

**Submission to the *Carbon Leakage Review - Consultation paper***

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The Australian Steel Institute (**ASI**) is pleased to make a submission to the *Carbon Leakage Review Consultation paper*.

### **Introduction**

The ASI is the nations peak body representing the entire steel supply chain, from the primary producers through to end users in building and construction, resources, heavy engineering and manufacturing.

Its membership base includes approximately 6,000 individuals that are associated with more than 500 corporate memberships and over 350 individual memberships.

A not-for-profit member based organisation, the ASI's activities extend to, and promote, advocacy and support, steel excellence, standards and compliance, training, events and publications. The ASI provides marketing and technical leadership to promote Australian-made steel as the preferred material to the resources, construction, and manufacturing industries, as well as policy advocacy to government.

### **The Australian steel industry**

The Australian steel industry consists of four primary steel producers, supported by over 300 steel distribution and processing sites throughout the country and hundreds of manufacturing, fabrication and engineering companies.

Australia's primary steel producers and steel product manufacturers together form a strategically important value chain that has the capability to supply in excess of 90 per cent of the steel grades and qualities required in this country. If special categories such as very large diameter pipe, stainless steel, electrical steel, and tinplate are excluded, then the capability is significantly closer to 100 per cent.

Australia produces around 6 million tonnes of steel per annum across five major manufacturing locations. It is important to note the economic and social contribution of the Australian steel industry. It employs over 100,000 people and generates \$29 billion in annual revenue, and is associated with a disproportionately large share of skilled jobs in regional and rural areas.

The economic contribution of the Australian steel industry is very significant. Based on recently completed analysis conducted by BIS Oxford Economics, it is estimated that for every \$1 million invested,

- 5 workers are employed in the steel and closely related industries,
- \$2.8 million output is contributed to the economy, and
- \$1.1 million of value is added to Australian GDP.

Steel fabrication is essential for manufacturing of bespoke construction products such as foundations, piling, columns, beams, girders, gantries, platforms, and towers. Areas of specialisation include wind turbine towers, transmission towers, storage tanks, chemical processing plant, boilers and pressure vessels, mining infrastructure refurbishment, mobile equipment for underground and surface mining, mobile cranes, bridges, armoured vehicles for Defence, naval and domestic ship building, rolling stock, truck bodies and trailer chassis.

The steel industry is noteworthy in having a high proportion of jobs and businesses located in regional areas or non-capital cities, where unemployment is typically higher than the national average. The industry is technically complex and requires a highly skilled workforce to support it, encouraging the ongoing presence of high-quality tertiary education institutions in regional areas.

This table sets out the steelmaking capacity and production processes used in Australia:

Company	Manufacturing Locations	Typical Production	Production Process
BlueScope	Port Kembla, NSW	3.2 million tonnes	<b>Integrated (BF/BOF):</b> iron ore / coal / scrap steel Coke Ovens, Sinter Plant, Blast Furnace, BOF steelmaking
InfraBuild	Laverton, VIC	0.7 million tonnes	<b>EAF route:</b> scrap steel EAF steelmaking
	Rooty Hill, NSW	0.6 million tonnes	
Liberty Primary	Whyalla, SA	1.2 million tonnes	<b>Integrated (BF/BOF):</b> iron ore / coal / scrap steel Coke Ovens, Pellet Plant, Blast Furnace, BOF steelmaking
Molycop	Waratah, NSW	0.25 million tonnes	<b>EAF route:</b> scrap steel EAF steelmaking

The steel industry is a key enabler for the nation's renewable energy transition and associated legislated climate targets. Between now and 2030 it is estimated that at least 400,000 tonnes of extra fabricated steelwork will be required per annum to service over 23 GW of existing renewable energy generation projects across wind, solar, water and transmission infrastructure.

## Carbon Leakage Review Consultation

The following responses are based on consultation with ASI steel producer and steel product manufacturer member businesses.

### 1.1 Carbon leakage

- **Is the description of carbon leakage appropriate for the purpose of this Review?**

The description provided in the *Box 1: Carbon leakage risks and industrial relocation* section of the consultation paper is appropriate.

### 1.2 The Safeguard Mechanism

- **What is your view on how your business or industry could be affected by carbon leakage?**

The market for steel in Australia is such that there are essentially very low or no barriers to international trade, meaning that to a large degree the pricing is set by import parity benchmarks. Since many steel products are pure commodities in the sense that the market treats them as generic provided basic mandated property requirements (e.g., mechanical strength) are satisfied, the domestic steel producers are obliged to compete directly with pricing determined by steel importers.

There are a range of significant costs associated with meeting Safeguard Mechanism emission reduction requirements, which mean that if only the domestic steel producers are subject to this requirement, they are at a production cost disadvantage relative to international competitors that aren't subject to comparable emission reduction regime. In the short term this situation will likely result in margin compression for domestic producers, causing reduced profitability. Over the medium to long term, the relative competitive disadvantage and reduced profitability outlook will likely result in a lack of capital investment and/or closure of higher cost facilities. The ultimate consequence of carbon leakage is therefore likely to be loss of domestic production capacity and a shift to sourcing of steel supply from international producers that aren't subject to comparable emission reduction requirements.

## 2.1 Relevant goods and commodities

- **Are there other goods or commodities beyond those identified as trade exposed under the Safeguard Mechanism that should be included in the assessment?**

In addition to commonly traded crude or semi-finished steel products such as hot rolled coil, reinforcing bar, hollow sections (pipe and tube), and plate, it is essential that manufactured finished goods such as fabricated steel are also included in the assessment. The estimate of approximately 18% imported steel as a percentage of total domestic consumption shown in figure 3 of the consultation paper only accounts for crude or semi-finished products. According to the World Steel Association, Australian Apparent Crude Steel Use in 2021 was 6.9 million tonnes, therefore the imported steel volume corresponds to approximately 1.2 million tonnes.

According to analysis of the ABS data for Fabricated Goods Imports (category 7308), the volume of imported fabricated steel in 2021 was also approximately 1.2 million tonnes. Therefore, the inclusion of imported fabricated steel should be included in the assessment on the basis of both the significance of the volume involved (and therefore the associated carbon emissions), and also the need to ensure that domestic fabricators of steel are not materially disadvantaged.

## 2.2 Assessing impacts of carbon leakage and policy instruments

- **Is this characterisation of the potential impacts of carbon leakage and instruments to address it appropriate for the purpose? Are there other aspects that should be considered?**

This characterisation is appropriate.

With regard to the data referenced in Figure 5, comparing the steel emissions intensity of various countries, the ASI would like to better understand the source of the information used for this analysis. In the case of comparison between Australia and China for example, the Figure 5 data indicates that China has a slightly lower emissions intensity than Australia. This finding is at odds with the composition of the steel production process used in each country. In China the emissions intensive Blast Furnace / BOF process accounts for approximately 91% of all steel production, whereas in Australia, the Blast Furnace / BOF process accounts for approximately 70% of all steel production (World Steel Association 2020). Since the Blast Furnace / BOF process is between four and eight times more carbon emission intensive than the Electric Arc Furnace (EAF) process, which accounts for the majority of the balance of steel production, this is difficult to reconcile with the analysis presented in the consultation paper.

## 2.4 Analytical approach

- **What domestic economic effects from carbon leakage and policy approaches to address it are of particular importance for analysis and modelling?**

The key economic effects for analysis and modelling are the profitability, production capacity utilisation, employment and capital investment metrics for the local steel producers.

- **Would the analysis benefit from an assessment of impacts on bilateral trading partners and net global emissions?**

The impacts on net global emissions should be included in the analysis.

## 3 Policy options to address carbon leakage risks

- **Are there additional policy options that should be considered alone or as part of a portfolio of approaches to address carbon leakage?**

The ASI is not in a position to provide a perspective on this question.

### 3.1 Existing measures under the Safeguard Mechanism

- **What is the capacity of current policy settings of the Safeguard Mechanism to mitigate carbon leakage risk into the future?**

The ASI is not in a position to provide a perspective on this question.

### 3.2 Australian carbon border adjustment mechanism

- **Is an Australian carbon border adjustment mechanism desirable? If so, which design features should be considered?**

In the context of domestic steel producers being required to meet the Safeguard Mechanism emission reduction requirements, an Australian carbon border adjustment mechanism is desirable in order to address the probable issue of carbon leakage.

In addition to the scope including imported fabricated goods as well as crude or semi-finished steel products, the design needs to include the provision of a comprehensive traceability scheme that is capable of providing verification of the provenance of the carbon emission intensity value associated with any given parcel of semi-finished steel or finished steel products. This traceability scheme needs to be able to account for the transit of imported steel and steel products through intermediate countries. In the absence of credible verified carbon emission intensity

credentials, the value assigned should default to that of the highest quartile producer group in the country of origin.

### 3.3 Emissions product standards

- **What is the appropriate role for emissions product standards to mitigate carbon leakage?**

Industry-specific emissions product standards have an important role to play in mitigating carbon leakage for steel. There are currently voluntary green labelling or product standards available for steel products across the globe which have involved an enormous amount of industry consultation and set a minimum expectation for the sustainability credentials for steel products entering the Australian market, including emissions. These are currently not mandated, however they are recognised in sustainability rating tools in the built environment, such as the Green Building Council of Australia (GBCA) Green Star tools and the Infrastructure Sustainability Council (ISC) rating tools.

To encourage the specification and procurement of more sustainable steel used in Australia, the ASI has published a sustainability specification for steel that references these steel products standards, which is available for download from:

<https://www.steelsustainability.com.au/resources/specification/>

ASI supports the mandating of the product standards referenced but offers cautionary advice when considering mandating only *one* steel specific product standard or emissions benchmark for all steel products used within Australia market. Due to the multiple steel production technologies and processes in operation across the globe (e.g., Blast Furnace / BOF, Electric Arc Furnace, Direct Reduced Iron), carbon emission profiles and trajectories differ for each, so it is impractical to set one carbon emission benchmark that is relevant for all.

### 3.4 Targeted public investment in firms' decarbonisation

- **What is the appropriate role for public investment measures to mitigate carbon leakage?**

Public investment should be used to encourage and accelerate the transition of domestic steel producers to lower carbon emission intensity production technologies. In addition to the types of support schemes outlined in the consultation paper, the scope should include funding for fundamental and applied research, preferably via industry-led collaborative initiatives such as the Australian Research Council funded [Steel Research Hub](#) and the [Heavy Industry Low-carbon Transition](#) (HILT) Cooperative Research Centre.

### 3.5 Multilateral and plurilateral initiatives

- **What is the appropriate role for multilateral and plurilateral initiatives to help to mitigate carbon leakage, and the impact of unilateral measures taken to address carbon leakage?**

The ASI is not in a position to provide a perspective on this question.

### 4 Feasibility of policy options

- **What principles should guide Australian policies to prevent carbon leakage?**

The fundamental principle should be that domestic steel producers are not commercially disadvantaged as a consequence of meeting the Safeguard Mechanism emission reduction requirements.

- **Should other factors be considered to assess the feasibility of potential policies?**

The ASI is not in a position to provide a perspective on this question.

Yours sincerely

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