

Let's not let 40% of EV batteries go to waste

On how the End-of-Life of Vehicles Directive revision can make the uptake of EVs faster and more sustainable.

For Europe to become carbon neutral by 2050, road transport needs to be entirely decarbonised by this date. Considering the average retirement age of petrol and diesel vehicles in Europe (around 15 years), the Platform for Electromobility believes that an EU-wide phase-out date for sales of new pure internal combustion engine passenger cars and vans no later than 2035 is necessary to achieve this objective with a clear emissions reductions trajectory.

Last year, the sales of new BEV accounted for 5.3% of the total¹. In other words, European market will need to grow from 530.000 battery cars today to around 16 million in less than 15 years.

Considering that to produce the corresponding amount of battery cells will require huge quantity of critical raw materials. There are several critical raw materials for which these market requirements mean a significant challenge. For example, major manufacturers² have already announced they will not use Ni in their entry level models. On average, it takes 10 years from taking the internal decision to have a new mine in operation. Accelerating the recycling capacities is therefore key for the deployment of accessible and sustainable electric vehicles (LDVs and HDVs alike).

Yet, in 2014, 4.66 million end-of-life vehicles (ELV), representing 39% of the total vehicles being decommissioned, were at 'unknown whereabouts'³. From 2007 at least, the 'unknown whereabouts' share has remained at a constant level⁴. The two main elements that explain most of the issue with ELVs at 'unknown whereabouts' are vehicle dismantling at illegal sites, and exporting of ELVs outside of Europe as used cars.

Consequently, it's of key relevance for the deployment of electromobility and to reach 2030 and 2050 EU climate goals not to spoil 39% of used batteries from future EU battery ELVs. Reinserting those ELV into the recycling system will reduce the stress of primary production as well as cost impact and a potential slowdown of the BEV uptake by lack of affordable materials.

While it is true that vehicle registration procedures are the national competence of the Member States, each EU legal act has to comply with two fundamental principles laid down in the Treaty on European Union, proportionality and subsidiarity. The content and scope of EU action may not go beyond what is necessary to achieve the objectives of the Treaties. Also, given that transport is a shared competence, the EU may act only if — and in so far as — the objective of a proposed action cannot be sufficiently achieved by the EU countries, but could be better achieved at EU level.

¹ <https://www.eafo.eu/vehicles-and-fleet/m1>

² [VW Power Day](#) and [Tesla Battery Day](#), need reference here

³ https://ec.europa.eu/environment/waste/elv/pdf/ELV_report.pdf. In the Assessment of the implementation of Directive 2000/53/EU on end-of-life vehicles, is defined the term “ vehicles of unknown whereabouts”: vehicles that are deregistered but without a Certificate of Destruction (CoD) issued or available to the authorities and also with no information available indicating that the vehicle has been treated in an Authorized Treatment Facility (ATF) or has been exported.

⁴ http://ec.europa.eu/environment/waste/pdf/target_review/Final_Report_Ex-Post.pdf

As Member States have not been able to reduce since 2007 the number of ELVs at unknown whereabouts, the Platform for electromobility proposes to introduce the following dispositions in the revised ELVD:

- **Registering any road transport vehicle – including heavy-duty – when the owner is a resident (or registered company) in that Member State** will have a large and cost effective impact on reducing the amount ‘unknown whereabouts’. By doing so, vehicle owners will face at least two payment obligations (i.e. insurance and Periodical Technical Inspection – PTI). Owners will therefore be incentivised financially to send the vehicle to an authorised treatment facility (ATF) when it reaches its end of life and therefore avoid those costs.
- Provide necessary safeguards to **avoid as much as possible temporary deregistration** that currently causes loopholes and increase the amount of ‘unknown whereabouts’
- In case of sale in the same Member State, or change of ownership (typically to its insurance company), the new owner will have to be updated in the vehicle registration system.
- It will only be possible to deregister a vehicle under one of the following circumstances:
 - Destruction, after presenting a certification of destruction (CoD) issued by an ATF.
 - Export within the EU, after presenting the certificate of having been registered in the second Member State.
 - Export outside the EU, after presenting the customs declaration for export.
 - Theft, after presenting the police report. If the vehicle was recovered, the vehicle will be registered again to its legitimate owner.
- Additionally, it should be made compulsory to have a valid roadworthiness certificate for a vehicle to be exported outside EU as used car.

To achieve the ambitious but necessary objective of decarbonizing road transport by 2050, transport must be seen holistically and therefore all upcoming legislations should, like the End-of-Life of Vehicles Directive revision, should consider needs that a fast and sustainable uptake of electromobility requires.

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