POLICY INSTRUMENTS
FOR EXTENDING THE
LIFE OF CONSUMER
DURABLES

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Abstract
Historically, environmental policy has focused on reducing the impacts of consumption in the energy and transport domains. With the emergence of the concept of ‘circular economy’, European Union (EU) states have begun focusing on prolonging product life by designing durable and repairable consumer goods such as furniture, white goods, IT products, and textiles. This Policy Brief presents five policy instruments for prolonging product lifetimes for wider adoption among G20: repair vouchers and repair funds; information on the service life and repairability of products; minimum product repairability requirements; ban on destroying unused goods; and criminalising planned obsolescence. The first three policies aim to promote product repair to extend product lifespan and decrease environmental impact by reducing purchases of new products. The remaining two policies intend to send normative signals to market players who deliberately destroy new products or reduce product lifespans through planned obsolescence. The G20 countries could explore the feasibility of developing similar policies to reduce the impacts of durable consumer goods.
The Consumption Challenge
Scientists agree that efficiency improvements and technological innovation alone will likely be insufficient to reduce greenhouse gas emission levels in line with the goals set by the Paris Agreement.\textsuperscript{1} They need to be accompanied by changes in consumption patterns and levels, too.\textsuperscript{2,3} Similarly, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services stresses that reduced material consumption is a fundamental leverage point for decreasing the pressure on biodiversity.\textsuperscript{4}

Many of the well-performing countries in SDG rankings, such as the Nordic countries, do not perform as well under SDG 12 (‘responsible consumption and production’) when consumption-based emissions of imported goods are considered.\textsuperscript{5} Historically centred around energy and transport consumption impacts, European environmental policies now increasingly target the life-cycle effects of diverse consumer goods.\textsuperscript{6} Products and services need to become more environmentally and socially sustainable, and aggregate levels of resources and energy consumed need to be reduced.\textsuperscript{7}

Early product-oriented policies focused on removing toxic substances, making products more energy efficient, and ensuring the collection and recycling of used products. With increasing awareness about the principles of circular economy, policies have been adopted or proposed aimed at prolonging the life cycle of products through enhanced durability and repairability.\textsuperscript{8} For example, the European Union (EU) has set minimum lifetime requirements for lighting products and vacuum cleaners. France and the EU have adopted policies that encourage consumers to repair broken products rather than discarding them, and to buy repaired and repairable products.

**A focus on product lifetimes**

Research indicates that it is often environmentally beneficial to prolong the lifetimes of most products,\textsuperscript{9} especially passive ones such as furniture and textiles, as well as IT products. Extending the lifetime of some product groups in the EU by five years could save around 10 MtCO\textsubscript{2} annually by 2030, equivalent to taking over 5 million cars off the roads for a year.\textsuperscript{10}
It is challenging to extend the lifetime of products as well as ensure that they have a ‘life’. In the EU and the United States (US), many products are never sold or used but are still destroyed. There are several reasons for product destruction. Overstocking and overproduction may lead to large volumes of unsold goods. Customer returns (to physical stores or e-returns) are not always resold, as the cost of repackaging and reselling is higher than the revenue from reselling the product. It is estimated that unsold clothing and IT products, with a total retail price of up to 20 billion euro, are destroyed annually in the EU.
G20’s Role
Given the situation described above, there is a lot of interest in developing public policies to address product-related problems, especially in Europe. The EU has started developing policies on right-to-repair and legal proposals for increasing the durability and repairability of products, while several EU member states have adopted national-level policies to address these issues.\textsuperscript{13}

In the following paragraphs, this brief presents the outcomes of a project that reviewed lifetime extension policies at various European national, regional, and local levels. The focus was on consumer durables—i.e., goods purchased less frequently than daily goods, such as food and personal hygiene products. Durable goods include furniture, white goods, IT products, and textiles. The main methods employed in the projects were literature reviews, expert workshops, and document analyses. Five potential policy instruments were found to be promising. These were analysed on design, potential environmental benefits, costs, and legal aspects. The policy instruments were:

- Repair vouchers and repair funds
- Information on the service life and repairability of products
- Minimum product repairability requirements
- Ban on destroying unused goods
- Ban on planned obsolescence

The first three policies are aimed at promoting product repair to extend product lifespan and thereby decrease environmental impact by reducing purchases of new products. The other policies are bans that send normative signals to market players who deliberately destroy new products or reduce product lifespans (planned obsolescence).

### 1. Repair vouchers and repair funds

The Austrian cities Vienna and Graz have introduced repair vouchers. During the first year of the scheme in 2022, 8,000 repairs were done in Vienna alone. The citizens receive a voucher, which gives them up to 50 percent reduction in the repair price, with a
maximum subsidy of about 1000 euro per year. Early evaluations of the schemes show that the vouchers may aid in changing consumer perceptions about repairs. There are also signs that consumers often invest in repairs with high-quality spare parts when public funds subsidise some of the costs. The vouchers can primarily be used by local repairers who serve several brands. Thus, this policy aims to support small repairers who often struggle financially. The scheme was criticised for restricting competition, since only small repairers can use the vouchers.

Not all cities or countries may be willing to use public funds to support repairs. Instead, money from product manufacturers, importers, or retailers can be used to subsidise repairs. France plans to begin a repair fund where producers will pay part of the costs of repairs for products that are no longer on warranty.

2. Information on the service life and repairability of products

France has introduced a mandatory repair index, which initially covered five product groups. The index uses five criteria that indicate how 'repairable' a product is: documentation; disassembly; availability of spare parts; price of spare parts; and product-specific aspects. Every product is assigned a score from 1 to 10 for each criterion. One year after the scheme's implementation, an evaluation by an NGO showed that most French consumers are aware of the index and find it helpful in purchasing situations. Several other European countries are considering a similar index. France also plans to introduce a durability index by 2024, which will provide more information about the durability of a product. The two indexes will be integrated into one.

A potential disadvantage of the indexes is that they would distort international trade if manufacturers must label their products differently in different countries. The EU is expected to harmonise national initiatives by introducing an EU-wide label, which could become a global tool for producers and consumers.

3. Minimum product repairability requirements

Lately, the EU has started regulating different aspects of repairability for some product groups, most
notably white goods. For example, manufacturers and producers must ensure that spare parts are available for professional repairers, and some parts should also be available to consumers. Spare parts must be delivered within a specified number of working days and professional repairers should have access to software needed for repairs. Dismantling of key components should be possible with commonly available tools. More such rules are forthcoming: EU rules on the repairability of cell phones and legal provisions about replaceable batteries in consumer products are expected in the near future.

4. Ban on destroying unused goods

Policymakers are concerned about the large volume of products that remain unused and go directly to landfills, incineration or, in the best case, recycling. Several European countries have started to address this problem: France has banned destroying unsold goods, Germany introduced mandatory reporting requirements for volumes of destroyed goods, and Belgium reduced a value-added tax (VAT) for products donated to charity. These policies are relatively new and have not been evaluated. However, preliminary research indicates that the French ban is ineffective due to limited reporting obligations and the practical problems associated with donating large volumes of goods. In March 2022, the EU proposed reporting obligations for European economic operators regarding the destruction of unused goods and rules that would make it possible to ban the destruction of unsold goods in the EU.

5. Criminalisation of planned obsolescence

In France’s Consumer Code, planned obsolescence is defined as “...a group of techniques through which a manufacturer or a marketer seeks to deliberately reduce the life cycle of a product in order to increase its replacement rate”. France has criminalised planned obsolescence. The legal text is intended to cover both product design and the use of software updates as a way to decrease product performance. Planned obsolescence is punishable by a two-year imprisonment and a 300,000-euro fine. The fine can be increased by up to 5 percent of the average annual turnover in proportion to the advantages drawn from the breach,
calculated over the last three known annual turnovers on the date that the events took place. While proving this crime is difficult, the criminalisation of obsolescence sends a clear signal to the market.
Recommendations to the G20
The policies outlined above are all European. The European product policy also significantly influences other countries, as many manufacturers worldwide want to comply with EU laws. However, leadership in Europe can also emerge at the national level, as exemplified by the French policies, or at the local level, as in the case of the repair vouchers used in Vienna and Graz. When international policies are being developed, it is essential to consider that eco-labelling schemes, the willingness of consumers to pay for green products, and existing systems to certify repairers can vary between countries.

In the context of the G20, several issues are relevant for policymaking and collaboration. First, EU policies on product durability and repair may influence product design positively, which may also be helpful for consumers outside Europe. This is because many manufacturers outside the EU develop product designs that comply with European laws, and some of these products will also be sold in other markets. Second, G20 countries can also learn from each other and emerging economies; some countries may be better at repairing products for economic reasons and have more repair shops and labour with relevant skills. Third, there could also be a reason for high-income countries to better explore and develop the community aspects of repair. Community repair is often non-profit and is built on ideas of learning together and sharing knowledge, extending product lives, and increasing attachment to products, thereby reducing product disposal and volume of waste.

Another aspect is the importance of local initiatives. The repair vouchers used by Austrian cities were tied to a network of local, small-scale repairers. There was considerable focus on developing and spreading the system locally. Such a system may also be a cornerstone of the local sharing economy where goods are shared among peers and organisations and must sometimes be repaired. Ultimately, repair is also a critical element in the circular economy, especially when it comes to supporting reuse.

There are several other policy options intended to support longer product lifetimes in addition to the five outlined in this brief. A promising way forward is
implementing policy packages, which are a mix of policies to gain substantial effects. This is because consumption habits are complex and occur in a particular context, resulting from various institutional, infrastructural, and cultural forces. A policy package is a combination of instruments that together increase the likelihood of achieving the set objectives and facilitate the implementation and legitimacy of the policy while minimising adverse side effects. The following is an example of a policy package that could support product repair and thereby promote sustainable consumption by bringing together regulatory, economic, and information-based instruments:

1. ‘Right to repair’ policy: This policy would require manufacturers to make repair information, parts, and tools available to consumers and independent repair shops and prohibit manufacturers from using software or other tactics to prevent third-party repairs.

2. Minimum product repairability requirements: This policy would require manufacturers to design easy-to-disassemble, repairable, and durable products. It would set minimum standards for repairability, such as the ability to replace batteries or other components.

3. Information on the service life and repairability of products: This policy would require manufacturers to provide consumers with information about the expected service life and repairability of products, such as through labels or online databases. This would help consumers make more informed purchasing decisions and encourage manufacturers to design better products.

4. Financial incentives for repair: This policy would incentivise consumers to repair rather than replace their products. This could include tax credits for repair expenses, repair vouchers, or subsidies for repair services and equipment.

5. Public awareness, education, and outreach: This policy would include public education campaigns and outreach programs to raise awareness about the importance of repair and sustainable consumption. These efforts may comprise repair workshops and training sessions to teach repair skills, in addition to organising public events and advertising campaigns to promote repair culture.
Combining these policies into a comprehensive policy package makes it possible to create synergies and reduce trade-offs between different policy objectives. Together, these policies could help promote repairability and reduce waste while supporting consumer choice and developing a more sustainable economy.

Research shows that administrative and economic instruments are often more effective at changing consumption patterns than informative instruments, but informative instruments can help and increase their acceptance. Different instruments in a policy package affect actors in different ways, e.g., producers/manufacturers, retailers, and consumers. Bundling policies in a package can counteract rebound effects that often undermine the effectiveness and outcome of standalone policies. The policies outlined in this brief show that a policy mix can: 1) use different incentives—e.g., a ban on the destruction of unsold goods or repair vouchers that incentivise repairs among consumers; 2) be adopted at different levels—e.g., the EU level, national level, and local level; and 3) address different actors—e.g., consumers and manufacturers.

The potential for implementing policy packages may differ between countries. For example, repairs are more common and cheaper in many developing countries than in the EU, but consumer law is less developed and consumer protection is weaker. The potential to support repair activities with public money may also differ among countries. In the near future, European consumers will likely have better access to spare parts than consumers in developing countries, as manufacturers will be mandated to supply such parts in Europe. There is no equal obligation to do so in many developing economies. Even when manufacturers want to supply spare parts, they often face barriers, as they must compete with cheaper, counterfeit parts, and many developing countries require costly certification of imported parts. Thus, countries need to cooperate on harmonising laws and standards and on sharing best practices, recognising that the specific design of a policy package to promote longer lifetimes and repairs depends on national, regional, and local contexts.
Endnotes


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