manufacturer must also show compliance to all lawful conduct.

Transparency

Manufacturers can make false or misleading claims about their environmental performance which can create consumer confusion or 'greenwash' in markets.

GECA Standard: GECA needs to see evidence that all environmental claims about a product undergoing certification are true and substantiated.

* According to the [Global Slavery Index](#), there are over 45.8 million people across 167 countries in some form of modern slavery



Fit for Purpose

Fit for Purpose

On top of all these essential environmental, health and social criteria, the product must also be fit for purpose. That is, it must do what the manufacturer claims it does. There's no use having a product if it doesn't deliver on its promise.

GECA Standard: To become certified, the product must meet or exceed the requirements of the relevant Australian Standards or equivalent international standard.

Let's Talk!

We would love to hear from you! Contact us via info@geca.org.au or +61 2 9699 2850 for further information on how we can help. You can also find us at www.geca.eco



Click the arrow to download the full Steel and Steel Products standard for free

This standard contributes to the following [Sustainable Development Goals](#)

