



European
Automobile
Manufacturers
Association

ACEA Position Paper on Circular Economy

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EXECUTIVE SUMMARY

The automobile industry welcomes the new European Commission's focus on the revised Circular Economy Package and is committed to making Europe's economy more resource efficient. Our sector has already anchored circularity by integrating the concept of the circular economy into product development, manufacturing processes and a range of new services offered by industry.

Automobiles are complex products manufactured using a large variety of raw materials, all essential to the excellent performance of a modern vehicle. Safety, eco-friendliness and comfort requirements, together with physical, chemical and economic limitations, set the framework in which our industry continuously optimises the efficient and responsible use of resources. Strong international competition automatically results in the most efficient use of resources in our products and processes.

The European Automobile Manufacturers' Association (ACEA) calls for a well-thought-out and balanced policy approach, which addresses the full spectrum of opportunities as well as barriers and obstacles. The following factors are identified by ACEA as being essential to an effective circular economy package, able to address resource efficiency in the automotive sector:

1. Promote holistic approach to product design for sustainability
2. Encourage innovation and ensure technological neutrality
3. Recognise achievements in remanufacturing – the limitations of recycling
4. Recognise recycling as a tool, not as an environmental target in itself
5. Improve implementation of existing EU waste legislation
6. Recognise the technical, economic and environmental limitations of resource-efficiency targets

1. PROMOTE HOLISTIC APPROACH TO PRODUCT DESIGN FOR SUSTAINABILITY

ACEA believes that binding rules to promote circular economy principles in product design at EU level should not be pursued by the European Commission in areas where there is overlap with existing legislation, in order to enable the successful implementation of circular economy principles. A limited approach that simply narrows down the complex situation to the recycling stage and end-of-life phase should be avoided, as it could prove counter-productive. Instead, both a holistic perspective and full-life-cycle approach should apply according to ACEA, rather than only considering isolated resource-efficiency aspects at the end of the life of a product. For most vehicles with conventional powertrains (ie diesel, gasoline, LPG and CNG) the automotive-use phase is predominant, representing around 80% of the total life-cycle impact. The use phase accounts for key impact categories such as the Global Warming Potential (mainly from CO₂ emissions) of a vehicle as well as the biggest share of fossil resources.

The environmental impact of the end-of-life phase is generally about 1% across all main impact categories and inventory items such as waste or resources, regardless of vehicle type. To design and produce energy-efficient vehicles, and to limit the environmental impact over the entire life-cycle, the automotive industry is committed to a design-concept aimed at sustainability, taking a holistic approach that reflects the complete cycle rather than the isolated end-of-life perspective.

2. ENCOURAGE INNOVATION AND ENSURE TECHNOLOGICAL NEUTRALITY

Ensuring technological neutrality is essential to supporting innovation. European automobile manufacturers believe that no option should be selected prematurely, in order to avoid market fragmentation or the misallocation of resources. Focusing on a limited number of technologies reduces the potential for overall technological progress in the long run. Legal requirements with regard to product design will hinder technological development. The automotive industry does not see any need for more legal obligations. Industry-led initiatives will be much better in promoting effective and economically viable circular economy models. The European automobile industry's continued investment in R&D keeps it ahead of global competition. ACEA members are committed to maintaining their leadership in sustainable low-carbon propulsion and safeguarding the

competitiveness of manufacturing in Europe.

3. RECOGNISE ACHIEVEMENTS IN REMANUFACTURING – THE LIMITATIONS OF RECYCLING

The automobile industry already contributes to the circular economy by remanufacturing a wide variety of components and parts, including engines, water pumps, alternators and gear-boxes. A remanufactured component fulfils a function which is equivalent to that of the original component. It is different from a reused, repaired, rebuilt, refurbished, reworked or reconditioned component. Furthermore, the automotive industry has a responsibility to its customers to support the longevity of their current vehicles by ensuring that products can be serviced, repaired and maintained in such a manner as to not be detrimental to their function, safety and reliability. The use of recycled materials in a product should never jeopardise safety rules, consumer health nor environmental protection. The possibility to use recycled materials largely depends on the individual application. Using recycled content in a product is not always technically feasible nor beneficial from an environmental or economic perspective. Ultimately, recycled materials need to fulfil exactly the same technical specifications as primary materials. Technical development of materials and/or higher quality standards – often triggered by legal obligations and restrictions – might hinder the use of recycled materials. Recycled components' higher weight or longer transport distances may result in a negative environmental impact from a life-cycle perspective. Consequently, remanufacturing has to be considered on a case-by-case basis.

4. RECOGNISE RECYCLING AS A TOOL, NOT AS AN ENVIRONMENTAL TARGET IN ITSELF

Recycling is important, as end-of-life vehicles are a major source of secondary raw materials. In our industry, recycling is therefore considered normal business practice and part of the design for sustainability concept. Car manufacturers acknowledge their responsibility to deliver sustainable products from cradle to grave. Only a limited amount of waste is sent to landfill by the automotive sector, even though some 8 million vehicles reach the end of their lives each year. To fulfil society's economic needs, a significant part of EU supply will continue to be sourced from primary production, which therefore requires an enabling framework as well. Recycling itself is not an environmental target per se, but rather a tool to improve the resource efficiency of certain raw materials. EU-funded Life Cycle Assessment studies have already proved that an increase of recycling targets would have no environmental benefit. In contrast, it is necessary to carefully

evaluate whether enforced recycling goes at the expense of other environmental aspects, or even leads to a trade-off with other resources. Indeed, it is not appropriate to mandate minimum recycled material targets for a material or product.

5. IMPROVE IMPLEMENTATION OF EXISTING EU WASTE LEGISLATION

In ACEA's view, a wide range of existing EU legislation already has the potential to improve circularity and to foster recycling, that is, if these rules are properly implemented and enforced without contradicting each other. An essential starting point is to map this legislation, while considering sectorial differences and looking closely at their impact on resource efficiency in the circular economy package, as well as on how they interact with each other.

- 5.1 Extended producer responsibility for cars (already implemented for 15 years through the ELV-Directive 2000/53/EC)
 - 5.1.1 The ELV Directive forms the statutory framework of end-of-life related requirements for economic operators. Fulfilling the main objectives of preventing abandoned vehicles and reducing the amount of (untreated) waste going to landfill, the directive stipulates increasingly stringent recycling and recovery targets of up to 85% / 95% in 2015.
 - 5.1.2 The ELV Directive has proven highly effective in preventing waste disposal from vehicles, increasing re-use, recycling and recovery, as well as ensuring that ELVs are treated in an environmentally sound way. Hence, both the directive and regulated industries are already contributing to the European principles laid down in the Resource Efficiency Roadmap (COM (2011) 571 final) by striving for the highest recycling and recovery quotas. The shared responsibility concept obliges the respective stakeholders to contribute actively to a reliable responsibility scheme.
 - 5.1.3 By creating this legal framework, authorities took an important step toward installing a consistent regulatory framework. However, enforcement is still lacking to a certain extent for the moment. ACEA calls for the enforcement of existing legislation in order to create a level playing field in the ELV recycling business, as well as a mandatory registration and de-registration system that includes a compulsory certificate of destruction (CoD) to demonstrate proper ELV treatment and support monitoring.

5.2 **Eco-design** (already applied by the automotive industry before and beyond the ERP Directive 2005/32/EC: eg as part of the EU Vehicle Type Approval process/RRR-Directive)

5.3 Regulations for industrial and product related emissions

5.3.1 Production phase: the Industrial Emissions Directive (2010/75/EC) ensures a high level of protection of the environment. This means that the entire environmental performance of a production plant must be taken into account, covering for example emissions to air, water and land; generation of waste; use of raw materials; energy efficiency; noise; prevention of accidents; and restoration of a site upon closure.

5.3.2 Use phase: CO₂ legislation and Euro norms set mandatory emission reduction targets for new vehicles. This legislation ensures improvement to the fuel economy of vehicles and a reduction of pollutant emissions.

5.4 REACH

5.4.1 To promote an accelerated uptake of the circular economy approach, hindrances stemming from the REACH regulation should be thoroughly reviewed and revised, or even removed where necessary. Recycling operations, and the use of secondary raw materials containing certain substances above a threshold, cannot be carried out in the value chain without prior authorisation. Any requirements that restrict the ability to recycle materials will lead to more waste ending up in landfills and increased use of virgin materials. The benefits of recycling and phase-out regimes for potentially hazardous substances have to be balanced, including sufficient lead-times to develop and introduce technically reliable and safe substitutions.

5.4.2 The requirement to seek REACH authorisations for spare parts (and particularly for legacy spare parts¹) production in Europe is also a barrier to circularity, given the absence of a spare parts provision in the REACH regulation. The availability of spare parts is crucial to facilitating the transition to a more circular economy. Since the supply of spare parts is also regulated at the national level, a long-term availability obligation

¹ In the automotive sector a legacy part is defined as any part of an end product for which mass production has ceased or in case of a granted authorisation before the end of the review period (spare parts).

must be fulfilled. Spare parts for vehicles must meet the quality requirements and performance demands of the original part and function. Thus in order to ensure road safety, modified vehicle components may need to be intensively tested, both as individual parts and in assembly together with associated components. In particular for safety-related spare parts such as brakes or airbags, re-validation has to be based on the original vehicle, production of which in most cases will have been ceased years before and thus is no longer available. All new material restrictions in the ELV Directive have a 'repair as produced' exemption for spare parts that were not originally designed to be compliant with new material restrictions.

6. RECOGNISE THE TECHNICAL, ECONOMIC AND ENVIRONMENTAL LIMITATIONS OF RESOURCE-EFFICIENCY TARGETS

It is essential to reach consensus among all stakeholders on which resources should be addressed by the Commission's initiatives and what is meant by resource efficiency. Definition and related indicators will have to be different for other sectors, companies, member states and regions.

6.1 Resource efficiency definition

Resource efficiency should reflect the nature and quantity of resources per produced unit of product. Resources can be qualified according to applicable and relevant environmental, economic, social and dependency factors (such as geographic availability). It is evident that conflicting targets can exist where these factors overlap and also within each of these dimensions (trade-off between CO₂ reduction targets and additional use of innovative materials, for example in the case of electric vehicles). We call on the European Commission and all interested stakeholders to initiate a scientific discussion to further work on an adequate definition of resource efficiency in relation to the overall circularity concept.

6.2 Ensuring a global level playing field

Raw material and product flows – including secondary raw materials – are global. To make best use of a circular economy approach, we need a global perspective instead of limiting our efforts to single countries or regions. Dismissing the fact that the EU is part of the global economy, means that European competitiveness could be severely compromised and harm our ability to reach resource efficiency objectives. A circular model should not jeopardise EU imports and exports. For example, the international competitiveness of producers based in the EU should

not be negatively affected in terms of trade volumes by increased administrative burden. European industry strongly depends on the import of raw materials and global material cycles. The circular concept should primarily aim at securing more access to, and quality of, secondary and primary raw materials. We need to acknowledge that for the foreseeable future, recycling alone cannot provide all the resources that Europe's economy and society need.

6.3 Resource efficiency indicators

Specific value chain information would be necessary to measure the resource efficiency along a product's life-cycle. Europe's automobile manufacturers are supplied by thousands of different companies, providing different parts from all over the world. Gathering detailed information on resource use from all these global supplies is impossible. The EU should particularly aim at avoiding an increase of administrative burden on European companies, as such an increase would result in European suppliers being replaced by foreign ones, not bound to such rules. This would only harm the competitiveness of Europe's economy, without achieving the overall objective. A resource productivity target set by the EU (using the lead indicator – material input / GDP – as a parameter for the resource efficiency) would simply contradict the holistic approach of the circular economy approach. The use of such an indicator would ignore the variety of accompanying requirements and would lead to a situation in which targets would be fulfilled by simply importing most products, rather than maintaining and strengthening the industrial base of Europe.

ACEA is confident that a circular economy approach, combined with the renewed industrial policy and better regulation agenda of the European Commission, will contribute to increasing overall resource efficiency and environmental performance in Europe without harming the competitiveness of its industry.

ABOUT ACEA

ACEA's members are BMW Group, DAF Trucks, Daimler, Fiat Chrysler Automobiles, Ford of Europe, Hyundai Motor Europe, Iveco, Jaguar Land Rover, Opel Group, PSA Peugeot Citroën, Renault Group, Toyota Motor Europe, Volkswagen Group, Volvo Cars, Volvo Group. More information can be found on www.acea.be.

ABOUT THE EU AUTOMOBILE INDUSTRY

- Some 12.1 million people - or 5.6% of the EU employed population - work in the sector.
- The 3.1 million jobs in automotive manufacturing represent 10.4% of EU's manufacturing employment.
- Motor vehicles account for €396 billion in tax contribution in the EU15.
- The sector is also a key driver of knowledge and innovation, representing Europe's largest private contributor to R&D, with €41.5 billion invested annually.

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