DESIGNING FOR REPAIR

LESSONS FROM THE EU'S *RIGHT TO REPAIR* MOVEMENT

Across Europe, the way we think about product design is changing. The traditional model of consumption, where products are made, sold, used, and then discarded, is giving way to a more circular vision. Durability, repairability, and remanufacturing are no longer niche ideas; they are increasingly at the centre of product policy and innovation.

At the forefront of this shift is the Right to Repair movement, which calls for products to be designed so that they can be fixed easily, affordably, and for many years after purchase. In the European Union, this movement has influenced a wave of legislative changes that aim to make repair more accessible. But while progress has been made, the road to a truly repairable product ecosystem is still long.

To understand the opportunities and challenges, we spoke with Cristina Ganapini, Coordinator of the Right to Repair Europe coalition, whose advocacy has shaped much of the current policy landscape.

She points to recent EU regulations, such as the Battery Regulation, the minimum eco-design requirements for smartphones and tablets, and the Right to Repair Directive, which have introduced important new measures. These include requirements for easier device disassembly, mandatory spare parts availability, repair scores, and obligations for manufacturers to provide repair services even after the guarantee period.

Cristina views these steps as significant but not transformative. "The direction is promising," she says, "but the scale and pace of change fall short of delivering a universal Right to Repair and unlocking viable circular business models." As of 2025, only a small number of product categories are covered by repairability rules, and often only specific parts are accessible. Many products still sit entirely outside any legal obligation to be repairable, and even where laws exist, enforcement remains a challenge, with spare part pricing rules vague and software practices that impede repair still allowed.

Barriers to Effective Repair

Even with these regulations in place, significant obstacles remain in achieving truly repairable products. Change must begin at the design stage, yet many products are still built in ways that make disassembly difficult or impossible without specialist tools. Adhesives, proprietary fasteners, and sealed casings create unnecessary obstacles, while one of the most problematic trends is software-controlled parts pairing. This practice locks replacement parts via the manufacturer's software, preventing them from functioning unless "authorised" or paired. While the Right to Repair Directive addresses this

to some extent, Cristina warns that exceptions and vague definitions leave loopholes wide open.

Access to diagnostic tools, internal components, and repair information also remains patchy. "Without comprehensive access," Cristina notes, "both consumers and independent repairers face severe limits on what repairs they can carry out effectively." Even where repairs are technically possible, they often fail the affordability test. Price is consistently the number one barrier reported by both consumers and professional repairers. If a repair costs more than 20–30% of a new product's price, most people will choose to replace rather than fix.

Spare parts make up a large share of this cost. Ideally, their prices should be no more than 15–20% of the product's retail value. Yet in many cases, they are far higher, making repair uneconomical and undermining circular economy ambitions. This is why Cristina and the coalition are pushing for spare part pricing to be a core metric in repairability scoring and policy enforcement.

From Europe to the World

Alongside addressing these barriers, upcoming changes such as the EU's repairability label requirement have strong potential to influence both design and consumer choice. From June 2025, smartphones sold in the EU will display a repair score at the point of sale, similar to the French repair index. This score will be based on factors such as ease of disassembly, availability of repair guides, and access to spare parts. Cristina expects this to create a competitive incentive for manufacturers to improve repair-related aspects of their products. However, she warns that without including spare part prices in the score, the label risks misleading consumers. "A product might score high for technical repairability but still be prohibitively expensive to fix in practice," she says.

For marketers, these labels offer an opportunity to showcase a brand's commitment to sustainability and product longevity, provided the scoring system reflects real-world repairability. The EU, often a global trend-setter in product regulation, may well see its Right to Repair framework, even in its current limited form, set a precedent internationally. Manufacturers could choose to apply EU standards globally, avoiding the need to create separate models for different markets, which in turn could encourage better design and after-sales practices worldwide.

Yet for this influence to be truly impactful, EU policies must become broader and more enforceable. Cristina points out that the piecemeal, category-by-category approach slows progress. Clearer, more comprehensive standards are needed, particularly on spare part pricing, long-term software support, and rights for self-repair, if the EU is to accelerate the global shift towards circular product lifecycles.

> "We are not just fighting for the Right to Repair, but for the right to choose products that respect our environment and our intelligence.
>
> — *Cristina Ganapini*

Lessons for Industry and Policy

From our conversation with Cristina and the EU's evolving policy framework, several lessons stand out for manufacturers, marketers, and policymakers:

1

Design with repair in mind from day one, ensuring modularity, standardised fasteners and minimal adhesives.

2

Control the total cost of repair, recognising that affordable spare parts are as important as their availability.

3

Remove software barriers, since parts pairing and locked diagnostics undermine repairability.

4

Use repairability as a brand advantage by leveraging labels and scoring to communicate sustainability commitments.

5

Support broad, enforceable standards that close loopholes and apply across more product categories.

A Shared Responsibility

The Right to Repair is not just a policy issue; it is a design challenge, a market opportunity, and a consumer right. By aligning these dimensions, Europe can move closer to a product ecosystem where longevity is the norm and waste is the exception.

As Cristina reminds us, "We are not just fighting for the Right to Repair, but for the right to choose products that respect our environment and our intelligence." In the context of remanufacturing, this is not simply about extending product life, but about designing the circular economy into the product from the very start. ◼