

A collection of various tools including tweezers, screwdrivers, and a utility knife are laid out on a wooden surface. A semi-transparent white box is overlaid on the left side of the image, containing the title text.

Encouraging Repair: Reducing Resource Consumption and Encouraging Local Economic Development

On October 7, 2015, the Repair Round Table was founded in Berlin with the goal of encouraging repair as a societal good. Representatives of environmental organizations and consumer protection groups, as well as representatives of the repair economy, industrial manufacturers, scientists, and repair initiatives were on hand to participate. The following explains the background that led to the founding of the round table and presents its shared recommendations.

The Repair Economy Must be Reinforced

We are not consuming goods in a sustainable manner. Mountains of garbage are growing, and the high level of energy and resources we consume endangers our climate. To reduce our ecological footprint, we have to begin using products for significantly longer periods of time. This will require all of us to create conditions in which goods can be repaired—an issue that has, to date, been practically ignored by political authorities.

Resource Preservation

Resources used during manufacturing are the dominant source of environmental utilization throughout the entire life of nearly all products. A new, highly energy-efficient laptop, for instance, must be used for several decades just to recuperate the energy that was expended to manufacture it [1]. Aside from energy, a variety of other resources are also used during the manufacturing process. Mining for the tiny quantities of gold contained in each cell phone, for instance, creates 100 kg of tailings [2]. High-quality recycling processes can never be more than a second-best solution: even the most sophisticated recycling operations can only return a fraction of the raw materials used in modern products back to economic circulation. From an environmental perspective, there is no more alternative than extending the lifespan of products and repairing them as needed.

Local Economy

Social and economic arguments, as well, support the promotion of repair as a social good. Repairing goods creates skilled jobs. If the societal conditions were improved to encourage repair, new jobs could be created in many areas of our economy [3]. In Germany today, for instance, there are still around 10,000 specialist retailers and independent workshops that repair major appliances. If more IT products, household items, and office products could be maintained and repaired, the repair industry would account for well over 100,000 jobs in Germany alone.[4]

Repair is also seeing a significant grassroots revival: repair initiatives have been created all over Germany—proof that the topic is of interest to a growing number of citizens.

Up to now, the repair sector has been neglected in the political realm and local repair shops are increasingly disappearing from communities. This development affects both manufacturer repairs and repairs undertaken during and after warranty periods, which are usually completed by independent repair shops. A small number of European brand-name manufacturers advertise their maintenance services effectively alongside their partners in the repair sector. Still, the number of products on the market designed to be used for only a short time period is growing. These disposable products either can't or shouldn't be repaired—not by the owner and not by repair professionals. Given the rise of products that are essentially designed for the dump, it is now all the more important to significantly improve societal conditions for product repairs in general.

Even where products are fully repairable, independent organizations still face significant barriers to repairing and returning products back to the marketplace. Today, organizations employing the disabled and long-term unemployed, small retailers, craftsmen, independent workshops, and Repair Cafés are all affected by the fact that manufacturers aren't willing to make spare parts, service information, or software tools available to the public. Other times, spare parts for products are overpriced—a tactic that tacitly encourages consumers to replace the entire product instead of merely replacing the broken part.

Why Should the Political Sector Intervene Now?

The topic of repair has become a political issue in many European countries. In 2014, France introduced a law encouraging repair and consumer independence [5]. No such law is on the horizon in Germany, even though the most recent study financed by the German Federal Environment Agency (UBA) confirmed that the operating life for many electronic products has dropped [6]. The same trend is evident in many other consumer goods markets. From an ecological standpoint, the sharp decline of product life spans is not sustainable and must be curbed. Our

ability to repair all products must be increased—and repair must be made a more attractive and more competitive option in every respect. We need a true repair revolution to ensure a shift in thinking and a change in the direction of our society and our politics.

Currently, reducing resource dependency and finding effective potential approaches for future-oriented economic reforms is a major topic of discussion in various areas of environmental politics. These approaches include, for instance, a series of measures on the EU level to encourage the recycling economy and ProgRess [7] in Germany. Goal 12 of the Sustainable Development Goals also needs to be rethought in this regard. This is why the Repair Round Table is requesting that political authorities include lengthening product life spans through repair as an important aspect in these debates. This could occur, for instance, through a new series of measures on the recycling economy in the EU, strengthening the national program for resource efficiency, implementing a waste avoidance program, further developing the EU eco-design guidelines, or elaborating the lower-level regulations of the Recycling Management Law or the Electrical and Electronic Equipment Act. In this way, governments could advance the goal of resource preservation while stimulating local labour markets and advancing climate protection.

Political Recommendations

We call upon the German political sector to promote repair as a significant element of resource preservation. This has not occurred to a sufficient extent in the past. The following measures should be taken:

1) Access to spare parts: Manufacturers, retailers, and importers must be obligated to make spare parts available throughout the entire useful life of the product to all market participants.

2) Access to affordable spare parts: The price of spare parts must be reasonable and well-founded in relationship to their manufacturing costs. A legal right to the availability of spare parts under these conditions must be ensured. Furthermore, devices must be constructed in such a manner that the price for functional spare parts does not exceed 20% of the non-binding recommended purchase price from the manufacturer.

3) Access to spare parts from used equipment: Repair shops and initiatives must be allowed access to used equipment in a suitable manner in order to remove spare parts from them. Since manufacturers are legally obligated to prove that they dispose of all the devices they place on the market, removal of spare parts from this equipment must be taken into consideration during disposal.

4) Germany needs a reduced VAT rate for repair services and used goods: A reduced VAT rate for repair services and used goods makes

repairs more attractive. This strengthens the repair sector and creates incentives for manufacturers to market products that are easier to repair. In some European countries—including France, for instance—these tactics are already in use.

5) Repair-friendly product design: The design of a product determines, to a great extent, whether it will be possible to repair the product and adapt it to new technological standards. Gluing in components, such as batteries, can render the product non-repairable and greatly decreases its useful lifespan. Fixed, installed elements can make it impossible to replace parts. The ever-increasing integration of components can also prevent repairs or make them unaffordable—since individual components cannot be repaired or exchanged on integrated parts. The demand for repairability should be anchored in binding product requirements.

Repairability must be made visible to customers: Taking a cue from Austria's standard ONR 192102 2014, we urge that long-lasting, easy-to-repair products be identified as such for consumers in a transparent and reliable manner. Existing environmental seals, such as the "blue angel" should take repairability and long useful lives into account more seriously in their distribution criteria—making it easier for consumers to recognize truly long-lasting products.

6) Inform consumers: Consumers must be informed about the importance of maintenance measures and options for repair. This is why we call for the following:

- a) that information on the importance of maintaining products and options for product repair be included with products and provided on the internet.
- b) that wide-ranging informational and educational campaigns be initiated and funded in order to make the value of an extended product use for resources and environmental protection clear. These should also highlight the importance of maintenance and repair options. Publicity campaigns by repair initiatives and workshops aid this goal, and should receive funding for this reason.
- c) confusing advertisements must be monitored and discouraged. Advertisements for purchasing new products associated with environmental concerns must refer to the raw materials and energy used in their production.

7) Provision of technical data and diagnostic software:

- a) Technical documentation/data relevant for repairs, diagnostics software, and product-specific tools must be provided to all repair businesses and voluntary repair initiatives. This should preferably be done through digital means and should be free of charge.

- b) Validated quality assurance systems by manufacturers can provide consumers with useful information on the qualifications of repair businesses. The mechanisms established for many years in the field of independent vehicle repair (the availability of spare parts, comprehensive service documentation, and diagnostics software for all independent workshops) must also be a matter of course in other product sectors.
- c) Gathering information relevant for repairs should be supported. Associated activities such as the digitalization of “older” operating manuals cannot be criminalized.
- d) Manufacturers should be obligated to provide construction data on unavailable spare parts free of charge, or at a price that stands in a reasonable and well-founded relationship to the manufacturing costs of the spare part. This ensures that replica spare parts can be produced (for instance, through 3D printing).

8) Authorize repairs for more specialist companies, even during warranty periods:

We call for specialist companies to be authorized to complete necessary repairs during warranty periods, and for the hurdles for this authorization to be as low as possible.

[1] Prakash et al (2012) Time-optimized use of a laptop computer in view of ecological concerns: <https://www.umweltbundesamt.de/publikationen/zeitlich-optimierter-ersatz-eines-notebooks-unter>.

[2] Earthworks (2007) Cellphone Recycling Report Card, S.4:
https://www.earthworksaction.org/files/publications/RecyclingReport_v2.pdf

[3] The EU study “Study on Socioeconomic impacts of increased repairability” accounting of the effects on employment that result from improving the societal conditions for repair. Also: RReuse (2015) - Briefing on job creation potential in the re-use sector:

<http://www.rreuse.org/wp-content/uploads/Final-briefing-on-reuse-jobs-website-2.pdf>

[4] Repair Revolution (2014). Repairing instead of trashing – is it worth it?:

<http://www.reparatur-revolution.de/antrieb/>

[5]Assemblée Nationale (2014) Loi Consommation: <http://www.economie.gouv.fr/loi-consommation>

[6] Oehme, Ines (2015) Fact check – Results of a study on the obsolescence of electrical and electronic devices. Symposium: Against Waste II.

http://www.umweltbundesamt.de/sites/default/files/medien/378/dokumente/04_oehme.pdf

[7] BMU (Hg), German Resource Efficiency Program (ProgRes) II draft dated August 17th, 2015



Arbeit für Menschen mit Behinderungen
GmbH (AfB)
Kontakt: Klaus Bölling



Stiftungsgemeinschaft anstiftung & ertomis
gGmbH (Repaircafés)



Bundesverband für Umweltberatung (bfu)
Kontakt: Gudrun Pinn



Blitz Blume Ingelheim
Kontakt: Heinrich Jung



Bund Umwelt und Naturschutz Deutschland
(BUND)
Kontakt: Rolf Buschmann



Deutsche Umwelthilfe (DUH)
Kontakt: Phillip Sommer



Germanwatch
Kontakt: Johanna Sydow



IFIXI GmbH
Kontakt: Matthias Huisken



Naturschutzbund Deutschland (NABU)
Kontakt: Sascha Roth



ÖKOPOL - Institut für Ökologie und Politik
GmbH
Kontakt: Dirk Jepsen



Netzwerk Reparatur-Initiativen
Kontakt: Tom Hansing



ReUse-Verein e.V. gemeinnützig
Kontakt: Stefan Ebel



Reparatur und Service-Zentrum
(RUSZ)
Kontakt: Sepp Eisenriegler



SERI
Kontakt: Christine Ax



Vangerow Service GmbH
Kontakt: Detlef Vangerow



Bundesverband Verbraucherzentralen
(VZBV)
Kontakt: Marion Jungbluth



Verband Kommunalen Unternehmen e.V.
Kontakt: Miriam Danner



Sustainable Design Center
Kontakt: Nikolaus Marbach