

ReCiPSS

D9.7 – Policy Brief

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Introduction

The circular economy offers solutions that can contribute to economic growth and concurrently satisfy sustainability ambitions. It tackles the root causes of global challenges, such as climate change, biodiversity loss, and pollution. Compared to a linear economy, which is based on the take-make-dispose principle, a circular economy is a regenerative system by design based on optimizing resource consumption and reducing waste. To enable the industry to transition smoothly to a circular economy, governments and industries must share a common direction to prevent fragmentation and reduce complexity and uncertainty.

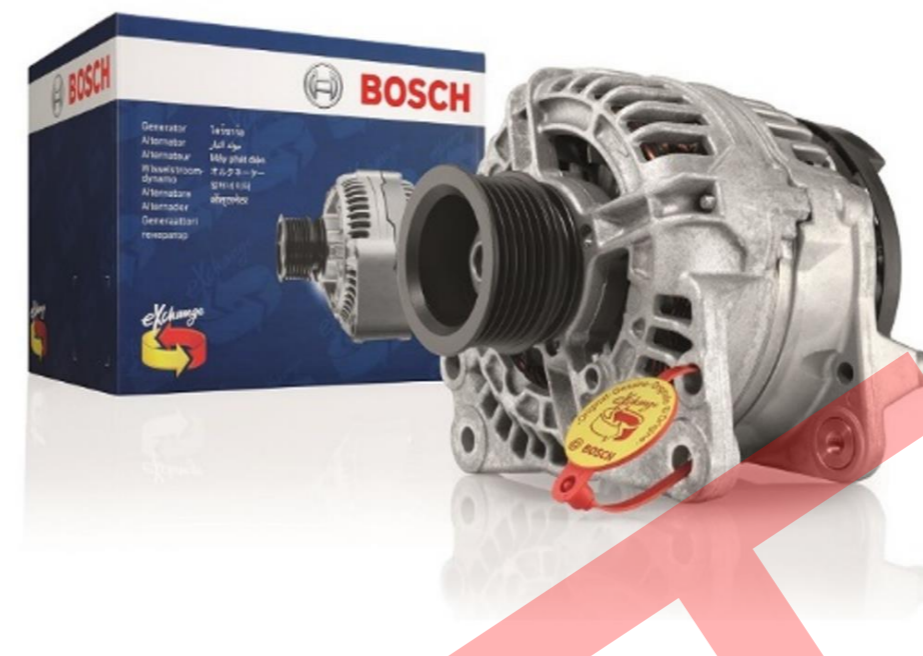
Objective

This policy brief addresses obstacles and barriers implementing the circular economy in the manufacturing industry in the EU. It also presents a set of interrelated measures, based on the results of the ReCiPSS project, to create a product policy framework that promotes sustainable products, services, and business models, particularly in the Automotive and White Goods industry. The product policy framework should help governments and industries make a rapid transition from the established linear economy to a circular economy by reducing regulatory ambiguity, economic uncertainty and aligning government and business goals to achieve common objectives. The proposed measures should motivate companies to increase their circular economy activities. The result is to reduce waste within the EU, ensure a well-functioning internal market for high-quality secondary raw materials, and fully contribute to climate neutrality.

The ReCiPSS Project

ReCiPSS refers to *Resource-efficient Circular Product Service Systems*, an EU-funded project in the H2020 innovation action. The project's overarching goal is to demonstrate the implementation of circular manufacturing systems addressing different aspects of the industrial and business environment. Two large-scale demonstrators include case studies from the White Goods and Automotive sector represented by project partners Gorenje and Bosch. The project gathers 13 partners from 8 countries and is being coordinated by the KTH Royal Institute of Technology in Sweden with support from an unique consortium of experts from four research and nine industrial partners.

ReCiPSS Industrial Demonstrators



Automotive Demonstrator



White Goods Demonstrator

01 Double taxation on circular products

Value-added tax (VAT) is levied at several value chain stages. Hence, for circular products, VAT is charged on a product's forward and return flow, see the German "[Altteilsteuer](#)", for example. Thus, the design of the VAT sets ecological disincentives with regard to circular products. This rewards the one-time use of products compared to multiple life cycles and obstructs the introduction of circular business models.

Potential Solution

Re-used products in the circular economy should be exempt or eligible for a deduction from VAT. Alternatively, raw material taxes could be applied on new products based on resource depletion, future amounts of emissions or waste, and substitution of virgin material resources with secondary and recycled materials to encourage a circular economy.

02 Lack of financial incentives for service-based business models

Currently, service-based and product-based business models are in the same taxation category, see, e.g., "[Umsatzsteuergesetz](#)" in Germany. The introduction of service-based business models in both demonstrators showed that, e.g., reverse logistics, inspection costs, and value retention processes lead to higher costs. The same level of taxation and potentially higher costs may not be economically motivating for manufacturers and service providers.

Potential Solution

Creating financial incentives such as reducing taxation on service-based business models or End-of-Life activities, such as remanufacturing or repair, through, e.g., reduced VAT on products and labor costs, (e.g., [Revision 2016:1055 of the income tax law 1999:1229 in Sweden](#)) can encourage both small and established players in the market to adopt circular business models.

03 Difficulties in harmonizing the markets across countries

Through country-specific standards and regulations, e.g., according to the Undersecretariat of Foreign Trade, the importation of used or remanufactured automotive parts and/or vehicles is not permitted in Turkey, so the remanufacturing industry faces unnecessary hurdles in international trade. In most cases, these provide no additional benefit to the consumer but increase supply chain costs and complexity in the aftermarket.

Potential Solution

It is necessary to take requirements of the circular economy into account in free trade agreements, e.g., as mentioned in the [Free Trade Agreement between the EU and the United Kingdom](#) concerning tax regulations for spare parts for aircraft. The objective must remain to create global standards and incentivize or facilitate the aftermarket stakeholders to promote a transnational circular economy.

04 Misleading labeling ‘Used products labeled as waste’
With the definition of ‘waste’ as in [Directive \(EU\) 2018/851](#) and the [EU Waste Shipment Regulation \(EC\) No 1013/2006](#), cross-border transportation of used products can cause difficulties if the product is intended to be remanufactured and is labeled as ‘waste’. Especially for international shipping, this could result in discarding used products instead of remanufacturing them.

Potential Solution

EU legislation and standards should declare used products as ‘products intended to be re-used, remanufactured, or refurbished’ and not as ‘waste’, like, e.g., in Germany “[Kreislaufwirtschaftsgesetz \(KrWG\) § 3](#)”. It should also be possible to declare disposed products (waste) as ‘used products intended to be re-used, remanufactured, or refurbished’ again in the waste treatment process. This would allow further processing, e.g., remanufacturing, as the waste status of a product could be revoked.

05 International remanufacturing process and quality standard
There are different standards for remanufacturing processes and product quality. There is a lack of standards that define and benchmark the remanufacturing process, establish specifications that distinguish remanufacturing from other practices, and address the impact of remanufacturing processes on product safety.

Potential Solution

Developing a standard to define a common understanding of remanufacturing processes to which remanufacturers can refer and commit. Compliance with defined requirements can thus lead to certification of the remanufacturing company, whereby, comparable to [ISO 9001](#) on quality management systems, requirements are set for the organization and not the result.

06 Insufficient visibility of sustainable products for the customer
There is a lack of awareness of circular economy that encourages citizens to consume more responsibly. Hence, the demand for sustainable products is often low due to a lack of knowledge about the existing supply. For example, the alternative of buying remanufactured products is often unknown.

Potential Solution

Implement Green Public Procurement by decision-makers into national law. France’s ‘anti-waste bill for a circular economy’ ([Loi n° 2020-105](#)) is a good example of increased remanufacturing activities’ visibility, which increased the acceptance of remanufactured products within the French trade levels in the automotive aftermarket. The bill obliges automotive workshops to offer parts from a circular economy with priority to enable car drivers to create demand. A similar approach could be used in public procurement for the member states as well as for EU organizations.

07 Higher recycling rates are not an indication of an improvement in the circular economy
The minimum target requirements for the recovery of waste electrical and electronic equipment (WEEE) stated in the [Directive 2012/19/EU](#) are a shared indicator for recycling and re-use. Companies often prefer recycling over re-use or remanufacturing for economic reasons and still comply with these requirements. As a result, products that could be reused are nevertheless often sent for recycling, thereby losing the product value that could be preserved for further life cycles.

Potential Solution

The measures re-use and recycling should be weighted and incentivized differently within the minimum target requirements of the WEEE to give re-use priority over recycling (e.g. according to [KrWG § 6](#) in Germany). Furthermore, recycling targets should be separated by material category, so incentives are created to recover critical raw materials in the recycling process, for example.

