

## EuRIC Position Paper: EPR schemes for ELV

19 April 2022

EuRIC welcomes the objective of the Commission to strengthen the re-use, prevention, recycling and other recovery of waste with the regulatory measure of extended producer responsibility (EPR). Yet EuRIC would like to stress that should EPR be mandated as part of the revision of the End-of-Life Vehicles Directive 2000/53/EC (ELVD), the specificities of the end-of-life vehicles (ELV) recycling industry and infrastructure shall absolutely be taken into account to ensure that such a policy-choice does not bring more risks than opportunities.

### Executive summary

While EPR are entirely justified for streams where the market fails to cover the costs of proper waste management or recycling, such as for instance packaging, WEEE or batteries, to quote important streams where EPR has been widely mandated in EU legislation and across Member States, recycling end-of-life vehicles features important differences:

- First, the value of the spare parts and embedded materials in cars enable to cover a significant amount the costs of proper waste management and recycling, provided a clear and uniform regulatory framework and appropriate enforcement is in place across all Member States. It is precisely the lack of enforcement that has hindered ELV-recycling for over 20 years.
- Second, the dismantlers/authorised treatment facilities (ATFs) must be kept absolutely independent from the car manufacturers regarding their “authorization”: **this authorization must be only connected to technical requirements** in terms of equipment or environmental requirements to be met, as it is now.
- Third, the ATFs are the only one hosting the **expertise** of the decision of classifying a vehicle as “end-of-life”.
- Fourth, an “**incentive**” must be given to vehicle owners to sell their vehicle in accordance with the regulation: the main conclusion of the ADEME study is to choose the Czech Republic solution linking the delivery of the Certificate of Destruction to the car insurance payment.
- Fifth, ATFs bear the brunt of the costs of recycling ELVs – 88% of all end-of-life costs – as acknowledged in the study commissioned by the European Commission to support the revision of the ELVD<sup>1</sup>. As a result, it is essential to ensure that, if EPR schemes were put in place to accompany the transition to EV, they won’t disrupt the well-functioning recycling processes. Consequently, before any decision of creating an EPR scheme to manage ELVs is taken, be it at European, national or regional level, the local authorities must mandatorily set an evaluation of the economic balance of the existing local ELV activity and only then take a decision about an organization maintaining the closest status to avoid major disorganization and imbalance in the repartition of role of the different stakeholders.

As a result, EuRIC is of the opinion that should EPR schemes be mandated as part of the revision of the ELVD:

- the Belgian EPR scheme – FEBELAUTO – could be a possible model to follow for a collective system of extended producer responsibility. It seems to organize the market efficiently without being too intrusive. It is important that EPR schemes do not interfere in the operational recycling and that ELV recycling is left to the professionals. It also allows a proper representation of the ELV recyclers within its [Board](#) which has greatly contributed to a practical understanding between on the one hand the EPR scheme itself fulfilling its part of the legal obligations stemming from the ELVD and Belgian legislation and ELV recyclers on

<sup>1</sup> [Supporting the Evaluation of the Directive 2000/53/EC on end-of-life vehicles, Final report, Trinomics \(2020\).](#)

the other hand. We emphasize here that local recyclers should definitely remain involved. Such a model should be the basis of any EPR mandated within the revised ELVD, to achieve a high level of mutual understanding, sound management at executive level and operational efficiency to achieve regulatory targets. This is all the more needed as the decision-making process within EPR schemes shall reflect the proportion of costs supported by the different stakeholders. For ELV recycling, as outlined, the lion share of costs is still borne by the ELV recyclers.

- the Spanish system could also be an alternative, where extended responsibility is based on individual responsibility and has proven to be efficient in sustaining a free and fair competition among ELV recyclers while achieving the obligations stemming from the ELV Directive.

ELV recycling exhibits features which are different from the recycling of other waste streams. These features have to be taken into consideration should EPR be considered as a policy option in the revision of the ELVD.

### 1. Differentiated approach for the ELV sector:

The end-of-life vehicles management sector is very particular, not comparable to other waste management sectors and requires special attention from the legislator.

First, the management sector for ELV is a very expert field of industrial activity going back to the development for the automobile sector in the 20<sup>th</sup> century. Since then, infrastructures for the collection, dismantling and recycling of ELV have established, ensuring today the full achievement of high recycling and recovery targets fixed by EU legislation: it should be absolutely clear that the ELV recycling industry followed a development trajectory totally independent from the car manufacturers who never made any substantial investment in ELV management. These well-established ELV management structures, mainly dismantlers (ATFs) and shredders, rely on the fact that ELV have an intrinsic positive value when entering the treatment process and result in the production of spare parts and valuable raw materials from recycling that are competitive in regard to extracted raw materials on international markets.

At the same time, through the substitution of extracted raw materials in new products or production processes, raw materials from ELV recycling effectively contribute to considerable reductions of CO<sub>2</sub> emissions and avoid catastrophic environmental consequences of raw materials extraction in third countries. Well-established ELV collection, dismantling and recycling infrastructures consisting of numerous small and medium sized enterprises are particularly vulnerable for radical market changes. In recent years, important investments have been made inter alia in pre-shredder and post-shredder technologies for ensuring a high-quality output for recycling materials. In this context, any change to well-established structures must be thoroughly assessed in order to prevent a disruption of functioning economic markets that would be detrimental on an economic and environmental point of view.

Most importantly, it must be emphasized that vehicles consist of a large number of technically highly sophisticated components, made up of thousands of sub-assemblies. Due to their long lifetime of more than 15 years in average, dismantler and recyclers deal on a daily basis with designs on recyclability old of more than 20 years<sup>2</sup>. The complexity of components, the technical standard, the long lifetime and the positive intrinsic value makes vehicles a special waste stream that is in no way comparable to other material streams, such as household packaging or household appliances. An end-of-life vehicle cannot be compared to either mono-material packaging products or a small electrical equipment when it

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<sup>2</sup> Taking into account an average time of 5 years for the conception of a vehicle.

comes to the legal requirements. EPR schemes for other waste streams, such as packaging, batteries or WEEE are not suited to be taken as model when considering the extension of EPR schemes for end-of-life vehicles. It is imperative that EPR schemes be specifically tailored to end-of-life vehicle recycling.

As a consequence, EPR schemes for ELV can only be considered an adequate policy tool on the basis of proven effectiveness taking into account technical feasibility, economic viability, the overall environmental, human health and social impacts, as well as the need to ensure the proper functioning of the internal market. EuRIC calls on the European Commission to undertake a thorough investigation for determining whether EPR schemes already in place are actually contributing to eco-design, high waste collection rates and more high-quality recycling and incentivize innovation or if there are any other measures that are more appropriate or cost-efficient to obtain goals such as waste reduction and recycling.

When considering the extension of EPR schemes for vehicles, getting a clear overview on the costs and revenues borne by each actor of the sector, namely the manufacturers, the ATFs and the shredders, is an indispensable prerequisite to the introduction of EPR obligations on EU level and the introduction of EPR schemes on Member State level that would modify the functioning equilibrium in place. The establishment of such an overview has already been done in the past and is paramount to an appropriate and equilibrate extension of EPR schemes for ELV<sup>3</sup>.

## 2. Equitable financial responsibility, where required only:

EuRIC stands for the achievement of high-quality recycling through the development and investments into advanced recycling technology. Since the adoption of the ELV Directive, important investments have been made in innovative recycling technology. Currently, recyclers still bear the brunt of the costs of recycling ELVs (88% of all end-of-life costs<sup>4</sup>), that are dependent from vehicles' design by manufacturers around 20 years in the past. Due to the particularities of the ELV management sector, the European recycling industry has found the right balance to achieve high quality recycling and the fulfillment of ambitious targets since the adoption of the ELV Directive. However, where the market does not allow an economically viable waste management process, manufacturers shall bear financial responsibility for the waste management of ELV parts in accordance with the "polluter pays principle". In this regard, 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. The compensation of authorized treatment facilities should focus on the removal of low-value parts and materials which require end-of-life treatment, as well as on dismantling efforts of hazardous or dangerous parts such as EV batteries.

### a) Dismantling for reuse to rely on technical expertise:

Depollution activities obviously require dismantling of ELV components. Valuable components for which there is a market shall also be dismantled for reuse, according to demand. On the contrary, imposing mandatory dismantling of about 20 years old vehicle components where there is no market for reuse would not be economically viable. Additional costs of manual dismantling activities can only be justified through appropriate environmental benefit. As manufacturers would have to pay for this expenditure, the price for dismantling at end-of-life would in the end be shifted to consumers through the sales price of new vehicles, as well as it would impact the positive value of ELVs. For an adequate evaluation of dismantling for reuse, the technical expertise of qualified specialists in ATFs as well as market expertise are paramount. From a general point of view, relying on and maintaining this expertise is of very high importance for the achievement of environmental objectives. Dismantlers are the only

<sup>3</sup> [Economic study on the management of End-of-Life Vehicles, Final report, Ernst & Young, 2003.](#)

<sup>4</sup> [Supporting the Evaluation of the Directive 2000/53/EC on end-of-life vehicles, Final report, Trinomics \(2020\).](#)

one hosting the expertise of the decision of classifying a vehicle as “end-of-life” because they have the necessary used spare parts and they have the know-how to reset the vehicle for perfect checking of the road worthiness control. Ensuring their autonomy regarding manufacturers is key for maintaining the independence of ELV industry.

*b) Cost/benefit analysis paramount for dismantling for recycling:*

EuRIC stands for high-quality recycling through the development and investments into advanced recycling technology. In the 21<sup>st</sup> century, and to ensure that the recycling industry keeps being competitive and keeps fostering innovation, it won't be credible if legislation mostly prescribes manual dismantling over modern recycling processes. This is all the more relevant since cars are produced in fully automatically production lines. Over the last 25 years, important investments have been made by the recycling industry into advanced shredding and post-shredding recycling technology have revealed that the European recycling industry can very well achieve high recycling levels and produce high quality raw materials from recycling that find a market and meet demand.

In shredding and post-shredding processes, the variety of materials found in ELVs are sorted and recycled into different material fractions. As a result, mechanical recycling offers not only a technical but also a decisive cost advantage over manual dismantling. Through investments into high quality post-shredding technologies, high quality recycling can be achieved at much lower costs than manual dismantling activities. High quality recycling processes are indispensable for the achievement of high quantity and quality level of raw materials from recycling, which are competitive and meet at industrial scale the demand of producers. Investment and planning stability is required to further develop high quality recycling infrastructure in Europe and achieve ambitious environmental objectives.

New dismantling obligations should only apply, if a comprehensive cost/benefit analysis<sup>5</sup> has been carried out in advance. The costs are an important criterion for or against the shredding process, because without a sufficient cost consideration, end-of-life vehicle recycling will be destroyed and the consumer would have to bear the consequences. If additional dismantling obligations were to be introduced, the national conditions in Member State must indispensably be taken into account.

Concepts that are demonstrably not economically viable must be financed via the manufacturers. The development of ELV recycling has shown that financial compensation should be required in any case for plastics<sup>6</sup> and glass<sup>7</sup>, as well as for hazardous or dangerous parts such as EV batteries. In particular on electric vehicles (EV) batteries, the increase in EVs is expected to substantially rise until 2030 and beyond<sup>8</sup>. 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

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<sup>5</sup> [Machine-based dismantling of end-of-life vehicles: A life cycle perspective, Ezzat El Halabia, Mike Thirdb, and Matthew Doolana, Elsevier, 2015](#); [Feasibility of aluminum component dismantling from ELV, IRT-M2P EAStudy-Report-20210225, 2021](#); [‘Can plastics from end-of-life vehicles be managed in a sustainable way?’, Cardamone, Ardolino & Arena, Ed. Prof. Suiran Yu, Elsevier, 2021.](#)

<sup>6</sup> [Summary of ‘Plastics Parts from ELVs’, Study, Ramboll Deutschland GmbH, 2020.](#)

<sup>7</sup> Final Report, Automotive Glass Part I - technical and economic aspects, Intertek RDC for OVAM, 2012; [‘Beeinträchtigt das Mitschreddern von Autoglasscheiben in Altfahrzeugen das Wohl der Allgemeinheit?’, Expert Report, Dr. Dirk Schöps, 2017](#); [‘Hand-Arm-Vibrationen entgegenwirken: Heraustrennen von Fahrzeugscheiben’, warnkreuz SPEZIAL Nr. 25, VBG, 2014.](#)

<sup>8</sup> [COMMISSION STAFF WORKING DOCUMENT EVALUATION of Directive \(EC\) 2000/53 of 18 September 2000 on end-of-life vehicles, SWD \(2021\) 60 final.](#)

safety of the workers handling the batteries. The cost of removing such a battery will be an expected additional cost for dismantlers, which should be considered to be covered by a compensation scheme.

### 3. Free, fair & competitive market conditions:

When considering an extension of EPR schemes for ELV, special consideration should be given to the fair competition among all actors involved in dismantling and shredding operations. In accordance with the particularities of the ELV stream, the effectiveness of existing ELV management chains must be taken into account. The introduction of EPR schemes should not result in damages to well-functioning and highly consolidated ELV waste streams and market. **Where an effective relationship between vehicle producer and ELV recyclers exists, new requirements on EPR must be avoided.**

#### a) Participation and voting rights in EPR schemes board:

From a general point of view, extended producer responsibility (EPR) must be able to be fulfilled freely by the manufacturers, both individually and collectively. Should EPR schemes be mandated as part of the revision of the ELVD, it would be essential that EPR schemes are designed in a way to guarantee an equitable place and voting rights for dismantlers and shredders in the boards in an adequate proportion to the costs borne by parties involved in ELV recycling in compliance with the obligations stemming from the ELV Directive. In accordance with joint cost sharing among parties involved, ATFs and shredders must be given a substantial participation and voting rights within the EPR structures to be established under national laws. As an example, the Belgian EPR scheme for ELV, [FEBELAUTO](#), has a very balanced approach involving all parties involved, allowing for good understanding and fruitful cooperation among all actors. When it comes to shaping new rules on ELV management, building on established well-functioning structures for dismantling and shredding of ELV is essential. That for, EuRIC calls the European legislator to make participation and voting rights of well-established ATFs and shredders mandatory in boards of EPR schemes for ELV to be set under legislation of Member States.

#### b) Access to market, authorization and ownership of materials:

Access to ELV and fair competition of all actors involved in dismantling and shredding operations is key for the preservation of well-established management chains and the reduction of costs for consumers. In this regard, financial compensation shall not preclude well-functioning waste management chains from access to the market. For the case they are needed, EPR systems financing the costs of collection and granting contracts for recycling of ELV should be designed in a fair, open and competitive manner. A circular economy requires open and competitive markets in which fair competition is guaranteed. For waste management and recycling companies, as well as downstream users, EPR systems should guarantee the rights to have access to the ELV market, especially for small and medium companies, guarantee materials' ownership, process waste into raw materials and sell them to downstream users. Also, the authorization of dismantlers should remain linked to technical requirements only (i.e. minimum equipment, environmental requirements). The success of the ELV sector has been so far its independence relying on the free market and principles of free trade. In France, current discussions reveal the intention to withdraw authorization of ATFs if a contract is not concluded with a car manufacturer EPR scheme. This would weaken the independence of ATFs and lead to the death of probably more that 60% of the existing ATFs with paramount social and economic consequences. Dismantlers should remain free to set contracts with manufacturers for instance to support new cost in dismantling, but a contract with manufacturers must not be a condition for their activity.

c) Access to information:

When introducing new obligations for OEMs to provide additional information on the composition of and dismantling method for certain ELV parts, this information shall be made available to dismantlers in an open, fair and competitive manner. Access to information is essential for ensuring proper dismantling and recycling of ELV parts and directly contributes to the achievement of environmental objectives. Improvements ensuring better availability and use of data should be based on the existing IDIS system that has proved its efficiency.

**4. Other related measures:**

From a general point of view, the best way to achieve further development of recycling infrastructure is to create a stable demand for raw materials from recycling competing with fluctuating prices for extracted raw materials on global markets. Therefore, EuRIC explicitly calls on the Commission to set targets for mandatory integration of raw materials from recycling at least for plastics and tyres at production stage of vehicles put on the market in the EU.

Also, the achievement of high levels of recycling also depends from the quantity of materials ending up at ATFs. Ensuring a better return of ELVs to dismantlers and addressing the phenomenon of “missing vehicles” is of critical importance. This can best be achieved through linking the delivery of the Certificate of destruction (COD) for ELV to the insurance premium, as already done in Czech Republic<sup>9</sup>. Accordingly, the owner who sells a vehicle would either deliver it to an ATF or sell it to a third party by proceeding to the change of registration with the competent public authority. Linking the payment of the car insurance to the deregistration gives a financial incentive to the owner to properly return the vehicle that ensures its environmentally sound management. As a subsidiary measure and if equivalently efficient, Member States could also link the deregistration of vehicles to the payment of taxes, as applicable in Spain<sup>10</sup> for the use of roads.

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<sup>9</sup> “In terms of acceptability, the scheme in the Czech Republic with an insurance obligation that already exists in France seems to be the simplest one to transpose”, cf. [Global Overview of Incentive Schemes aiming to bring ELVs through Authorised Processing Channels, Final Report, ADEME, 2019](#), page 105.

<sup>10</sup> In Spain, according to a tax for the use of roads, the owner remains taxable until proper deregistration of his vehicle.