# REPAIR ECONOMY, BOTH ENVIRONMENTALLY AND FINANCIALLY BENEFICIAL

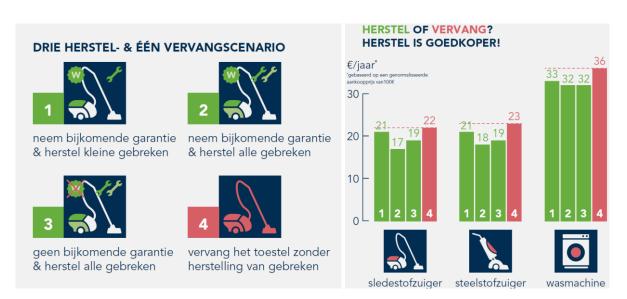
By repairing a product instead of replacing it (purchasing a new product), the **lifetime** of the product is extended. This saves materials and greenhouse gas emissions during the production of a new product. For products that consume a lot of energy, the balance must always be made between repairing the 'old' appliance or purchasing a new, more energy-efficient appliance. In order to map the **environmental impact** of products over their entire life cycle, OVAM developed the **Ecolizer** design tool - <u>ecolizer.be</u>.

In addition to the environmental benefits, repairing products can also be **financially beneficial**, as a study by VITO and KU Leuven (2018) shows.

OVAM supports re-use centres, manufacturers and other players who are committed to product life extension, maintenance, repair, remanufacturing, refurbishment, etc. in order to expand and modernise their activities.

#### REPAIR IS CHEAPER THAN REPLACEMENT

Commissioned by the Benelux Union, VITO and KU Leuven investigated what the most financially beneficial scenario is: repairing or replacing a device? They did this for 3 products (a cylinder vacuum cleaner, a stick vacuum cleaner and a washing machine) and for 4 scenarios (3 repair scenarios and 1 replacement scenario). In 2 repair scenarios, the consumer takes an 'additional warranty', which means that the warranty is extended subject to an additional payment.

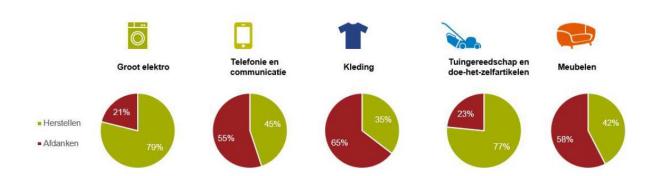


The modelled scenarios for the 3 products (left). The cost of repairing versus replacing 3 products, 'Life Cycle Cost' expressed in €/year (right). Source: VITO, KULeuven (2018)

From a consumer perspective, for each strategy, the total financial cost associated with purchase, use, repair and disposal was modelled. Over the entire life cycle of the device, all three of the repair scenarios investigated are **cheaper** than the replacement scenario. This finding applies to repairs on the current generation of energy-efficient appliances, unless the expected end of life of the appliances has been reached.

The study showed that three main criteria were essential for repairability: **Information provision**, **product design** and **repair services** offered by the manufacturer.

## CHOICE TO REPAIR LARGE ELECTRICAL GOODS AND TOOLS



Reaction of Flemings to products that are broken: have them repaired or scrapped? Source: GfK Belgium (2017)

The action taken by Flemings when a product breaks down depends on the product group. According to GfK Belgium (2017), the products investigated by VITO and KU Leuven (2018) are often repaired. For large electrical goods and gardening tools or DIY products, a majority of 79% and 77% respectively will try to repair them. In the telephony, communications and furniture categories, more than half choose to discard the product. In the case of clothing, 2 out of 3 Flemings opt to discard it instead of having it repaired.

### WANT TO KNOW MORE?

In Flanders, Repair Cafés are organised on a regular basis in many municipalities. Repair Cafés are free meetings, organised by motivated volunteers. Local authorities and associations sometimes assist with infrastructure and materials, and some thrift stores are also involved. Netwerk Bewust Verbruiken supports the organisers with practical information and communication material. A local working group, including volunteers with technical knowledge of the maintenance and repair of various product groups, organises and communicates locally about the event. This ranges from clothing to electrical appliances, furniture, bicycles, computers and other electronics. Visitors bring their own products, which can be checked for repair or maintenance, and work together with the (voluntary) experts.

The network of Repair Cafés will be expanded from 2019 under the <u>vzw Repair&Share</u>, whereby the operation will also expand other activities and concepts about repair and sharing knowledge about the repair and life extension of various products.

For specific product groups, such as electrical and electronic equipment, there are organisations that arrange training and courses on the subject of repairs (<u>VOLTA</u>)., among other things

Products are also repaired or furbished for reuse in the **re-use centres**. These centres have built up experience and knowledge in a wide range of product groups, including the inspection and repair of waste electrical and electronic equipment (WEEE). In addition, there is a varied range of repair and refurbish opportunities in the commercial sector and sharing economy, through the recognised platforms for matching supply and demand for repairs.

## **SOURCES**

GfK Belgium (2017), Milieuverantwoorde consumptie: monitoring kennis, attitude en gedrag, Study on behalf of the Government of Flanders, Department of the Environment.

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VITO, KU Leuven (2018), Repairability criteria for energy related products, Study in the BeNeLux context to evaluate the options to extend the product life time, Study on behalf of the Benelux Union. <a href="mailto:benelux.int/nl/publicaties/publicaties-overzicht/repairability-criteria-energy-related-products">benelux.int/nl/publicaties/publicaties-overzicht/repairability-criteria-energy-related-products</a>