

ELV-Regulation

EU End-of-Life Vehicles Regulation Proposal (ELVR)

Executive Summary

What we like

- One regulation instead of several directives
- A legal framework for EU-wide harmonized circularity requirements and (future) recycling quotas
- The ambition to introduce uniform calculation methods (e.g., for recycled content or reusability/recyclability/recoverability rates)

Worthy of improvement

- Consider safety-relevant aspects for recycling quotas. Quotas must not compromise safety and quality requirements for parts and components
- Ensure availability and sufficient supply of recycled material: allow for diverse recycling methods (in addition to mechanical recycling) and multiple waste streams (in addition to post-consumer waste)
- Enable close industry involvement when adopting implementing and delegated acts to specify ELV requirements
- Introduce a clear and manageable threshold for recycled material reporting requirements
- Consider intellectual property rights and sensitive product-specific information in disclosure obligations
- Build on existing and established automotive databases
- Guarantee consistency with existing and upcoming legislation: ELVR must take precedence for vehicles over the Critical Raw Materials Act, substance restrictions should primarily remain under REACH

IN DETAIL

On the legal instrument

We welcome the European Commission's proposal to introduce a regulation instead of a directive. A regulation is the adequate legal instrument to ensure uniform application and maximum harmonization across the 27 EU Member States. Merging two previous directives (3R Type-Approval Directive 2005/64/EC and the "old" ELV Directive 2000/53/EC) into one legal framework serves as an excellent basis for harmonized circularity requirements in the European Union. Additional or diverging national requirements must be avoided to prevent fragmentation of the Internal Market. Furthermore, we appreciate

the introduction of a legal act that is particularly tailored to vehicles. Vehicles and their parts and components are subject to a variety of legal requirements that should be regulated under one dedicated and specialized legal regime. For legal certainty, we stress that requirements stemming from other EU legislation must be fully in line with the provisions of the ELVR which should serve as the primary and superseding act for ecodesign and circularity requirements for vehicles.

On minimum recycled content in vehicles (Art. 6)

Introducing harmonized recycled content targets is an important step to further increase circularity in the automotive industry. At this point, the Commission proposes to establish a minimum quota on recycled plastics from post-consumer waste within 72 months after the ELVR's entry into force. According to Art. 6 (1), this would mean that 25 per cent of the plastics used (by weight) in vehicles must be recycled. Of these 25 per cent, again 25 per cent must be recycled from ELVs (closed-loop plastic recycling). From a supplier's perspective, we would stress the following points for further consideration:

- Since automotive manufacturers (OEMs) will be responsible to implement and verify the recycled content share for type-approval of the whole vehicle, it remains unclear at this point how respective obligations will be passed on to suppliers. This might lead to diverging requirements for the same or similar components, depending on the individual allocation of the OEM. In this regard, special consideration must be given to safety relevant parts and components. Recycling quotas must not compromise safety and quality requirements. As the incorporation of recycled material in automotive parts may come along with modifications of their properties and characteristics, it must be ensured that safety-relevant parts can be exempted from the quota, provided that recycled material negatively impacts their specific qualities.
- We welcome the adoption of an implementing act to specify the methodology for calculation and verification of the plastic recycling quota (Art. 6 (2)). Although primarily an OEM requirement, details of the methodology will be decisive as data will have to be collected along the supply chain. To reduce red tape and keep the bureaucratic burden for all supply chain actors as limited as possible, clear standards should be defined to facilitate compliance. In this process, the transparent involvement of stakeholders from affected industries is desirable and documentation requirements should be built on existing databases and standards (e.g., IMDS, Catena-X).
- Art. 6 (1) on closed-loop recycling specifies that 25 per cent of the overall 25 per cent recycled plastics must be generated “from ELVs *in the vehicle type concerned*”. The requirement could be interpreted that recycled plastic from one vehicle type cannot be reused in another vehicle type. Accordingly, for example, plastics recycled from motorcycles could not be used in a car. Establishing separate recycling lines for every single vehicle type would make recycling and respective documentation even more complex and complicated without any ecological benefit. Although this interpretation might be unintentional, the reference to vehicle types should be deleted for clarity.
- While an increased use of recycled plastics is highly desirable, the availability of secondary material must be ensured. Suitable recycled plastic from post-consumer waste – especially closed-loop recycling material – is not available at large scale today and will require a lengthy and costly transformation process in the industry. To facilitate the process and to keep prices within a

reasonable margin while catering to the overall carbon reduction targets of the EU, it would be reasonable to:

- A) Consider and include pre-consumer waste; at least for an intermediary period until a post-consumer plastic waste market and infrastructure is sufficiently established. This would require specification in Art. 6 (1) and should be further technically evaluated in the process of the corresponding implementing act (Art. 6 (2)). Any recycling quota should include manufacturing waste, i.e., materials rejected during the manufacturing process which cannot be re-used in the same process that can contribute to circularity and recycling targets.
- B) Keep an technology-open approach to plastic recycling to make optimum use of available resources. We appreciate that the current proposal does not rule out chemical recycling, bio-waste based or other forms of recycling. We strongly make the case for a recycling approach that focuses on the overall objective to increase circularity and reduce carbon emissions while remaining open to technological advancements in the future. Mechanical recycling cannot always reprocess all types of plastics, nor provide the quality that is needed for safety, performance, and other legal requirements of vehicle components. Furthermore, mechanical recycling bears the risk of decreased thermomechanical material properties as well as a higher risk for contaminations (e.g., outgassing of formaldehyde) which is why respective material can often not be used in the passenger compartment. On a similar note, the energy used for mechanical recycling and the potential deterioration of material quality that comes along with it (such as increased weight of components in relation to primary material) may lower the material footprint on the one hand but, on the other, increase the carbon footprint in the use-phase of a vehicle in comparison to alternatives. The framework regulation should remain flexible while details on the methodologies and calculations will need to be spelled out in the implementing act in accordance with Art. 6 (2).
- C) Amend the definition of plastic: There is concern regarding the definition of plastic provided in Article 3(9), as it limits the scope of plastic that can be used to reach the targets. The plastic definition based on REACH does not include polymer types commonly used in vehicles. Thus, we advocate for extending the scope of the plastic definition to include not only thermoplastics but also thermosets, elastomers, and polyurethane foams, following the dedicated JRC report.
- We strongly support the ambition to introduce the ELVR as a framework regulation for further harmonized recycling quotas and circularity requirements in the future. According to Art. 6 (3) the Commission would be entitled to adopt delegated acts introducing a minimum share for recycled steel, based on a feasibility study. We would like to highlight that such a feasibility assessment should be carried out with close involvement of the industry concerned to ensure ambitious yet feasible targets. The same should apply to potential future recycling quotas for aluminum and magnesium, as well as for rare earth elements in permanent magnets of e-drive motors. Again here, the prescribed feasibility assessments (within 23 months for steel (Art. 6 (3)) as well as within 35 months for aluminum and magnesium and rare earths in permanent magnets (Art. 6 (4)) must incorporate industry expertise while conflicting regulation (esp. in relation to the Critical Raw Materials Act, CRMA) must be prevented.

Declaration on recycled content (Art. 10)

The proposal stipulates that OEMs shall declare, within three years after the ELVR's entry into force, the recycled content share of several materials present in the vehicle. These include rare earth elements in permanent magnets of e-drive motors, aluminum, magnesium and steel. It must furthermore be indicated whether the material is recycled from pre-consumer or post-consumer waste (Art. 10 (1)).

Since the proposal does not make any further specifications, we suggest introducing a threshold for respective reporting obligations (e.g., parts and components above a weight of 5 grams). Otherwise, this provision could be interpreted in a way that even insignificant amounts of recycled material in smallest vehicle parts would need to be reported. While benefits are small, the effort for such a task would be excessive and disproportionate throughout the supply chain. Even more so, if an additional distinction between post- and pre-consumer waste as origin of the recycled material is required in the reporting. Furthermore, we appreciate if requirements were clarified with regard to a uniform calculation method and reporting format. Sufficient time for implementation must be granted to all supply chain actors for data acquisition. An implementing act to address these issues could provide a remedy.

Circular design (Art. 7) and information on removal and replacement of parts components (Art. 11)

The proposal sets out a list of certain parts and components in vehicles that shall be designed in a way which does not hinder the removal by authorized treatment facilities (Art. 7 in combination with Part C of Annex VII). Special consideration is given to the readily and non-destructive removal and replacement of electric vehicle batteries and e-drive motors by treatment facilities or repair and maintenance operators (Art. 7 (2)) which will be further specified in upcoming delegated acts (Art. 7 (3)). Similarly, Art. 11 requires the provision of information on the safe removal and replacement for waste management, repair and maintenance operators with details specified in Annex V.

These provisions expand the current ELVD's requirements and could significantly enhance circularity in the industry. However, since respective data sharing can include sensitive corporate information, it must be ensured that intellectual property is protected. For example, information on the (chemical) composition of parts (Art. 10) in addition to specifications with regard to weight, measurements and location (Art. 11 & Annex V) bear the risk of disclosing sensitive product-related data. Further clarification (e.g., through guidelines or clear examples) are desirable to demonstrate how these design and information requirements can be met correctly without interfering with IP issues.

Implementation measures must also be proportionate. For example, Annex V prescribes mandatory reporting on removal and replacement of ferrite magnets. There is however currently no sustainable business case for ferrite recycling while supply chain actors would have to share potentially sensitive information without any subsequent utilization, let alone positive environmental impact.

Consistency with existing and upcoming legislation

Given the extensive introduction and revision of EU sustainability initiatives in recent years, we welcome the fact that the ELVR shall serve as the primary piece of legislation for vehicle circularity requirements in the future. However, duplications and inconsistencies must be avoided:

- The CRMA states that the ELVR will supersede all provisions regarding permanent magnets in vehicles. We welcome this arrangement as the ELVR is best suited to establish circularity requirements in the industry. However, there needs to be full alignment about definitions, reporting obligations and timeline to prevent confusion in the industry. While the CRMA has overlaps in the scope, it differs in its reporting obligations and will determine its own recycling quotas for permanent magnets in a different workflow through secondary legislation at some point. Since the ELVR should serve as the primary and single legal source for vehicles, respective requirements should only be established under the ELVR framework and be closely coordinated with the CRMA timeline.
- Similarly, the Ecodesign Regulation (ESPR) generally excludes motor vehicles from its scope, provided that other legislation (such as the ELVR) addresses circularity and ecodesign aspects adequately. It must thus be ensured that all circularity requirements for vehicles, their components and materials are regulated centrally under the ELVR.
- The ELVR defines “substance of concern” (SoC) with a reference to the Ecodesign Regulation (ESPR). Yet, the ESPR does not provide a precise definition of SoC at this point. Instead, these substances will be determined through dozens of delegated acts for highly specific product groups. It is thus unclear which substances shall be minimized by OEMs and suppliers in accordance with Art. 5 (1) of the ELVR. To provide consistency with existing chemical legislation, a reference to “substances of very high concern” could be made as it represents a clear and established concept under REACH. Substance restrictions should be regulated centrally via REACH and only in exceptional cases through the ELVR. Potential future material restrictions must not undermine the “repair-as-produced” principle to ensure that circularity of spare parts is not impaired: reused parts and components need to comply with the regulations that were in place at the time of the vehicle production.

On the Circularity Vehicle Passport (Art. 13)

The ELVR proposes the introduction of a Circularity Vehicle Passport (CVP) containing information on removal and replacement of parts, components and materials for each vehicle placed on the market 84 months after the regulation’s entry into force. While technical details, exact design requirements and access rights are not specified yet and will be determined in future implementing acts, we highlight the following claims for a successful CVP in line with industry demands regarding the digital product passport (DPP):

- Close involvement of the affected industry must be ensured in the CVP development process.
- The CVP must build on existing industry databases and standards (in particular IMDS and Catena-X).
- Mandatory CVP data needs to be selected on a “need-to-know” basis, i.e. only data deemed relevant to increase circularity should be included for reasonable and proportionate reporting requirements.
- Intellectual property, trade secrets and confidential business information must be considered and protected.
- The CVP should bank on a decentral operation to ensure that companies manage the data themselves and control access to it.
- Access rights must be clearly defined and limited to relevant circularity stakeholders.

- Sufficient time to adapt must be granted to affected stakeholders as the necessary data collection involves various actors along the supply chain.

On the scope (Art. 2)

We support the extension of the ELVR's scope to further vehicle categories to increase circularity in the industries. With regard to the newly included L-categories, we think it was very wise to exclude pedal-driven cycles (i.e., in category L1e) from the ELVR since other legal frameworks (e.g., the Ecodesign Regulation) are better suited to address the highly specific circumstances in the bicycle industry.

On penalties (Art. 48)

Penalties should not be individually defined by the 27 Member States but instead be harmonized across the Single Market as different penalties on national levels could potentially distort competition.

Contact details:
Political Affairs and Government Relations (abteilungsbriefkasten.ccg@de.bosch.com)