EUROFER
The European Steel Association

# A GREEN DEAL ON STEEL

## PRIORITIES FOR TRANSITIONING THE EU TO CARBON NEUTRALITY AND CIRCULARITY


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### PRIORITIES FOR TRANSITIONING THE EU TO CARBON NEUTRALITY AND CIRCULARITY

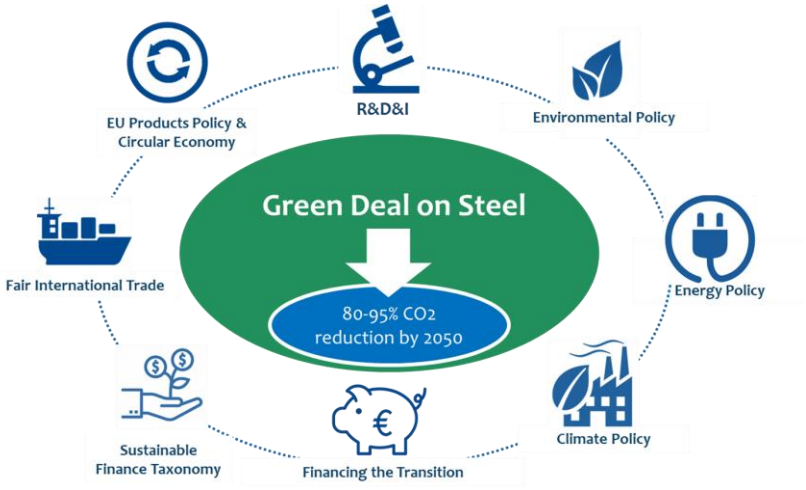
Europe has the opportunity before it to lead the transformation of its economy to a future in which it is carbon-lean, environmentally responsible, circular and able to compete internationally. Steel is central to the EU economy, and it underpins the development of major manufacturing sectors right along the value chain.

With supportive conditions in place, notably the right infrastructure and a supportive regulatory framework, the European steel industry will be empowered and fully committed to the EU's climate objectives and sustainable growth targets. The sector would be able to develop, upscale and roll-out new technologies that could reduce EU steel production's $CO_2$ emissions by 30% by 2030 and by 80 to 95% by 2050, while contributing to greenhouse gas mitigation across all sectors.

### COMBINED POLICY SOLUTIONS

A Green Deal on Steel is not a single policy. Rather it combines existing EU policy fields and updates them to provide specific objectives, alongside how to field-test best practice *in low-carbon steelmaking*. These Green Deal on Steel actions need to be compatible with, and inclusive of, the various facets of the EU's broader Green Deal climate policy; the Green Deal will have a wide and varied impact across all EU industries, thus it must be coherently constructed and deployed. The success of the Green Deal depends on the horizontal, cross sectoral integration of an industrial strategy and needs to be implemented throughout the full value chain.

The policy recommendations below are, in EUROFER's view, essential to succeeding in the aims of ensuring the EU steel industry remains on track to meet its emissions reductions targets (i.e. 30% by 2030 and 80-95% by 2050) whilst also remaining competitive globally and finding a sustainable market for its green steel products.




EUROFER AISBL • Avenue de Cortenbergh, 172 • B-1000 Brussels • Belgium
+32 3 738 79 20 • mail@eurofer.be • www.eurofer.eu • EU Transparency Register: ID 93038071152-83

# POLICIES FOR A SUCCESSFUL GREEN DEAL ON STEEL

## RESEARCH & DEVELOPMENT & INNOVATION

**Deploying breakthrough technologies**

The most promising breakthrough technologies need to be tested and implemented on an industrial scale between 2020 to 2030, and beyond. These include Carbon Direct Avoidance (CDA: hydrogen- and electricity-based metallurgy), and Smart Carbon Usage (SCU: Process integration and Carbon Valorisation, CV, or Carbon Capture and Usage, CCU).

**A European Partnership for Clean Steel**

- Adopt the European Commission proposal for a 'Clean Steel' European partnership under Horizon Europe and support the demonstration of breakthrough technologies in steelmaking (Carbon Direct Avoidance and Smart Carbon Usage).

**Synergies and sequencing among different financing schemes**

- Ensure synergies between various financing programs, e.g. between the EU ETS Innovation Fund and Important Projects of Common European Interest (IPCEIs) and a 'sequencing mechanism' for continuation of successful projects under Horizon Europe.

## ENERGY POLICY

**Low- or $CO_2$-neutral steel transition energy requirements**

The EU steel industry will require approximately 400TWh of $CO_2$-free electricity every year by 2050 (including for the production and use of hydrogen). The reliable availability and abundant supply of low- or $CO_2$-neutral energy (mainly electricity and hydrogen) at economically viable, affordable cost levels is a necessary pre-condition for the successful transformation of the steel sector in the coming decade and beyond.

**Infrastructure investment planning**

- For investment planning, map current and future requirements of EU energy infrastructure.

**Regulatory framework for EU energy network**

- Adopt and implement a common European hydrogen strategy.
- Foster the development of green electricity while maintaining the international competitiveness of energy-intensive sectors that participate in global markets.
- Support the development of electrolysis plants and distribution networks to scale-up green hydrogen production.

**State Aid rules**

- Enable state aid to adjust the price of green electricity and hydrogen to an internationally competitive level. This would provide a reliable and viable cost basis for investment decisions in $CO_2$-lean steel plants.

## CLIMATE CHANGE POLICY

**Ensuring international competitiveness throughout the transition and beyond**

The steel sector is the most exposed to carbon leakage of all energy intensive industries. During and beyond the transition towards production of $CO_2$-lean steel, a supportive regulatory framework that ensures a level playing field with third country competitors is required. To this end, steel products sold on the EU market, whether produced in the EU or imported from third countries, and steel exported from the EU to third countries need to have similar $CO_2$ cost constraints.

**Short-term regulatory framework: improve carbon leakage protection with a Carbon Border Measure**

- Introduce, for a transitional period, a WTO-compatible Carbon Border Measure that factors in both direct and indirect emissions. This measure needs to be set at an **effective** level to avoid carbon leakage via imported products; the measure also needs to be introduced in addition to existing carbon leakage provisions on free allocation and indirect cost compensation within the existing EU ETS. Introducing Carbon Border Measure and removing free allocation would not prevent carbon leakage; it would almost certainly be detrimental to steel production in Europe.

**Short and mid-term: Create lead markets for low carbon products with demand-side measures**

- Introduce incentives for steel users (such as automotive, among others) to use 'green steel'. The EU regulation on passenger cars should apply a more holistic approach towards Life-Cycle Thinking through $CO_2$ credits for the use of 'green materials', such as 'green steel'. The implementing act which to date limits 'Eco-innovation' credits (for $CO_2$ savings of up to 7 g $CO_2$/km) to the 'efficient operation' of the vehicle should be extended to include 'green materials'.
- Promote low carbon products in public procurement.
- Facilitate CCS and CCU options to support the steel industry in decarbonising.

**Mid- and long-term: enhanced measures**

- A methodology for calculating the $CO_2$ footprint (through the value chain, including *scope 3*) as a basis of future regulatory solutions.
- Introduce, as a complement to the Carbon Border Measure, a minimum $CO_2$ standard, based on the footprint calculation that must be met by all steel products sold on the EU market in order to ban the dirtiest steel from the market.
- Carbon-added tax that functions similarly to VAT
- Measures and incentives to keep ferrous scrap in the EU for its subsequent treatment and quality improvement, helping to deliver on the EU's circular economy and $CO_2$ reduction objectives.

## SUSTAINABLE PRODUCTS AND 'ALTERNATIVE' MATERIALS FOR THE CIRCULAR ECONOMY

**Steel is a highly versatile, sustainable product, and it contributes to making society as a whole more sustainable**

The circular economy policy field is broad and encompasses a range of EU regulatory measures and initiatives. As a result, in enacting the Green Deal, care must be taken to align it with existing principles in the EU's circular economy policy, most notably the Circular Economy action plan (e.g. the next climate policy, toxic-free/zero-pollution and chemicals strategies and the Industrial Emissions Directive).

Steel is a permanent material – it is reusable and endlessly recyclable. Steel scrap generated in the EU should be considered as a strategic resource insofar as its use is essential to the completion of the EU's circular economy – in addition to recycling supporting the EU's $CO_2$ reduction objectives.

Scrap has, embedded within it, a considerable energy use and $CO_2$ reduction potential that is lost by EU economy when it is exported to third countries – of which 18 million tonnes are exported net every year. Annually, the steel sector generates – alongside its 165 million tonnes of finished steel products - around 40 million tonnes of other materials which are used as alternatives (i.e. as secondary raw materials), thereby replacing virgin resources in numerous downstream sectors.

**Enhancing circularity requires a holistic EU Products and Secondary Raw Materials Policy by developing and applying:**

- Life-cycle assessment (LCA) and
- Product indicators such as:
  - A Circular Footprint Formula (CFF)
  - Circular product requirements (e.g. re-usability, high quality recyclability, durability and disassembly), and
  - Co-products/residues use
- Recognition and integration of the EU Product Policy as an 'enabler' of climate and resource efficiency goals.
- Extension of the scope of the Eco-Design Directive, focusing on sustainable products and on product design requirements.
- Prioritising the use of 'alternative' materials, (such as by-products, end-of-waste and waste) over virgin materials, irrespective of their legal status in public procurement and tender.
- EU-wide criteria for by-products and end-of-waste materials.
- The use of 'alternative' materials, which must meet the same standard specifications used for virgin materials.
- A toxic-free strategy that focuses on reducing the actual risk of exposure, and not on the theoretical content of hazardous substances; This would further facilitate and enable circularity.

## FINANCING THE TRANSITION

**Transition to the low-carbon future will require a range of financing mechanism**

EU steel producers face not only the compliance costs of the EU ETS (€25 per tonne of $CO_2$ in October 2019), but the full abatement costs. These costs can be more than ten times the current compliance cost per tonne of $CO_2$ abated. Steel markets will not tolerate respective cost pass-through and therefore an overall legal framework needs to address both issues.

The new technologies would result in additional production costs for the EU steel industry of at least €20 billion per year compared to the retrofitting of existing plants (i.e. upgrading of existing plants with best available techniques), of which at least 80% Operating Expenses (OPEX) mainly due to prices for CO2 lean energy. Public financial support for R&D&I and up-scaling to initial industrial demonstrators remains crucial. The cost per tonne of primary steel would likely increase by 35% to 100% compared to the current baseline.

**EU and national financial support schemes**

- Support private capital with a consistent and coordinated framework of public funding opportunities at EU, national and regional level:
  - de-risking facility with zero or low-interest loans over very long maturities,
  - EU-wide programs, e.g. Private-Public-Partnerships (PPP) and Important Projects of Common European Interest (IPCEI)
  - $CO_2$ grants, and
  - other forms of 'contracts of difference'.

## SUSTAINABLE FINANCE

**Ensuring access to sustainable finance**

Massive transformative investments are needed for the development, demonstration and scaling up of new $CO_2$-low technologies over a relatively short time period. The sustainable finance taxonomy should maintain a flexible approach that prevents prescriptive and rigid categories which do not take the dynamic evolution of technology into account.

**Taxonomy Regulation/Technical Screening Criteria**

- Enable industrial activities in transition towards a low-carbon and energy efficient society to access financing at competitive conditions.
- ETS benchmarks are not suitable as thresholds for sustainable finance. GHG performance assessment should be performed on entire value chains and full life cycle analysis (LCA). Instead of the ETS benchmarks, a European Standard EN 19694 should be used.

## FAIR INTERNATIONAL TRADE FOR INDUSTRY

**The EU steel industry stands for fair international trade, which must be based on global rules that are effective and enforceable, ensuring a level playing field for all.**

Global steel overcapacity and related government support measures continue to hinder the financial and economic sustainability of the global steel industry. Steel is an intensively traded product. Global overcapacity was around 440 million tonnes in 2019, equivalent to almost 25% of global steel production capacity.

EU steel imports have increased significantly, up from 18 million tonnes in 2013 to a record 30 million tonnes in 2018. 2019 import levels have remained high, and a return to growth in the EU steel market in 2020 is expected to be accompanied by a return to rising import levels.

**EU steel safeguard**

- Urgently align the EU's tariff-free steel import quota with market realities and decreased EU demand and stabilise import flows

**Fair international trade**

- Counter dumping, governmental subsidisation and other support schemes in third countries by improving the application of Trade Defence Instruments (TDI).
- Modernise the WTO rulebook to more effectively tackle trade distorting practises, in particular excessive subsidies to industry.
- Continue addressing global steel excess capacity at international level.
- Gain a new leverage at international level by:
    - Developing effective solutions to promptly react to unilateral protectionist measures.
    - Upgrading the EU's Enforcement Regulation to allow the use of sanctions when third countries adopt illegal measures.
    - Reciprocity where third countries deny access to public procurement.
    - Enforcing screening of Foreign Direct Investment.
    - Analyse new Free Trade Agreements, and if appropriate revise existing ones, to ensure market access and the sustainable development of EU industry.

## ENVIRONMENTAL POLICIES

**Environmental policies need to be modern, based on science and efficiently implemented to support the industrial transition.**

- Permits in Industrial Emissions Directive (IED) should be updated and granted based on a technology driven analyses and a transparent and robust methodology to derive emission limits.
- Modernise the Water Framework to enable a resilient water system combined with industrial and societal development.
- Introduce a risk-based approach to evaluate environmental and health effects of materials.

# EUROFER POSITION PAPERS

EUROFER has published a range of papers, studies, and reports that highlight the thinking behind its positions. These documents underpin EUROFER's call for a Green Deal on Steel.

All of these documents can be downloaded by visiting:
www.eurofer.be/documents/greendealonsteel

## ENSURE COMPETITIVENESS THROUGHOUT THE CLIMATE TRANSITION AND BEYOND

- EUROFER Discussion Paper: '*A Regulatory Framework for $CO_2$-Lean Steel Produced in Europe*'
- EUROFER/ESTEP Position Paper: '*The European steel industry welcomes the Commission proposal for the 'Clean Steel - Low Carbon Steelmaking' European Partnership*'
- EUROFER Vision Paper: '*Towards carbon neutrality: A European Partnership for Clean Steel*'
- EUROFER Low Carbon Roadmap: '*Pathways to a $CO_2$-neutral European Steel Industry*'
- EUROFER Position Paper: '*Revision of the Environmental and Energy Aid Guidelines (EEAG)*'
- EUROFER Fact Sheets: '*Revision of the Environmental and Energy Aid Guidelines (EEAG)*'
- EUROFER Position Paper: '*Compensation of indirect carbon costs in the post 2020 EU ETS*'
- NERA Economic Consulting Executive Summary: '*Characteristics of European Steelmaking in the Context of Indirect Emissions Costs*' study
- EUROFER Position Paper: '*Sustainable Finance Taxonomy Update*'
- EUROFER Position Paper: '*On Technical Report on EU Taxonomy of June 2019*'
- EUROFER Position Paper: '*Border Adjustment and Carbon Leakage Measures*'
- EUROFER Position Paper: '*Creating Markets for Low CO2 Materials: Sector coupling via lifecycle $CO_2$-credits for the use of low- $CO_2$ steel as 'eco-innovations' in the automotive industry*'

## FAIR INTERNATIONAL TRADE FOR INDUSTRY

- EUROFER Position Paper: '*Global Forum on Steel Excess Capacity*'
- EUROFER Infographic: '*Safeguarding EU Steel*'
- AEGIS Europe Position Paper: '*The reform of the WTO*'
- AEGIS Europe Position Paper: '*A call for a more effective application of existing EU policy instruments and improvements where needed*'
- AEGIS Europe Position Paper: '*Public Procurement*'

## SUSTAINABLE PRODUCTS AND THE CIRCULAR ECONOMY

- EUROFER Position Paper: '*Policy Options for Product Environmental Footprint (PEF)*'
- EUROFER Position Paper: '*Towards an EU Product Policy Framework*'
- EUROFER Position Paper: '*The New Circular Economy Roadmap – Summary & Priorities*'
- EUROFER Input: '*Consultation on the New Circular Economy*'
- EUROFER Brochure: '*Steel and the Circular Economy*'