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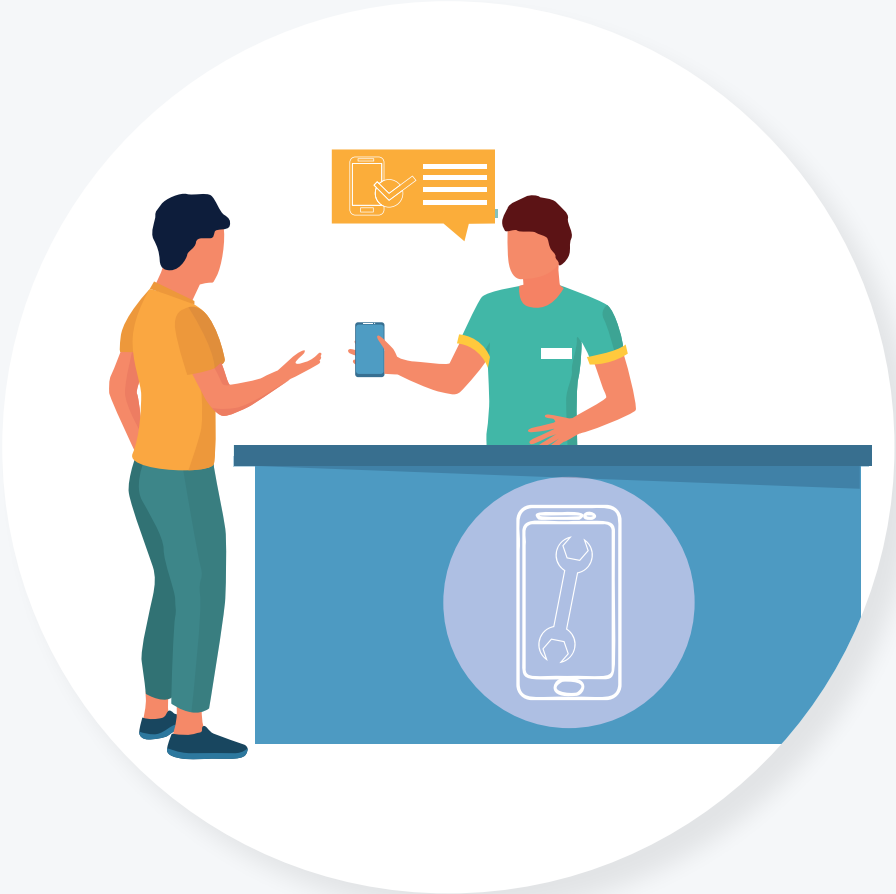
REPAIRING THE MARKET

How EU regulation is making it easier for consumers to repair faulty products

A cross-European repairability check



BEUC The European Consumer Organisation

The Consumer Voice in Europe

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The European Consumer Organisation (BEUC) is the largest organisation promoting the general interests of Europe's consumers. Founded in 1962, it proudly represents more than 40 independent national consumer organisations from over 30 European countries. Together with our members, we inform EU policies to improve people's lives in a sustainable and fair economy and society.

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WHY THIS MARKET CHECK

European consumers today seek products that are repairable. **Almost six in 10 people are willing to pay more for sustainable products that are easier to repair**, recyclable and/or produced in an environmentally sustainable way, according to a 2024 Eurobarometer survey. In Germany, a 2025 survey by the Federation of German Consumer Organisations (vzbv) found 89% of consumers consider the right to repair to be important. In the Netherlands, the Dutch consumer organisation Consumentenbond showcased more than 80% of their panel members think prioritising repair over replacement is a good approach. In Spain, a survey from CECU found 61% of consumers hold the repairability of a product very firmly in mind before buying it; furthermore, 72% would use a potential repairability label to decide whether to buy a product or not. In Austria, a survey from 2021 found that two-thirds (77%) of consumers would welcome a legal obligation for companies to provide repairability of goods. Furthermore, 79% wanted a label that indicates the repairability of purchased products.

This desire is not sporadic: repairability is a key factor in extending the lifespan of the products people rely on every day. When devices are designed to be easier to repair, they remain in use longer, reducing the need for frequent replacements. It also helps consumers save money by maintaining and repairing their existing products instead of purchasing new ones regularly. Beyond the consumer experience, repairability has broader implications: it can contribute to strengthening Europe's strategic autonomy, support the creation of local jobs, and help reduce environmental pressure.

A longer lifetime for products reduces the demand for imported raw materials, such as rare earths and critical raw materials needed to produce smartphones and other everyday goods.[1] This helps ease Europe's dependencies on external suppliers, while contributing to stable prices and materials availability.[2] At the same time, a strong repair system in the EU creates local jobs and technical expertise.[3] By fostering circularity in its internal market, the EU can reinforce its strategic autonomy and better absorb external geopolitical and economic shocks, which heavily strain both businesses and consumers.[4] Additionally, prolonging the lifetime of products cuts emissions and contributes to the EU decarbonisation goals, while reducing costs for consumers.

Consequently, repairability has become an increasingly important focus in EU policy. The Ecodesign framework, particularly through the revised Ecodesign for Sustainable Products Regulation (ESPR), has expanded its scope beyond energy efficiency to address resource efficiency more broadly. This includes a stronger emphasis on extending product lifetimes by improving their repairability. In parallel, the Right to Repair Directive - which is set to apply as of July 2026 - introduces measures to promote repair, such as requiring manufacturers to provide spare parts and repair services for certain consumer products, with the aim of reducing economic and practical barriers for consumers. Overall, these developments reflect a shift in EU policy towards linking product sustainability with resource efficiency and a more circular economy in supporting Europe's security and supply chain resilience.

Despite these signs of progress, access to repair remains low. **Consumers continue to face key barriers** because the majority of products in the EU do not yet have specific repairability requirements. This translates into **high repair costs, unavailability of spare parts and complex products design**, making repair an unattractive option.[5]

To assess the degree to which consumers can repair their products, BEUC coordinated a market check together with several member consumer organisations. The findings offer a snapshot of the repairability practices offered by selected brands in key EU markets to identify best practices, weaknesses, and opportunities to further foster a shift to repair over replacement. It also aims to evaluate the effectiveness of Ecodesign measures in enabling repair, by comparing product groups within the scope of EU requirements against product groups with no specific EU legislation.

1 EEA, Europe's consumption in a circular economy: the benefits of longer-lasting electronics 2020

2 Bruegel, A European circular single market for economic security and competitiveness, 2024

3 European Environmental Agency, Employment in the circular economy, 2025

4 Joint Research Center, The role of circularity in European strategic autonomy, 2025

5 BEUC, Improving consumers' access to product repair, 2023

Tracking the consumer's journey to repairability

This market check was conducted across six EU Member States (Austria, Denmark, France, Slovenia, Spain, The Netherlands), with the objective of mapping the consumer repair journey. The focus was on assessing how repair information, spare parts availability, and repair instructions are provided by the most common brands in each country, to understand the practical accessibility of repair for consumers.

The analysis covers two product categories: smartphones and battery-operated vacuum cleaners. Smartphones were selected as they are subject to repairability requirements introduced under Regulation (EU) 2023/1670 since late June 2025, while vacuum cleaners were included as a comparable category without specific EU repair requirements in place. This approach allows for a comparison between regulated and unregulated products, with the aim of identifying the impact of regulation on repairability practices as well as potential remaining gaps.

Brands and models were identified using market data collected by consumer organisations.[6] While efforts were made to assess the same brands and models across all six countries, adaptations were necessary in certain cases to reflect national market realities, particularly for lower-end brands that tend to vary more significantly across countries.

Finally, the sample included both newer and older product models, as well as different product ranges within brands. This approach was intended to capture potential differences in repair practices depending on time of market introduction and market segment, and to assess whether repairability practices vary between lower-end and higher-end models.

Given the limited number of brands and products examined, the exercise does not aim to produce statistically representative findings for the entire market. Instead, it provides a qualitative snapshot of current market practices and highlights key barriers that consumers face when they try want to repair their products.

WHAT WE FOUND

Main findings

We found clear differences between the two selected product categories, smartphones and vacuum cleaners, with the new Ecodesign rules for smartphones emerging as a key driver of better repair practices offered by brands.

First, we found that Ecodesign repairability requirements have a strong impact on the availability of spare parts and repair instructions. Smartphones, which are covered by Ecodesign repairability requirements, consistently offer better access to both spare parts and repair instructions, including for some older models. By contrast, battery vacuum cleaners, which are not yet subject to such obligations, show limited and inconsistent availability. For these cleaning appliances, practices vary widely across brands and countries, often making it difficult for consumers to identify and obtain the correct spare parts.

Second, where Ecodesign rules apply, companies are more likely to provide meaningful, repair-oriented guidance, while in their absence, repair information remains insufficient. For smartphones, repair instructions are generally comprehensive and enable consumers and repair professionals to carry out actual repairs. For battery vacuum cleaners, however, the information provided is typically limited to maintenance and basic troubleshooting, offering little practical support for repair.

Third, the cost of repair remains a major barrier across both product categories. Spare parts prices are high in many cases, reducing the attractiveness of repair, particularly when considering the overall cost of repair. For battery vacuum cleaners, the most expensive

6 Data provided by the six consumer organisations involved in the market check, as well as via the International Consumer Research and Testing Organisation (ICRT)

spare part we identified (a €281 battery) exceeded 50% of the product's original price.[7] For smartphones, the highest-priced component (a €400 display) accounted for around 30% of the product's original purchase price. This is particularly important given evidence gathered from literature and the Impact Assessment Study for the Common Rules Promoting the Repair of Goods adopted by the European Commission, which shows that consumers are highly sensitive to repair costs and are generally only willing to repair products when costs remain around 20-30% of the original purchase price.[8] When prices exceed this threshold, repair becomes significantly less likely. This finding suggests that, while regulation has improved availability, additional measures are needed to address repair affordability.

The case of smartphones

The new Ecodesign and energy labelling rules for smartphones, which include repairability obligations, have been in place since 20 June 2025. The Ecodesign Regulation introduces requirements to make spare parts and repair manuals available to end users, as well as to increase transparency on the price of spare parts. New smartphones also must display an EU-wide repairability score, as part of the energy label.

To assess impact of these new rules, we reviewed a sample of smartphones placed on the market after this date, alongside older models, to understand what changes, if any, have been brought about by the new obligations. Overall, the Ecodesign framework represents a positive step towards improving product repairability and longevity. Evidence gathered via this market check suggests that the new rules are beginning to deliver results, particularly for newer devices. However, some barriers to their effective implementation remain, such as difficult navigation paths to find the appropriate spare parts and related repair instructions and complex repair procedures.

Spare part availability

Spare part availability for smartphones is gradually improving, particularly for devices introduced after June 2025, which generally demonstrate stronger compliance with EU requirements to make spare parts accessible. This suggests that **the new regulatory framework is beginning to deliver tangible results** and is moving the market in the right direction. Yet some inconsistencies remain across countries, models, and release periods.

Athough many manufacturers provide listings of spare parts on their websites, actual access is not always guaranteed. In several instances, commonly needed components such as screens or batteries were listed but **marked as "out of stock."** This means that, while parts are theoretically available, consumers may still

be unable to obtain them when needed, limiting the practical impact of repairability policies. For spare parts that are in stock, the **average delivery time is five to seven days.** However, some brands report significantly shorter delivery times of just one or two days, which makes repairs more appealing to consumers since the wait to get a phone fixed is significantly reduced.

A clear divide also emerges between higher-end and budget devices in terms of long-term support. **Higher-end models tend to benefit from extended spare parts availability**, even several years after their release. By contrast, we found that some lower-cost devices released as recently as 2022 had little to no spare parts available, despite being less than five years old and likely to be repaired by consumers in case of defects. This raises concerns about the effective lifespan of such devices and whether they are being prematurely pushed towards replacement.

At the same time, there are notable examples of strong performance. In one case, a manufacturer continues to offer spare parts for a device released in 2015, including components such as batteries, cameras, and display modules. This demonstrates that long-term support is feasible and can contribute to increase brands' reputation for long lasting products.

Additional challenges stem from how spare parts

7 In our analysis we refer to price estimates of the cost of products at the time they were first introduced on the market, as collected by consumer organisations via the International Consumer Research and Testing (ICRT) organisation.

8 ADEME, Étude sur les pièces détachées pour la réparation, 2025

are distributed and presented to consumers. **Many manufacturers rely on third-party providers** rather than offering parts directly through their own websites. In these cases, it is not always clear whether the external platforms are officially affiliated with the brand, which can create confusion about who is responsible if parts are not delivered or if issues arise.

In many cases, there is **no straightforward link between spare parts listings and the corresponding repair instructions.** For example, a consumer looking to replace a screen may find the relevant part on one page, but must separately search for the repair manual elsewhere, with no direct connection between the two. On top of that, we found that part codes listed in repair manuals do not always match those shown on spare parts webpages, which can make it difficult for consumers to identify the correct component.

Finally, **availability is not uniform across markets.** The same model may have different spare parts accessible depending on the country. For instance, a back cover for a specific smartphone model was not available in two of the countries assessed, while it could be purchased in the other four. Such discrepancies highlight the fragmented nature of spare parts availability and undermine efforts to create a consistent and reliable repair ecosystem across countries.

Spare part prices

Our analysis indicates that the **display assembly is, on average, the most expensive spare part for smartphones**, particularly in the case of high-end models. For one high end device examined, the cost of replacing the display exceeds €400 across the six countries covered by our analysis. When compared to the average original retail price of the device,[9] this represents roughly 30% of the total cost. The proportion becomes even higher when considering the actual market value of the phone at the time the repair is carried out. This level clearly exceeds the commonly accepted repair threshold,[10] considering that the price of spare parts is only one of the components of the total repair costs faced by consumers (e.g. manpower, VAT, delivery costs). This reinforces the idea that high spare parts costs act as a major deterrent to repair.

In contrast, spare parts for lower- and mid-range devices are considerably more affordable. For example, the price of a display for a mid-level model assessed in the six countries was around €56 (or 10% of the product price). This substantial price difference illustrates how repair affordability varies depending on the segment of the device, with lower-end models generally presenting fewer financial barriers to exchange broken spare parts. Yet, it is not always easy to find replacement parts for some of these lower-end models.

The **battery is typically the second most expensive component.** Here too, a clear distinction emerges between high-end and lower-end models. For instance, the battery for a recent high-end smartphone model was priced at around €109 in the six countries (around 10% of the original price of the phone), whereas a comparable component for a mid-cost device was available for around €35 (around 5% of the original price of the phone).

The market check also identified **variations in spare part practices within the same manufacturer's product range**. In one case, an older flagship model (not covered by the new Ecodesign measures) did not allow the battery to be purchased separately, as it was bundled together with the display and frame. This combined component reached a price of up to €188 in one country, significantly increasing the overall cost of repair. By contrast, in the same county, a newer model from the same manufacturer offered these components separately, with the battery and display priced at approximately €40 and €117 respectively.

Finally, **price variations were observed across countries** for identical spare parts of the same device model. On average, the highest prices were found in the Danish market, while the other countries included in the market check displayed relatively similar price levels, with only minor differences. These findings suggest that, beyond product design and market segment, geographic factors also play a role in shaping the overall cost of repair.

Repair manual availability

We found that, for newer smartphone models, **most manufacturers do provide repair manuals.** However, accessibility remains uneven. In many cases, these manuals are difficult to locate on official websites and are typically available only in English, which creates an additional barrier for consumers in non-English-speaking countries. Access pathways also differ significantly: some manufacturers offer relatively direct and intuitive access to repair instructions, while others require users to navigate less transparent routes, such as entering specific search queries, scrolling through lengthy pages, or following redirects to third-

9 In our analysis we refer to price estimates of the cost of products at the time they were first introduced on the market, as collected by consumer organisations via the International Consumer Research and Testing (ICRT) organisation.

10 ADEME, Étude sur les pièces détachées pour la réparation, 2025 ; Impact Assessment Study for the Common Rules Promoting the Repair of Goods

party platforms hosting self-repair information. This complexity can discourage consumers to undertake repair.

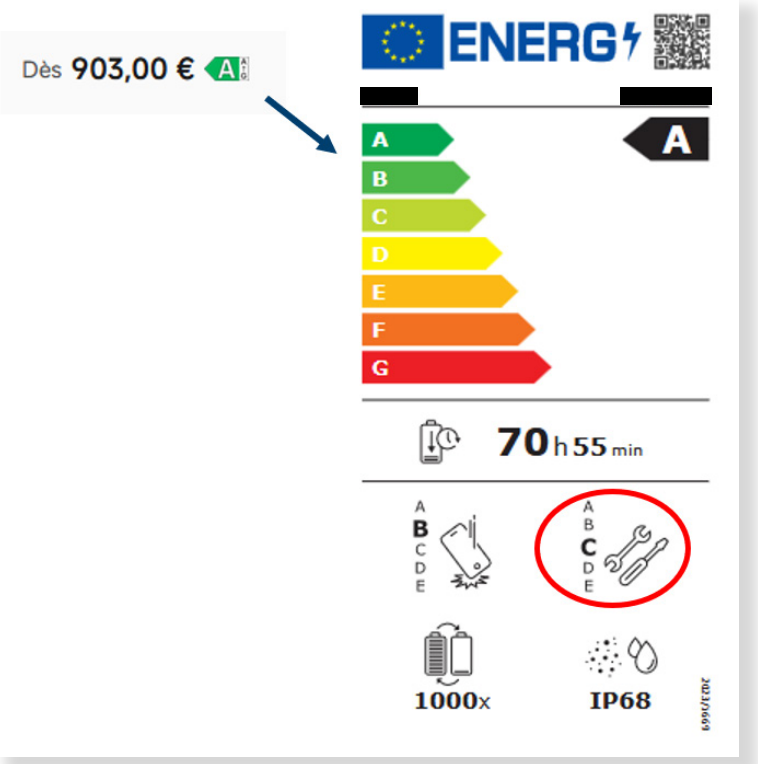
Clear differences also emerge when considering older device models. Some manufacturers continue to provide detailed repair manuals for devices released several years ago, including models introduced in 2021. In contrast, others **limit support for older devices** by offering only general repair guidance or no documentation at all, even for models that are less than five years old. This inconsistency reduces the feasibility of repair for consumers using slightly older, but still widely used, devices.

The quality of repair instructions is generally higher among higher-end smartphone models. Leading manufacturers in this segment tend to include detailed exploded diagrams, step-by-step visuals, and occasionally video guidance, all of which enhance user understanding of repair procedures. Despite this, practical accessibility remains constrained by **the complexity of procedures and frequent requirement for specialised tools**. Although such tools can often be purchased or rented online, they introduce additional costs and logistical hurdles. For instance, in Spain, one manufacturer offers a tool rental service priced at approximately €56 for a seven-day period, but this requires a temporary credit card authorisation exceeding €2,000. Such conditions represent a significant financial barrier, particularly for consumers, small repair shops and community repair initiatives like repair cafes.

For lower-end smartphone models, the availability and accessibility of repair instructions are even more inconsistent and vary considerably across countries. Manuals for newer entry-level devices are only sporadically available and are not systematically provided across all markets. In one example involving a model released in September 2025 and assessed across six countries, repair documentation was entirely unavailable in three of them, while in the remaining countries it could be accessed, although only via interfaces that were not particularly user-friendly or easy to navigate. This uneven provision further complicates repair efforts for consumers in certain regions.

EU repairability score

Most of the models we reviewed that were placed on the market after 20 June 2025 (the date when displaying an energy label became mandatory) did include a repairability score on the label. However, **it was not always immediately visible on the websites we checked.** On most of them, **only a small icon showing the energy efficiency rating is displayed, and users must click on it to view the full label.** This feature is not always available. As a result, the repairability score remains largely hidden and is unlikely to influence consumer decisions – especially online – unless it is presented more prominently.



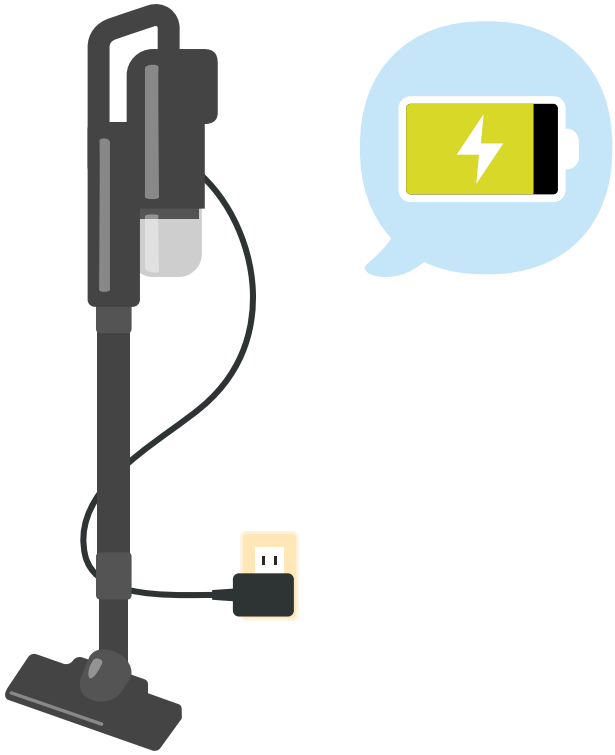
When shopping online, the energy label is usually displayed as a small icon indicating the energy class of the product, usually placed next to the price. This practice is allowed under the Energy Labelling Regulation, but it reduces the visibility of the entire energy label, including the repairability score, which is placed at the bottom of the energy label.

The case of battery vacuum cleaners

The current Ecodesign framework for vacuum cleaners does not impose specific requirements on manufacturers regarding repairability. However, this regulatory landscape is evolving. The European Commission is in the process of revising the applicable rules and is expected to publish draft measures later this year (2026), which are likely to introduce repair-related obligations comparable to those already in place for smartphones.

For our analysis, this creates a clear distinction between the two product categories. While smartphones are already subject to EU-wide repairability requirements, vacuum cleaners remain, for the time being, largely outside such a harmonised framework. The only exceptions are limited national initiatives, such as those implemented in France, which impose certain repair-related obligations at the domestic level.

This contrast provides a useful basis for our analysis. By comparing a product category that is already regulated at EU level (smartphones) with one that is not yet subject to equivalent requirements (battery vacuum cleaners), it becomes possible to assess how regulatory frameworks influence manufacturers' practices.



Repair manual availability

The assessment of battery-powered vacuum cleaners reveals a limited availability of repair information for consumers. In most countries examined, manufacturers do not provide dedicated repair manuals. Instead, what is often presented as **"repair documentation" consists primarily of maintenance guidelines** or troubleshooting instructions. These materials, such as troubleshooting decision trees, can be useful in helping users identify and resolve minor issues. However, they fall short of enabling actual repair, as they do not provide the detailed technical guidance required to disassemble, diagnose, and replace components. As a result, while such information is essential to keep products working for longer, it does not meaningfully facilitate repair.

Spare part availability

The availability of spare parts for battery vacuum cleaners varies significantly across countries, brands, and product ranges. **Out-of-stock messages appear for several of the spare parts we examined,** and availability for the same component can differ depending on the country. For example, the nozzle of a specific high-end model is available in the Netherlands and Austria, while it is marked as out of stock in Slovenia and Denmark. In France and Spain, the complete nozzle for the same model checked is not available, but certain internal components, such as wheels or rollers, are offered separately and are available.

There is a notable disparity between brands in the type of spare parts offered. Some brands provide extensive lists of components, while others limit their offerings to a smaller selection of accessory parts, such as nozzles, dust containers, and batteries. While comprehensive spare parts catalogues can be beneficial, they can also be difficult to navigate. This remains the case even when AI-assisted search tools are available. In particular, the existence of multiple versions of the same spare part (sometimes up to ten variations within a single product range) makes it **challenging to identify which part is compatible with a specific product.**

For lower-end products, which differ across countries depending on their relevance in each market, spare parts are even more difficult to identify. It was challenging to find suitable components for these products, and in one case, no information on repairability was available at all.

Delivery times for spare parts also vary considerably across countries and brands. For example, the motor of a specific model can be delivered in just under seven weeks in Austria, within two working days in France, and within five to eight days in Slovenia. More

generally, stated delivery times range from as little as one day to seven weeks, depending on the brand and country. The shorter the delivery time, the more likely a repair is taking place, as consumers are left without a functioning appliance for a shorter period.

Price of spare parts

Given the differing levels of spare parts availability across countries for the battery vacuum cleaners we checked, the analysis of spare parts pricing proves more complex. As a result, the findings presented here are limited to those spare parts that were identifiable on brands' official webpages and may not fully capture the complete market situation.

Among the spare parts that were available for analysis, the main nozzle and the battery stand out as the most expensive components on average across brands. In particular, **the highest-priced main nozzle identified reached €240** (or 37% of the original product price) **for a high-end model, while the most expensive battery was priced at €281** (or 56% of the original product price).

Geographical differences in pricing were also notable. Interestingly, when spare parts were available, the highest prices were consistently observed in France. More broadly, prices varied substantially across countries, even for the same product from the same brand. For example, for a mid-range model examined across six countries, the battery was priced at €281 in France, approximately €145 in both the Netherlands and Austria, and €208 in Denmark. In contrast, the battery for this model was not available in Spain and Slovenia, further illustrating inconsistencies in availability.

Lower-end products we checked generally tend to have lower spare parts prices. However, their spare parts were often not available at all. Notable exceptions were Slovenia and Austria, where some lower-end brands provided a relatively wide range of spare parts at reasonable prices.

Finally, like the case of smartphones, **spare parts prices were found to vary considerably across brands for identical components**. For instance, the cost of replacing the tube of a battery-operated vacuum cleaner ranged from as high as €100 for one brand to as low as €19 for another, underscoring significant pricing disparities within the market.

WHAT POLICYMAKERS CAN DO WITH THESE RESULTS

This market check provides a snapshot of how accessible repair is in practice for consumers. While limited in scope, the findings offer useful insights into the real-world conditions that shape consumers' ability to repair products, including access to spare parts and repair information.

Repair plays a crucial role in meeting consumer expectations to hold on to their products for longer, reducing the environmental impact of products, and strengthening Europe's strategic autonomy.[11] Policymakers can use these findings to better understand existing barriers and identify opportunities to further support repair across product categories.

Our findings indicate clear differences between sectors: smartphones, which are already covered by EU repairability requirements under the Ecodesign framework, perform significantly better than the battery vacuum cleaners assessed. This demonstrates that targeted regulatory measures can effectively improve access to spare parts and repair instructions.

Considering these findings, **there is a strong case for extending similar requirements for the repairability of smartphones to additional product groups.**

In particular, the European Commission should:

1. **Move forward without further delay on the adoption of Ecodesign rules for vacuum cleaners**, which have already been postponed for several years, delaying their potential benefits for repair. The same urgency should apply to other pending product-specific Ecodesign regulations, including those covering printers, computers, and televisions, ensuring that they incorporate robust repairability provisions.

2. **Advance with the development of horizontal repairability measures under the Ecodesign for Sustainable Products Regulation (ESPR),** for electronics, small household appliances, and light means of transportation. These measures, currently under development, are expected to broaden access to repair across a wider range of consumer-relevant products. Adopting a horizontal approach is particularly important because it allows common repairability requirements (such as access to spare parts, repair information, and ease of disassembly) to be applied across multiple product groups at once, rather than progressing through slower, product-by-product rules. This can significantly speed up the adoption process and ensure that consumers benefit more quickly from improved repair conditions across the market. It also helps create greater consistency and legal clarity for manufacturers, reducing fragmentation between product categories and making compliance more straightforward.

3. **Enable access to repairability information through the upcoming Digital Product Passport (DPP),** allowing consumers and independent repairers to easily obtain relevant details such as repair instructions, spare parts availability, and information on available repair services through this new tool.

4. **Ensure that the upcoming product-specific Ecodesign Regulations and the new ESPR horizontal delegated act on repairability are swiftly added to Annex II of the Right to Repair Directive,** to ensure comprehensive coverage and enforceable repair obligations for more products. This is important, given that some of the provisions of the Right to Repair Directive only apply to products for which EU legislation such as Ecodesign already set reparability requirements.

11 Joint Research Center, The role of circularity in European strategic autonomy, 2025

5 **Ensure that the new precontractual information obligations on product repairability are complied with and enforced.** The Directive on empowering consumers for the green transition (ECGT), entering into application on 27th September 2026, introduced an obligation for traders to inform consumers about the repairability of the goods in a clear and comprehensive manner. This includes an obligation to inform about the EU repairability score, if available. When it comes to smartphones, our market check shows that existing EU Ecodesign rules have already improved repair options. That said, there are still some gaps that need attention. One example is the repairability score, which is meant to help consumers make more informed choices but may not yet be having its full impact. The European Commission and the national enforcement authorities should take a closer look at how the EU repair score is being displayed to consumers to make it more visible and easier to understand at the point of sale. If it remains hidden behind clicks or secondary pages, it is unlikely to influence consumer decisions nor to fulfill the new information obligation introduced by the ECGT.

6 **Improve price transparency,** so that consumers can easily access and compare the cost of spare parts and factor this into their purchasing decisions. In addition, **fostering greater competition in the spare parts market** is essential, including enabling the use of third-party components, which can be more affordable, while ensuring that manufacturers provide the necessary safety criteria and specifications applicable to both official and non-official spare parts. Ecodesign measures should prevent manufacturers from using parts pairing and serialisation techniques that restrict or disable the use of compatible third-party components.

7 **Prioritise repair-by-design requirements.** Measures such as allowing certain repairs to be carried out without tools (e.g. removing certain battery covers without the need of screws), or with only basic tools, can make a substantial difference in practice. Complex repair processes can discourage both consumers and professional repairers, while also increasing costs, as longer and more intricate procedures typically result in higher service prices.

8 **Launch the European online platform for repair as soon as possible to allow consumers to easily find the nearest repairer,** as established in the Right to Repair Directive, and further confirmed in the Consumer Agenda 2030.

WHAT CAN BRANDS DO WITH THESE RESULTS

We identified a few good practices across brands that could be more widely adopted to make it easier for consumers to repair their products.

1. Some brands **offer helpful video tutorials that walk users through repair steps.** While some repairs may still be too complex for most people, it is still valuable to provide clear, step-by-step visual guides. These can also be useful for third-party repairers and community repair services, which are increasingly popular among consumers.[12]

2. **It is best practice to extend repair manuals availability to older models to foster a more holistic culture of repair.** This should be particularly feasible where products have similarities, and the instructions do not change. Our market check showed it is not easy to find repair manuals, especially for older models. Yet, some of the smartphones' brands we checked already provide repair instructions for both their older and newer models. We recommend this best practice is implemented across the market.

3. **Provide clear guidance on how to find spare parts and instructions on websites.** Make sure that repair instructions are easy to find and positioned near to the spare parts page on the website. This allows users to visually locate and confirm the exact component required, without having to navigate different pages. Providing instructions in the local language is also recommended. We found that even some brands that already provide very good visibility to repair instructions on their website often lack translated versions in some countries, which can hinder repair for non-English speakers.

4. **Wherever possible, provide clear, standardised names and detailed descriptions for all spare parts** to further simplify and improve the consumer journey. Make sure that the identifiers (names/codes) of each spare part provided on your webpage match those provided in the repair manuals. This is important to facilitate the repair journey for consumers and professionals.

5. **Use standardised components across product ranges wherever possible,** enabling the same spare parts to be compatible with multiple models. This can help resolve spare parts inventory challenges while also lowering spare part costs. In addition, prioritise repair-friendly design practices, e.g. by avoiding hard-to-remove adhesives/glues and minimising the use of unnecessary screws.

6. **Finally, consider lowering the price of spare parts to ensure that repair remains a cost-efficient option** for consumers and transparently communicate about spare parts availability and price on websites.

12 See, for example, Arbeiterkammer (AK) Wien recent report on repair cafes in Austria: https://wien.arbeiterkammer.at/repaircafe

REPAIR DO'S AND DON'TS: HIGHLIGHTS FROM SIX COUNTRIES

AUSTRIA

The Austrian Chamber for Workers and Employees identified Fairphone as the best brand regarding repair information and spare part availability. The manufacturer makes information intuitively searchable and provides extensive video tutorials on how to repair their products. Xiaomi, on the other hand, has a less intuitive website structure. Products can be found on the main website, but spare parts must be accessed via a separate spare parts website. Additionally, repair manuals are not linked on the product pages of the main website but must also be searched for on the spare parts website. This structure does not seem customer-oriented at all.

For vacuum cleaners, Einhell provides the most detailed product information compared to other manufacturers. Separate files can be downloaded: detailed exploded assembly drawing, product information, manual and safety warnings. Most common spare parts are directly linked as consumers scroll down the product page. A clearly visible link to additional compatible spare parts is located just a few scrolls further down. Due to direct links to spare parts, there is no doubt about their compatibility. Although it lacks a repair manual in the same fashion as other vacuum cleaners, Einhell makes all other information accessible to consumers on a single page. Xiaomi on the other hand, requires consumers to navigate more complex pathways to find information. While information for smartphones is prominent in their product portfolio, there is little to no information provided for vacuum cleaners. Separate websites for products and spare parts increase mental barriers for consumers to follow through with intended repairs.

DENMARK

The Danish consumer organisation Forbrugerrådet Tænk found that, for vacuum cleaners, spare parts are generally available through manufacturers' websites with prices and delivery times, but repair instructions are generally either very brief or not available, and names of parts can be inconsistent and/or not specific enough to determine if it is the right version.

For smartphones on the other hand, most brands provide spare parts and repair manuals. But often, spare parts are sold through third-party web shops that can look rather dubious. The repair guides will usually still be on the manufacturer's website while consumers have to purchase the parts through another store, which means looking in two places and added complexity in the process, which might cause some consumers to stop their repair process.

FRANCE

The market research by Que Choisir Ensemble highlights significant differences between manufacturers in terms of repairability, access to spare parts, and repair services for both smartphones and vacuum cleaners. Some brands make repairs relatively accessible through clear documentation, affordable spare parts, and transparent repair services, while others create practical obstacles such as limited spare parts availability, high prices, or difficult access to repair information. Fairphone stands out as a strong positive example because of its commitment to durability and self-repair, offering clear manuals, reasonably priced spare parts, and long-term availability of components even for models launched in 2015. In the vacuum cleaner sector, Rowenta also demonstrates good practices with detailed repair information (including dozens of video tutorials to show how to disassemble and reassemble spare parts), online repair booking, and affordable secondary parts.

In contrast, Apple represents a less consumer-friendly model: although it provides high-quality technical documentation, repair procedures remain highly controlled through mandatory specific tools, account requirements, and very expensive spare parts, making self-repair difficult in practice. Similarly, Silvercrest and Proline – two widely distributed private-label brands positioned in the entry to mid-range segment of the French market – perform poorly in the vacuum cleaner category due to the absence of spare parts and repair services online.

SLOVENIA

The Slovenian consumer organisation Zveza Potrošnikov Slovenije highlights some encouraging progress in supporting self-repair in the country but also reveals considerable differences between product categories and manufacturers. In several cases, consumers can access repair manuals in Slovenian, order spare parts online without creating an account, and find components even for older products. Some websites are transparent, easy to navigate, and provide clearly stated delivery times together with visual identification of spare parts.

The review also showed that self-repair support is generally more advanced for mobile phones than for vacuum cleaners. For phones, spare parts platforms are usually better organised, repair manuals easier to access, and direct online ordering more common. In contrast, the situation for vacuum cleaners is often less consumer-friendly: consumers are more frequently redirected to service centres (also with disclaimers not to repair if they're not the experts), finding compatible spare parts may require exact model numbers, and some manuals or spare parts could not be found at all.

At the same time, the market still lacks a consistent and standardised approach. Availability of spare parts, transparency of information, and ease of ordering vary significantly. Important details such as pricing, availability periods, or compatibility information are sometimes missing, making self-repair unnecessarily difficult for consumers. Overall, while certain manufacturers are clearly improving support for product longevity and repairability, accessibility of spare parts remains uneven and fragmented across the market.

SPAIN

Spanish consumer organisation OCU found that smartphone repair information is often difficult for consumers to navigate. Instead of being in one place, details are scattered across product pages, support sections, and separate repair or parts stores, making the process confusing and indirect. A key issue is that model-specific repair manuals are frequently missing. Even when brands offer general repair sections, consumers can still hit dead ends when they cannot find instructions for their exact device.

At the same time, some positive practices were identified. Several brands provide dedicated self-repair sections that make it easier to find repair guides and spare parts. One positive example comes from Apple, which offers a refund system where customers get part of the cost back if they return replaced components, helping reduce repair costs and encourage responsible returns. However, a major remaining problem is spare part availability: even when parts are listed, they are sometimes out of stock, which can stop consumers from completing repairs altogether. Product pages often do not clearly direct consumers toward repair options, and available manuals are too generic or not available in Spanish.

THE NETHERLANDS

The Dutch consumer organisation Consumentenbond found there is a big difference between smartphones and battery vacuum cleaners. While new smartphones do have detailed repair instructions, for vacuum cleaners there are no repair instructions at all. Even when a vacuum cleaner brand has elaborative spare part database (like Miele, AEG, Bosch), it lacks instructions and guidance on which part you'll need. This clearly shows Ecodesign repair regulations work and we would like to see the regulations being expand to more product groups.

There is also much to improve. Spare parts can be described more clearly, with a clear link to the compatible appliance and repair instruction, to ensure compatibility. Navigation through websites to the spare parts section can be better.

Spare parts are found for most appliances, except for some older smartphones and low-end vacuum cleaners. However, even when spare parts are found, some brands seem to have problems with their stock (Samsung, Xiaomi, Motorola, Dyson). Apple provides clear repair instructions for older models too - it is easy to identify the models, and the codes on the repair manual correspond to the spare parts and tools. Yet repairs are often very complex. Also, Fairphone clearly designs products to enable easy replacement of parts. It has clear instructions and videos, there is no complicated coding system and almost no special tools are needed.

APPENDIX I: HOW DID WE GET THESE RESULTS

The Market check was conducted in six EU Member States: Austria, Denmark, France, Slovenia, Spain, and the Netherlands. This provides a good overview of key markets in the EU and enables some level of comparison across countries.

The data collection in each country was carried out by the following consumer organisations, over the months of January and February 2026:

- **Austria:** Arbeiterkammer (AK) Wien
- **Denmark:** Forbrugerrådet Tænk
- **France:** Que Choisir Ensemble
- **Slovenia:** Zveza Potrošnikov Slovenije (ZPS)
- **Spain:** Organización de Consumidores y Usuarios
- **The Netherlands:** Consumentenbond

The check was conducted by the above organisations and consisted of navigating the official websites on the selected brands in each country.

We selected products and brands based on market data collected by consumer organisations, also via the International Consumer Research and Testing Organistion (ICRT).[13] In total, each organisation checked a minimum of nine products across different brands.

While we attempted to analyse the same brands and models across the six countries, some adjustments were necessary to reflect national market differences, especially for lower-end brands that tend to be more country-specific. In the case of smartphones, the check included newer models (mostly placed on the market after June 2025) and older models, to enable a comparison between products that fall under the new Ecodesign rules[10] and products outside their scope. For this reason, more than one product was checked for the same brand. Below is an overview of the brands we checked in each country.

We assessed three key elements of repair offers by selected brands, in line with existing repairability measures under the Ecodesign framework:

- Availability of repair instructions by brands;
- Price of spare parts indicated on brands' webpages;
- Access to spare parts by brands:

For Smartphones	For Battery Vacuum Cleaners
• Battery • Back cover • Screen • Charger • SIM and memory card tray • Charging port	• Tube • Main nozzle • Motor filter • Container/bag • Battery

We selected two categories of products, with the purpose of comparing regulated *vs* non-regulated products to identify effects of regulation and remaining gaps:

- **Smartphones** (subject to EU repairability requirements under Regulation (EU) 2023/1670 since 20 June 2025); and
- **Battery-operated vacuum cleaners** (no specific EU repair requirements, used as a comparison group)

13 The data provided by ICRT refer to the following joint tests, which involved the consumer organisations listed:

14022 vacuum cleaners: Altroconsumo, Consumentenbond, dTest, DecoProteste, Forbrugerrådet Tænk, Kulutajamedia, OCU editiones, Que Choisir Ensemble, Råd & Rön, Testachats, ZPS

20006 smartphones : Altroconsumo, Consumentenbond, Choice, Consumer Reports, DecoProteste, OCU editiones, Que Choisir Ensemble, Stiftung Warentest, Testachats, Which?

SMARTPHONES

Country	Product ID	Brand	Segment	Year of placement on the market
Netherlands	Product 1	Samsung	High-end	2022
	Product 2	Apple	High-end	2023
	Product 3	Xiaomi	Mid-end	2022
	Product 4	Samsung	Low-end	2022
	Product 5	Apple	High-end	2025
	Product 6	Samsung	High-end	2025
	Product 7	Xiaomi	Mid-end	2025
	Product 8	Motorola	Low-end	2025
	Product 9	Google	Low-end	2025
	Product 10	Fairphone	Mid-end	2025
Austria	Product 1	Samsung	High-end	2022
	Product 2	Apple	High-end	2023
	Product 3	Xiaomi	Mid-end	2022
	Product 4	Samsung	Low-end	2022
	Product 5	Apple	High-end	2025
	Product 6	Samsung	High-end	2025
	Product 7	Xiaomi	Mid-end	2025
	Product 8	Oppo	Low-end	2025
	Product 9	OnePlus Nord CE	Low-end	2025
	Product 10	Fairphone	Mid-end	2025
Denmark	Product 1	Samsung	High-end	2022
	Product 2	Apple	High-end	2023
	Product 3	Xiaomi	Mid-end	2022
	Product 4	Samsung	Low-end	2022
	Product 5	Apple	High-end	2025
	Product 6	Samsung	High-end	2025
	Product 7	Xiaomi	Mid-end	2025
	Product 8	Motorola	Low-end	2024
	Product 9	OnePlus Nord CE	Low-end	2021
	Product 10	Fairphone	Mid-end	2025
Spain	Product 1	Samsung	High-end	2022
	Product 2	Apple	High-end	2023
	Product 3	Xiaomi	Mid-end	2022
	Product 4	Samsung	Low-end	2022
	Product 5	Apple	High-end	2025
	Product 6	Samsung	High-end	2025
	Product 7	Xiaomi	Mid-end	2025
	Product 8	Realme	Low-end	2025
	Product 9	Oppo	Low-end	2025
	Product 10	Fairphone	Mid-end	2025

France	Product 1	Samsung	High-end	2022
	Product 2	Apple	High-end	2023
	Product 3	Xiaomi	Mid-end	2022
	Product 4	Samsung	Low-end	2022
	Product 5	Apple	High-end	2025
	Product 6	Samsung	High-end	2025
	Product 7	Xiaomi	Mid-end	2025
	Product 8	Motorola	Low-end	2025
	Product 9	Fairphone	Mid-end	2025
Slovenia	Product 1	Samsung	High-end	2022
	Product 2	Apple	High-end	2023
	Product 3	Xiaomi	Mid-end	2022
	Product 4	Samsung	Low-end	2022
	Product 5	Apple	High-end	2025
	Product 6	Samsung	High-end	2025
	Product 7	Xiaomi	Mid-end	2025
	Product 8	Honor	Low-end	2025
	Product 9	Fairphone	Mid-end	2025

BATTERY VACUUM CLEANERS

Country	Product ID	Brand	Segment	Year
Netherlands	Product 1	Dyson	High end	2021
	Product 2	Miele	High end	2020
	Product 3	AEG	Mid end	2022
	Product 4	Rowenta	Mid end	2021
	Product 5	Samsung	Mid end	2021
	Product 6	Bosch	Mid end	2021
	Product 7	Philips	Mid end	2020
	Product 8	Silvercrest (lidl)	Low end	2022
	Product 9	Tristar	Low end	2020
Austria	Product 1	Dyson	High end	2021
	Product 2	Miele	High end	2020
	Product 3	AEG	Mid end	2022
	Product 4	Rowenta	Mid end	2021
	Product 5	Samsung	Mid end	2021
	Product 6	Bosch	Mid end	2021
	Product 7	Philips	Mid end	2020
	Product 8	Severin	Low end	2021
	Product 9	Xiaomi	Low end	
	Product 10	Einhell	Low end	2022
Denmark	Product 1	Dyson	High end	2021
	Product 2	Miele	High end	2020
	Product 3	Electrolux	Mid end	2021
	Product 4	Rowenta	Mid end	2021
	Product 5	Samsung	Mid end	2021
	Product 6	Bosch	Mid end	2021
	Product 7	Philips	Mid end	2020
	Product 8	Princess	Low end	2023
	Product 9	Nilfisk	Low end	2019
Spain	Product 1	Dyson	High end	2021
	Product 2	Miele	High end	2020
	Product 3	Electrolux	Mid end	2021
	Product 4	Rowenta	Mid end	2021
	Product 5	Samsung	Mid end	2021
	Product 6	Bosch	Mid end	2021
	Product 7	Philips	Mid end	2020
	Product 8	Silvercrest (Lidl)	Low end	2023
	Product 9	Cecotec	Low end	2019

France	Product 1	Dyson	High end	2021
	Product 2	Miele	High end	2020
	Product 3	AEG	Mid end	2021
	Product 4	Rowenta	Mid end	2021
	Product 5	Samsung	Mid end	2021
	Product 6	Bosch	Mid end	2021
	Product 7	Philips	Mid end	2020
	Product 8	Silvercrest (lidl)	Low end	2022
	Product 9	Proline	Low end	2020
Slovenia	Product 1	Dyson	High end	2021
	Product 2	Miele	High end	2020
	Product 3	Electrolux	Mid end	2021
	Product 4	Rowenta	Mid end	2021
	Product 5	Samsung	Mid end	2021
	Product 6	Bosch	Mid end	2021
	Product 7	Philips	Mid end	2020
	Product 8	Hisense	Low end	2022
	Product 9	Gorenje	Low end	2019

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