

## **EUROFER REPLY TO THE FEEDBACK CONSULTATION “CIRCULAR ECONOMY – NEW ACTION PLAN TO INCREASE RECYCLING AND REUSE OF PRODUCTS IN THE EU”**

The European Steel Association, EUROFER, welcomes the Roadmap “New circular economy action plan” by the European Commission. Steel is one of the most recycled materials in the world, playing a vital role as an enabler for transitioning to a CO<sub>2</sub> neutral and circular economy.. It is possible to recycle steel multiple times into same quality or even better quality steel, a permanent material. Steel inherent properties make it more versatile, durable and even separable than other materials. Thus, steel is a material permanently available to society, a “permanent material”. However, notwithstanding the previous EU action plan on circular economy, there are still barriers which limit the contribution of the steel sector to the EU transition towards a circular economy. In the following paragraphs, EUROFER summarises its suggestions and proposals on how to support the initiatives contained in the roadmap and how to achieve the goals without hampering the industrial transition.

### **Consistent and coherent as a part of Green Deal**

The proposed roadmap already contains important initiative but there are aspects that need to be clarified and others to be taken into account. EUROFER supports the horizontal view adopted by the Green Deal communication which encompasses laws and strategies and aims at working on all of them in an inclusive way. Thus, EUROFER encourages the EU Commission to take the same approach in the new Circular Economy Action Plan. In such a way, it will be coherent, consistent and not-overlapping with other policies.

- The roadmap and its related actions need to be consistent and inclusive with all the different dossiers that are in the scope of the EU Green Deal. The roadmap itself does not explicitly mention the EU climate goals, the toxic-free/zero-pollution strategy, chemicals strategy for sustainability or the Industrial Emission Directive. However, these dossiers will act transversally on many aspects of the EU industry. All the initiatives launched by this Roadmap and the others, parts of the Green Deal, need to be coherent among each other. It is worth to stress the importance of avoiding possible double regulation effects and the necessity of being consistent across different laws.
- Different background documents, mentioned by the roadmap, such as ‘Sustainable Products in a Circular Economy’ or ‘The EU Green Deal’ refer to similar aspects using different terms. EUROFER would like to recommend using the same terms, given with clear definitions, in all the documents. For instance, different references mention ‘Green products’ and others mention ‘Sustainable products’. Although one can assume the terms similar, legally they do not mean the same. Green is associated to environment while sustainable encompasses economy, society and environment. Thus, given the large number of initiatives linked to this roadmap, it is essential to use same terms and definitions across all the dossiers. This will help in removing legal issues and different understanding of the same item by different laws and strategies from the beginning: consistency is fundamental.
- The management of the hazardous substances across all the different dossiers linked to Circular Economy, such as Toxic-Free agenda or Chemicals strategy for sustainability, have to focus on phasing out the Substances of Very High Concern (SVCHs) using a risk of exposure approach. A ‘toxic-free’/‘chemicals’ strategy that will focus only on the

hazardous content in materials and products, will heavily hamper the progresses towards a functioning circular economy. Therefore, a functioning circular economy has to be based on a proper management of minimising the exposure of risk and not only an analysis of the content.

- The future initiatives of the Roadmap will be developed in parallel with other EU Green Deal dossiers, the chemical ones in particular. Therefore, it is worth to have a proper definition of what it is meant across all the EU products policy for ‘harmful product’. A harmful product is an item for which the exposure during its use phase is not reduced enough, making the risk associated to its hazardous properties the lowest possible, i.e. not representing a risk for the human health or the environment.
- There is a general agreement across policy, society and industry that the use of ‘alternative’ materials (by-products) and secondary raw materials, that substitute primary materials, is a basic step for the circular economy. For making it happens, however, the use of materials such as by-products, end-of-waste, industrial residues or waste (which are ‘alternative’ materials) have to be equally supported and stimulated. Most important, this support has to be given irrespectively of their legal status. Otherwise, it will be impossible at a certain moment in time to decrease anymore the use of primary resources.
- The transition towards a fully functioning circular economy will be a long and diversified process. For sure, it will be necessary to make adjustments and improvements along the way. Thus, it is fundamental to register the right data in order to correctly measure the effectiveness of certain measures and in case needed to choose proper corrections. For instance, the measurement of real recycling of waste, the mapping of EU flows moving in Europe, such as waste, by-product or End-Of-Waste is of relevance. A more precise monitoring of the trade flows of the second raw materials is relevant and has to be done for all the streams. The EU statistics should reflect the use of by-products, the trade and exchanges of all the types of secondary raw materials, end-of-waste or waste. In addition, better quality data about waste statistics has to be collected taking into account a more precise differentiation among re-use, recycling, recovery and back-filling. The correctness of all this data collection is essential for revealing where the EU is improving and where more incentives and stimuli are needed.

### **Sustainable Steel Products Policy**

- The EU products policy can be a key enabler for achieving EU goals on resource efficiency and climate. However, products policy is a legislative body populated by many laws and characterised by different methods and approaches. Thus, it is essential that the EU Commission will work for aligning the different product laws around certain ‘key features’, to the maximum extent possible, and across as many as possible different product laws.
- The first feature of a successful EU products Policy is to focus on sustainability for all products, being them real products, shared products or services. The three pillars of the sustainability have to be taken into account when assessing them, otherwise unintended trade-offs among economy, society or environment might occur and frustrating thus initial good. Specific indicators could be envisaged in order to facilitate product assessment within a sustainability framework.
- The second one is to impose circular requirements on products such as re-usability, recyclability (design for recycling), durability and disassembling. These requirements work for making available part of the secondary raw materials of the future, materials that need to be of higher quality than today ones. Waste management can be very effective only if the products are designed with these end-of-life scenarios in mind. Recycling and recyclability definitions need to differentiate between materials capable of multiple

recycling without loss of properties, and materials that lose properties and fall out of the circular material value chain. The current EN 45555 standard on calculating recyclability does not differentiate the outcomes of material recycling in terms of quality the preservation of material properties.

- The third feature of a sustainable products policy is to assess the environmental attributes of products or services using a robust LCA-based methodology, with a cradle-to-cradle approach. Moreover, the modelling of the end-of-life stages of products has to consider the right recycling metrics according to the types of materials. For instance, end-of-life recycling rate is a measure appropriate for steel while recycled content is more suitable for those materials that are not sufficiently recycled. If both metrics have to be taken into accounts, then their ‘weighing’ has to be aligned with the characteristics of the material (e.g. not recyclable, simply recyclable or multiple-recyclable) and with the characteristics of its recycling value chain (mature or still to be developed). A good example of this approach can be found in the “Circular Footprint Formula” which gives a balanced modelling of the end-of-life scenarios, taking into account all possible options.
- Finally, it would be also appropriate to extend the scope of and improve the Eco-Design directive. In the past, it has been a successful instrument for reducing energy use of energy-products, taking into account impacts and economic dimensions. Now, the scope of the Eco-Design directive has to be extended for covering other products, such as the non-energy related ones, and for assessing products sustainability as a whole. The economic, social and environment dimensions have to be assessed within the Eco-Design framework. Appropriate methods for assessing the three pillars have to be developed per product segment, whilst also being consistent with the general principles.
- The product laws, other than Eco-Design and already covering certain products, should be modernised and updated for being aligned to the extent possible to the approach followed by the Eco-Design. Only with such an approach it will be possible to pursue products sustainability without creating distortions and unfair competition among materials and different products which can fulfil similar functions and services.

### **Empowering Consumers**

- To give the correct information to consumers and allowing them to make sustainable choices is necessary to have harmonised tools which follow the same rules. Thus, it is fundamental to refer to an assessment of products sustainability that has to be unbiased, robust and harmonised for all products.
- Instruments such as Eco-Label or Green (Sustainable) Public Procurement criteria or new instruments that will be developed within this roadmap have to be based on the assessment method presented in the previous paragraph (Sustainable Products Policy). This is an essential step. In the past, different Eco-Label or Procurement Criteria have been developed using different approaches and this created a limitation in their take-up by the market.
- The assessment of products sustainability has to be transferred into easily readable communication vehicles. However, these communication vehicles have to be properly designed in order to avoid misleading messages to consumers. EUROFER would like to stress the importance of how information on sustainability is given; otherwise good intentions might turn negative.
- Finally, the Green Public Procurement has to turn into a Sustainable Public Procurement, for sake of coherency and consistency with the Sustainable Products Policy given above, which will assess products and services put into the market.

### **Reduce Waste Generation and use of by-products**

- The waste generated within the EU is not all of the same type and it is important to make distinctions, when a general reduction is pursued. It is important to reduce the needless waste generation such as over-packaging of products or the waste created by the premature obsolescence. Thus, imposing reductions on waste generation from over-packaging and making products more recyclable or durable are clear ways forward for reducing consumers/society-waste generation. In this case, the extended producers' responsibility schemes also have a role to play, ensuring somehow an approach based on eco-modulated fees. Products designed with circularity in mind will be rewarded by paying lower fees than non-circular products.
- The same approach cannot be simply applied to industry generated residues that are co-produced with the main product as a function of the process. In some cases, these are classified at the moment of their generation as waste; in other cases, can be by-products or end-of-waste. For instance, the EU steel industry, like others, is subjected to the Industrial Emission Directive (IED), that means installing filters and applying techniques (Best Available Technologies, BAT) for reducing pollution to the environment. In such a situation, collecting more waste, such as dusts for instance, is even desirable because means that pollution is avoided. Thus, in this case having more waste generation is a positive outcome (i.e. more waste generation equals less pollution). Rather than imposing limitation on waste generation, this situation requires the right legal and surrounding conditions for recovering and recycling these waste streams. In support to that, it is worth recalling that IED (BREF) documents on the steel sector already has recovery and recycling requirements, because it is the only way forward in such a situation. For other waste streams, EU Industry, and in particular the steel sector, already acted for controlling and reducing the generation of waste that are not functional and that are nor recyclable in order to improve efficiency and circularity.
- The EU legislation such as the Waste Framework Directive focuses on the management of household, consumers and municipal waste and fixes targets. In this case, it seems appropriate to impose reduction targets on waste generation. Within the industry domain, it will be more effective and functional to the goals of the Circular Economy to create an instrument to increase the use of by-products. Following this proposal, there will be more opportunities for finding market applicants for industrially co-generated materials, and at the same time replacing virgin raw materials and supporting climate and resource efficiency goals, and generating less waste.

#### **A well-functioning and integrated internal market for secondary raw materials and by-products**

- The main hurdle of developing a well- functioning market of the secondary raw materials within the EU territory is also linked to a fragmented implementation and interpretation of the EU laws. The circular economy should always promote the recycling, recovery and reuse of all the (secondary) materials whatever is their legal status.
- For instance, the EU steel sector co-generates several streams together with steel and these can be by-products, end-of-waste or waste. This legal classification depends on the type of material, on the EU law and on how the law is implemented by the member states. Thus, a basic element for an integrated market for secondary raw materials is to give access to the market to all the 'alternative' materials, other than virgin, irrespectively of their legal status.
- Moreover, the market has to check the performance of the materials against standards and specifications linked to the application or the product/material in which they will be used. This check has to be the same between virgin and not-virgin raw materials, in order to develop the market. This approach will not create distortions, will not deliver biased choices and will not put at a disadvantage an EU industry that wants to go circular. It will give a fully-functioning market.

- In relation to the legal status of these ‘alternative’ materials, EUROFER wants to stress the necessity of having EU-wide criteria for by-products and end-of-waste materials. European industries co-generate many different materials and the different legal interpretations about how to apply these criteria fragment the EU market and create hurdles to industry. Best practices and applicative cases already functioning in some member states should be considered as potential a starting point for creating EU-wide criteria for by-products and end-of-waste materials.
- Another aspect worth to be mentioned here is the often used ‘recycled content’ metric. The imposition of a mandatory recycled content for products or materials, as mentioned in certain documents released in the past by EU Commission and advocate by many NGOs, is a measure to be applied only to certain market segments and under certain conditions. For instance, the market of the secondary raw materials will encompass several end-of-life materials and products. Certain segments are characterised by a mature market, such as steel or glass for packaging, and others have a not well functioning market, such as plastic, wood or industrially generated co-products (residues) and ‘alternative’ materials. Thus, EUROFER suggests that proposals on imposing recycling content should address the less well functioning or immature segments of the secondary raw (alternative) materials market. For instance, the market for ferrous scrap is very mature and its internal demand is always larger than the supply, making the need of having more collection, separation and high quality treatment more relevant.
- For instance, EUROFER supports recycled content measures applied to industrially co-generated materials when they are classified as waste, e.g. some types of ferrous slags, mill scales or dusts. The recycled content measure could be applied, for instance, also to plastic products/materials or to wood products segments. On the contrary, a measure for having a certain amount of ‘by-product content’ in certain applications or uses can be a helpful instrument for circularity and resource efficiency and supporting the use of by-products. For instance, with reference to the ferrous slag case, a minimum by-products content requirement can be applied to road construction, concrete products manufacturing or other applications. In such a way, the use of virgin resources will be mitigated: it is clear that the use of such streams of ‘alternative’ materials have to be prioritised.
- The use of manufactured ‘alternative’ materials such as by-products or generated by waste streams have to be incentivised. A change of the legal framework of the public procurement and of the public tenders should be foreseen, ensuring a prioritisation of ‘alternative’ materials in tenders and procurement activities.
- It should not be however underestimated the quality aspects related to manufactured alternative materials co-generated by industry. There are cases in which the quality of certain streams is so high that its market segment has a strong demand. In other cases, certain types of ‘alternative’ materials need to be improved, similarly to the issues related to waste valorisation through sorting, treatment and cleaning. Technology, digitalisation and innovation can help improving on this. A financial support dedicated to innovation, technology and digitalisation focusing on quality improvement of ‘alternative’ materials such as those co-generated by European industry and of secondary raw materials recovered from waste such as ferrous scrap should be envisaged.
- This quality improvement will have a direct effect in the up-taking of all these material streams, positively impacting on climate and resource efficiency goals across the entire EU industry.

#### **To increase the share of waste treated domestically**

- The export of EU generated waste should occur only when, in sustainability terms, it makes sense. It should be ensured that exported waste will be treated in the country of



destination with technical and environment standards equivalent to the European ones; otherwise its processing in EU remains the only option. It is worth to stress that in many cases waste export happens because the material has not been properly managed and treated along the waste management chain. Poor or no sorting process, cross contamination among different waste streams and insufficient treatment and cleaning of the waste are limiting factors that reduce recycling options.

- In the case of steel scrap recovered from end-of-life products, demolition waste or mixed waste streams, the quality aspect is essential for its use by the EU steel industry. Sub-standard quality or not properly treated scrap is exported outside from EU. Ferrous scrap is a resource playing a key role for climate and circular economy goals, thanks to its valuable energy and CO<sub>2</sub> reduction potential. The availability of ferrous scrap of sufficient high quality is a key barrier due to poor separation and treatment techniques. Thus, the next circular economy action plan of the EU Commission should launch and support initiatives focused on tackling the issue of the large amount of scrap exported from the EU aiming thus at improving their quality in line with the requirements of the EU industry. On an annual basis, around 20 million tons of ferrous scrap are exported that could instead be used by the EU steel industry to further reduce CO<sub>2</sub> emissions.
- The improvement of the quality of the EU-generated secondary raw materials, such the ferrous scrap or other materials, is then relevant and should be ensured. This objective can be reached through various instruments. For instance, the implementation of the Waste Treatment BREF by the member states will be a solid starting basis. This BREF document will impose environmental management criteria to the waste treatment installations with a stronger focus on waste material processing and its final quality. Another important contribution can be given by the definition of quality standards of the secondary raw materials, following the requirements of the EU industries, e.g. metals, paper or glass. Having qualities driven by EU demand will facilitate the up-take of secondary raw materials by the market.
- Moreover, digitalisation can be of help during this transition. Innovative tracking technologies, new types of sensors and robotics can be of support to the waste management sector in order to improve materials segregation, to identify certain specific material types and to monitor the change of the materials of the waste pool. In particular, monitoring will be more and more important in the future because of the decarbonisation of the EU that will bring into the market new processes and thus new materials and products.

#### **Action on high-impact sectors: construction**

- Construction is one of the most energy and material intensive sectors in Europe. EUROFER welcomes specific actions in construction and more specifically supports a revision of the Construction Products Regulation that has to result in more clarity of the legislation. In particular, it is necessary to give more clarity on how sustainability performance of construction products and the design of sustainable buildings/constructions is incentivised and robustly assessed. For example the design of products and buildings that is easy to disassemble, reuse and recycle, and achieve high quality circular outcomes at end of life.
- The legal status of an ‘alternative’ material/waste should not hamper its use in construction products once their qualities fit for the intended applications. For instance the use of recycled aggregates, coming from waste, and of manufactured aggregates, coming from by-products and end-of-waste streams, should be subjected to the same checks for natural aggregates.
- More in details, and in agreement to what has been said concerning Sustainable Products Policy, the Construction Products Regulation has to embed methodologies and criteria

focusing on sustainability assessment and coherent with other product laws principles. A reliance solely on the EN 15804 standard on Environmental Product Declarations has some shortcomings in achieving a robust assessment method that can fully support policy goals. In particular improvements are needed on data sources and quality, end of life modelling, system boundaries, and co-product allocation. In addition, the link between construction product sustainability the design of buildings for disassembly, reuse and high quality recycling is not clear.

### **Remaining barriers for the Circular Economy in the steel industry**

- The first circular economy action plan majorly focused on improving the legal framework of the EU waste law. However, the full potential of the new EU waste legislation can be exploited only having a harmonised and consistent implementation across the EU member states.
- The actual products policy has, for the time being, a 'lock-in' effect because the absence of circular requirements in products design can limit or even nullify the contribution of the waste law towards the EU circular economy goals. For instance, the sharing economy (seen as a sub-part of the circular one) has an untapped potential. In order to exploit it fully, products requirements such as durability or reparability need to be addressed.
- Although, the concept of by-products has been widely discussed during the last revision of the EU waste law, the steel sees there another untapped potential for delivering in a faster and smoother way many of the circular economy goals (e.g. waste prevention and preservation of natural resources).
- The design of the next generation policies and laws needs to take into account the specificities of different materials. For instance, the properties of metals are totally different compared to persistent chemicals or organic-chemistry compounds. Therefore, specific tools need to be taken into account in order to keep them into use within the economy, controlling their safety and the eventual associated risks. Precautionary principle-based laws and one-size fits all approach will be detrimental for the transition to circularity. Specific tools all based on risk-based principles and exposure minimisations are more appropriate.
- Consistency and coherency are necessary for preparing the EU market for sustainable products. A common approach to the assessment of products (traditional, circular, carbon-neutral...), shared and circular services is an unavoidable step. Different methodologies for assessing different product/service segments are a heavy limiting factor, affecting both industries options and consumers' choice.
- Circular economy and EU Green Deal have to develop policies, strategies and measures preserving at the same time the competitiveness of the EU industry. Therefore, as a minimum, the articles, products and substances imported into the EU have to be subjected to the same requirements imposed to EU producers.
- Opportunities coming from a wider digitalisation of the economy and the creation of the 'Internet of Things' have to be unleashed. The new technologies can support the circular economy in many ways, such as: the transfer of products information; the monitoring materials flows across the economy; the possibility of identifying different materials in end-of-life products.