



EUROFER CONTRIBUTION TO INCEPTION IMPACT ASSESSMENT ON EU TAXONOMY

1. Background and summary

The European Steel Association, EUROFER, welcomes the opportunity to contribute to the Commission's Inception Impact Assessment on the EU Taxonomy for Sustainable Finance. On 9 March 2020, the EC Technical Expert Group on Sustainable Finance (TEG) published its final report on the taxonomy. Whilst there have been some improvements, the main concerns of the European steel industry still remain to be addressed. Our overriding comment is that the sustainability of steel cannot be judged by reference to EU-ETS benchmarks, which not designed for measuring sustainability. We call for more relevant criteria that would incentivise substantial reductions of CO₂ emissions in projects in the spirit of the Regulation¹. In addition, we call for a more integrated assessment of the wider contribution steel makes as an enabler for CO₂ mitigation, adaptation and overall sustainability in society. The contribution is evident in the many value chains that rely on steel, and can be demonstrated through integrating lifecycle approaches such as Life Cycle Assessment. **It is essential that technical screening criteria for sustainable finance follow the requirements of article 11a and article 14 (f) of the Regulation**, which emphasise the necessity of *“taking life cycle into account, including evidence from existing life cycle assessment, by considering the environmental impacts of the economic activity itself, as well as of the products and services provided by that economic activity, notably their production, use and end-of life”*. A summary of our main concerns is listed below:

- Using genuinely an integrated lifecycle approach to take into account steel as an enabler for CO₂ mitigation in multiple value chains.
- Using the principles of standard EN 19694-2, developed with a mandate from the EU Commission, to assess relative performance in place of unsuitable ETS benchmarks where lifecycle approach is not available.
- Greater coherence with other approaches, such as those used in the EU Innovation Fund.

¹ COM (2018)353 final: Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the establishment of a framework to facilitate sustainable investment, 17 December 2019

- Securing the eligibility of EAF steel production without excluding different steel qualities, like stainless steel, due to the threshold proposed on scrap sourced iron content in final products.
- Adding CCU to the list of low carbon breakthrough technologies and taking all sources of hydrogen - as well as from iron and steel production – into consideration.
- Make allowances for the fact that the decarbonisation pathway for steel will not be linear, requiring step changes and investments spanning several decades.

2. Specific concerns on the ‘manufacture of iron and steel’ technical screening criteria

Generally, we do not agree with drawing the strict eligibility line at the level of, or below, any benchmark. It should be always possible to evaluate all environmental benefits of the activities primarily by qualitative approach. The goal should be to help identify activities contributing to the EU sustainable goals, whilst maintaining technological neutrality. The technical screening criteria should promote substantial CO₂ reduction in Europe and be geared to this goal according to the Regulation. The TEG Report in this context, and most importantly all following legal acts, should be more aligned with the Regulation and needs improvement.

- A new provision has been introduced in the principle for mitigation criteria (page 176) for “*manufacturing of iron and steel*” stating that “**Mitigation measures are eligible provided they are incorporated into a single investment plan within a determined time frame (5 or 10 years) that outlines how each of the measures in combination with others will in combination enable the activity to meet the threshold defined below actions**”. We welcome that this new provision extends the scope/list of activities making substantial contribution to climate change mitigation. We understand and welcome that this provision acknowledges the role, and enabling more meaningful implementation, of mitigation measures, leading to transition towards a sustainable and low carbon economy. **The 5-10 year timeframe might not include all longer term investments to 2050 so this aspect will need clarification.**
- As regards the thresholds for mitigation criteria:
 - Unfortunately, the TEG report is still recommending use of the ETS benchmarks as thresholds for mitigation criteria, as in the June 2019 report. The various ETS benchmarks for the iron and steel sector are unsuitable for use in Taxonomy. We stress again that the **ETS benchmarks cannot reflect the environmental sustainability of steel, as they do not consider the life cycle along the steel value chain. Taking a life cycle approach is a request of article 11a and article 14 (f) of the Regulation which put emphasis on considering life cycle implications of an economic activity** – this also as recognised by the TEG report (page 21). We note that lifecycle emissions may be considered in other activities relating to steel product applications, such

as ‘Manufacture of low carbon technologies’ (page 162), electricity/heat generation (page 205), as well as potentially being considered in automotive (page 326) and construction (page 373) in future. We call for a more integrated approach towards assessing the ‘manufacture of Iron and Steel’ activity, by including the contribution steel makes to other eligible activities over the lifecycle, and so embracing a value chain approach. In the event that a more integrated approach may not be implemented in the short term, we **reiterate our call for effectively using the principles of standard EN 19694-2**, developed with a mandate from the EU Commission, in place of ETS benchmarks. EN 19694-2 is able to accommodate more technologies and different configurations of processes. This allows the relative GHG performance to be assessed for a given process configuration.

- Furthermore, the Taxonomy should consider the full CO₂ reduction potential of projects as part of the criterion, and will benefit from a coherence/alignment with the general approach used in different EU initiatives, such as the **EU Innovation Fund**. The Innovation Fund makes a more constructive assessment of CO₂ mitigation potential by prioritising the most substantial CO₂ reductions, while **allowing life cycle emission reductions to be included**.
- It should not be forgotten that the European Emission Trading System (EU ETS) is a “cap and trade” system which follows the “make or buy” approach to climate protection, in which the implementation of decarbonisation measures and/or the acquisition of certificates are permitted to achieve this. The use of the ETS benchmarks as a benchmark for sustainable financing would therefore thwart the objective of ETS.
- The report states that **“All green new steel production, or combination of new and recycled steel production, is eligible if the emissions fall below the thresholds above”** – the thresholds being the ETS benchmarks for hot metal, sintered ore, coke, iron casting, EAF high alloy steel and EAF carbon steel. We welcome that the report recognises the positive role of new low carbon production technologies in considering them eligible. Unfortunately, the condition to be fulfilled (meaning “... the emissions must fall below the thresholds above”) is problematic especially if one considers that “the thresholds above” are the ETS benchmarks. It should be noted that, green new steel production may be done via innovative processes and thus may have no ETS benchmarks. Combination of new and recycled steel production may also deliver products that do not have ETS benchmarks. Most importantly, an approach based merely on ETS benchmarks would fall short of **taking the overall effects of steel products on the environment and the society into account**. Many companies would not have an opportunity to achieve financial support for their activities contributing significantly to the

environmental goals (due to not being at the level lower than the benchmarks).

- We would like to stress that **innovation will not follow a linear path** and that the disruptive breakthrough technologies needed for the long-term climate neutrality objective will require sufficient time for being developed, up-scaled and implemented including auxiliary equipment and infrastructure as well as financing and by-products management. Hence, an accelerated pathway post 2030 could well be achievable when these prerequisites are sufficiently provided for.
- The transformation process of the iron and steel sector will take a long time, during which existing plants will also have to be operated and developed further, while they will be gradually replaced by new technologies. Accordingly, **sustainable financing must be guaranteed for both the new, the “climate-neutral” processes and systems, as well as for the existing systems.**
- Eligibility for “EAF using 90% scrap” has been removed. Instead, a new formulation has been introduced. The report now foresees that *“Additionally, all production of steel in EAF where at least 90% of the iron content in the final products is sourced from scrap steel is considered eligible. In this case, no other thresholds are applicable.”* We welcome this improvement in the text, which acknowledges the principle that the secondary steel production route should be considered sustainable because it enables the recycling of steel, contributing this way to a significant reduction of CO₂ emissions, but at the same time we remark that the proposed threshold does not consider all the EAF produced steel qualities nor all low carbon input material, eg. HBI/DRI, and would not correspond to a series of efficient practices in this production route. Thresholds for the use of steel scrap need to reflect technical feasibility **sufficient availability of needed scrap quality** and the range of products being produced. **During the next implementation of such a requirement, this principle should be absolutely taken into account; otherwise the effect will be at detriment of some valuable and sustainable steel value chains**, in particular for stainless steel, but also for other steel qualities including carbon and high alloy steel.²
- The primary (integrated) steel production route is also recycling steel scrap, and so this element of production should also be considered eligible for the same reasoning above i.e. enabling recycling and reducing CO₂ emissions.
- Several studies also assessing possibilities of the low-carbon transformation of the steel sector show that primary steel production, using iron ore as well

² Stainless steel is high alloyed steel which always have to alloy with ferrochromium (and main grades also with ferronickel). There is not enough stainless scrap available in Europe or globally to reach 90% recycled “scrap” content. Chromium content in stainless steel is as an average 18%. Additionally and as an average stainless steel contains always as a minimum 15-20% iron from virgin ferrochrome or ferronickel. A similar situation applies for certain steel qualities (carbon and high alloy) which needs a very strict level of inclusions which otherwise would need to be produced exclusively from Iron Ore.

as recycling scrap, will still be necessary in the future to satisfy global demand for steel. They stress the **complementarity of primary steel production and secondary steel production based on recycling steel scrap**. Hence, if criteria for the primary steel production would be not achievable, the consequence could be that the EU primary steel production would shift to third countries where the environmental impacts of primary steel production (also in terms of GHG emissions) are higher.

- The content of the ‘Rationale’ for mitigation criteria (page 177) has almost not been changed and still needs to be improved:
 - For **hydrogen-based steelmaking** only “*hydrogen steelmaking in shaft furnaces using hydrogen produced via water electrolysis (e.g.; using renewable electricity sources)*” is considered. Here it should be noted that, **on the path to climate neutrality as objective of the EU Green Deal, other hydrogen production technologies must not be precluded** - given the big amount of hydrogen need of the whole industry. The steel industry will need considerable amounts of hydrogen independently from production technologies. **Key should be to make sure that the requested amount of hydrogen is reliably available at affordable cost**. Furthermore, iron and steel production technologies should also not be limited to “*shaft*” furnaces. Hence, **we recommend to use simply ‘hydrogen-based iron and steel making’** in the list.
 - Carbon valorisation/Carbon Capture and utilisation technologies have not been included in the above list of breakthrough technologies. We would like to emphasise **that CV/CCU technologies need to be considered because they are an essential part of steel industry strategies for substantial contribution to reduction of CO₂ emissions and thus to the climate neutrality objective of the EU Green Deal**. There are also significant lifecycle benefits of CCU technologies that go beyond the steelmaking activity itself.
 - In general, the wider contribution of steel to other activities and sectors (value chains), is not mentioned, but it has been mentioned in the rationale for other material categories.
- On the ‘Do no significant harm assessment’ part, we welcome that **Blast Furnace Slag** has been removed from the list of main potential source of significant harm to other environmental objectives from the iron and steel production (page 177) - thus, acknowledging the substantial contribution of Blast Furnace Slag to climate change mitigation, however, again **this not recognised in the benchmarks**.

3. Points of concern related to other economic activities

- We welcome that the TEG report recognises the **role of steel as enabler for climate change mitigation contribution in other sectors**. The report states in the ‘Rationale’ for mitigation criteria that **“The potential of greening by products made of iron and steel can be addressed through other activities such as “manufacture of other low carbon technologies” where according to the criteria given for this activity, the manufacturer can prove the overall environmental benefits over the whole life”**. Furthermore, now the TEG report brings new elements that clarifies the mitigation criteria for the above economic activity. Hereupon, as regards principle for mitigation criteria (page 162) the report provides that **“The manufacture of low carbon technologies that result in substantial GHG emission reductions in other sectors of the economy (including private households) is eligible provided that product related emissions are at least the level of best available techniques i.e. a factory that produces electric cars, but burns coal is not eligible).”** However, ‘best available techniques’ have not been defined in the report. Therefore, a link to the industrial emissions directive is necessary, because for iron and steel production and ferrous metal processing, the best available techniques are listed in the BREF documents (IED).
- For the ‘manufacture of low carbon technologies,’ there may be a potential conflict with the threshold for ‘climate change mitigation’ and ‘do no significant harm’ criteria, especially for (4) Circular Economy. An electric vehicle will qualify for the mitigation threshold, but may not pass the circular economy threshold. The threshold states that **“Embodied carbon emissions should represent less than 50% of the total carbon emissions saved by the use of the energy efficient equipment. Carbon emissions and savings at the end-of-life stage are not included in the assessment for this criteria (too uncertain).”** Whether or not you can meet this threshold will depend on what you compare your emission savings against (what is the reference). A battery electric vehicle compared to an internal combustion engine vehicle will meet the threshold but compared against a plugin hybrid vehicle, maybe not. In addition, the exclusion of end-of-life credits makes it more difficult to achieve for metals, and goes against circular economy principles. The use phase saving are equally as uncertain as end-of-life. **The Circular Economy criteria itself is not a measure of circular economy but is in fact another measure of climate mitigation, so alternative proposals are needed e.g. a circularity index could be based on the sum of savings from reuse, recycling and recovery being greater than 50% of the virgin production impacts. The savings should be expressed in terms of resource use and GHG emissions to capture both resource efficiency and climate mitigations aspects.** This approach has already been developed by the European Commission JRC - see technical report: **“Revision of methods to assess material efficiency of energy related products and potential requirements” Environmental Footprint and Material Efficiency Support for Product Policy**, Ardente F., Mathieux F., Talens Peiró

L. December 2016. The approach has been further developed in a white paper as referenced in EN 45555 - General methods for assessing the recyclability and recoverability of energy-related products: https://maki-consulting.com/wp-content/uploads/2018/03/Environmental-benefits-recycling_White-paper_clean.pdf

- For the “manufacture of low carbon technologies,” Low carbon *technologies* and their key components used in the construction and building sectors (e.g. private households included – page 164) are eligible “if they demonstrate substantial higher net GHG emission reductions compared to the best performing alternative technology/ product/ solution available on the market on the basis of a recognised/standardised cradle-to-cradle carbon footprint assessment (e.g. ISO 14067, 14040, EPD or PEF) validated by a third party”. **Whilst it is good to make reference to a cradle-to-cradle approach, the standards listed are not all consistent with each other.** For example an EPD without Module D is not cradle-to-cradle, and so some consistency between the different standards is needed. Moreover PEF has been designed specifically for making comparisons on a consistent basis and is envisaged for substantiating environmental claims. The comparison should not be to ‘the best performing alternative’ but to the ‘market average’.
- We expect that the **upcoming Sustainable Finance Platform**, successor of the TEG on sustainable finance, will ensure the inclusion of the required multidisciplinary expertise/ competencies and secure better transparency in the development and decision-making process. Hence, we understand that the governance will be adjusted accordingly and **experts from manufacturing sectors will be selected as effective members** in order to ensure better balance of expertise within the platform.

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