





JOINT STATEMENT

THE NEED FOR INCLUSION OF PREPARATION FOR RE-USE AND RECYCLING TECHNOLOGIES IN THE NET ZERO INDUSTRY ACT PROPOSAL

The undersigned Associations and Companies would like to provide their views on the European Commission's (EC) 'Net Zero Industry Act' proposal.

This statement aims at increasing the ambition of the Commission's proposal in order to deliver the ambitious but necessary targets of both the <u>EU Green Deal</u> and hence the <u>new Circular Economy Action Plan</u> (CEAP).

Strengthening the Net Zero Industry Act (NZIA)

The signatories to this statement welcome the publication of the proposal for a Regulation on establishing a framework of measures for strengthening Europe's net-zero technology products manufacturing ecosystem (Net Zero Industry Act) and see it as a step forward in terms of achieving the ambitious, but necessary, targets of the EU Green Deal. The above referred signatories are aligned with the Commission's view that it is absolutely crucial to improve the investment environment for the Union's manufacturing capacity of technologies that are key to meeting the Union's climate neutrality goals, and ensuring that our decarbonised energy system is resilient whilst also contributing to reducing pollution, to the benefit of public health and planetary environmental wellbeing.

As communicated by the European Commission, the proposed regulation addresses technologies that will make a significant contribution to decarbonisation. In that regard, we would like to highlight once again the environmental benefits of recycling (i.e., metals, plastics, e-waste, textiles, paper and tyres recycling.,), especially in terms of CO2 and energy savings (Annex 1).

Furthermore, the legislative proposal clearly states that, besides helping to reach the Union's climate and energy objectives, it also aims to support other Green Deal objectives, while creating jobs and growth. To that end, it should be noted that European recyclers are in an optimal position to quickly deliver some of the goals of this proposal. In 2017, the European Parliament highlighted how the transition to a circular economy could create between 1.2 and 3 million new jobs by 2030¹.

However, it is clear that the role of circularity in achieving climate neutrality has been overlooked in the Commission proposal. Including preparation for re-use and recycling technologies (be them manual processes and mechanical recycling) within its scope would strongly reinforce the in-question regulation and help in

¹ <u>https://www.politico.eu/article/circular-economy-jobs-waste-garbage-trash-recycling/</u>

achieving its targets. Noteworthy to mention is that the EU recycling industry would strongly benefit from improved conditions for investments in net zero technologies (reduced administrative burden when setting up projects and simplification of permit-granting processes) and being 'prioritised' when applying for projects. Furthermore, the waste management and recycling industries are currently investing large sums of capital on research and innovation to further improve the quality and volumes of recycled materials needed for the transition towards a circular economy. Thus, allowing Member States to set up regulatory sandboxes to test innovative mechanical recycling technologies and stimulate innovation, under flexible regulatory conditions would be an important steppingstone for the EU's circular economy.

Positive impacts from including recycling in the scope of NZIA

The inclusion of manual recycling processes and mechanical recycling technologies to the annex of the regulation will have several positive impacts. These include:

1. Encouraging investments: The inclusion of recycling in the Annex of the Regulation will undoubtedly encourage investments in new recycling facilities and scaling up existing recycling capacity of different waste streams.

Increasing investments in the recycling sector will strongly help the Union to reach its climate and energy efficiency targets, as well as increase strategic autonomy of different materials (including critical raw materials).

- 2. **Promoting innovation:** Currently, players in the recycling sector dedicate large sums of capital into research and innovation. This allows them to improve existing technologies that will in turn allow them to ameliorate the recycling process and hence increase the recovery rate of the different fractions. It should be mentioned that the speed at which technological innovation or advancement is occurring is largely dependent on the availability of capital. In that regard, inclusion of the aforementioned technology into the Annex of the Regulation will allow recycling companies to easily apply for projects and have access to more funds, which will further promote innovation in the recycling sector, which is already at the heart of the Circular Economy.
- **3. Job creation:** Investments in recycling will drive growth and job creation in this very sector. As highlighted above, in 2017, the European Parliament mentioned in a report that according to its estimations, the transition to a circular economy could create between 1.2 and 3 million new jobs by 2030.

Conclusion

The undersigned association and companies believe that mechanical recycling is one of the technologies that can contribute to strengthening Europe's net-zero technology products manufacturing ecosystem and hence the objectives of this regulation.

Mechanical recycling of the different waste streams is found to save vast amounts of energy as the recovered materials are produced with less energy than would have been otherwise required to produce virgin materials.

The signatories to this statement call on the co-legislators to add preparation for re-use and mechanical recycling into the Annex of the Net Zero Industry Act.



Metals

- Recycling steel saves 72% of the energy needed for primary production (i.e., 4,697 kWh per tonne), while the use of steel scrap in the production process reduces CO₂ emissions by 58%.
- Recycling aluminium saves 95% of the energy needed for primary production, while the use of aluminium scrap in the production process reduces CO₂ emissions by 92%.
- Recycling copper saves 85% of the energy needed for primary production, while the use of copper scrap in the production process reduces CO₂ emissions by 65%².

Tyres

• For each tonne of ELT going through material recycling instead of co-incineration, the environment is spared from 700 kg of CO2 emissions³.

Plastics

- Recycling one tonne of plastics can avoid the emissions of 2.5 tonnes of CO2 when produced from virgin materials, and 2.7 tonnes of CO2 emissions if incinerated.
- PET recycling saves 83% of energy and 70% of CO2 emissions compared to PET produced from virgin materials.
- For each tonne of PVC recycled, two tonnes of CO2 are saved. Indeed, in 2018, 740,000 tonnes of PVC waste recycled contributed to save 1.5 million tonnes of CO2 going into the atmosphere.
- The energy demand from recycled PVC is typically between 45% to 90% lower compared to its production from virgin materials⁴.

Textiles

• Mechanical recycling of textiles saves between 60-90% GHG emissions compared to the use of virgin cotton, estimates for the savings of chemical recycling vary⁵

Paper

o Recycling one tonne of paper saves more than 4000 kWh of energy as well as vast quantities of water⁶

² https://euric.org/resource-hub/reports-studies/metal-recycling-factsheet

³ https://euric.org/resource-hub/reports-studies/mechanical-tyre-recycling-factsheet

⁴ https://euric.org/resource-hub/reports-studies/plastic-recycling-factsheet

⁵ McKinsey & company (2022): Scaling textile recycling in Europe–turning waste into value

⁶ BIR: Paper & Board Statistics 2020