Revision of the ELV and 3R type approval Directives

EuRIC: Position Paper

26 October 2021

The European Recycling Industries' Confederation (EuRIC), welcomes the initiation of **the Impact Assessment and revision of both Directive 2000/53/EC on End-of-Life Vehicles (ELVs) and of the Directive 2005/64/EC on the type-approval of motor vehicles with regard to their reusability, recyclability, and recoverability (3R type-approval)**.

EuRIC represents the recycling industry at a European level. Gathering the vast majority of national recycling federations from EU/EEA Member States, the Confederation represents about 5,500+ recycling companies – from market leaders to SMEs – generating an aggregated annual turnover of about 95 billion € by treating various waste streams such as household or industrial & commercial waste including ferrous and non-ferrous metals, end-of-life vehicles (ELVs), electronic waste (WEEE), packaging (paper and plastics), end-of-life tyres or textiles.

EuRIC - via its various branches[1] - represents Authorised Treatment Facilities (ATFs) and the vast majority of ELV recycling facilities (shredders and post-shredder installations) which recycle ELVs in Europe, and producers of plastics, rubber and metal recyclates incorporated into new automotive vehicles/parts. The Confederation therefore has a strong interest in the revision of the ELV and 3R Type-Approval Directives, and call upon the European Commission to ensure the highest level of environmental ambition is achieved as a result of this revision process.

For the recycling industry, several key concerns must be addressed to build upon the success noted within the European Commission's Evaluation report on the state of ELV treatment in the EU.[2] These concerns include: missing-vehicles, the eco-design of new vehicles to allow for future recyclability, recycled content, and free and fair compensation for the implementation of the Circular Economy.

This paper outlines EuRIC's position in regard to the revision process ahead for both Directives, with a focus on key measures to be addressed.

Key messages

EuRIC recommends the following:

Missing vehicles – It is crucial that the large number of vehicles of unknown whereabouts (ca. 4 million) are captured and sent to proper Authorised Treatment Facilities (ATFs), avoiding that ELVs are transferred as used cars outside of the EU. These missing vehicles currently represent significant raw materials lost from the European system and an environmental risk, as these vehicles will not be treated in an environmental sound manner compliant with the ELV Directive. **EuRIC suggests proper incentives ranging from financial incentives linked to the Certificates of Destruction (CoD), improved registration systems, or easy systems to make distinctions between used cars and ELVs**.

Design for Circularity – recyclers have no control over the design or composition of ELVs that end up at ATFs. This power lies in the hands of manufacturers. This has led to several challenges for recyclers, who nonetheless overcame them to achieve the high recycling targets of the ELV Directive. In recent years increases in certain materials create a problematic landscape for the continued high recycling rates (i.e., composite plastics, plastics with certain additives). **Difficulties with reuse and recycling at**

[1] European Shredder Group (ESG), European Plastics Recycling Branch (EPRB), Mechanical Tyre Recycling branch (MTR), European Ferrous Recovery and Recycling branch (EFR), European non-Ferrous Metal trade and Recycling branch (EUROMETREC).

[2] European Commission (2021) Evaluation of Directive (EC) 2000/53 of 18 September 2000 on end-of-life vehicles.

Boulevard Auguste Reyers 80, Brussels | Tel.: +32 2 706 87 24 | E-mail: euric@euric-aisbl.eu |

End-of-Life (EoL) could be easily avoided with better eco-design measures. Better free knowledge sharing and discussion between recyclers and manufacturers would encourage more comprehensive dismantling practices, and benefit reuse and high-quality recycling. Further strides are mandatory to achieve a true Circular Economy for the automotive sector.

Recycled content – to scale up capacity for mature technologies providing quality recycled materials, to reinforce eco-design measures, and to reward recycling by driving demand, recycled content targets are key for plastics and rubber. **EuRIC supports a 25% recycled content target for thermoplastics[3] by 2025, and a 20% recycled content target for Original Equipment Manufacturer (OEM) rubber parts coming from end-of-life tyres (ELT) recycled rubber for 2030. In addition a 10% recycled content for Tyres would also be achievable by 2030.** These are seen as technically feasible and achievable targets.

Free and fair compensation – EuRIC calls for other members of the automotive value chain to provide fair compensation for the additional costs burdened onto recyclers for going to extreme lengths and costs with the dismantling of low-value parts to achieve high quality recycling. **However, how this is implemented should be carefully considered to avoid the creation of an EPR monopoly**, where producers have power over where finances and ELVs end up, limiting the free and fair competitiveness of the current network of dismantlers and shredders.

Missing vehicles and materials

As outlined in the ELV Directive Evaluation report[4], approximately 4 million ELVs (35% of deregistered vehicles) are of an unknown whereabouts. This lack of awareness of their location provides the possibility that they do not end up in registered ATFs where their proper EoL treatment is assured and the materials gathered.

As a result, these missing vehicles currently represent significant raw materials lost from the European system and an environmental risk, as these vehicles will not be treated in an environmental sound manner compliant with the ELV Directive. EuRIC's previous position paper[5] on the ELV Directive revision outlines several methods which could help tackle this unprecedented issue of missing ELVs. This includes the following prioritized measures:

1. **"Clear & easy way to implement" distinction between used cars and ELVs**, i.e. via a roadworthiness test or a technical control, as implemented in Italy.
2. **Well-framed financial incentives for the last holder to deliver a vehicle to authorized treatment facilities in exchange of a CoD**, such as an incentive based on an insurance premium paid by the owner of the vehicle until the ELV meets proper EoL treatment at an ATF (and the owner can show the insurer a CoD).
3. **Improved registration and de-registration systems**, via a harmonised EU (de-)registration system that validates import/export figures and ensures no loopholes are created where vehicles can go missing.
4. **Emphasizing the important role of insurers in case of total loss,** where they should declare "total loses" as ELVs.
5. **Improvement in the information exchange about the fate of temporary de-registered vehicles**, again ensuring that statistical gaps are avoided.
6. **Tackling illegal online sales of valuable spare parts from ELVs which have been declared total losses, scavenged cars etc.**, by ensuring e-commerce platforms require sellers to be ATFs.

Many of these options, as well as others outlined in the Questionnaire for this open public consultation, are paramount for the higher capture rate of ELVs. Therefore these measures should be prioritized in the revision process to ensure

[3] By total weight of plastics in the vehicle.
[4] European Commission (2021) Evaluation of Directive (EC) 2000/53 of 18 September 2000 on end-of-life vehicles. SWD(2021) 61 final.
[5] EuRIC (2020) EuRIC Position on the revision of the End-of-life Vehicles (ELV) Directive.

that all ELVs are treated in an environmental sound manner compliant with the ELV Directive and contributing to the Circular Economy

Design for Circularity

The (eco)-design of automotive vehicles has immense repercussions on the possibilities of environmentally sound EoL treatment. As is often emphasized by EuRIC: **the quality output of recycling facilities (dismantlers and shredders) is completely dependent on the design/quality of the input sent to the recyclers**. Therefore, the topic of eco-design is a vital discussion when focusing on the Circularity of the ELV Directive. **For this reason, EuRIC thanks the Commission for considering the incoherence (and possible merger) of the ELV and type approval (3R) Directives**. If achieved, this would ensure that the complete life cycle of the vehicle (from manufacturing to ELV treatment) will support the implementation of the EU Circular Economy.

Several components/materials are currently being incorporated into newly manufactured vehicles which actually lead to reduced recyclability at EoL. This includes complex composite plastics or plastics with certain additives. **Furthermore certain parts could be better dismantled if further information, guidance or design-for-dismantling practices were implemented**. This would not only enhance better reuse and recycling practices; but would further protect the safety of the recyclers on the front-line of ELV treatment. The safety concern is specifically relevant for parts such as batteries, and pyrotechnical units (airbags). Beyond the provision of information, EuRIC advocates for an increased exchange between recyclers and manufactures on win-wins for the eco-design of future vehicles.

Post Shredding Technologies (PST)
On the topic of dismantling (and eco-design), it is important to emphasise – contrary to the assumptions of the questionnaire – that dismantling is not always required for high-quality recycling. Many ELV recyclers have adopted innovative PST[6] over the last 20 years. The solutions on eco-design therefore should not be solely based on manual separation/sorting, but should further allow complementarity with PST sorting. Those that have the means to utilize such advanced technologies should not be penalized for such innovation. Simultaneously those without the means to adopt such expensive techniques should further be able utilize alternative manual means to achieve the same goal.

For tyres, as outlined in the EuRIC position paper on the eco-design of tyres[7], certain substances (e.g., sealants) can be found in new tyres to make them puncture-free and for noise-dampening properties. Alternative materials must be used, as currently the types of tyres containing these substances end up contaminating and affecting the recyclability of large batches of ELT, making them unusable for new applications. In addition, when these tyres make it to the recycling process, they cause accidental fires in shredder facilities. To maximize the use of resources such as rubber, a critical raw material in EU, in the most sustainable way possible, **new tyres placed on the market need to be entirely recyclable by mature best available technologies used by tyre recyclers**.

Owing to the long lifetime (15-22 years) of EU ELVs (and even longer for trucks and buses), a time lag is experienced between the deployment of new vehicle models / innovative materials or parts and the need to be able to treat this at a large scale. **This therefore reinforces the dire need to implement eco-design requirements today to ensure that ELVs are easily recoverable** in the future (be it with more interoperability between spare parts or more recyclable materials).

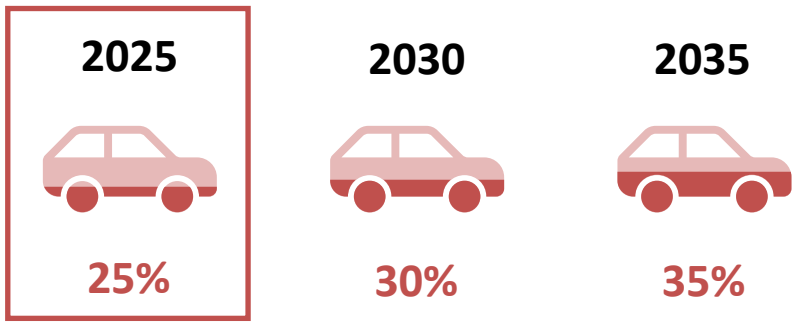
[6] For more information see: "Post Shredder Technology".
[7] EuRIC (2020) EuRIC Comment on Tyre Eco-design to Boost Circular Economy.

Recycled Content

Currently, there is a minimal uptake of Raw Materials from Recycling (RMR) in the automotive sector, with only a few front-runners supporting the Circular Economy. The phenomenon is principally explained in the market price of RMR compared to extracted raw materials, particularly for plastics (which is linked to oil prices). This further incentivises poor design practices of ELVs leading to problems with the recyclability (see section above).

For several materials (i.e. metals), high recycling rates are already achieved and a market for RMR is already established and therefore further regulatory demand is not currently required. However for plastics, there are large issues with the recyclability and recyclates uptake. Plastics, as the second most commonly used material in vehicles after metals (e.g., dashboards, bumpers, handles, buttons, casings, ceiling fabric, seats, seat belts, airbag, carpeting), require further regulatory measures to ensure the use of recycled materials, as well as increasing recyclability.

EuRIC calls[8] for the following achievable recycled content targets for post-consumer thermoplastics – emphasizing the need for imminent action by 2025 (and beyond):



Such a target should be based on the weight of plastics used in vehicles, and should be based on an open-loop approach where other sectors can feed recyclates into the automotive, **whilst keeping a minimum quantity of closed-loop recycled content to ensure a proper eco-design of automotive parts**. The 25% target for 2025 is viewed as an extremely plausible whilst ambitious target. Currently this is already achieved by frontrunner manufacturers. After 2025, targets of 30% (2030) and 35% (2035) would further be feasible, following the implementation of eco-design measures coming into effect. Following this, further ambitious targets could be foreseen if necessary and after a review of the future context (i.e., 50% recycled content by 2050).

Further to recycled plastic content in new vehicles, **EuRIC advocates for additional criteria to be adopted for rubber from ELT**. As outlined in the previous section, there are concerns regarding the recyclability of tyres owing to the inclusion of certain substances (i.e. sealants) that are non-recyclable and negatively impact on the recyclability of this waste stream. As a result, and to incentivize the recyclability and the uptake of rubber granulates from ELTs in new innovative applications, EuRIC calls for two achievable targets for uptake of ELT-derived rubber:

1. **20% recycled content** for OEM rubber parts coming from ELT recycled rubber by **2030**.
2. **10% recycled content** for tyres by **2030**.

Waste Shipment Regulation
EuRIC prioritizes the need for recycled content targets where issues are found in regard to the market uptake of the RMR, or the recyclability of parts/materials in the product (i.e. car/ELV). This is why currently EuRIC strongly supports the need for recycled content targets for plastics and ELT/rubber in new manufactured vehicles. For metals currently there is no direct need for such regulatory measures.

[8] EuRIC (2020) EuRIC call for Recycled Plastic Content in Cars.

However, with the revision of the Waste Shipment Regulation (WSR) it is clear that the market for RMR metals is at risk. The revision is intended to promote the capture and utilization of raw materials within Europe. This could have huge implications for recyclers, where part of their market could collapse leading to huge losses and a subsequent large decrease in recycling capacity. In such a case EuRIC supports recycled content targets for a broader range of materials for European manufacturers, to incentivize the uptake of high-quality RMR already recycled at high rates in Europe.

It is understood the WSR is not directly related to the revision of the ELV Directive, however it is important to emphasise this horizonal interlinkage and the need to consider broader recycled content targets, depending on other EU regulatory developments.

Free and fair compensation

Currently, recyclers bear the brunt of the costs of recycling ELVs (88% of all EoL costs), something which is associated with the manufacturers and the design of their vehicles several years in the past. As such, EuRIC is greatly appreciative that the questionnaire focuses on the compensation of ATFs for the removal of low-value parts/materials which required EoL treatment, and for dismantling efforts of hazardous or dangerous parts (i.e., EV batteries). Financial compensation is key to ensure that depolluting, dismantling and recycling is not leading to ATF losses and closures, which would be a huge detriment to the Circular Economy for automotive vehicles.

However, it must be emphasized that a fully-fledged EPR scheme must be taken with extreme care, as it could be also damaging to European dismantlers and shredders. If producers would have full power over exactly where finances are provided it would destroy the competitiveness of many market actors currently involved in dismantling and shredding operations. This would be seen as a major disruption to the free and fair functioning of the single market for RMR, and should be avoided at all costs. Therefore, any such regulatory obligations must be heavily scrutinized to ensure the impacts would not facilitate a producer monopoly over the ELV and its associated materials. We are happy to be involved in any discussions on how this system to could be worked out to ensure the free and fair compensation of recyclers for the efforts undertaken to depollute and recycle ELVs.

Rise of Electric Vehicles (EVs)
As modelled in the ELV Directive Evaluation, the increase in EVs is expected to rise in 2030 and beyond. With an average lifetime of 15 years, it means that already ELVs with traction batteries will start showing up at ATFs in increasing numbers. This is a concern for several reasons, both economic and safety oriented. In regard to the latter, further information is required on the safe dismantling, storage and transport of such batteries. This is not only to protect the environment, but further the safety of the workers handling the batteries. Additionally, the cost of removing such a battery will be an expected additional cost for dismantlers, which should be considered to be covered by any compensation scheme.

Other issues

Scope of the Directive: EuRIC advocates for the **inclusion of motorcycles, trucks (>3.5t), and buses** into the scope of the revised ELV Directive. This should be undertaken with the objective of ensuring minimum End-of-Life (EoL) treatment standards for the various vehicle types. This should not be with the goal of obligating all ATFs currently treating ELVs to further be able to treat all types of vehicles or to oblige the same targets for recovery/recycling. Targets and conditions for these other vehicle types must be carefully thought to ensure the realities of the use, composition and depollution/recycling requirements are taken into account.

Recycling Definition: This should be aligned with the Waste Framework Directive (WFD)'s definition of recycling, where backfilling is not in scope. **However, as a result of this, the current reuse and recycling target of 85% will not be attainable by several Member States**, where backfilling is still a

common recovery method (recycling, under the ELV Directive). Therefore if the definition is aligned, a more comprehensive review will be required of what should be a realistic target (whilst also driving best practices).

Future targets: for reusability and specific material recycling must be carefully considered. Reuse targets already exist in some Member States (i.e., Spain). In these systems it is sometimes very hard to comply with such targets. This is owing to the fact that the dismantling of ELV parts is heavily related to market demand for such parts. Specific models (depending on brand, style, and age) utilize different parts and therefore rely on what the contemporary car fleet requires. Setting specific part targets, without eco-design requirements that ensure interoperability of parts between brands, therefore would be unachievable. In regard to material-specific targets, the more dismantling obligations, the higher the associated costs of recycling will be (where recyclers already bear the brunt of costs). Therefore such targets should focus only on materials/parts that either provide societal value (EEE parts) or where there is an ease and associated benefit to separate manually before shredding (including bumpers - where no PST are used - and tyres).

Survey prioritization of measures: In regard to EuRIC's responses to the survey, it is key to outline why for several questions many-to-all possible responses were selected. This is principally because across the entire EU, often all are relevant responses. Circumstances vary from country-to-country (and recycler-to-recycler) and it was often difficult to merely select one option and neglect the circumstances of some of our membership. However we further appreciated that this isn't always easy to analyse. As a result, for all these cases, we have prioritized the most relevant responses in the "other" section. Further detail on these prioritizations can be provided in writing or via interview.