Extending product lifetime
Case study

L'INDICE DE RÉPARABILITÉ

REPAIRABILITY INDEX

- **Website:** ecologie.gouv.fr/indice-reparabilite
- **Country:** France
- **Sector:** Electronic
- **Strategy for product lifetime extension:** repair, eco-design requirements, extended producer responsibility

The index goal is to inform the repairability of electrical and electronic devices

The problem

In 2019, France generated 1.362 million tons of e-waste[1], becoming one of the top 10 e-waste generators in the world, while its recycling rate was only 32%[2]. On the other hand, 77% of Europeans say they would rather repair than replace a damaged device[3]. However, it is challenging to do so as manufacturers have no formal commitment to make products easier to repair. In response to this challenge, the French government created the Repairability Index in 2020 as part of the Anti-Waste and Circular Economy Law to facilitate the repairability of electrical and electronic products and the reuse of spare parts. The goal is to increase the proportion of repair products from 40% to 60% by 2026, considerably decreasing its rate of e-waste.

What it does

The Repairability Index is a mandatory display that manufacturers must add on electrical and electronic equipment to inform about its repairability. By displaying a score out of 10 — based on dimensions including how to take the product apart and the availability of spare parts —, people can understand if the device is easy to repair, difficult to repair, or impossible to repair, encouraging them to choose more repairable options.
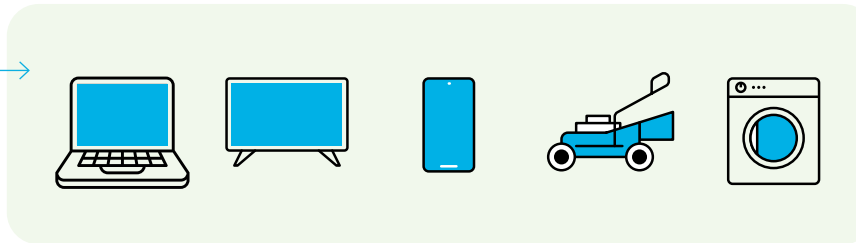
▶ Watch a video here

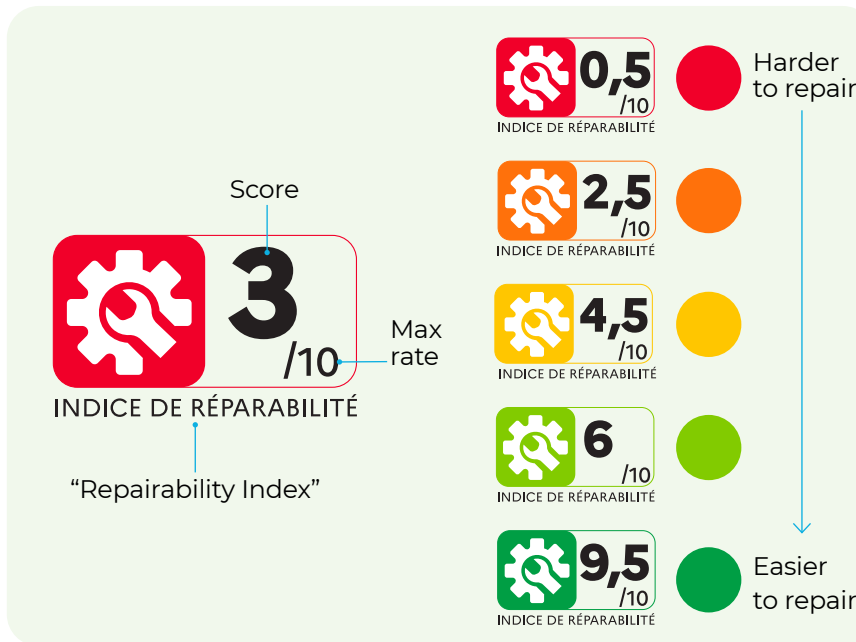(1) Euromonitor, (2) Statista, (3) SGS

How it works

Product categories: the index initially covered nine categories of electrical and electronic products: computers, TVs, smartphones, lawnmowers (wired, batteryoperated and robotic), washing machines, top-loading washing machines, dishwashers, vacuum cleaners, and high pressure cleaners.

The score: the Reparability score ranges from 0 to 10, in which 10 is considered the best and therefore the most reparable option. It's calculated based on the following dimensions:

1. **Documentation:** the manufacturer's commitment to making technical documents available free of charge, in number of years, to repairers and consumers

2. **Disassembly and tools:** the ease of disassembly of the product, the type of tools required, and the characteristics of the fasteners

3. **Spare parts:** the manufacturer's commitment to spare parts availability and delivery time

4. **Pricing:** the ratio between the manufacturer's selling price of spare parts and the price of the product

5. **Specific aspects:** sub-criteria specific to the product category concerned

Score

3 /10

Max rate

INDICE DE RÉPARABILITÉ

"Repairability Index"

0,5 /10
INDICE DE RÉPARABILITÉ — Harder to repair

2,5 /10
INDICE DE RÉPARABILITÉ

4,5 /10
INDICE DE RÉPARABILITÉ

6 /10
INDICE DE RÉPARABILITÉ

9,5 /10
INDICE DE RÉPARABILITÉ — Easier to repair

The score is displayed on a wrench logo with color gradations showing the level of reparability: green is very good, and red is very bad. It must be displayed close to the price at the point of sale or on any advertised product page. Furthermore, the manufacturer must make it available to anyone who requests it.

The challenges

Experts indicate that one limitation of the Repairability Index is how easy it can be to obtain a good grade, especially on specific aspects of the product. Laptops, for example, can gain 1 point out of 10 by indicating the objective of a software update (corrective, upgradable, or mixed). This can be considered a free point as the information doesn't limit software obsolescence. In that sense, authorities are looking for ways to tighten that criteria during the first revision.

Transparency is also a relevant aspect to be considered. Once the score is self-declared by manufacturers, it should be sufficiently verifiable by consumers. Additionally, there is a concern that the French market surveillance authorities (MSA), who are responsible for verifying the products' compliance, might not have enough resources to do so extensively.
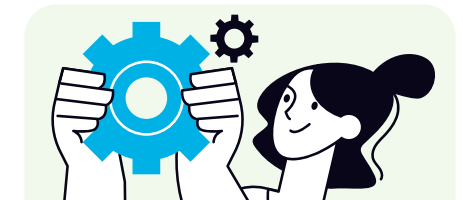
More about the Anti-Waste and Circular Economy Law

The Anti-Waste and Circular Economy Law (known as the AGEC Law), signed in 2020 in France, aims to eliminate waste and pollution from the design stage and transform the linear model of production, distribution, and consumption into a circular model.

It encourages businesses across various sectors, municipalities, and citizens to adopt more circular practices. It addresses and measures five main topics:

1. **Phasing out of disposable plastic**
2. **Better informing consumers**
3. **Fighting against waste and for solidarity reuse**
4. **Acting against planned obsolescence**
5. **Better production**
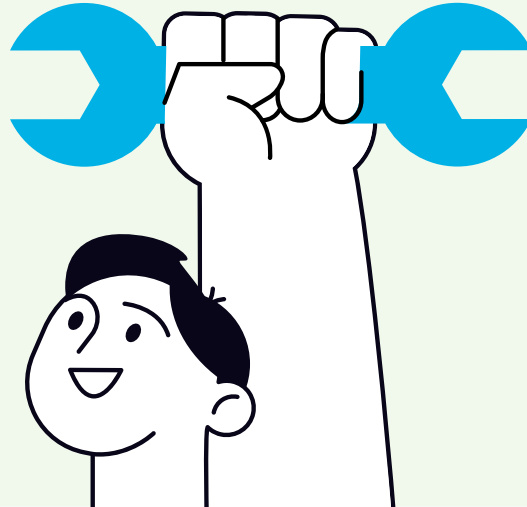
The law's objectives for electrical and electronic production and consumption are: to facilitate the repair and the use of spare parts, to create a repair fund, to extend the legal guarantee of products and make that information mandatory, to prohibit the destruction of non-food unsold products, to encourage eco-designed products with a bonus-malus system, and to promote the Repairability Index to help consumers to make better choices.

> "It is a tool in the fight against **obsolescence** — planned or not — to avoid the premature disposal of products and preserve the **natural resources** used in their manufacture

France's environment ministry