



The tyre value chain is united and ready for EU-wide EoW criteria for End-of-Life Tyres (ELT) derived rubber

ETRMA and EURICⁱ call for the development of EU-wide EoW criteria for the ELT-derived Rubber Waste Stream. The rubber supply chain is ready for the next step in the advancement and uptake of the recycling of ELT-derived Rubber.

Thanks to the efforts of the tyre value chain during the last 25 years, the logistical issue of the collection of End-of-Life Tyres (ELT) has been solved through the set-up of ELT Extended Producer Responsibility schemes. And thanks to that, the valuable materials contained in tyres have become available for recycling. **All tyres are collected and treated resulting in a current 95% treatment rate across Europe.** During this period the material recovery from ELT, has increased from 10% up to 60% annually in Europe. Out of the approx. 3 million tonnes (Mt) of tyres reaching end-of-life stage, **1.6 Mt are recycled into rubber, steel and textile fibers.** In other words, raw materials recycled from waste tyres which are used in many different applications and contribute to decrease Member States' reliance on natural resources and provide large environmental benefits as well as jobs creation and industrial growth opportunities.

Nevertheless, still **more than 1 Mt of End-of-Life tyres are used in co-incineration** in the cement industry. This is because as observed during the last decade, **end-markets for recycled rubber granulate and powders remain stable**¹. With one tyre going to co-incineration per one tyre mechanically recycled into rubber granulate, there is room for improvement in terms of the waste hierarchy. And plenty of untapped potential regarding ELT recycling to help the EU to meet the overarching objectives set in The European Green Deal to speed up the transition towards a circular economy and achieve climate neutrality by 2050. The **demand for rubber in the EU will only rise in the future**, and the only way to meet that demand is by the increase and uptake of recycled materials.

With the availability of ELTs for recycling, the recycling industry for rubber in Europe has been established but the recycling industry for ELTs is still in development. Performed mostly by SME's having been in existence for more than 10 years. **The industry is still in need of a maturity step.** This can only be achieved by adding value to the system in terms of an EU-wide end-of-waste status. **Starting with and producing waste is not the way to achieve progress in the business case that is End-of-Life tyres.**

EU harmonized EoW criteria will firstly secure that trade across European borders happens normally in equal conditions and with equivalent opportunities across borders. It will also reduce the administrative burdens associated with trading.

Secondly, **and even more important, it secures that the material is accountable for safety and quality criteria.** Many regulations, like Declarations of Performance for construction products, or the REACH restriction of chemical substances only apply once the material has ceased to be waste.

¹2021, AECOM, End-of-life tyre rubber Assessment of waste framework directive End of Waste criteria

This is of tremendous importance to increase the uptake of ELT derived rubber in the manufacture of new rubber goods and new tyres.

Background

Europe's industry remains mostly linear with only 12% of the materials it uses coming from recycling, and increasing material recovery from ELTs is essential as natural rubber is a critical raw material in Europe^[1]. Recycling ELT derived rubber into new tyres remains a technical challenge and close loops applications are so far rather limited despite the R&D efforts. Nonetheless, the industry has developed lots of new products where recycled rubber can be put to good use, fulfilling the technical requirements for the specific purposes and complying with the existing legislation and standards applicable to products.

Taking into consideration that ELT rubber waste is a well-defined and homogenous waste stream, and with a constant supply. To enhance existing ELT-recycled rubber markets and create new ones able to optimize the excellent technical properties of the high-quality rubber contained in ELT, it is vital and urgent that the EU takes action and consider further measures to secure the Circular Economy of tyres, with a special focus on rubber in particular, by creating EU-wide end-of-waste criteria for ELT derived Rubber (granulates and powders) which are essential to enable circular uses of materials derived from ELT recycling into a variety of applications benefiting society, the environment and industrial symbiosis.

While existing national end-of-waste criteria, like the one recently adopted by Italy², are strongly supported and show many similarities, harmonization at EU level is key for a well-functioning internal market for raw materials from recycling and increased certainty for investments in new recycling technologies. Moreover, given the fact that the recently developed national end-of-waste of Spain received no notifications in TRI³S we are foreseeing little debate among member states regarding the adoption of EU wide EoW for ELT derived materials.

Regarding the potential risks to the environment and human health, EoW for ELT rubber will provide an opportunity for safe usage of ELT recycled rubber. A 'product' regulatory framework will help control the risks or even tailor the use of ELT rubber granulates in certain applications, such as the case of the Spanish EoW draft; where rubber granulate used as infill material is subjected to the use of risk management measures in place to prevent the releases of microplastics from artificial turf pitches, as well as the material to be compliant with existing REACH-regulations (PAHs). It is furthermore clear that rubber granulates under REACH are considered a mixture⁴ and fall under the CLP regulation. Granting, therefore, environmental protection from production till usage across its whole lifetime.

² Regolamento recante disciplina della cessazione della qualifica di rifiuto della gomma vulcanizzata derivante da pneumatici fuori uso, ai sensi dell'articolo 184-ter del decreto legislativo 3 aprile 2006, n. 152. (20G00094) ([GU Serie Generale n.182 del 21-07-20](#))

³ <https://ec.europa.eu/growth/tools-databases/tris/en/search/?trisaction=search.detail&year=2021&num=354>

⁴ Caracal 29 June/1 July 2016 - CA/30/2016: "As regards the question whether the rubber granules used in synthetic sports pitches are articles (and therefore covered by the restriction) or mixtures, at the previous CARACAL meeting COM agreed with the majority of Member States that the granules are mixtures".



Concluding

As provided through detailed reasoning and exhaustive information in the Annex II and the AECOM report, **we believe rubber (granulate/powder) from ELT fulfils the conditions set out in Article 6 of the Waste Framework Directive and is therefore the ideal candidate for an EU-wide end-of-waste criteria as supported by the whole tyre value chain.** Due to the intensive collaboration of all the actors along the tyre production and recycling chain there are **no conflicts of interest that would hamper or delay the introduction of EoW for ELTs.**

Securing a common starting point for end-of-life tyres rubber to cease to be waste is essential. This can only be achieved with a European End-Of-Waste criteria, that is translated in a legal text, applicable in all Member States. This will add trust to the market, increase investors' security and boost the research and development on innovative solutions of this valuable rubber.

We will help on this endeavor, industry is committed to support the European commission in developing a feasible and workable set of rules and, together, make circularity a reality while contributing to the Green Deal's objectives.

¹ **ETRMA:** The European Tyre & Rubber Manufacturers Association represent nearly 4.400 companies in the EU, directly employing about 370.000 people. The global sales of ETRMA's corporate members represent 70% of total global sales and 7 out of 10 world leaders in the sector are ETRMA Members¹. The product range of its members is extensive from tyres to pharmaceutical, baby care, construction and automotive rubber goods and many more applications. We have a strong manufacturing and research presence within the EU and candidate countries, with 93 tyre plants and 16 R&D centres.

EuRIC: The European Recycling Industries' Confederation -is the umbrella organisation for recycling industries. Through its Member Federations and Companies from 21 EU&EFTA countries, EuRIC represents across Europe over:

- 5,500+ companies generating an aggregated annual turnover of about 95 billion €, including large companies and SMEs, involved in the recycling and trade of various resource streams;
- 300.000 local jobs which cannot be outsourced to third EU countries;
- Million tons of waste recycled per year (metals, paper, glass, plastics, WEEE, ELVs, tyres², textiles and beyond).

By turning wastes into resources, recyclers play a key role in bridging resource efficiency, climate change policy and industrial transition.