

# We are ready – are you?

## Making a success of the EU Green Deal

**We need effective enabling policies for a Green Deal on Steel that sets out a clear action plan for the recovery of the steel industry and boosts our CO<sub>2</sub> reduction efforts - serving as a blueprint for Europe.**

**Publication date:** 13 October 2020

### Overview

Europe has the unique opportunity to lead the transformation of its economy to a future in which it is CO<sub>2</sub> neutral, environmentally responsible, circular and able to compete internationally, addressing third country trade distortions without inhibition. Steel is central to the EU economy, and it underpins the development of major manufacturing sectors right along the value chain. Our industry sustains 2.6 million direct and indirect jobs in the EU<sup>1</sup>.

To make the EU's recovery plan and green transition a success, a Green Deal on Steel should be agreed between EU steel industry and the EU institutions and governments, with a clear action plan establishing a market for *green steel* in the period 2021 to 2030. This plan can serve as a blueprint for other sectors, and help the industry out of the worst economic crisis in decades.

### Why steel?

Because the EU steel industry:

- is able to significantly advance the EU's climate objectives as CO<sub>2</sub> emissions are concentrated in a limited number of installations that cover about 25% of EU industrial and 5% of EU total CO<sub>2</sub> emissions;
- is most advanced among the energy intensive industries in terms of CO<sub>2</sub>-low projects<sup>2</sup>;
- is already committed to reducing CO<sub>2</sub> emissions by 2030 by 30% compared to 2018 (which equates to 55% compared to 1990) and towards carbon neutrality by 2050, under the right conditions;
- will allow the EU to set a global example for hard-to-abate industries can significantly lower their CO<sub>2</sub> emissions in a relatively short period of time.

---

<sup>1</sup> The impact of the European steel industry on the EU economy. Oxford Economics, May 2018

<sup>2</sup> Highest Technology Readiness Levels (TRL) are achieved in a large number of projects, several large-scale projects already started, including hydrogen-based steelmaking, carbon capture and usage, and carbon capture and storage.

- is a strategic sector producing 100% recyclable, circular materials for the EU’s key industries such as automotive, mechanical engineering, CO<sub>2</sub> low energy industries, construction, household goods, packaging, medical devices, sanitary systems, defence, among others.

## What can we achieve?

The EU needs a supportive regulatory framework and enabling policies to empower the European steel industry to contribute 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<sub>2</sub> emissions by 30% by 2030 compared to 2018 emissions (or about 55% compared to 1990) and by 80 to 95% by 2050, while contributing to greenhouse gas mitigation across all sectors.

However, changing circumstances resulting from the COVID-19 crisis will have to be taken into account. The European steel industry and its value chain have been severely affected by its impact. In September 2020 approximately 40% of the steel workforce was still affected by temporarily lay-offs and



reduced working, while average production in the period from March to September was 21% below the levels of previous year. Recovery is very slow and fragile, and stockpiling in third markets may deprive the European steel industry of a fair chance to rebound.

## A plan of action: A Green Deal on Steel

In light of the EU’s climate ambition, agreement on a comprehensive plan of action to implement it is urgently needed. A regulatory framework is required to allow companies and investors today to make investment decisions for the coming decade and beyond.

A Green Deal on Steel should not be necessarily a single policy. The related Action Plan would rather outline how existing EU policy fields shall be updated, combined and expanded in order to achieve the objectives of carbon neutrality, secure jobs and a prosperous industry, while supporting field-testing of best practice in low-carbon steelmaking. The German “Steel Action

Concept<sup>3</sup> is a good example of such an approach undertaken at national level. This initiative can, and should, serve as the basis for agreement on a similar initiative at an EU level, with a coordinated approach for the EU's climate, energy, trade, and industry related policies.

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 essential to succeeding in the aims of ensuring the EU steel industry remains on track to meet its envisaged 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.

## Policies for a successful Green Deal on Steel

### Free and fair international trade for industry

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

EUROFER welcomes the Commission's concept of 'Open Strategic Autonomy' outlined in the Trade Policy Review, acknowledging the need for the EU to evaluate and further develop its policies and capacity to build up resilience, capacity to effectively pursue and protect – without inhibition – its interests. This implies a necessary shift in views on the trade policy functions: European trade policy should forcefully support strategic EU objectives set in the frame of rapidly evolving EU industrial and environment policies.

In this context, for industry sectors like steel facing massive global excess capacities – almost 25% of global steel production capacity in 2019 – fuelled by foreign government subsidisation and other distorting support measures, the overarching function of the abovementioned EU policies is to ensure that integrated production, manufacturing value chains and technological innovation can remain and further develop within the EU securing well-paid jobs and avoiding societal distress. The focus should be on the application of existing and deployment of new tools that effectively tackle distortions from imports and guarantee access to export markets.

---

<sup>3</sup> <https://www.bmwi.de/Redaktion/EN/Publikationen/Wirtschaft/the-steel-action-concept.html>

## More effective trade defence measures and application

- Apply EU Trade Defence Instruments (TDI) without inhibition to effectively tackle third country trade distortions and their domestic industry support schemes. Adapt TDI to the new global reality of third country distortions which are detrimental to the EU economy and jobs.

## Focus on fair international trade

- Extend the EU Steel Safeguards beyond June 2021, if the U.S. Section 232 trade distortion, which plays directly against EU interests, is not revoked.
- Counter dumping, governmental subsidisation and other support schemes in third countries by improving the application of Trade Defence Instruments (TDI).
- Tackle foreign subsidies distorting the EU market by quickly adopting and effectively enforcing a new tool in the framework of the White Paper dealing with the distortive effects caused by foreign subsidies in the Single Market.
- Modernise the WTO rulebook to more effectively tackle trade distorting practices, in particular excessive subsidies to industry and raw material distortions.
- Continue addressing global steel excess capacity at international level.
- Gain a new leverage at international level by:
  - Developing effective solutions to react promptly to unilateral protectionist measures.
  - Upgrading the EU's Enforcement Regulation to allow the use of sanctions when third countries adopt illegal measures.
  - Leveraging reciprocity where third countries deny access to public procurement.
  - Enforcing screening of Foreign Direct Investment.
  - Analysing new Free Trade Agreements, and if appropriate revise existing ones, to ensure market access, EU standards on competition and state aid as well as the sustainable development of EU industry.

## Climate change policy

### Ensuring international competitiveness throughout the transition and beyond

The steel sector is at highest risk of carbon leakage and most impacted by unilateral climate policy among energy intensive industries<sup>4</sup>. During and beyond the transition towards production of CO<sub>2</sub>-lean steel, a supportive regulatory framework that ensures a level playing field with third country

---

<sup>4</sup> European Commission, In-Depth Analysis in Support of the Commission Communication COM(2018) 773 “A Clean Planet for all - A European long-term strategic vision for a prosperous, modern, competitive and climate neutral economy” page 221

competitors is required. To this end, steel products sold on the EU market, whether produced in the EU or imported from third countries, need to have similar CO<sub>2</sub> cost constraints. EU steel exports need also to have CO<sub>2</sub> cost level playing field on global steel markets.

### Short-term regulatory framework: improve carbon leakage protection

- 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; the measure also needs to be complementary to existing carbon leakage provisions on free allocation and indirect cost compensation within the existing EU ETS, in a transition until a market for green steel is established in the next decade. Introducing Carbon Border Measure and removing free allocation would not prevent carbon leakage; it would be detrimental to steel production in Europe.
- The implementation of the new 2030 climate and energy targets should focus on sectors that have delivered lower emission reductions than the EU ETS, but new sectors like road transport and buildings should not be included in the scope of the existing EU ETS due to their higher cost abatement. Any revision of the EU ETS should ensure the continuation of existing carbon leakage measures at the level of benchmarks, without the application of the cross sectoral correction and should ensure cost efficiency for covered sectors by avoiding interventions that artificially increase the carbon price.
- Introduce a force major clause under the EU ETS to avoid undue impacts of COVID-19 related temporary production cuts on the amount of free allocation in the post 2020 period
- Agree on fair compensation of indirect CO<sub>2</sub> costs. Fully implement the new ETS State aid Guidelines which in phase 3 cover not even 50% of steel's real indirect costs. Encourage member states, where compensation is not applied, to do so.
- Revise the Guidelines on State aid for Environmental protection and Energy (EEAG) to compensate the "transformation cost" of the transition to Low CO<sub>2</sub> steel, e.g. through Contracts for Difference (CfD) to de-risk investment in low carbon products/solutions by covering the difference between costs of conventional and CO<sub>2</sub>-low steelmaking.
- Continue carbon leakage protection in the form of exemptions and reductions regarding renewable electricity and energy taxation costs.

### 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<sub>2</sub> credits for the use of 'green materials', such as 'green steel'. The implementing act, which to date limits 'Eco-innovation' credits (for CO<sub>2</sub> savings of up to 7 g CO<sub>2</sub>/km) to the 'efficient operation' of the vehicle, should be extended to

include 'green materials'. This would generate a substantial incentive downstream the value chain.

- Promote low carbon products in public procurement.

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

- Develop a methodology for calculating the CO<sub>2</sub> footprint (through the value chain, including scope 3, the extraction and processing of raw materials) as a basis of future regulatory solutions.
- Introduce, as a complement to the Carbon Border Measure, a minimum CO<sub>2</sub> standard, based on the footprint calculation that must be met by all steel products sold on the EU market in order to phase out the most CO<sub>2</sub> intensive steel from the market.
- Explore a carbon-added tax that would function similarly to VAT.
- Adopt 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<sub>2</sub> reduction objectives. No scrap should be exported to third countries that are not compliant with EU environmental standards.

## Research, development and innovation

### Deploying breakthrough technologies

The most promising breakthrough technologies need to be tested and implemented on an industrial scale between 2020 and 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, Carbon Capture and Usage, CCU), and Carbon Capture and Storage (CCS).

### A European Partnership for Clean Steel

- The Clean Steel partnership will support the demonstration of breakthrough technologies in steelmaking (Carbon Direct Avoidance and Smart Carbon Usage) and deliver on the European Green Deal once sufficient resources are made available under Horizon Europe.
- The Commission legislative package<sup>5</sup> reforming the Research Fund for Coal and Steel will provide additional resources for Clean Steel in synergy with Horizon Europe. The package should be swiftly adopted before the launch of the partnership in early 2021.

---

<sup>5</sup> Proposal for a COUNCIL DECISION Amending Decision 2003/76/EC; Proposal for a COUNCIL DECISION amending Decision 2008/376/EC; Proposal for a COUNCIL DECISION amending Decision 2003/77/EC and ANNEX

## Innovative technologies at industrial scale

- Existing R&D programs shall work in synergy and be complemented with additional funding sources up to first industrial deployment.
- A newly established '*Low CO<sub>2</sub> Emissions Industry Alliance*' will be instrumental in delivering a first pipeline of investment in projects, and in providing a platform to design the necessary regulatory framework and enabling policies; Important Projects of Common European Interest (IPCEI) should be proposed for financing in 2021, in synchrony with the Next Generation EU (NGEU) instrument.

## Energy policy

### Low- or CO<sub>2</sub>-neutral steel transition energy requirements

The EU steel industry will require approximately 400TWh of CO<sub>2</sub>-free electricity every year by 2050 (including for the production and use of hydrogen). The reliable availability and abundant supply of low- or CO<sub>2</sub>-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, finalize swiftly the mapping of current and future requirements of EU energy infrastructure.

### Regulatory framework for EU energy network

- Implement solutions in the frame of the European hydrogen strategy to stimulate demand for hydrogen use in the steel industry.
- Start planning the backbone infrastructure, taking into consideration the impact on end-user applications.
- Foster the development of green electricity while maintaining the international competitiveness of energy-intensive sectors that participate in global markets.
- Develop and implement EU wide import strategy for renewable energy and green hydrogen from third countries.

## 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 (€25-28 per tonne of CO<sub>2</sub> in August 2020), but the full abatement costs (including for example CAPEX and OPEX of new technologies and alternative input material). These costs can be more than ten times the current

compliance cost per tonne of CO<sub>2</sub> abated<sup>6</sup>. Moreover, steel markets will not tolerate respective cost pass-through; an overall legal framework needs thus to address both costs and cost-pass-through 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). At least 80% of this share would be constituted by Operating Expenses (OPEX), mainly due to increased use and higher prices for CO<sub>2</sub> 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<sup>7</sup>.

### EU and national financial support schemes

- Private capital has to be supported with a consistent and coordinated framework of public funding opportunities at EU, national and regional level. To start production of low-CO<sub>2</sub> steel in the period until 2030, both funding programs and state aid legislation need to allow support for and cover increased OPEX.
  - EU Innovation Fund and Important Projects of Common European Interest (IPCEI) shall be instrumental in launching first industrial scale projects in Low CO<sub>2</sub> steelmaking.
  - Resources under the EU Recovery Plan must be made accessible to R&D&I and first industrial scale projects for the steel industry. The Just Transition Fund and Mechanism should provide additional resources. However, these need to be designed in a way to not distort competition among companies.
  - Provide a reliable and viable cost basis for investment decisions in CO<sub>2</sub>-lean steel plants and their operational costs, for instance by introducing Carbon Contracts for Difference (CCFD) for CDA and SCU projects in steelmaking and thus launch commercial scale production of Low CO<sub>2</sub> steel by 2030.
  - De-risking facility with zero or low-interest loans over very long maturities would further support commercialisation

---

<sup>6</sup> <https://www.eurofer.eu/publications/reports-or-studies/low-carbon-roadmap-pathways-to-a-co2-neutral-european-steel-industry/>

<sup>7</sup> <https://www.eurofer.eu/publications/reports-or-studies/low-carbon-roadmap-pathways-to-a-co2-neutral-european-steel-industry/>



## Sustainable finance

### Ensuring access to sustainable finance

Massive transformative investments are needed for the development, demonstration and scaling up of new CO<sub>2</sub>-low technologies over a relatively short time period. The sustainable finance taxonomy should facilitate the transition and therefore maintain a flexible approach that prevents prescriptive and rigid categories which do not take the dynamic evolution of technology into account. The transition of the steel sector will not be linear, but will rather require step changes and investment spanning over several decades.

### Taxonomy Regulation/Technical Screening Criteria

- The new system should use genuinely an integrated lifecycle approach to take into account steel as an enabler for CO<sub>2</sub> mitigation in multiple value chains.
- The principles of standard EN 19694-2, developed with a mandate from the EU Commission, shall be used to assess relative performance instead of ETS benchmarks, which do not entail a lifecycle approach and are thus not suitable for this purpose.
- Secure the eligibility of EAF steel production without excluding different steel qualities, like stainless steel, due to the proposed threshold of at least 90% scrap sourced iron content in final products.
- Add CCU and CCS to the list of low carbon breakthrough technologies and take all sources of hydrogen - as well as from iron and steel production – into consideration.

## Enabling the Circular Economy through steel: sustainable products and raw materials

Steel is a highly versatile material that contributes to the sustainability of our society. It is a permanent material, which is reusable and can be endlessly recycled. Since decades, the steel sector recycles annually million tonnes of ferrous scrap recovered from end-of-life products and is engaged in the re-use and recycling of most of the industrial residues generated with steel. However, the contribution of steel to the circular economy can be even greater. Three concrete passages are necessary: a better raw materials policy for the circular economy; a renewed EU Sustainable products policy; a harmonised legislation that removes current incongruencies.

### Raw Materials Policy

Steel scrap generated in the EU should be considered as a strategic resource insofar. Its use is essential not only to the completion of the EU's circular economy, but also in supporting the EU's CO<sub>2</sub> reduction objectives. Scrap has a considerable volume of energy embedded in it and a CO<sub>2</sub> reduction potential that is lost by the EU economy when it is exported to third countries.

Currently, 12 million tonnes are exported net every year, often to regions that neither apply comparable EU environmental standards, nor share the EU's climate objectives.

Annually, the steel sector generates alongside its 165 million tonnes of finished steel products around 40 million tonnes of other materials, such as slags. These are used as alternatives (i.e. as secondary raw materials), thereby replacing virgin resources in numerous downstream sectors. The use of these alternatives helps in saving CO<sub>2</sub> emissions and in reducing the overall environmental impact.

The EU shall promote availability of ferrous scrap to the EU steel sector, secure its quality and support the use of secondary raw materials – such as industrial co-generated materials - for replacing virgin resources. These can be achieved by:

- Reviewing the legislation on waste shipment to ensure that export of ferrous scrap from the EU is allowed only if the receiving countries observe equivalent environmental standards, including climate aspects.
- Prioritizing the use of “alternative” materials, co-generated in steel processes, in public procurement and tender over virgin resources;
- Ensuring that the use of “alternative” materials meets the same standards and specifications used for virgin materials;
- Facilitating industrial symbiosis among industrial sectors for the exchange of secondary raw materials and industrial co-generated materials;

### Sustainable Products Policy

Circularity of steel can be further fostered by defining a legal framework focused on products sustainability. This should adopt a life-cycle assessment (LCA) and specific products indicators linked to circular performance. The framework should aim at guiding product design, avoiding excessive trade-offs between circularity and environmental footprint. EU Product Policy should be an 'enabler' of climate and resource efficiency (circularity) goals, at the same time. This framework can be realised through the following elements, and in particular by:

- Widening the scope of the Eco-Design Directive, focusing on sustainable products, non-energy related products and on product design requirements;
- Defining requirements such as re-usability, high quality recyclability, durability and disassembly to be applied to different product segments;
- Using a cradle-to-cradle LCA approach and an approach to recycling based on the Circular Footprint Formula, within the whole EU products policy;
- Reviewing and improving sectoral legislations – e.g. constructions, packaging, vehicles – to ensure recyclability and re-usability of products;
- Linking the EU sustainable products policy to robust tools that would allow consumers to make sustainable choices in a transparent way.

## Horizontal issues

Flagship EU policies such as the Green Deal, the Circular Economy Action Plan, the Chemicals Strategy for Sustainability or the Zero Pollution Action Plan have important interlinkages. Therefore, their complex design requires particular scrutiny. Care must be taken to align the Green Deal with existing principles of the EU's circular economy policy and the proposals of the Circular Economy Action Plan. The adoption of certain guiding principles such as those on circular economy should be also reflected in other dossiers. The Chemicals Strategy for Sustainability should aim at fostering the safe recycling of materials. This strategy, together with the Zero Pollution Action Plan, should have as a target the reduction of the actual risk of exposure, entail a science-based approach and not be based on the theoretical content of hazardous substances; this is an essential condition to enable circularity.

## Environmental policies

Environmental policies need to be coherent, modern, based on scientific evidence and efficiently implemented to support the industrial transition.

- When developing the zero-pollution action plan (ZPAP) for water, air and soil, an integrated approach (recognising cross-media effects) for all climate and environmental aspects is needed whilst also recognising the better Regulation package (reducing regulatory burdens and red-tape).
- 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. The IED itself is fit for its purpose. A review of the IED should continue recognising that GHG emissions – for sectors such as steel - are already regulated under the EU ETS. Aspects related to the circular economy are already being effectively developed under the EU Circular Economy Action Plan.
- Modernise the Water Framework to enable a resilient ecosystem that meets societal needs for sustainable development.
- Introduce a risk-based approach to evaluate environmental and health effects of materials, in particular for metals and alloys (for example in the toxic free strategy and in ZPAP). The “one substance-one assessment” (OSOA) approach should be used as a key element to simplify existing chemical legislations.

\*\*\*

## 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: <https://www.eurofer.eu/issues/climate-and-energy/a-green-deal-on-steel/>

### Fair international trade for industry

- EUROFER request for a continuation of the EU steel safeguard regime after three years of application
- 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'

### Ensuring competitiveness throughout the climate transition and beyond

- EUROFER Discussion Paper: 'A Regulatory Framework for CO<sub>2</sub>-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<sub>2</sub>-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: "Contribution to Inception Impact Assessment on EU Taxonomy"
- EUROFER Position Paper: "Consultation on 2030 climate and energy policy"
- EUROFER Position Paper "Border Adjustment and carbon Leakage Measures"

- EUROFER Position Paper: “Just Transition Fund and Mechanism”

### COVID-19 crisis and green transition

- EUROFER Position Paper: ‘EU Recovery Plan’
- EUROFER Position Paper: ‘Council conclusions on MFF and EU Recovery Plan’

### Sustainable products and the circular economy

- EUROFER Position Paper: ‘Policy Options for Product Environmental Footprint (PEF)’
- EUROFER Position Paper: ‘Substantiating Green Claims roadmap’
- 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’
- EUROFER Input: ‘Consultation on the Inception Impact Assessment on Packaging and Packaging Waste Directive – Review of packaging requirements’
- EUROFER Input: ‘Public Consultation on the review of the End-Of-Life Vehicles directive’
- EUROFER Input: ‘Position paper on the review of the Waste Shipment Regulation’