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Work package 2

Activity 2.2 REPper Factory setting up

D.2.2.4

Training first-aid kit adapted to the local environment

<https://repper.interreg-euro-med.eu>



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LIST OF ABBREVIATIONS

AE	ALTROCONSUMO Edizioni SRL
ANATOLIKI	ANATOLIKI S.A.
AULEDA	AULEDA – local Economic Development Agency
AViTeM	Agency for Sustainable Mediterranean Cities and Territories
BiH	Bosnia and Herzegovina
DECOP	DECO PROTESTE LDA
E-Institute	E-Institute, Institute for Comprehensive Development Solutions
ENoLL	European Network of Living Labs
EU	European Union
FoDSA	Regional Association of Solid Waste Management Agencies of Central Macedonia
KPI	Key performance indicator
MCBO	Metropolitan City of Bologna
OCU	OCU Ediciones SA
PP	Project Partner
SME	Small and medium-sized enterprise
UNSA	University of Sarajevo Bosnia and Herzegovina
WP no.	Work Package, e. g. 1

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Executive Summary

The document of the Joint training first-aid kit (D 2.2.3) has been locally adapted by all partners of the REPper project, to tailor its content to the specific characteristics, needs, and priorities of each territory. Even if the kit maintained a shared methodological approach and common core principles, it has been customised to reflect local regulatory frameworks, market conditions, cultural contexts, and training ecosystems related to repair and circular economy practices. Partners of the REPper project have adapted examples, tools, and training materials to ensure relevance and accessibility for local stakeholders, including trainers, mentors, vocational education providers, business support organisations, and learners. The kit is translated into local languages to inclusiveness, facilitating the transfer of knowledge at the territorial level. The locally adapted Training First-Aid Kit strengthens the impact of the REPper Factory training activities by ensuring that the materials of the training are directly connected to local realities and opportunities. At the same time, it preserves coherence with the transnational framework, enabling mutual learning across partner regions.

RIGHT TO REPAIR GUIDE



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REPper project

REPper PERSpective or REPper is a project involving eight european countries, which aims to strengthen **the repair economy**, to support small and medium-sized enterprises in the repair sector, and to raise consumer awareness of more environmentally friendly choices. A circular and resource-efficient economy requires **products to be durable and easy to repair**.

It is necessary to increase the number of companies that already design their products with durable, easy-to-replace, and reusable components. But it is also necessary to increase the number **of more responsible consumers who oppose the throwaway culture**.

In order to do so, REPper brings together qualified and diversified partners in the Mediterranean region to carry out **actions aimed at SMEs, schools, public administrations, and citizens**. The project promotes the circular economy and the new opportunities that can be created in this area. The REPper project is structured into 3 main pillars:

1. **REPper HUB:** physical and virtual places where information and services on repair can be found.
2. **REPper FACTORY:** training spaces where it will be possible to undertake professional development and deepen the themes of the right to repair and the circular economy.
3. **Repair Culture:** actions focused on people to disseminate the habits underpinning the circular economy and create a community of conscious and responsible political decision-makers and consumers.



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Training kit REPper

This training, in the domain of the REPper project, **motivates to develop a critical and participatory thinking on sustainable issues**. In particular, this initiative will enable **to address a highly topical issue such as the right to repair**, a principle approved by the European Parliament to achieve circular economy and sustainable development.

This guide aims to introduce the principle of the right to repair and the historical normative path that led EU to identify this need and make it a right of every citizen.

The educational materials explain the concept of **sustainability** not only in relation to production or life-cycle monitoring, but also in terms of product design and conception, **to make resource reuse more effective, safer, and more secure**.

Moreover, the training documentation aims to make understandable what tools are available to become a class of attentive consumers and to raise awareness of the future opportunities from a professional and employment point of view.



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Educational Sheet 1

The right to repair:
what it is



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The right to repair: what it is

Each year, **35 million tonnes of waste** accumulate in the European Union, including a vast number of potentially repairable items that end up in landfills. This excessive waste generation threatens progress toward a circular and sustainable economy.

Electronics is the fastest-growing source of waste in the EU



To counteract this, the **right to repair** directive ensures that consumers can repair their goods easily and affordably rather than having to replace them.



The regulation has been approved by the European Parliament, and the 27 EU member states must transpose the directive into their national legislation by **31 July 2026**.

MAIN POINTS OF THE RIGHT TO REPAIR:

Repair obligation:

Manufacturers will be required to provide timely and affordable repair services while informing consumers of their rights. Additionally, legal warranties will be extended by one year.

Repairable products:

The law applies to products such as household appliances and electronic devices, though the category may be expanded. Consumers will also have the option to borrow devices or choose refurbished products.

Information on repair services:

Information on repair services: Consumers will receive a standardised European form to compare repair services, and an online platform will be developed to help locate local repair shops.

Promoting affordable repairs:

Each Member State will be required to implement strategies to make repair services more accessible.

Revitalising the repair market:

Manufacturers must ensure the availability of spare parts and tools at reasonable prices, and must not obstruct repairs, even those performed independently.

77% of EU consumers would prefer to repair their goods rather than purchase new ones, but often forego repairs due to high costs

(source: Eurobarometro 2020)



Recycling policies in the EU vary from country to country. In 2021, Austria had the highest average e-waste collection among EU nations, reaching **15.46 kg per inhabitant**.



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Educational Sheet 2

The stages of the right
to repair standard



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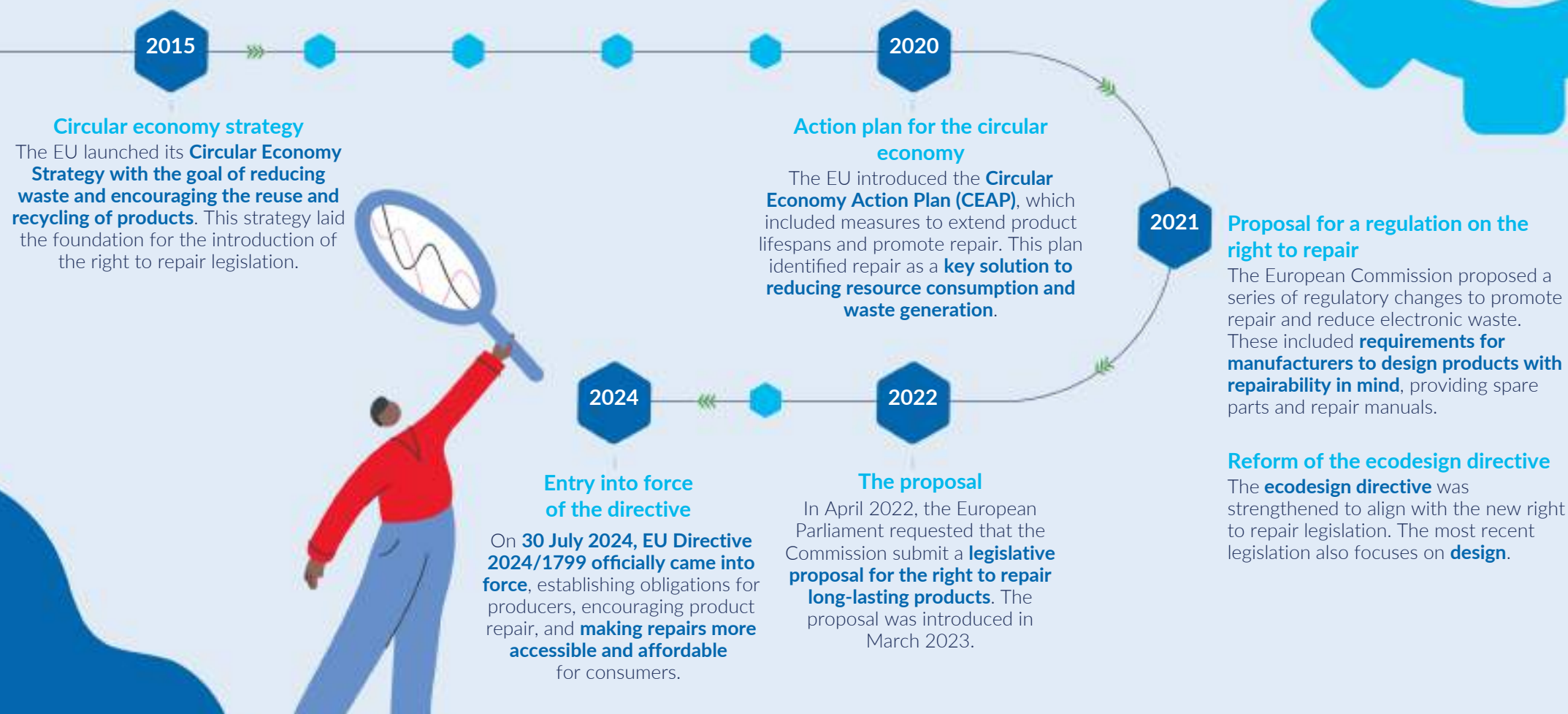
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The stages of the right to repair standard

The "Right to Repair" directive is part of a broader effort to develop European legislation aimed at promoting sustainability, reducing waste, and fostering a circular economy.



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Educational Sheet 3

The Ecodesign Regulation and the Digital Product Passport



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The Ecodesign Regulation and the Digital Product Passport

The ecodesign for Sustainable Products Regulation (ESPR)

This regulation introduces stringent requirements for the ecodesign of products placed on the EU market. **There's also a list of products not covered by the standard** (e.g. foodstuffs, medicines, plants, animals, and products of human origin).



The **DPP** will provide the products concerned with a **clear identity**, enabling consumers, businesses, and authorities to access the relevant data more easily

Product origin, composition, durability, and traceability

Environmental impacts

Repair and recycling options

Availability of spare parts

A key feature of the regulation is the introduction of the Digital Product Passport, an information system **designed to track and document product sustainability**. It collects and provides essential data on various aspects, including:

MAIN OBJECTIVES

- ◆ To **encourage sustainable** design for nearly all goods on the EU market
- ◆ To fulfil the objectives of the **Circular Economy Action Plan 2020**
- ◆ To improve **energy efficiency** while reducing **environmental impact** by 2030
- ◆ Promoting **sustainable production** and **consumption models**

MAIN MEASURES

- ◆ A **ban on the destruction** of unsold product
- ◆ The obligation for large companies to **disclose information** about disposed products
- ◆ The promotion of **used and remanufactured products**
- ◆ Establishment of new **ecodesign requirements**

Digital Product Passport - DPP



Digital register

By 19 July 2026, the EU Commission will establish a secure register containing data on products, traders, and production sites



European Commission Web Portal

This portal will allow users to search, compare, and access digital product passports, ensuring continued availability of product data, even if the manufacturer discontinues operations

NEXT STEPS

By 19 April 2025, the EU Commission will adopt a Working Plan outlining priority products subject to the new ecodesign requirements.



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Educational Sheet

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The product warranty



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The product warranty

New Products

All new products sold in Italy have a **minimum guarantee of 24 months from delivery**. This duration does not apply to goods purchased for business activities.

- During the guarantee period, any original defects can be remedied by replacement or repair (or, where not possible, with an agreed-upon price reduction).
- **Spare parts:** For durable goods, such as washing machines, spare parts must be available for 10 years beyond the date the production of the model ceases.

Used or Refurbished Products

- A minimum warranty of 12 months from the date of delivery applies to these products if they are sold by a professional (shop).

Warranty on Repair

- **During the warranty period:** currently, the duration of the warranty period does not change, but after the transposition of EU Directive 2024/1799 (deadline July 2026), a product purchased as new and repaired under warranty will benefit from a 12-month extension of the warranty.
- **Outside the warranty period:** repair carried out by a professional comes with a 24-month warranty on the replaced parts (only if they are new and supplied by the repairer).

What consumers can do in case of problems with the warranty or repairs:

1. Retrieve documentation:

Proof of purchase (receipts, invoices), repair documents, and any correspondence with the seller, manufacturer, or repair centers.

2. Lodge a written complaint with the seller or the repairer.

3. If an agreement is not reached:

Seek the support of a consumer association (e.g., Altroconsumo).

Resort to out-of-court dispute resolution methods (details on the website <https://www.mimit.gov.it/it/>).

4. Judicial route: To be considered as a last resort only for cases where the amounts claimed are very high.



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Educational Sheet 5

Conscious consumption



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Conscious consumption

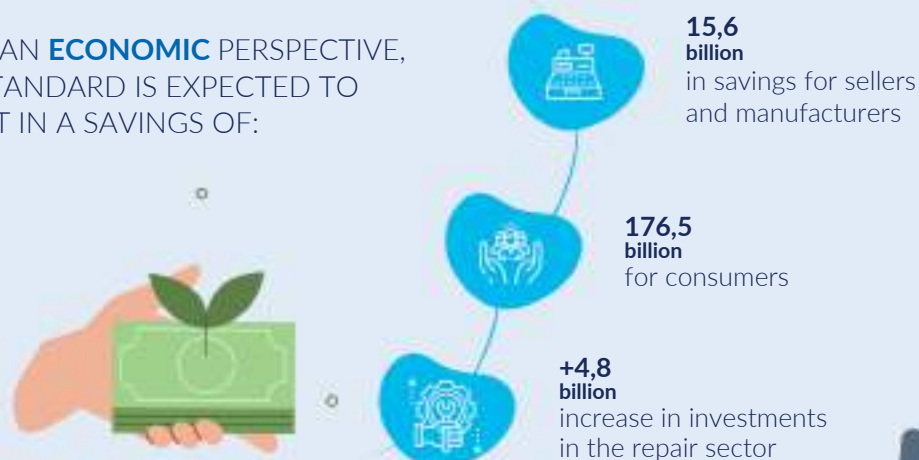
The right to repair not only benefits the environment, it also offers significant economic advantages. **Here is a projection of the expected savings over the next 15 years.**

FROM AN **ENVIRONMENTAL** PERSPECTIVE, THE STANDARD IS EXPECTED TO RESULT IN A SAVINGS OF:

Did you know that...?



FROM AN **ECONOMIC** PERSPECTIVE, THE STANDARD IS EXPECTED TO RESULT IN A SAVINGS OF:



PLANNED OBSOLESCENCE

some products are intentionally designed to **fail** or **become obsolete after a predetermined period** set by manufacturers. In certain cases, components are assembled in a way that prevents their removal or replacement.

In the 1930s, researchers at the chemical company DuPont developed nylon, an exceptionally strong synthetic fibre. **Perhaps too strong:** nylon stockings no longer laddered, leading to a decline in sales. In response, DuPont instructed its technicians to weaken the fibre they had originally engineered.

the average lifespan of computers has dropped

from **11** to just **4** years over three decades

Is there an International Repair Day? Yes, it's on the third Saturday in October



REPAIR

If there is one place that **embodies the circular economy**, it is the Repair Café. These **public spaces** (whether bars, shops, or courtyards) allow people to bring damaged objects to be repaired by volunteers, provide both the skills and the necessary who tools.

Items of all kinds can be brought in, from hair dryers and smartphones to washing machine circuit boards, blenders, and even wooden stools. Today, **there are approximately 3,000 Repair Cafés** worldwide, and their number continues to grow.



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Educational Sheet **6**

**Right to repair and
green jobs**



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Right to repair and green jobs

The right to repair will bring significant **economic and environmental benefits**. But that's not all: it will also stimulate **employment**, fostering **job** creation across various sectors.

As companies are obliged to guarantee the reparability of products, **the demand for qualified technicians will increase**, ranging from specialists in repairing household appliances and electronic components to professionals in component remanufacturing.

The **logistics** and **distribution** sector will also see growth, particularly in services related to the handling and transport of spare parts.

Furthermore, **new businesses specializing** in maintenance and the circular economy will emerge, fostering innovation among start-ups and independent artisans.



Finally, companies will have to invest in **training and professional development**, creating new opportunities for engineers, designers, and environmental consultants tasked with developing more durable and sustainable products. THE MOST IN-DEMAND PROFESSIONS WILL BE:



THE ECODESIGN PROJECT MANAGER

Helps companies develop products that minimize environmental impact while maintaining functionality, affordability, and quality.

Supervises the entire design, production, and marketing process to ensure compliance with environmental and social standards.



THE SUSTAINABLE INNOVATION MANAGER

Plans and manages the implementation of strategies that integrate sustainable practices within an organization.

Evaluates the environmental and social impact of business activities, developing action plans to improve sustainability, reduce waste, and optimize resource use.



THE ENVIRONMENTAL RESEARCH AND DEVELOPMENT MANAGER

Keeps the company strategy updated with scientific and technological innovations.

Works on improving production processes, materials, and overall sustainability, developing eco-friendly technologies and materials, and testing solutions to minimize the environmental impact of products and production processes..



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Educational Sheet **7**

Resources for repair



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Resources for repair

Do you want to try repairing it yourself or are you looking for a Repair Café? Here are some links that might help you:

iFixit is a company that sells repair tools and spare parts; on their website, you can connect with a community of repairers to get advice or consult the numerous repair guides available: <https://it.ifixit.com/>

Repair Cafe is a community of repairers that provides guides and advice for creating new Repair Cafés and a map of existing ones. Here you can find guides and forums for repairing various types of objects, statistics on repair activities, and much more: <https://www.repaircafe.org>

Repara is the website created within the framework of the REPair project by the spanish consumer association OCU; it contains guides for the repair and correct use of common household appliances: <https://www.deco.proteste.pt/reparacoes>

Reparar is the website created within the framework of the REPair project by the portuguese consumer association DECO PROteste; it contains guides for the repair and correct use of common household appliances: <https://www.deco.proteste.pt/reparacoes>

Restarters is a global network that supports repair communities; their website provides guides for those who want to approach repair and a wide selection of online resources on the topic: <https://wiki.restarters.net/Resources>

Right to Repair is the european campaign on the right to repair; on their website, you can find in-depth information on european regulations and links to organizations dealing with repair (including Repair Cafés): <https://repair.eu/it/>

Wiki repair is a database of repair guides to which users can contribute by adding or modifying content: <https://repair.wiki>



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Educational Sheet 8

**Local associations
dealing with repair and
reuse in Bologna**



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Local associations dealing with repair and reuse in Bologna

In Bologna, there are several organizations involved in repair and reuse; here are the main ones:

BackBo is a non-profit social promotion association (APS); it aims to reduce waste and raise public awareness of the pollution linked to single-use items. They promote initiatives against resource waste, including reusable tableware rental for events and creative 3D printing workshops that reuse plastic bottles and containers: <https://backbo.it>

Barca59 is a social cooperative that manages services for vulnerable people in collaboration with public bodies and third-sector organizations, such as the Case Zanardi Gnudi Solidarity Emporium and the MenSana canteen. Its mission is to strengthen relationships and promote rights, inclusion, and social interaction. It organizes initiatives such as Repair Cafés, book and clothing swaps, screenings, meetings, and a 'library of things' to spread the circular economy and community participation: <https://barca59.org/>

Camere d'aria (Multipurpose Workshop of Arts and Crafts in Bologna) is a non-profit social promotion association (APS); this space hosts various activities ranging from performing arts to crafts, including bicycle repair workshops: <https://cameredaria.net/>

ExDynamo is a multipurpose space dedicated to bicycles, but also a cultural and gathering place where events, workshops, talks, concerts, and DJ sets are regularly organized. It also hosts bicycle repair workshops: <https://www.instagram.com/ex.dynamo/>

L'Altra Babele is a non-profit social promotion association (APS); it promotes active citizenship, legality, and integration. It organizes various activities, including bicycle repair workshops and courses: <https://laltrababele.it/>

Leila is a non-profit social promotion association (APS); it promotes the culture of sharing through a "library of things" which allows members to borrow everyday objects: <https://leila-bologna.it/>

Rusko is a repair café based in Bologna; it is a non-profit social promotion association (APS). Anyone with a non-functional item can bring it to the repair events, where they can disassemble it and try to fix it with the help of volunteer repairers, using the equipment provided by the association: <https://rusko-bo.it/>



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Educational Sheet 9

REPper Repair Hub in the city of Bologna



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REPper Hub in the city of Bologna

The **REPper Hub** is a place that promotes the **culture of repair and reuse** as a concrete form of environmental sustainability, social inclusion, and civic participation. It aims to **develop awareness, skills, and sustainable behaviors** within the community.

Main Objectives

- **Disseminate the culture of repair** as a daily practice and civic value, countering the "throwaway" logic.
- **Educate for responsible consumption**, reuse, and the conscious maintenance of objects.
- **Create connections** between schools, third-sector organizations, institutions, and active citizens, generating a territorial network oriented towards sustainability.
- **Strengthen technical and transversal skills**, especially among young people, promoting learning through learning by doing.

Actions and Tools

- **Informational and educational materials** (flyers, brochures, and educational kits) to promote the culture of repair in schools, educational settings, and citizenship contexts.
- **Awareness-raising activities** directed at citizens, students, and workers, including meetings, events, and thematic campaigns.
- **Training courses** dedicated to developing basic and specific technical repair skills.
- **Collaborations** with local entities (FabLabs, associations, cooperatives, institutions) to share experiences, best practices, and resources.
- **Documentation and communication** of repair and reuse experiences as a collective narrative of change.

A Widespread Territorial Network

The Repair Hub is present in three operational and cultural locations within the city of Bologna, connected by a single educational vision.

Ciofs-fp/ER ETS – Via San Savino 35/37, Bologna
Ciofs-fp/ER ETS – Via Jacopo della Quercia 4, Bologna
Città Metropolitana di Bologna – Via Benedetto XIV, 3, Bologna



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RIGHT TO REPAIR GUIDE

Selected chapters on repairs



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Educational sheet 6

CIRCULAR BUSINESS MODELS



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Educational sheet 6 Circular business models

**CIRCULARITY IS NOT A TREND,
IT IS A WAY OF THINKING.**

Unlike linear business models, which focus on selling as many products as possible that become waste immediately after use, **circular business models** are sustainable. Sustainable products are designed to have a long service life and can be repaired, upgraded, and recycled. The revenue of a circular business is also generated through maintenance, refurbishment, replacement parts, and services.

Repairs are one of the most effective practices of the circular economy, as they reduce environmental impact while strengthening the local economy. They address four key areas:

-  **CONSUMERISM** Promoting repairs changes consumer culture, condemns misinformation, and planned obsolescence.
-  **RAW MATERIALS** Repairs reduce the need to mine rare raw materials, thereby reducing pollution and preventing worker exploitation.
-  **ENERGY** Repairs conserve the energy that went into making the existing product.
-  **WASTE** Repairs extend the life of products and significantly reduces the amount of waste.



TURN A PROBLEM INTO AN OPPORTUNITY

Repairs can become:

- the main activity (e.g., repair of electronics or textiles, practice during guided lessons),
- sales support (e.g., warranty repairs, rentals, PaaS),
- part of resale (refurbished products),
- a service for companies or public institutions (e.g., ZJN, B2B maintenance).



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Businesses should consider circularity at multiple levels:

- can use waste, discarded, recycled, or biodegradable materials for repairs,
- can collaborate with local repairers, shops, and associations,
- can offer to take back irreparable products,
- should be transparent about where the materials for their products come from,
- should create new jobs,
- should encourage creativity and innovation.



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Educational sheet 7

GREEN PUBLIC PROCUREMENT AND REPAIRS



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Educational sheet 7 Green public procurement and repairs

Green public procurement (GPP) refers to the procurement of goods, services, or construction works with a lower environmental impact throughout their entire life cycle, while offering the same or better functionality.

European legal basis:

- Directive 2014/24/EU,
- Directive 2014/25/EU,
- Directive (EU) 2024/1799.

Slovenian legal basis:

- ZJN-3, ZPVPJN, OZ,
- Regulation on financial guarantees in PP,
- Regulation on joint PP by the Government of the Republic of Slovenia,
- **Regulation on GPP.**

2025
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Many possibilities!

Public contractors include ministries, agencies, municipalities, educational and healthcare institutions, courts, public utility companies, etc.

R2R will strengthen the role of repairs in PP.

CHALLENGES

- Low awareness,
- short deadlines,
- bias against PP,
- uncompetitive prices for repairs,
- fixation on lowest price (~90 % of PP),
- lack of staff and knowledge,
- complex documentation,
- poor communication,
- fragmented market.

Repair is a service subject to a threshold value of €40,000 (excl. VAT) under ZJN-3 (SI). For purchases below this value, contracting authorities use a record order in accordance with the internal procurement rules of the individual institution.

SUGGESTIONS

- Preliminary market research,
- use of (eliminated) lots,
- use of reserved procurement for social enterprises,
- combination of criteria (e.g., 50 % price, 50 % quality).

EXAMPLES of technical specifications:

- Spare parts available for ≥ 5 years after purchase,
- free access to service documentation,
- repairability: key parts replaceable,
- second-hand equipment preferred (without energy class requirements where this is not relevant).

EXAMPLES of evaluation criteria:

- On-site service response speed,
- warranty + service contract (responsiveness, replacement eq., repair time),
- additional evidence (e.g., repairability index, standards, EPD),
- evaluation of life cycle costs and external environmental costs.

EXAMPLES of implementation clauses:

- Obligation to provide spare parts and repairs throughout the entire duration of the contract,
- published price list for repairs,
- eq. must be taken over, refurbished & returned or handed over for reuse.

Regulation on GPP requires contracting authorities to achieve environmental objectives but **does not specify the exact method**; this most often follows technical specifications and criteria.

Most common aspects of GPP:

- energy efficiency & renewables,
- efficient resources & water use,
 - less impact on health, environment & biodiversity,
 - reuse, repair, recycling,
- circular aspects (waste reduction, prolonging lifetime)..



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Educational sheet 8

THE ROLE OF EDUCATION



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Educational sheet 8 The role of education

Visits to **Repair Cafés**, **reuse centres**, or **themed workshops** run by providers give students an insight into **practical** and **entrepreneurial approaches to repairs**.

A comprehensive **interdisciplinary approach** connects and intertwines various disciplines, levels of operation, tools, etc., into a unified, comprehensive solution and enables:

- experimental learning (demonstrate, correct, improve),
- learning with real-life challenges,
- encouraging innovative thinking.



EG: School challenge "**Repair, don't waste**" – students analyze, repair, and improve broken household appliances, using knowledge from several subject areas: electrical engineering (fault diagnosis, repair of electronic components), mechanical engineering (understanding of working mechanisms, replacement of mechanical parts), computer science (chip programming, data search, report writing), technical drawing (drawing plans, documenting the process), Slovenian language (writing a technical report), environmental education (calculating CO₂ emissions savings, advantages of repair), entrepreneurship (estimating repair costs, comparing with the price of a new product, preparing an offer).



EG: In physics, students learn about how household appliances and electronics work; in art, they redesign objects; in technical classes, they make replaceable parts; and in civics and ethics, they discuss sustainability and the right to repair.



A **multidisciplinary approach** (e.g., STEAM - Science, Technology, Engineering, and Mathematics) to the problem brings together experts from different fields, each providing their own insights into the same problem.

TEACHING/TRAINING METHODS

Frontal (tradiTional): The teacher serves as the information provider and authority figure, while students are passive recipients.

Participatory: Interaction and active participation between teachers and students; suitable for small groups.

DEMONSTRATIONS
LECTURES

PROJECTS

**PROBLEMS
SOLVING**

DISCUSSIONS

**METHODS,
SUITABLE FOR TRAINING
SERVICE TECHNICIANS**

DEMONSTRATION

explaining and demonstrating a procedure or concept, enabling students to observe and then repeat the demonstrated activity themselves

GROUP LEARNING

learning in small groups, where students collaborate, solve problems, and learn from each other through social interaction

PROJECT-BASED LEARNING

students work on practical, real-life content with tangible results for extended periods of time, often in an interdisciplinary format

The use of **augmented reality (AR)** is particularly promising in vocational education and training. It enables visualization, guidance, interaction, and simulation, which facilitate understanding of how devices work or what faults occur, and shorten learning times.



Repairing is not just a technical task; it is a lesson in responsibility, creativity, and sustainability. By incorporating repairs into schools, creative spaces, and community workshops, we are laying the foundations for long-term change in consumer habits and creating generations that will know how to think circularly.



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Educational sheet 9

PROFESSIONAL SKILLS AND META-COMPETENCES



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Educational sheet 9 Professional skills and meta-competences

Vocational skills are technical and practical knowledge that is characteristic of and necessary for the competent performance of a particular occupation (e.g., electronics repair, sewing, woodworking).

Meta-competences are broader, transferable skills such as critical thinking, problem-solving, concern for sustainable development, cooperation, digital literacy, effective communication with others, learning to learn, ethical competencies (e.g., tolerance), adapting to change, and entrepreneurial thinking. Meta-competencies should be considered an integral part of knowledge and skills.

The development of professional and meta-competences opens up new opportunities for SMEs and public institutions:

◆ SMEs

- Opportunity to recruit staff with relevant skills through the NPK and VET system.
- Opportunity to participate in the design of training programs.
- Introduction of internal training and links with local schools or knowledge centres.

◆ Public institutions (e.g., municipalities)

- Support for local initiatives (centres, workshops, public procurement).
- Inclusion of repair skills in youth, social, and employment programs.
- Use of **green public procurement** with repairability requirements.

SLOVENIA

In 2023, Slovenia introduced a **vocational qualification** for electrical appliance repairers.

The National Vocational Qualification (NPK) enables formal recognition of skills even for individuals without vocational school education.

Vocational training in the field of repairs is possible in **cooperation with** the Center for Vocational Education (CPI), the Chamber of Crafts and Small Businesses of Slovenia (OZS), educational centers, and social enterprises (e.g., reuse centers, ZEOS, KNOF).

In accordance with the Right to Repair Directive, Member States must develop an environment that facilitates access to repairs, supports sustainable employment and occupational mobility (horizontal, vertical, geographical, or intersectoral) and encourages small and medium-sized enterprises (SMEs) to develop or restore repair services.

VEDETI, KJE
ISKATI ALI
ODLOŽITI
ODPADNI
TEKSTIL V VAŠI
OKOLICI, JE
PRIMER META
ZNANJA.



Zeleni programi

poklicnega izobraževanje in usposabljanja (VET) poudarjajo razvoj znanj in spretnosti na področju tehnologij popraviljanja in obnove, da se zmanjša količina odpadkov in ogljičnega odtisa ter spodbudi učinkovita raba virov.

EXAMPLES FROM EU

France has introduced repairs into secondary school curricula and developed a national platform for education on repairs.

Italy finances local reuse and repair centers as part of its circular economy strategy.



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Educational sheet **10**

COLLECTIVE MODELS



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How can local repair initiatives, such as Repair Cafés, reuse centres, and time-limited project activities by organisations be upgraded into **sustainable, stable, professional collective models with economic potential** that serve the public interest and **go beyond the model of volunteering and project funding**?

What could follow the REPper project?

Establishment of a **national network** of repair hubs.

COLLECTIVE REPAIR CENTRE (MODEL)

LEGAL FORM

It describes how the centre is legally registered and defines its responsibilities, ownership, taxes, and management.

An **association, cooperative, institute, or limited liability company**, possibly in combination with **social enterprise** status.

The broader organisational and administrative framework for cooperation within the chosen legal form may be a **public-private form** (involving municipalities or companies).

REVENUE SOURCES

- repair services (commercial customers, households, B2B).
- Workshops and courses (training (CPI, VET, communities).
- Sale of refurbished products (social enterprise).
- **Green public procurement (GPP)** (furniture, ICT, white goods).
- Public grants (calls for development, not regular operations).
- Membership fees/cooperative shares (individuals, companies).
- Donations (including crowdfunding).
- **Collective investments.**
- Sponsorships (e.g., manufacturers; return models in warranty, partnerships with brands).

MARKET

INSTITUTIONAL

COMMUNITY

PROMOTIONAL

INITIAL STEPS

1. **Establishment of a core group:** at least 3–5 stakeholders; preparation of a shared vision and role from the perspective of impact; appointment of a leader.
2. **Space selection and logistics establishment:** e.g., municipal premises, libraries, reuse centres.
3. **Business model preparation:** describe how the centre operates and creates value (SWOT analysis of existing initiatives that are not working; define value, customers, income, and expenses (space, basic equipment, working hours, promotion, etc.); creating of a consulting, training, and mentoring model (with VET partners)).
4. **Phased transition design:** *Phase 1:* testing services on weekends. *Phase 2:* expanding services, inclusion of GPP. *Phase 3:* inclusion of other institutions.

KEY ELEMENTS FOR SUCCESS

- A clear vision and a coordinated team.
- Regular communication.
- A legal form that enables revenue generation.
- Investment of revenue.
- Professional management by a coordinator.
- Impact measurement (effects on waste, employment, knowledge).



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Educational sheet **11**

CHANGING CONSUMERS' HABITS



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Educational sheet 11 Changing consumers' habits

Consumers often decide not to repair because it is financially, geographically, informationally, or technically inaccessible.

Behavioural incentives work, but they must be used correctly:

- Repair should be the default option in communication (e.g., service included in the warranty).
- Repair should be made easy and affordable.
- The reparability of a product should be clearly indicated (e.g., DPP).



A **culture of repair** is not only environmentally responsible but also socially beneficial and economically sensible.

To change consumer habits, we need systemic support, visibility, and clear messages.

Initiatives such as coffee shop repair shops demonstrate that repair can be a social, cultural, educational, and inspiring activity. These events are not just about service, but about a **sense of capability, collaboration, and value**.

Prejudice, mistrust, and lack of knowledge about services often deter consumers from seeking repairs.

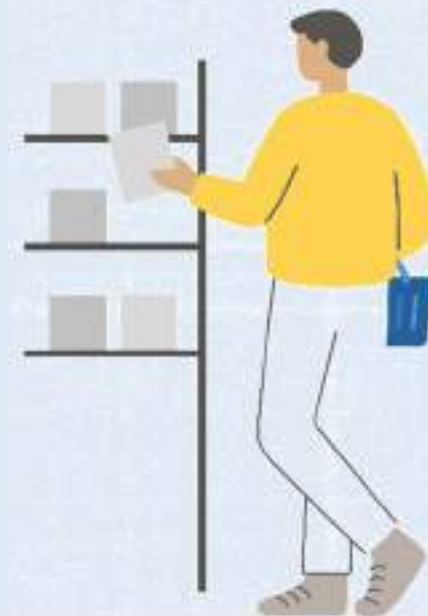
Lessons and cultural and social events can be enlivened with **role-playing** (consumer, advisor, repair technician).

Each participant describes what motivates, hinders, and convinces them. Together, find **communication solutions** that address real consumer dilemmas.

If we want people to trust repairs, we need to communicate them professionally and with the same level of confidence as new goods. Trust is built over time, through cooperation, transparency, and recognition.

How can we **communicate** repairs as a trustworthy choice?

- Messages should be clear and positive: "A smart choice for you and the planet.,,"
- Emphasize quality, guarantees, and the professionalism of service providers.
- Highlight values (e.g., environmental responsibility, support for local craftsmen).
- Create a simple, local **trust mark** or **service provider certificate**. Let it be developed in dialogue with consumers and label products that meet **ethical, sustainable, and quality standards**.



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The right to repair: what it is and what it entails

77% of EU consumers would prefer to repair their goods rather than purchase new ones, but often forego repairs due to high costs


(source: Eurobarometro 2020)

Each year,  accumulate in the European Union, including a vast number of potentially repairable items that end up in landfills.



This excessive waste generation threatens progress toward a circular and sustainable economy.

Electronics is the fastest-growing source of waste in the EU

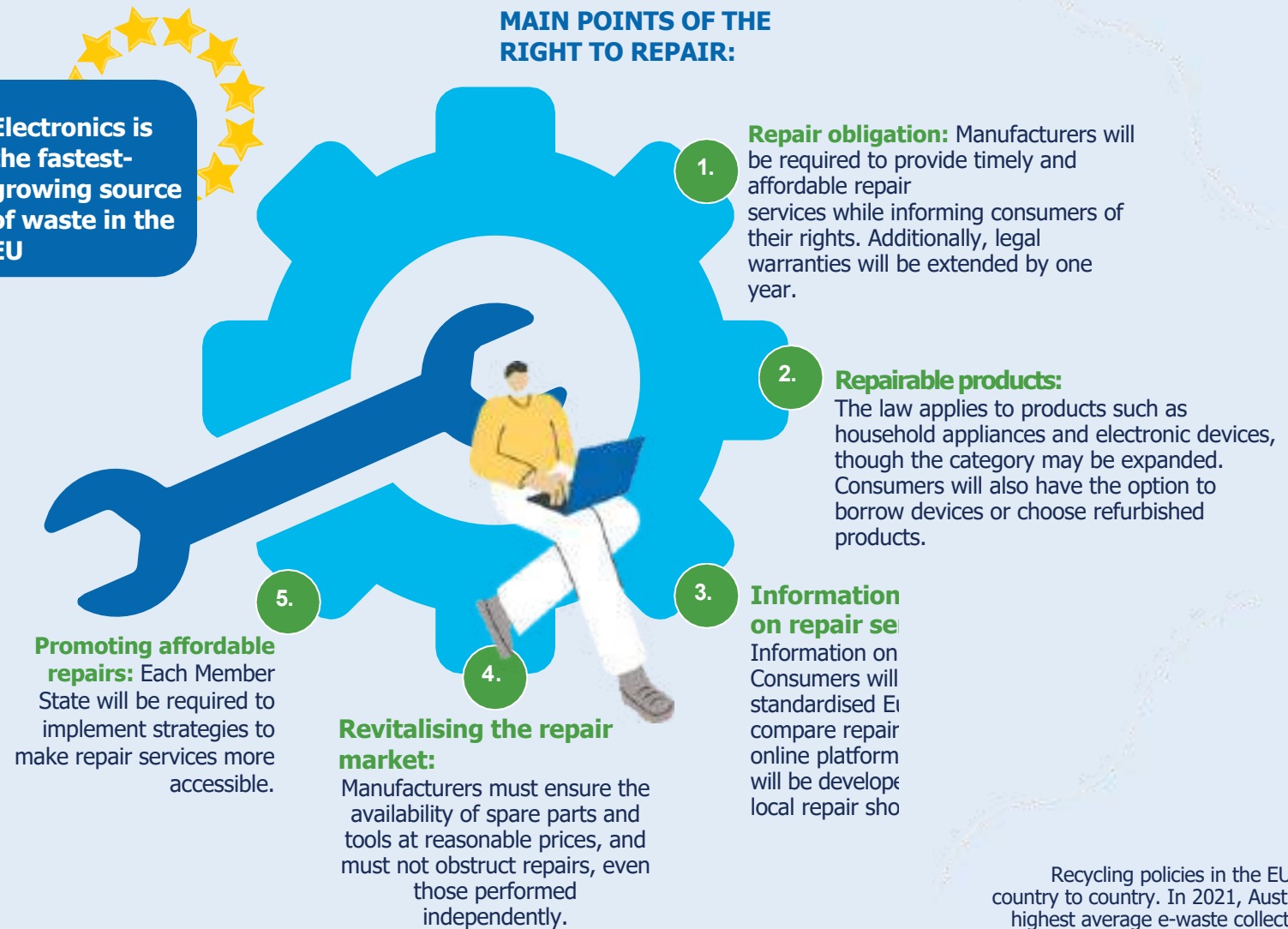


That's why, at this, the  ensures that consumers can repair their goods easily and affordably rather than having to replace them.



The  has been approved by the European Parliament, and the 27 EU member states must transpose the directive into their national legislation by .

MAIN POINTS OF THE RIGHT TO REPAIR:



Recycling policies in the EU vary from country to country. In 2021, Austria had the highest average e-waste collection among EU nations, reaching **15.46 kg per inhabitant**.



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ALTROCONSUMO

The stages of the right to repair standard

The "Right to Repair" directive is part of a broader effort to develop European legislation aimed at promoting sustainability, reducing waste, and fostering a circular economy.

2015

Circular economy strategy

The EU launched its **Circular Economy Strategy** with the goal of **reducing waste and encouraging the reuse and recycling of products**. This strategy laid the foundation for the introduction of the right to repair legislation.

2020

Action plan for the circular economy

The EU introduced the **Circular Economy Action Plan (CEAP)**, which included measures to extend product lifespans and promote repair. This plan identified repair as a **key solution to reducing resource consumption and waste generation**.

2021

Proposal for a regulation on the right to repair

The European Commission proposed a series of regulatory changes to promote repair and reduce electronic waste.

These included **requirements for manufacturers to design products with repairability in mind**, providing spare parts and repair manuals.

Reform of the ecodesign directive

The **ecodesign directive** was strengthened to align with the new right to repair legislation. The most recent legislation also focuses on **design**.

2022

The proposal

In April 2022, the European Parliament requested that the Commission submit a **legislative proposal for the right to repair long-lasting products**.

The proposal was introduced in March 2023.

2024

Entry into force of the directive

On **30 July 2024**, **EU Directive 2024/1799** officially came into force, establishing obligations for producers, encouraging product repair, and **making repairs more accessible and affordable** for consumers.



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The Ecodesign Regulation and the Digital Product Passport

The ecodesign for Sustainable Products Regulation (ESPR)

This regulation introduces stringent requirements for the ecodesign of products placed on the EU market.

There's also a list of products not covered by the standard (e.g. foodstuffs, medicines, plants, animals, and products of human origin).

2024
23
APRIL

Adopted by
the EU Parliament

2024
27
MAY

Adopted by
the EU Council

2024
18
JULY

Entry into
force

MAIN OBJECTIVES

- ◆ To **encourage sustainable** design for nearly all goods on the EU market
- ◆ To fulfil the objectives of the **2020 Circular Economy Action Plan**
- ◆ To improve **energy efficiency** while reducing **environmental impact** by 2030
- ◆ Promoting **sustainable production** and **consumption models**

MAIN MEASURES

- ◆ A **ban on the destruction** of unsold product
- ◆ The obligation for large companies to **disclose information** about products disposed of
- ◆ The promotion of **used and remanufactured products**
- ◆ Establishment of new **ecodesign requirements**

Digital Product Passport - DPP

The **DPP** will provide the products concerned with a **clear identity**, enabling consumers, businesses, and authorities to access the relevant

Product origin, composition, durability, and traceability

Environmental impacts

Repair and recycling options

Availability of spare parts

A key feature of the regulation is the introduction of the Digital Product Passport, an information system **designed to track and document product sustainability**. It collects and provides essential data on various aspects, including:

Digital register

By 19 July 2026, the EU Commission will establish a secure register containing data on products, traders, and production sites

European Commission Web Portal

This portal will allow users to search, compare, and access digital product passports, ensuring continued availability of product data, even if the manufacturer discontinues operations

NEXT STEPS

By 19 April 2025, the EU Commission will adopt a Working Plan outlining priority products subject to the new ecodesign requirements.



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ALTROCONSUMO

Conscious consumption

The right to repair not only benefits the environment, it also offers significant economic advantages.

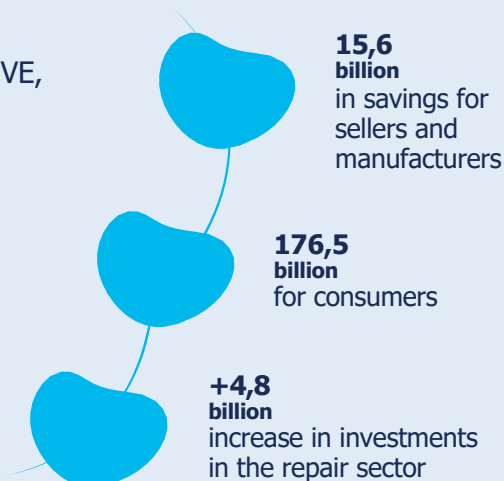
Here is a projection of the expected savings over the next 15 years.

FROM AN **ENVIRONMENTAL** PERSPECTIVE, THE STANDARD IS EXPECTED TO RESULT IN A SAVINGS OF:

Did you know that...?



FROM AN **ECONOMIC** PERSPECTIVE, THE STANDARD IS EXPECTED TO RESULT IN A SAVINGS OF:



PLANNED OBSOLESCENCE

some products are intentionally designed to **fail** or **become obsolete after a predetermined period** set by manufacturers. In certain cases, components are assembled in a way that prevents their removal or replacement.

In the 1930s, researchers at the chemical company DuPont developed nylon, an exceptionally strong synthetic fibre. **Perhaps too strong:** nylon stockings no longer laddered, leading to a decline in sales. In response, DuPont instructed its technicians to weaken the fibre they had originally engineered.

the average lifespan of computers has dropped

from **11** to just

4 years over three decades ?

Is there an International Repair Day?
Yes, it's on 19 October



REPAIR CAFÉS

If there is one place that **embodies the circular economy**, it is the Repair Café. These **public spaces** (whether bars, shops, or courtyards) allow people to bring damaged objects to be repaired by volunteers, who provide both the skills and the necessary tools.

Items of all kinds can be brought in, from hair dryers and smartphones to washing machine circuit boards, blenders, and even wooden stools. Today, **there are approximately 3,000 Repair Cafés** worldwide, and their number continues to grow.



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Right to repair and green jobs

The right to repair will bring significant **economic and environmental benefits**.

But that's not all: it will also boost **employment**, fostering **job creation** across multiple sectors.

As companies become obligated to ensure product repairability, **demand for skilled technicians will rise**, ranging from appliance and electronics repair specialists, to professionals in component remanufacturing.

The **logistics and distribution** sector will also experience growth, particularly in services related to the handling and transport of spare parts.

Furthermore, **new businesses specialising** in maintenance and the circular economy will emerge, fostering innovation among start-ups and independent craftsmen.

Finally, companies will need to invest in **training and professional development**, creating new opportunities for engineers, designers, and environmental consultants tasked with developing more durable and sustainable products.

WHEN THE RIGHT TO REPAIR TAKES EFFECT,
THE MOST IN-DEMAND PROFESSIONS WILL INCLUDE:



THE ECODSIGN PROJECT MANAGER

Plays a crucial role in helping companies develop products that minimise environmental impact while maintaining functionality, affordability, and quality. This figure also ensures compliance with environmental and social standards, and oversees the entire process of designing, manufacturing, and marketing sustainable products.



THE SUSTAINABLE INNOVATION MANAGER

Responsible for planning and implementing strategies that integrate sustainable practices within an organisation. Assesses the environmental and social impact of business operations, developing action plans to enhance sustainability, reduce waste, and optimise resource use.

THE ENVIRONMENTAL RESEARCH AND DEVELOPMENT MANAGER

Bridging scientific research, business strategy, and technological innovation, this figure focuses on improving production processes, materials, and overall sustainability, developing eco-friendly technologies and materials, and testing solutions to minimise the environmental impact of products and manufacturing processes.



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ALTROCONSUMO



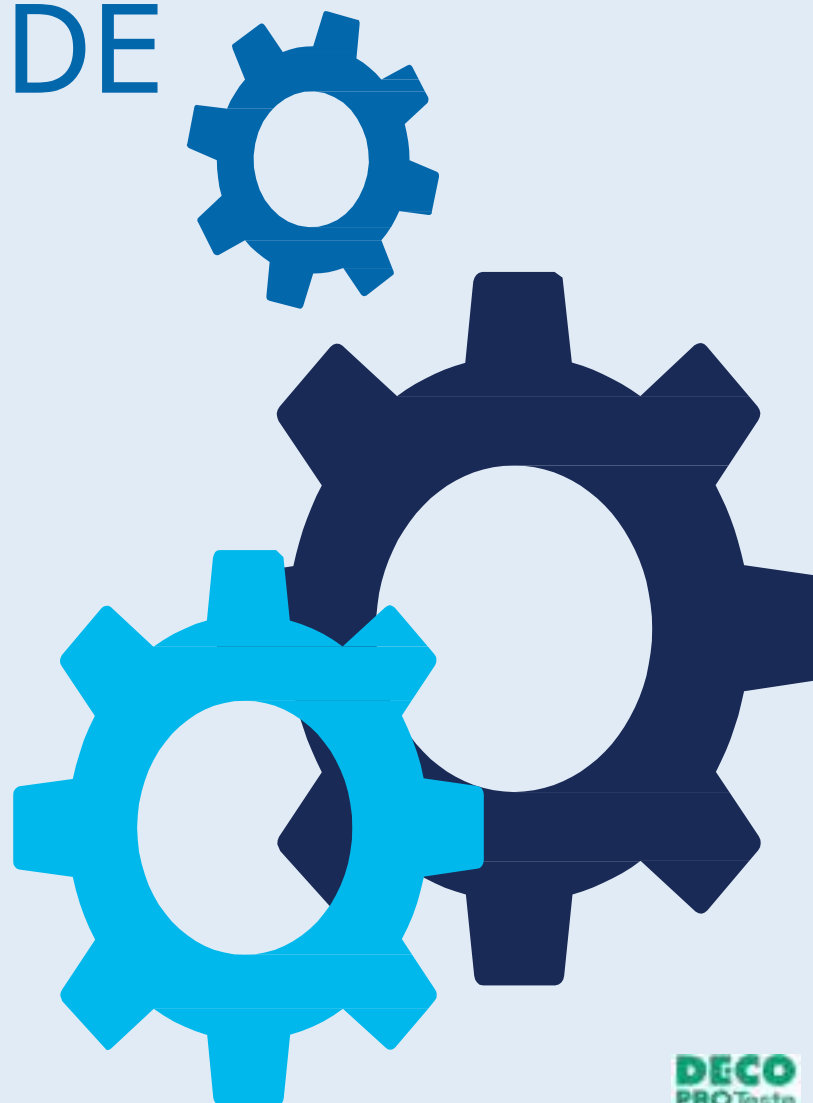
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RIGHT TO REPAIR GUIDE



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REPair PERspective project

The aim of the REPPER project, REPAIR PERspective, is to **facilitate the transition to more sustainable choices and a circular, resource-efficient economy by developing a culture of repair**. Respecting the environment and protecting the planet means **rethinking the traditional business models**, rediscovering the centrality of human value in the research for innovation and competitiveness, reviewing behaviours, towards a new model circular economy. To this end, REPPER brings together qualified and diversified partners in the Mediterranean region, capable of capitalizing on past results and implementing new actions aimed at public and private targets such as SMEs, public authorities, sectoral agencies, business support organizations, schools and citizens. The project aims to change the mindset and attitudes of policy makers and citizens, increase skills and support SMEs in the repair economy by promoting circularity and providing concrete answers such as **the creation of new sustainable business opportunities**. **The REPPER project, has 3 main strands:**

1. Implementation of the REPPER HUB - a single physical and digital point of contact that
2. will design and test a transnational network of pilot services. Creation of the REPPER
3. FACTORY for upskilling, providing training on the right to repair and the circular economy. Building a new CULTURE OF REPAIR through nudges that can trigger positive changes and new habits.



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Training kit Rep.per

This training, in the domain of the REP.per project, **motivates to develop a critical and participatory thinking on sustainable issues**. In particular, this initiative will enable **to address a highly topical issue such as the right to repair**, a principle approved by the European Parliament to achieve circular economy and sustainable development.

This guide aims to introduce the principle of the right to repair and the historical normative path that led EU to identify this need and make it a right of every citizen. The educational materials explain the concept of **sustainability** not only in relation to production or life-cycle monitoring, but also in terms of product design and conception, **to make resource reuse more effective, safer, and more secure**.

Moreover, the training documentation aims to make understandable what tools are available to become a class of attentive consumers and to raise awareness of the future opportunities from a professional and employment point of view.



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Educational Sheet 1

The right to repair:
what it is



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The right to repair: what it is

77% of EU consumers would prefer to repair their goods rather than purchase new ones, but often forego repairs due to high costs

(source: Eurobarometro

2020)

Each year, **35 million tonnes of waste** accumulate in the European Union, including a vast number of potentially repairable items that end up in landfills. This excessive waste generation threatens progress toward a circular and sustainable economy.

Electronics is the fastest-growing source of waste in the EU

MAIN POINTS OF THE RIGHT TO REPAIR:

Repair obligation:

1. Manufacturers will be required to provide timely and affordable repair services while informing consumers of their rights. Additionally, legal warranties will be extended by one year.

Repairable products:

The law applies to products such as household appliances and electronic devices, though the category may be expanded. Consumers will also have the option to borrow devices or choose refurbished products.

Information on repair services:

Information on repair services: Consumers will receive a standardised European form to compare repair services, and an online platform will be developed to help locate local repair shops.

Revitalising the repair market:

Manufacturers must ensure the availability of spare parts and tools at reasonable prices, and must not obstruct repairs, even those performed independently.

Promoting affordable repairs:

Each Member State will be required to implement strategies to make repair services more accessible.

To counteract this, the **right to repair** directive ensures that consumers can repair their goods easily and affordably rather than having to replace them.

The regulation has been approved by the European Parliament, and the 27 EU member states must transpose the directive into their national legislation by **31 July 2026**.



Recycling policies in the EU vary from country to country. In 2021, Austria had the highest average e-waste collection among nations, reaching **15.46 kg per inhabitant EU**.



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Educational Sheet 2

The stages of the right
to repair standard



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Educational Sheet 3

Legal product
warranty



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Legal product warranty

Productos Novos

- Todos os produtos comprados a partir de 1º de janeiro de 2022 têm uma **garantia legal de 3 anos a partir da entrega**.
- Durante os primeiros 2 anos, se surgir um defeito, presume-se que é de origem.
- **Pecas de reposição:** Para bens duráveis, elas devem estar disponíveis por pelo menos 10 anos a partir do momento em que o produto é descontinuado.

Productos em Segunda-mão e Recondicionados

- **Para uma loja:** Por defeito, a garantia é de 3 anos, a menos que seja acordada uma duração mais curta, que não pode ser inferior a 1 ano.
- **Entre particulares:** 6 meses para reclamar defeitos ocultos, desde que o defeito seja comprovado e nenhuma outra condição tenha sido acordada.

Garantía das Reparações

Durante o período de garantia de compra: 1 ano de garantia sobre a reparação realizada. Tem direito a um comprovativo da reparação com uma data de entrega (não precisa de ser uma fatura).

Quando a garantia de compra terminar: Garantia mínima de 3 meses na reparação.



O que devem fazer os consumidores se surgir problemas:

- 1. Reúna toda a documentação:** Recibo de compra, fatura, fotos, comprovativo de reparação e comunicações com a empresa.
- 2. Reclame por escrito ao vendedor ou à oficina de reparação.**
- 3. Se não houver acordo, aceda aos seguintes canais:**
 - Reclamação no livro de reclamações em loja ou online.
 - Organização de Defesa dos Consumidores (DECO PROteste).
 - Plataforma europeia de reparação dos consumidores, para compras transfronteiriças.
- 4. Vía judicial:** Último recurso, recomendado apenas para casos com quantidades elevadas ou provas sólidas. Se o pedido for inferior a 2 000 euros, não é necessário advogado ou solicitador.



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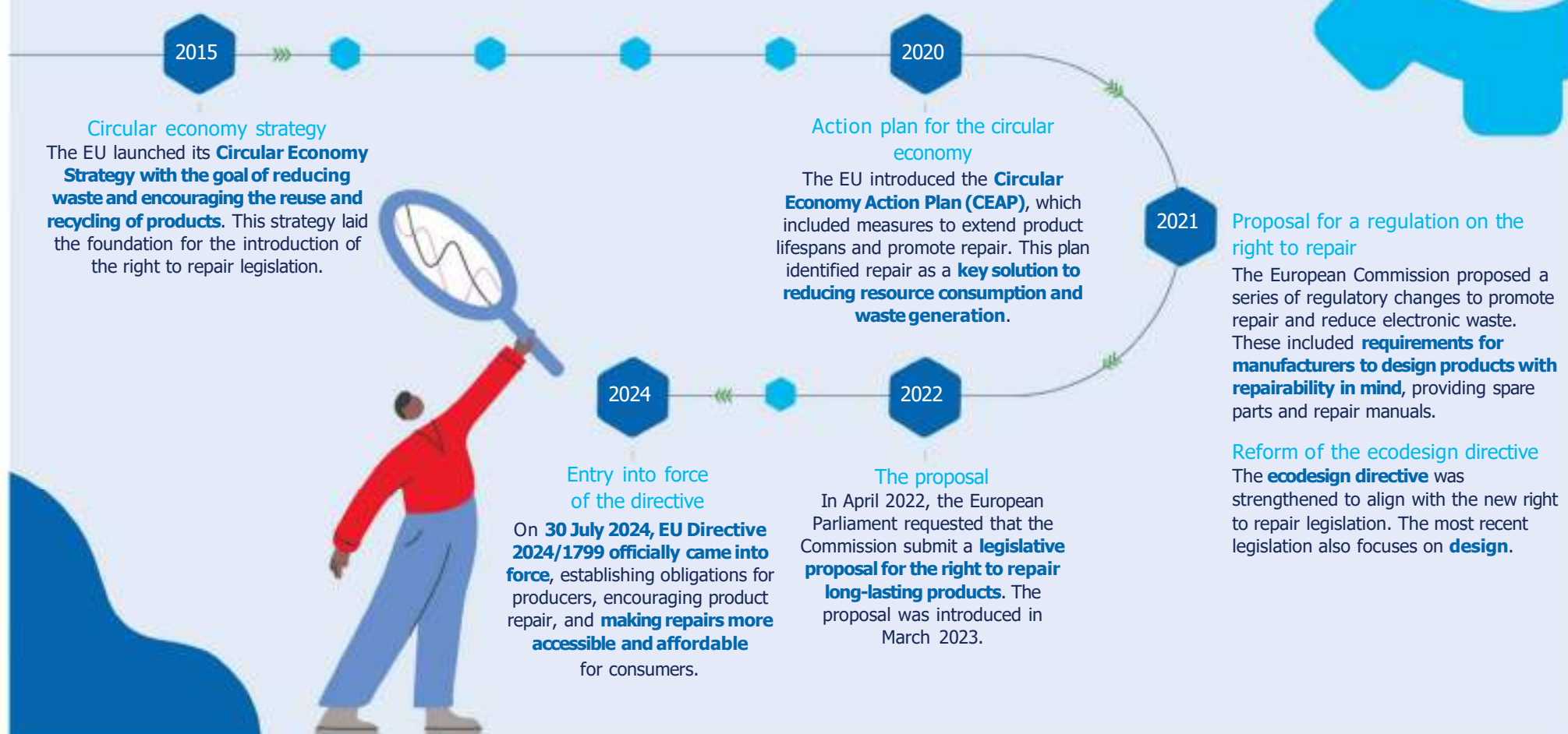


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The stages of the right to repair standard

The "Right to Repair" directive is part of a broader effort to develop European legislation aimed at promoting sustainability, reducing waste, and fostering a circular economy.



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Educational Sheet 4

The Ecodesign Regulation and the Digital Product Passport



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The Ecodesign Regulation and the Digital Product Passport

The ecodesign for Sustainable Products Regulation (ESPR)

This regulation introduces stringent requirements for the ecodesign of products placed on the EU market. **There's also a list of products not covered by the standard** (e.g. foodstuffs, medicines, plants, animals, and products of human origin).



MAIN OBJECTIVES

- To **encourage sustainable** design for nearly all goods on the EU market
- To fulfil the objectives of the **Circular Economy Action Plan 2020**
- To improve **energy efficiency** while reducing **environmental impact** by 2030
- Promoting **sustainable production** and **consumption models**

MAIN MEASURES

- A **ban on the destruction** of unsold product
- The obligation for large companies to **disclose information** about disposed products
- The promotion of **used and remanufactured products**
- Establishment of new **ecodesign requirements**

Digital Product Passport - DPP

The **DPP** will provide the products concerned with a **clear identity**, enabling consumers, businesses, and authorities to access the relevant data more easily

Product origin, composition, durability, and traceability

Environmental impacts

Repair and recycling options

Availability of spare parts

A key feature of the **DPP** is the **digital foundation** of the Digital Product Passport, an information system **designed to track and document product sustainability**. It collects and provides essential data on various aspects, including:



Digital register

By 19 July 2026, the EU Commission will establish a secure register containing data on products, traders, and production sites



European Commission Web Portal

This portal will allow users to search, compare, and access digital product passports, ensuring continued availability of product data, even if the manufacturer discontinues operations

NEXT STEPS

By 19 April 2025, the EU Commission will adopt a Working Plan outlining priority products subject to the new ecodesign requirements.



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Educational Sheet 5

Conscious consumption



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Conscious consumption

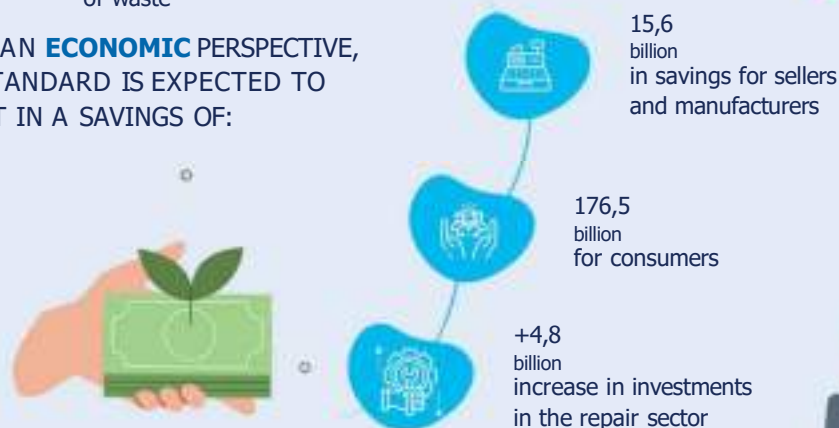
The right to repair not only benefits the environment, it also offers significant economic advantages. Here is a projection of the expected savings over the next 15 years.

FROM AN **ENVIRONMENTAL** PERSPECTIVE, THE STANDARD IS EXPECTED TO RESULT IN A SAVINGS OF:

Did you know that...?



FROM AN **ECONOMIC** PERSPECTIVE, THE STANDARD IS EXPECTED TO RESULT IN A SAVINGS OF:



PLANNED OBSOLESCENCE

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In the 1930s, researchers at the chemical company DuPont developed nylon, an exceptionally strong synthetic fibre. Perhaps too strong: nylon stockings no longer laddered, leading to a decline in sales. In response, DuPont instructed its technicians to weaken the fibre they had originally engineered.

the average lifespan of computers has dropped

from 11 to just 4 years over three decades?

Is there an International Repair Day? Yes, it's on the third Saturday in October



REPAIR CAFÉS

If there is one place that **embodies the circular economy**, it is the Repair Café. These **public spaces** (whether bars, shops, or courtyards) allow people to bring damaged objects to be repaired by volunteers, who provide both the skills and the necessary tools.

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Educational Sheet 6

Right to repair and green jobs



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Right to repair and green jobs

The right to repair will bring significant **economic and environmental benefits**. But that's not all: it will also boost **employment**, fostering **job creation** across multiple sectors.

As companies become obligated to ensure product reparability, **demand for skilled technicians will rise**, ranging from appliance and electronics repair specialists, to professionals in component remanufacturing.

The **logistics and distribution** sector will also experience growth, particularly in services related to the handling and transport of spare parts.

Furthermore, **new businesses specialising** in maintenance and the circular economy will emerge, fostering innovation among start-ups and independent craftsmen.



Finally, companies will need to invest in **training and professional development**, creating new opportunities for engineers, designers, and environmental consultants tasked with developing more durable and sustainable products.

WHEN THE RIGHT TO REPAIR TAKES EFFECT,
THE MOST IN-DEMAND PROFESSIONS WILL INCLUDE:



THE ECODESIGN PROJECT MANAGER

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Training Sheet 7

Repair is easy: "REPAIR" tool



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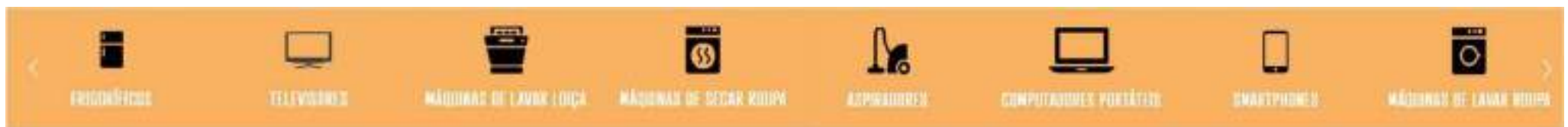
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Repair is easy: "REPAIR" tool



“**REPARAÇÕES**”: A platform to promote repair, empower consumers and reduce e-waste

- Aimed at helping consumers repair rather than replace items such as vacuum cleaners, washing machines, fridges, or TVs
- Supports the fight against premature obsolescence and promotes the right to repair
- Designed to reach consumers, businesses, and policy-makers to promote sustainable consumption



<https://www.deco.proteste.pt/reparacoes>



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Repair is easy: "REPAIR" tool



What DECOP Repair Hub offers

- Step-by-step guides and tips to troubleshoot common faults
- Advice on spare parts and what to check before calling a technician
- Educational resources to increase repair skills and confidence
- Highlights the economic and environmental value of repair
- Contributes to implementing the new EU Directive on Right to Repair (to be transposed by July 2026)



<https://www.deco.proteste.pt/reparacoes>



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RIGHT TO REPAIR GUIDE



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REPair PERspective project

The aim of the REPper project, REPair PERspective, is to **facilitate the transition to more sustainable choices and a circular, resource-efficient economy by developing a culture of repair.** Respecting the environment and protecting the planet means **rethinking the traditional business models**, rediscovering the centrality of human value in the research for innovation and competitiveness, reviewing behaviours, towards a new model circular economy. To this end, REPper brings together qualified and diversified partners in the Mediterranean region, capable of capitalizing on past results and implementing new actions aimed at public and private targets such as SMEs, public authorities, sectoral agencies, business support organizations, schools and citizens. The project aims to change the mindset and attitudes of policy makers and citizens, increase skills and support SMEs in the repair economy by promoting circularity and providing concrete answers such as **the creation of new sustainable business opportunities.** The REPper project, has 3 main strands:

1. Implementation of the REPper HUB - a single physical and digital point of contact that
2. will design and test a transnational network of pilot services. Creation of the REPper
3. FACTORY for upskilling, providing training on the right to repair and the circular economy. Building a new CULTURE OF REPAIR through nudges that can trigger positive changes and new habits.



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Training kit Rep.per

This training, in the domain of the REP.per project, **motivates to develop a critical and participatory thinking on sustainable issues**. In particular, this initiative will enable **to address a highly topical issue such as the right to repair**, a principle approved by the European Parliament to achieve circular economy and sustainable development.

This guide aims to introduce the principle of the right to repair and the historical normative path that led EU to identify this need and make it a right of every citizen. The educational materials explain the concept of **sustainability** not only in relation to production or life-cycle monitoring, but also in terms of product design and conception, **to make resource reuse more effective, safer, and more secure**. Moreover, the training documentation aims to make understandable what tools are available to become a class of attentive consumers and to raise awareness of the future opportunities from a professional and employment point of view.



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Educational Sheet 1

The right to repair: Circular economy and repair



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The right to repair: Circular economy and repair

77% of EU consumers would prefer to repair their goods rather than purchase new ones, but often forego repairs due to high costs

(source: Eurobarometro 2020)

Each year, **35 million tonnes of waste** accumulate in the European Union, including a vast number of potentially repairable items that end up in landfills. This excessive waste generation threatens progress toward a circular and sustainable economy.

Electronics is the fastest-growing source of waste in the EU



To counteract this, the **right to repair** directive ensures that consumers can repair their goods easily and affordably rather than having to replace them.



The regulation has been approved by the European Parliament, and the 27 EU member states must transpose the directive into their national legislation by **31 July 2026**. Spain will do it through the Sustainable consumption law

MAIN POINTS OF THE RIGHT TO REPAIR:

Repair obligation:

1. Manufacturers will be required to provide timely and affordable repair services while informing consumers of their rights. Additionally, legal warranties will be extended by one year.

Repairable products:

The law applies to products such as household appliances and electronic devices, though the category may be expanded. Consumers will also have the option to borrow devices or choose refurbished products.

Information on repair services:

Information on repair services: Consumers will receive a standardised European form to compare repair services, and an online platform will be developed to help locate local repair shops.

Promoting affordable repairs:

All EU countries will implement strategies to make repair services more accessible. In Spain, co-financing has been proposed, charged to the extended responsibility of manufacturers.

Revitalising the repair market:

Manufacturers must ensure the availability of spare parts and tools at reasonable prices, and must not obstruct repairs, even those performed independently.



Recycling policies in the EU vary from country to country. In 2021, Austria had the highest average e-waste collection among nations, reaching **15.46 kg per inhabitant**.



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Educational Sheet 2

10 years to achieve a
right to repair



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The stages of the right to repair standard

The "Right to Repair" directive is part of a broader effort to develop European legislation aimed at promoting sustainability, reducing waste, and fostering a circular economy.

2015

Circular economy strategy

The EU launched its **Circular Economy Strategy with the goal of reducing waste and encouraging the reuse and recycling of products**. This strategy laid the foundation for the introduction of the right to repair legislation.

2020

Action plan for the circular economy

The EU introduced the **Circular Economy Action Plan (CEAP)**, which included measures to extend product lifespans and promote repair. This plan identified repair as a **key solution to reducing resource consumption and waste generation**.

2021

Proposal for a regulation on the right to repair

The European Commission proposed a series of regulatory changes to promote repair and reduce electronic waste. These included **requirements for manufacturers to design products with repairability in mind**, providing spare parts and repair manuals.

Reform of the ecodesign directive

The **ecodesign directive** was strengthened to align with the new right to repair legislation. The most recent legislation also focuses on **design**.

2022

The proposal

In April 2022, the European Parliament requested that the Commission submit a **legislative proposal for the right to repair long-lasting products**. The proposal was introduced in March 2023.

2024

Entry into force of the directive

On **30 July 2024, EU Directive 2024/1799 officially came into force**, establishing obligations for producers, encouraging product repair, and **making repairs more accessible and affordable** for consumers.



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Educational Sheet 3

WARRANTIES OF THE PRODUCTS



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Warranties of the products

New Products

- All products purchased from January 1, 2022, have a **3-year legal warranty** starting from the date of delivery.
- During the first 2 years, if a defect appears, it is presumed to be of origin.
- **Spare parts:** For durable goods, they must be available for at least 10 years from the moment the product ceases to be manufactured.

Second-hand and Refurbished Products

- **From a store:** By default, the warranty is 3 years, unless a shorter duration is agreed upon, which cannot be less than 1 year.
- **Between individuals:** There is a 6-month period to claim for hidden defects, provided that the defect can be proven and no other condition has been agreed upon.

Repair Warranty

- **During the purchase warranty period:** There is a 1-year warranty on the repair carried out. You are entitled to receive proof of the repair with the delivery date (it does not need to be an invoice).
- **Once the purchase warranty has expired:** There is a minimum 3-month warranty on the repair.



What consumers can do if a problem arises:

1. **Gather all documentation:** Purchase receipt, invoice, photos, proof of repair, and communications with the company.
2. **Submit a written complaint to the seller or repair service.**
3. **If no agreement is reached,** use the following options:
 - Official complaint form.
 - Municipal Consumer Information Office (OMIC).
 - Consumers and Users Organization (OCU).
 - European Consumer Redress Platform, for cross-border purchases.
4. **Judicial route:** Last resort, recommended only for cases involving large amounts or solid evidence. If the claim is under €2,000, no lawyer or court representative is required.



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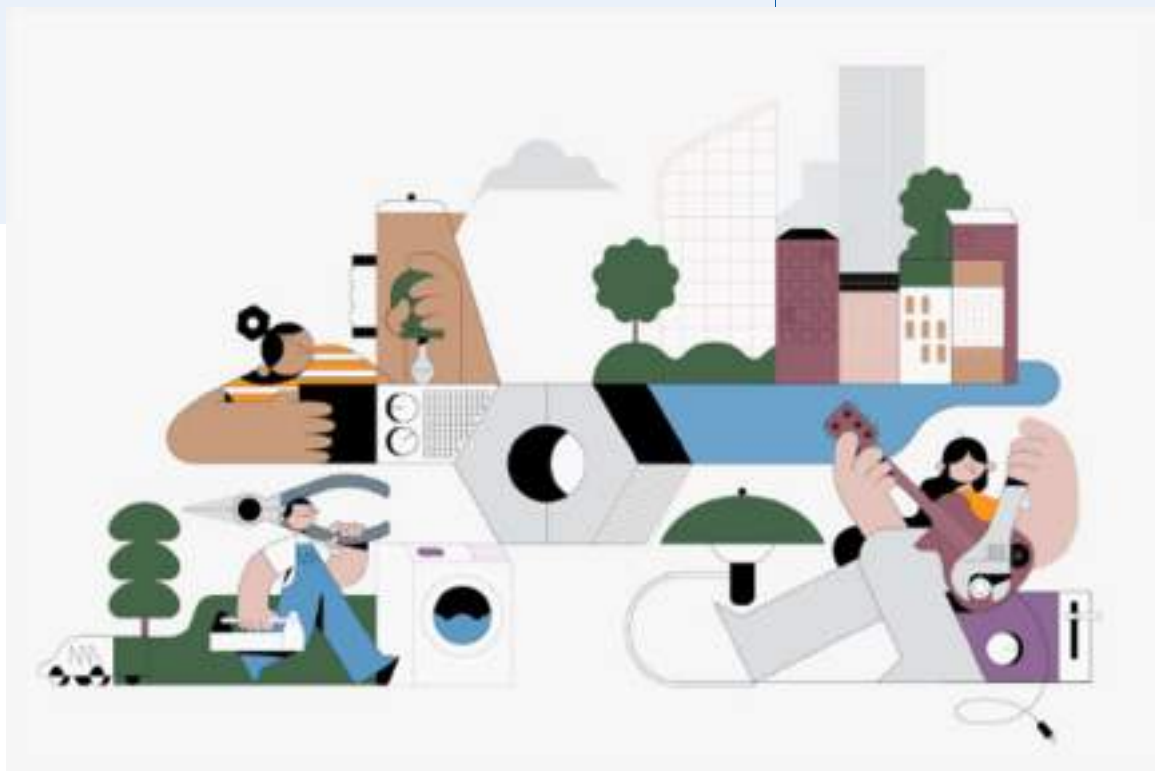


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Educational Sheet 4

Repair is easy: **REPARA REVIVE**



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Reparar es fácil: Hub REPARA REVIVE



<https://www.ocu.org/repara>

Access OCU news and video tutorials

To learn more about repair and maintenance: how to change the washing machine seal, detect where the fridge leak is coming from, and much more...
Check out our tutorials **and dare to repair!**

¡I want to fix it!

Often it's not that complicated.
Discover step-by-step solutions
to make your own repairs..



And what about spare parts?

If you feel confident enough to fix the issue but are missing the spare parts, we'll tell you where to find the **replacement pieces**.

Do you prefer to have it fixed by a professional?

Schedule an appointment with a workshop or technical service. If you lack the knowledge or experience, you can always take your device to a **repair shop**. We'll show you where to find **Technical Services, repair professionals, Repair Cafés, and repair workshops**.

What should I do with the old one?

Have you ended up buying a new appliance and don't know what to do with the old one?

- If it still works, we'll tell you where you can donate it or sell it second-hand.
- If it's beyond repair, we'll help you find the nearest recycling center to your home.



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Educational Sheet 5

Conscious consumption



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Conscious consumption

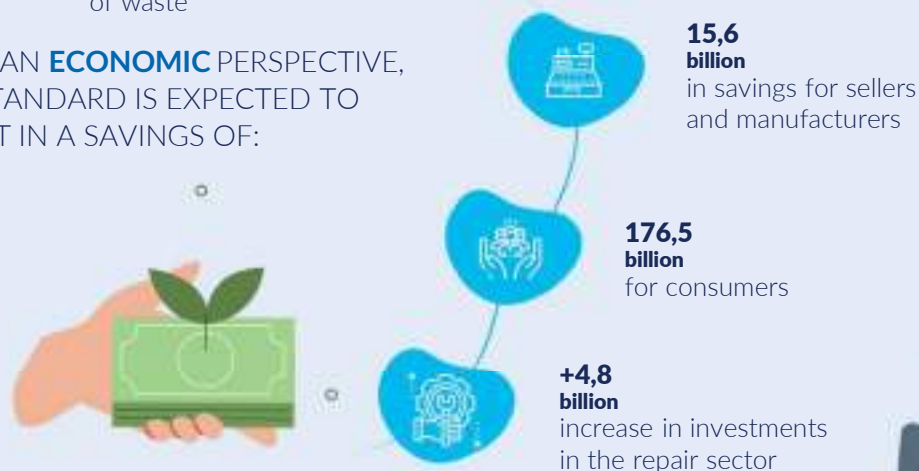
The right to repair not only benefits the environment, it also offers significant economic advantages. **Here is a projection of the expected savings over the next 15 years.**

FROM AN **ENVIRONMENTAL** PERSPECTIVE, THE STANDARD IS EXPECTED TO RESULT IN A SAVINGS OF:

Did you know that...?



FROM AN **ECONOMIC** PERSPECTIVE, THE STANDARD IS EXPECTED TO RESULT IN A SAVINGS OF:



PLANNED OBSOLESCENCE

some products are intentionally designed to **fail** or **become obsolete after a predetermined period** set by manufacturers. In certain cases, components are assembled in a way that prevents their removal or replacement.

In the 1930s, researchers at the chemical company DuPont developed nylon, an exceptionally strong synthetic fibre. **Perhaps too strong:** nylon stockings no longer laddered, leading to a decline in sales. In response, DuPont instructed its technicians to weaken the fibre they had originally engineered.

the average lifespan of computers has dropped from **11** to just **4** years over three decades?

Is there an International Repair Day? Yes, it's on the third Saturday in October



REPAIR CAFÉS

If there is one place that **embodies the circular economy**, it is the Repair Café. These **public spaces** (whether bars, shops, or courtyards) allow people to bring damaged objects to be repaired by volunteers, who provide both the skills and the necessary tools.

Items of all kinds can be brought in, from hair dryers and smartphones to washing machine circuit boards, blenders, and even wooden stools. Today, **there are approximately 3,000 Repair Cafés** worldwide, and their number continues to grow.



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Educational Sheet 6

The Ecodesign Regulation and the Digital Product Passport



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The Ecodesign Regulation and the Digital Product Passport

The ecodesign for Sustainable Products Regulation (ESPR)

This regulation introduces stringent requirements for the ecodesign of products placed on the EU market. **There's also a list of products not covered by the standard** (e.g. foodstuffs, medicines, plants, animals, and products of human origin).



MAIN OBJECTIVES

- ◆ Promote sustainable design in almost all goods on the European market.
- ◆ Meet the objectives of the 2020 Circular Economy Action Plan.
- ◆ Improve energy efficiency and reduce environmental impact by 2030.
- ◆ Encourage sustainable production and consumption models

MAIN MEASURES

- ◆ A **ban on the destruction** of unsold product
- ◆ The obligation for large companies to **disclose information** about disposed products
- ◆ The promotion of **used and remanufactured products**
- ◆ Establishment of new **ecodesign requirements**

Digital Product Passport - DPP



The Product Passport is used to track and document the sustainability of products.

It also helps collect and provide essential data on different aspects of each product.



Digital register



By 19 July 2026, the EU Commission will establish a secure register containing data on products, traders, and production sites

European Commission Web Portal



This portal will allow users to search, compare, and access digital product passports, ensuring continued availability of product data, even if the manufacturer discontinues operations

NEXT STEPS

The European Commission has published a plan listing the priority products for ecodesign requirements: textiles, furniture, mattresses, tires, detergents, paints, lubricants, chemicals, electrical and electronic products, iron, steel, and aluminum.



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Educational Sheet 7

Right to repair and green jobs



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Right to repair and green jobs

The right to repair will bring significant **economic and environmental benefits**. But that's not all: it will also boost **employment**, fostering **job creation** across multiple sectors.

As companies become obligated to ensure product repairability, **demand for skilled technicians will rise**, ranging from appliance and electronics repair specialists, to professionals in component remanufacturing.

The **logistics** and **distribution** sector will also experience growth, particularly in services related to the handling and transport of spare parts.

Furthermore, **new businesses specialising** in maintenance and the circular economy will emerge, fostering innovation among start-ups and independent craftsmen.

Finally, companies will need to invest in **training and professional development**, creating new opportunities for engineers, designers, and environmental consultants tasked with developing more durable and sustainable products.

WHEN THE RIGHT TO REPAIR TAKES EFFECT,
THE MOST IN-DEMAND PROFESSIONS WILL INCLUDE:



THE ECODESIGN PROJECT MANAGER

Plays a crucial role in helping companies develop products that minimise environmental impact while maintaining functionality, affordability, and quality.

This figure also ensures compliance with environmental and social standards, and oversees the entire process of designing, manufacturing, and marketing sustainable products.



THE SUSTAINABLE INNOVATION MANAGER

Responsible for planning and implementing strategies that integrate sustainable practices within an organisation. Assesses the environmental and social impact of business operations, developing action plans to enhance sustainability, reduce waste, and optimise resource use.



THE ENVIRONMENTAL RESEARCH AND DEVELOPMENT MANAGER

Bridging scientific research, business strategy, and technological innovation, this figure focuses on improving production processes, materials, and overall sustainability, developing eco-friendly technologies and materials, and testing solutions to minimise the environmental impact of products and manufacturing processes.



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Case Studies Issue

**Presentation of Good Practices in the Repair
Economy in Greece and Abroad**



<https://repper.interreg-euro-med.eu>

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- **Brief Overview**

Repair Economy enhances the lifespan of products through repair, remanufacturing and reuse — reducing waste, saving resources and creating local jobs. The European legal framework (Directive 2024/1799) strengthens repair rights and places obligations on producers/ providers; in parallel, projects and initiatives (community-based, business, municipal) show practical ways of implementation.

Repair reduces the demand for raw materials and emissions associated with the production of new products; it is considered a "green" economic activity with a social impact (skills, jobs). Directive 2024/1799 establishes rules to make repair affordable/ accessible to consumers and independent repairers.



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- Case Study A: Repair Café (original and network)

Repairs Cafés started in the Netherlands (late 2000s) and became an international movement — communities offering free/low-cost sessions where volunteers help citizens repair items. The network has demonstrated success through RepairMonitor (more than 37,000 repair records in 2024, with ~62% success rate in recorded cases).

<https://www.repaircafe.org/en/>

<https://www.repairmonitor.org/>

<https://www.youtube.com/watch?v=gVjU1ydAUIQ&t=1s>

<https://research.uca.ac.uk/3140/1/The%20Second%20Global%20Survey%20of%20Repair%20Cafes%20-%20A%20Summary%20of%20Findings.pdf>



Main activities

- Regular "workshops"/ meetings with volunteer technicians.
- Data register (type of object, repair result) → patterns and educational material.

Economics & Governance

- Low functional cost (space, tools, volunteers). Funding from local Government programs, donations and small sponsorships.
- Simple management / local coordinator.

Results – Lessons

- High repair success rate for small appliances / furniture / clothes.
- Key: correct monitoring and management of spare parts supply.

Adjustment in the Region of Central Macedonia (RCM)

- Strategy: start with a pilot application of one day/month in Municipality library or cultural center. Organization: local coordinator, list of volunteers, basic tools, "stand-by" spare parts. (detailed steps in the form of a checklist below)
- Existing experience: RepairCafés days have already been organized within the framework of the REPPER project. More information:

<https://anatoliki.gr/repper/repair-cafe-gia-tin-epidiorthosi-rouchon-kai-yfasmaton/>

<https://anatoliki.gr/repper/repair-cafe-daneistiki-ergaleiothiki-2/>



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- Case Study B : LIFE RE - WEEE / Oreokastro Center (Greece)

Summary

The LIFE RE-WEEE project in Greece created centers of sorting/classification of Waste from Electrical and Electronic Equipment (WEEE), one of which in Northern Greece, in the Region of Central Macedonia, aiming at the preparation for reuse and the reduction of electrical / electronic waste and garbage. The project has been awarded / recognized for the continuous support of repair services and reuse.

https://cinea.ec.europa.eu/news-events/news/repair-reuse-and-recycle-success-award-winning-life-re-wEEE-leads-way-2023-12-12_en

<https://www.reweee.gr/el>

<https://www.reweee.gr/el/attachments.html>



Main activities

- Aggregation, evaluation & classification of devices (in order to separate in operational pieces /parts).
- Preparation for reuse workshop: control, simple repairs, reconstruction.
- Networking with social structures (donation/sale of repaired/reusable devices in reduced prices in vulnerable population groups).



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Economics & Governance

- Financing from LIFE program & synergies with local institutions / businesses.
Important value: management flow products (logistics) & technical specifications for reuse.

Results – Lessons

- The model shows that WEEE centers with the capacity to prepare for reuse can feed local markets with repaired and reusable products. Key: correct documentation of product status and safety control before the re-allocation to the market.

Adjustment in the RCM

- Cooperation between local Municipalities and the Region of Central Macedonia with existing Centers (e.g. Oreokastro) for the next step: micro –hubs for local repair / reconstruction which will obtain devices from the WEEE center.



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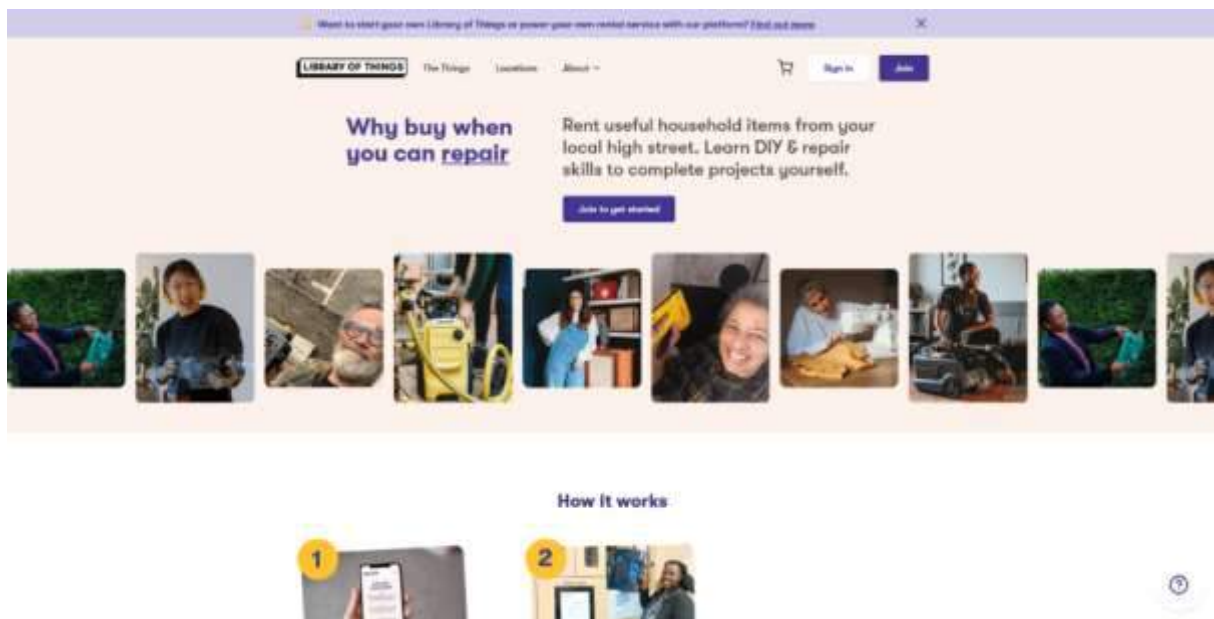
- Case Study C: Library of Things (UK — Communities Lending)

Summary

The Library of Things platform (and the corresponding network) provides citizens with access to tools / devices which they could need occasionally (drills, sewing machines, tools etc.). In this way purchases are decreasing, reuse is encouraged and often the same network supports repair activities and learning. The Library of Things has proven results in changing behavior and big resonance in cities such as London.

<https://www.circularonline.co.uk/case-studies/what-library-of-things-has-taught-us-about-behaviour-change/>

<https://www.libraryofthings.co.uk/>



Main activities

- List of objects for lending, online reservations, delivery/pickup points.
- Educational seminars and workshops for the use of tools and devices as well as for basic repairs.



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Economics & Governance

- Business model: subscriptions + loan fees + sponsorships. Collaborations with municipalities / local communities.

<https://relondon.gov.uk/resources/case-study-library-of-things-surviving-covid-19-to-come-back-bigger-and-better>

Results – Lessons

- Requires good inventory management, insurance policies and clear terms of use. Very effective for behavior change (borrow than buy).

Adjustment in the RCM

- Creating a “Library of Things” in cooperation with municipal libraries— ideally combined with activities such as Repair Cafés and educational workshops.



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- Case Study D : iFixit (educational & business example)

Summary

The iFixit is a business / non-business speculative model, which provides free repair guides, spare parts and collections of spare parts as well as repair tools (parts & kits) — and promotes the right to repair. The platform also empowers do-it -yourself repair communities.

<https://www.ifixit.com/News/61140/what-is-right-to-repair>



Main activities

- Detailed step-by-step repair guides (with photos / videos).
- Sale of spare parts and repair tools.
- Pro legislative change campaigns (Right to Repair).

Results – Lessons

- The documentation (repair guides – how to guides) and the supply of spare parts and tools are critical: when the citizen / technician has repair guide and spare parts available, the success of repair increases dramatically.

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4182742



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Adaptation to the RCM

A local "library" of instructions" (digital and/ or printed) with translated and appropriately adapted repair guides can be developed for the more common objects /products, as well as a list of reliable spare parts suppliers.



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- Case Study E: Community Repair Hubs & Fixing Factories (UK)

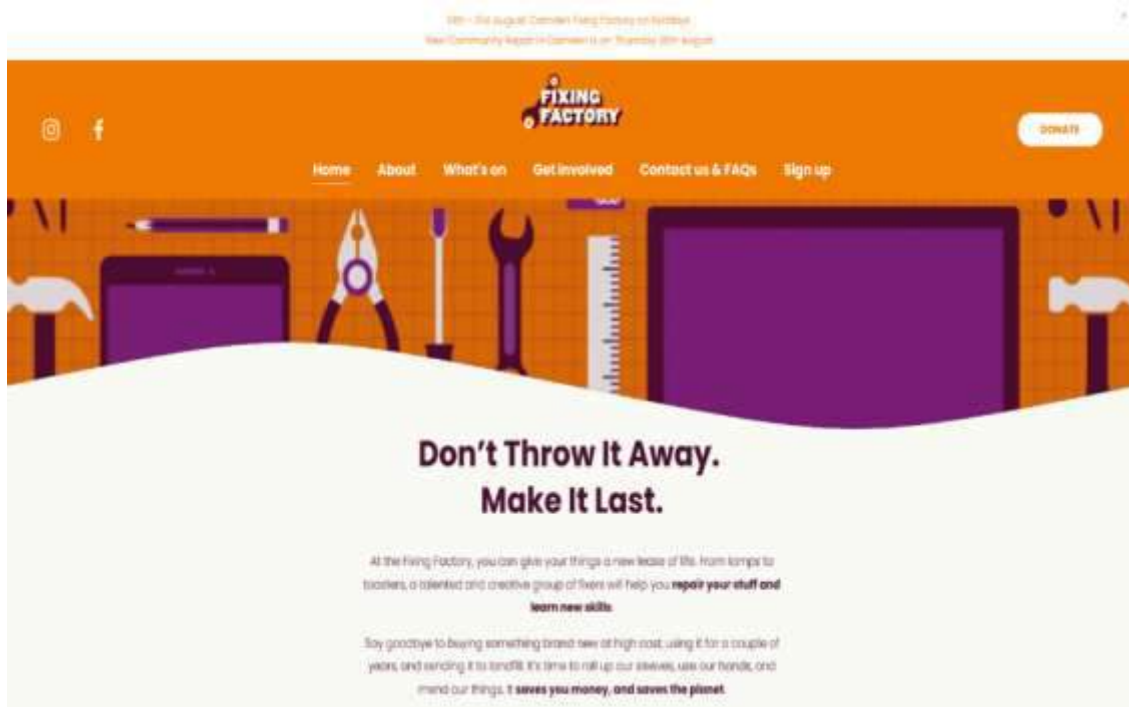
Summary

Projects such as the "Fixing Factories" (e.g. Camden Fixing Factory) and other initiatives present combination of commercial services, education and social actions — they also offer free and paid repairs, repair courses and related professional training.

<https://www.theguardian.com/environment/2025/mar/06/repair-shops-broken-devices-new-lease-of-life>

<https://www.fixingfactory.org/>

<https://communityrepairnetwork.org.uk/>



Results – Lessons

- Mixed income models (paid + voluntary services) offer economic sustainability.
- Link with local jobs market (training for technicians) increases resonance.

Adaptation to the RCM

Aim to mixed model: municipal micro-grants + paid services + training programs.



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- Practical guide to implementation in the RCM

Basic Strategic Areas

- A. Pilot Implementation & Recognition building (with creation of a local Repair Café & Library of Things)
- B. Infrastructure & spare parts/tools flows (link to WEEE Center)
- C. Human resources & training (seminars, repairer certifications)

Indicative Timetable for Pilot Implementation in the RCM (12 months):

1. **Months 0–1:** Formation of the Project working group (Representatives of bodies, for example: RCM, Municipality in RCM, Center of Environmental Education, NGOs, WEEE at Oreokastro etc.).
2. **Months 1–3:** Creating a Pilot Repair Café (e.g. once per month) and results recording (in the form of the RepairMonitor of Repair Café). Communication activities, creation of pilot Library of Things with 30 objects.
3. **Months 3–6:** Link to WEEE Center (supply chain for/ disposal / reuse of products and tools), training for volunteers / small businesses / repairmen .
4. **Months 6–9:** Upgrade of pilot application to organized repair point (fixed location and premises, operation hours etc), development of mixed commercial services model.
5. **Months 9–12:** Evaluation of key performance indicators (KPIs), further expansion in up to 2 to 3 Municipalities in the RCM, submission of an application/plan for local / regional funding (e.g. ESPA/PEP or other co-financed program).
6. **Continuation:** Creation of training programmes for IEK/EPAL/CEE and preparation of a local “repairers map”, creation of a network of repairers in the RCM.



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Training Seminar Plan

Indicative Training Seminar Plan on the Repair Economy and its Applications



<https://repper.interreg-euro-med.eu>

Training Seminar Plan (Duration: 2 hours)

Topic : Introduction to the Repair Economy

Target group : Secondary school students or students / trainees / trainees in Environmental Education & Circular Economy programs.

Duration : 2 hours (120 minutes)

Method : Experiential - collaborative learning - discussion.



Teaching Objectives

After the course, participants will be able to:

1. Explain the concept and importance of the Repair Economy.
 2. To know examples of international and local applications.
 3. Recognize the place of repair in the circular economy.
 4. To understand the benefits for their access to the labor market of acquiring new skills in the field of product repair.
 5. To plan simple awareness-raising or implementation actions in their school/organization.
-



Scenario Structure

1. Part A: Introduction (20')

- **Activity 1 – Brainstorming :**

The trainer asks: “What do you do when one of your devices breaks?” The answers are recorded on a board (e.g. “throw it away”, “repair it”, “keep it in the drawer”).

- **Short Presentation** (with slides or paper/board):

- The prioritization of waste management (prevention → reuse → repair → recycling).
 - What is the right to repair?
 - Connection with local and international policies (EU, ECHR, Directive 2024/1799).
 - Importance of acquiring new skills related to the Repair Economy for integration into the labor market (reference to Joint Needs Analysis of the REPper project)
-

2. Part B: Good Practices – Experience (30')

- **Activity 2 – Presentation of Examples :**

The trainer shows images/videos from:

- Repair Cafés (international & Thessaloniki).
- ReWeee Center of Oreokastro.
- Library of Things abroad and in the Thessaloniki CCI.

- Discussion with questions:

- "Is it worth training and getting involved in product repairs?"
 - “What example could work in your own community/school?”
 - "What obstacles do you imagine?"
-

3. Part C: Experiential Action – Small « Repair Café » (40')

- **Activity 3 – Group Work**

Participants are divided into small groups (4–6 people).

Each team takes on a **simple object to repair** (e.g. broken cable, broken zipper, broken bookend, bicycle with low tires).

Worksheet :

1. Problem recording.
2. Suggested repair solution.
3. What tools/materials were needed?
4. What did we learn from the process?

The trainer acts as a facilitator and provides guidance, not solutions.

4. Part D: Campaign Creation (20')

- **Activity 4 – “I repair first”**

Each group plans a **small information campaign** for the school/organization:

- Slogan (e.g. "If it's broken, fix it!").
 - Poster or post for social media.
 - Action proposal (e.g. weekly repair) corner).
-

5. Part E: Summary & Conclusions (10')

- Discussion: What did I learn today that I didn't know before?
- How can I apply repair in my daily life?
- How can I broaden my job prospects by acquiring skills in product repair?
- The trainer summarizes:
 - Repair reduces waste, saves resources, and creates jobs.

- The PRC and Greece already have good practices.
 - Every citizen can contribute.
-



Materials & Media

- Projector or board.
 - Pictures / videos by Repair Cafés, ReWeee , Library of Things.
 - Simple items to repair (classroom friendly).
 - Basic tools (screwdriver, glue, bicycle pump, sewing supplies).
 - Worksheets (with the steps of the activity).
-



Expected Results

- Participants recognize the importance of repair in the circular economy.
- They have practically experienced a repair experience.
- They produce creative material (slogan/ poster).
- They are inspired to bring the "I fix it" mentality to their community.
- Understand the benefits for their job market prospects of skills related to the Repair Economy



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Instructor's Manual

**Embedding the Repair Economy in Environmental
and Circular Economy Education**



<https://repper.interreg-euro-med.eu>

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1. Introduction to Repair Economics

Definition:

The **repair economy** is the set of economic activities associated with **extending the life cycle of products through maintenance, repair, reuse and upgrading**, rather than replacing them with new ones. It is a key subsystem of the **circular economy**, which aims to reduce waste and use resources more efficiently.

Basic Principles of Repair Economics:

The basic principles governing the Repair Economy are as follows:

1. **Right to repair:** Consumers have access to spare parts, instructions and repair tools.
2. **Product Life Extension:** Instead of rapid product withdrawal (“planned obsolescence”), priority is given to their maintenance and repair, with the aim of extending their lifespan.
3. **Cost and waste reduction:** Saving money for the consumer, reducing production of new products and waste.
4. **Emphasis on the local economy:** Creation and support of small repair businesses at the neighborhood level.

Benefits of the Repair Economy:

Applying the principles of the Repair Economy presents multi-level benefits:

1. Economic Benefits:

- Consumers are spending less, as they buy fewer new products.
- New jobs are created at the local level (technicians, maintenance workers, repair crews).
- Reducing the dependence of local economies on imported raw materials.

2. Environmental Benefits:

- Less electronic and electrical waste (e- waste).
- Reducing CO₂ and other greenhouse gas emissions associated with the production of new products.
- Reducing the use of natural resources.



3. Social Benefits:

- Strengthening technical skills of consumers and the community.
- Promoting a culture of sustainability and reuse versus the "disposable" consumption mentality.
- Access to more affordable solutions for people with lower incomes.

Challenges & Obstacles

The implementation of the Repair Economy presents significant challenges and obstacles, such as:

1. **Design of products that are difficult to repair** (welded batteries, glued or non-removable components).
2. **Lack or excessive cost** of spare parts.
3. **Legal barriers** – companies prohibiting access to technical information.
4. **Consumer habits** – established preference for “new” over “refurbished” or “reused” products.
5. **Rapid technological obsolescence** – e.g. on mobile phones, where software becomes outdated.

Examples of areas of application of the Repair Economy

- **Electronic products (such as mobile phones, laptops , tablets , etc.):** these products generate a large volume of Waste Electrical and Electronic Equipment (WEEE). At the same time, a strong movement for the right to repair has already developed.
- **Cars & bicycles:** in these specific sectors, the repair/maintenance market is historically established.
- **Clothing & footwear:** a return to tailoring and repairs is observed, while the latter is developing and acquiring consumer behavior characteristics, the shift to second - hand purchases.
- **Furniture & home appliances:** development of DIY communities and makerspaces (places where communities consisting of users of all ages, with different backgrounds, meet and, based on the logic of open co-design and collaboration, experiment with digital technologies and produce social goods).



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International Initiatives for the Repair Economy

- **European Union:** Since 2021, the European Union has been adopting Directives and Regulations that oblige product manufacturers to provide spare parts and repair instructions, while encouraging the right to repair.
- **USA:** Some states, such as New York, have passed right to repair laws.
- **Repair Cafés :** These are volunteer spaces in various cities around the world where citizens bring things to be repaired instead of throwing them away. (More details in the Case Studies Issue).

Prospects for the Future

- **Greater institutional pressure:** The European Union intends to extend the right to repair to all sectors and products.
- **Digitization of repairs:** use of augmented (AR) or virtual (VR) reality systems and electronic guides (online manuals) for DIY product repairs.
- **New business opportunities:** Business opportunities are created for start – ups that sell repaired products with a warranty.
- **Culture of resilience:** Changing consumer behavior and moving from "buy - throw away" to "care - repair - reuse".



2. Good Practices and Familiarity with International and Local Applications *

International

- **Repair Cafés:** Volunteer repair workshops operating worldwide.
- **Library of Things (UK, NL):** Places to borrow tools and devices for home repairs.
- **Right to Repair Europe :** NGO network that promotes the right to repair at the European level.
- **iFixit:** business/non-profit model that provides free repair guides (free repair guides), spare parts and collections of spare parts and repair tools (parts & kits) — and promotes the right to repair (right to repair).

National & Local (Greece / Region of Central Macedonia)

- **LIFE RE-WEEE (Oreokastro, Thessaloniki):** Collection and preparation center for the reuse of electrical appliances.
- **Repair Café Thessaloniki:** Voluntary actions for repairs of small appliances and electronics.
- **ReWeee Platform:** Online platform for donating/exchange of devices for repair.
- **Thessaloniki Environmental Education Center:** Educational activities with emphasis on "Library of Things" and repair culture.
- **Region of Central Macedonia:** Participation in the Circular Cities & Regions Initiative (CCRI), with strategies for a circular economy.

Detailed information on Good Practices and International and Local Applications is included in the **Case Issue Studies .*



3. Pedagogical / Educational Design

Educational objectives of training seminars

- Trainees to understand the place of repair in the waste management hierarchy.
- Trainees to learn good practices and develop problem-solving skills.
- Trainees should be able to plan small repair actions in their daily educational life.
- Trainees to understand the benefits they will have in relation to access to the labor market, acquiring new and upgrading their existing skills (upskilling) in the field of product repair and maintenance.

Teaching methods

- **Learning by doing:** repair workshops (e.g. bicycle repair, small appliance repair, clothing/shoe repair, etc.).
- **Cooperative learning:** group work in the role of "repairmen".
- **Case studies:** presentation of examples (Repair Café Thessaloniki, ReWeee).
- **Gamification:** "Who will repair it faster?" or "Broken treasure hunt" with old devices.

Suggested activities

1. **Community repair unit map:** students/trainees list repair shops/workshops in their area.
2. **Small Repair Café at school/Vocational Training Centers:** event with the participation of parents, volunteers and craftsmen.
3. **Poster/campaign design:** "If it breaks, fix it!" with the aim of raising awareness among classmates/fellow citizens.
4. **Collaboration with Municipality/RCM:** visit to a Recycling Center – introduction to the preparation process for repair and reuse.

Indicative Training Seminar Plan

The Indicative Training Seminar Plan is presented in a separate issue.

4. Summary and Conclusions

- The Repair Economy is a central tool for achieving the circular economy and sustainable development.
- In education, it functions in two ways: **it informs** about the institutional framework and environmental needs, but also **cultivates life skills** (repair, responsibility, cooperation).
- Greece and especially Central Macedonia already have good practices (ReWeee , Repair Cafés , CCI actions) that can be used educationally.
- The teacher, as a "catalyst for change," can incorporate experiential activities that bring repair into students' daily experience.



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Training Worksheets

**Worksheet Templates for use within
training seminars**



<https://repper.interreg-euro-med.eu>

Worksheet 1 — What do we do when something breaks?

Purpose: To have participants reflect on their usual practices when an object breaks.

Activity: Recording steps and justifying choices.

Instructions:

1. Think about the last item that broke. 2. Write down what steps you took. 3. Write down why you made that decision.

Objective

Steps I followed

Why?

Worksheet 2 — Good Practice Analysis

Purpose: For participants to study a Good Practice and identify the critical elements of success.

Activity: Analysis after watching a relevant video and/or presentation.

Instructions:

1. Briefly describe the Good Practice under analysis.
2. Identify what problem it solves.
3. List the key elements that make it successful.
4. Suggest how it can be implemented in Greece.

Good Practice	Problem that it	Critical elements of	How can it be
Name /Description	solves	success	implemented in Greece?

Worksheet 3 — Designing a New Training Activity

Purpose: Participants to design their own training activity.

Activity: Group Activity (workshop)

Instructions: Work in groups and complete the following:

Element	Description
Target Group	
Activity Title	
Activity Description	
Necessary Materials & Training Tools	
Expected Results	

RIGHT TO REPAIR GUIDE



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REPper project

REPair PERSpective or REPper is a project that involves 8 European countries and aims to strengthen the repair economy, to support small and medium-sized enterprises in the repair sector, and to raise consumer awareness of more environmentally friendly choices. A circular and resource-efficient economy requires products to be durable and easy to repair.

It is necessary to increase the number of companies that already design their products with durable, easy-to-replace, and reusable components. It is also necessary to increase the number of more responsible consumers who oppose the throwaway culture.

For this purpose, REPper brings together qualified and diversified partners in the Mediterranean region to carry out actions aimed at SMEs, schools, public administrations, and citizens. The project promotes the circular economy and the new opportunities that can be created in this area. The REPper project is structured into 3 main pillars:

1. REPper HUB: physical and/or virtual spaces where information and services on repair can be found.
2. REPper FACTORY: training spaces where it will be possible to undertake professional development and deepen the themes of the right to repair and the circular economy.
3. REPper CULTURE: actions focused on people to disseminate the repair and reuse habits underpinning the circular economy and create a community of conscious and responsible political decision-makers and consumers.



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Training kit REPper

This training, in the domain of the REPper project, **motivates to develop a critical and participatory thinking on sustainable issues**. This initiative aims **to address a highly topical issue such as the right to repair**, a principle approved by the European Parliament to achieve circular economy and sustainable development.

This guide aims to introduce the principle of the right to repair and the historical normative path that led the EU to identify this need and make it a right of every citizen.

The educational materials explain the concept of **sustainability** not only in relation to production or life-cycle monitoring, but also in terms of product design and conception, **to make resource reuse more effective, safer, and more secure**.

Moreover, the training documentation aims to make understandable what tools are available to become a class of attentive consumers and to raise awareness of the future opportunities from a professional and employment point of view.



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Educational Sheet **1**

The right to repair :
what it is



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The right to repair: what it is

77% of EU consumers would prefer to repair their goods rather than purchase new ones, but often forego repairs due to high costs

(source: Eurobarometro

2020)

Each year, **35 million tonnes of waste** accumulate in the European Union, including a vast number of potentially repairable items that end up in landfills. This excessive waste generation threatens progress toward a circular and sustainable economy.

Electronics is the fastest-growing source of waste in the EU



To counteract this, the **right to repair** directive ensures that consumers can repair their goods easily and affordably rather than having to replace them.



The regulation has been approved by the European Parliament, and the 27 EU member states must transpose the directive into their national legislation by **31 July 2026**.

MAIN POINTS OF THE RIGHT TO REPAIR:

Repair obligation:

1. Manufacturers will be required to provide timely and affordable repair services while informing consumers of their rights. Additionally, legal warranties will be extended by one year.

Repairable products:

2. The law applies to products such as household appliances and electronic devices, though the category may be expanded. Consumers will also have the option to borrow devices or choose refurbished products.

Information on repair services:

3. Information on repair services: Consumers will receive a standardised European form to compare repair services, and an online platform will be developed to help locate local repair shops.

Promoting affordable repairs:

5. Each Member State will be required to implement strategies to make repair services more accessible. In France, the Repair Bonus is automatically applied to any repair carried out by QualiRepar labelled professionals.

Revitalising the repair market:

4. Manufacturers must ensure the availability of spare parts and tools at reasonable prices, and must not obstruct repairs, even those performed independently.



Recycling policies in the EU vary from country to country. In 2021, Austria had the highest average e-waste collection among nations, reaching **15.46 kg per inhabitant EU**.



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Educational Sheet 2

The stages of the right to repair standard



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The stages of the right to repair standard

The "Right to Repair" directive is part of a broader effort to develop European legislation aimed at promoting sustainability, reducing waste, and fostering a circular economy.

2015

Circular economy strategy

The EU launched its **Circular Economy Strategy with the goal of reducing waste and encouraging the reuse and recycling of products**. This strategy laid the foundation for the introduction of the right to repair legislation.

2020

Action plan for the circular economy

The EU introduced the **Circular Economy Action Plan (CEAP)**, which included measures to extend product lifespans and promote repair. This plan identified repair as a **key solution to reducing resource consumption and waste generation**.

2021

Proposal for a regulation on the right to repair

The European Commission proposed a series of regulatory changes to promote repair and reduce electronic waste. These included **requirements for manufacturers to design products with repairability in mind**, providing spare parts and repair manuals.

Reform of the ecodesign directive

The **ecodesign directive** was strengthened to align with the new right to repair legislation. The most recent legislation also focuses on **design**.

2022

The proposal

In April 2022, the European Parliament requested that the Commission submit a **legislative proposal for the right to repair long-lasting products**. The proposal was introduced in March 2023.

2024

Entry into force of the directive

On **30 July 2024, EU Directive 2024/1799 officially came into force**, establishing obligations for producers, encouraging product repair, and **making repairs more accessible and affordable** for consumers.



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Educational Sheet **3**

The Ecodesign Regulation and the Digital Product Passport



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The Ecodesign Regulation and the Digital Product Passport

The ecodesign for Sustainable Products Regulation (ESPR)

This regulation introduces stringent requirements for the ecodesign of products placed on the EU market. **There's also a list of products not covered by the standard** (e.g. foodstuffs, medicines, plants, animals, and products of human origin).



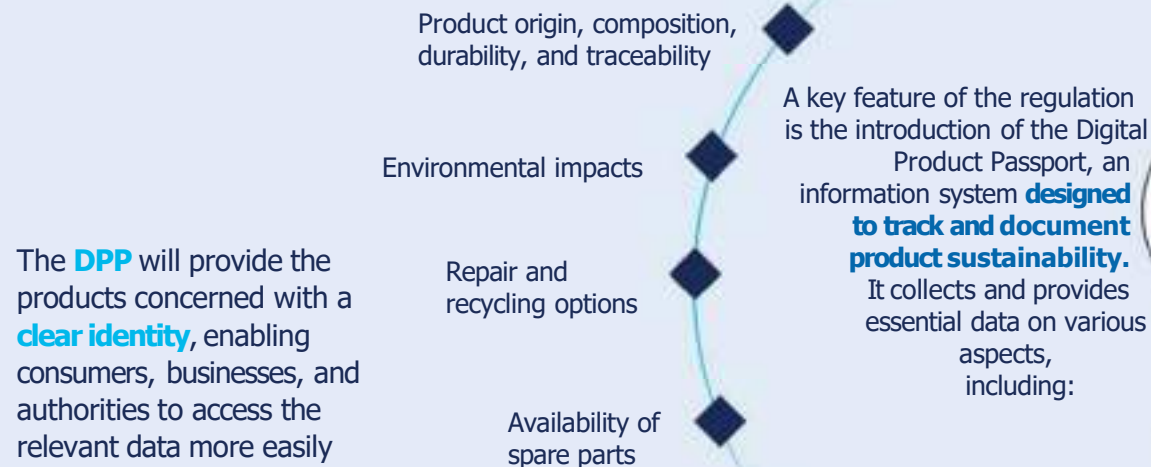
MAIN OBJECTIVES

- ◆ To **encourage sustainable** design for nearly all goods on the EU market
- ◆ To fulfil the objectives of the **Circular Economy Action Plan 2020**
- ◆ To improve **energy efficiency** while reducing **environmental impact** by 2030
- ◆ Promoting **sustainable production** and **consumption models**

MAIN MEASURES

- ◆ A **ban on the destruction** of unsold product
- ◆ The obligation for large companies to **disclose information** about disposed products
- ◆ The promotion of **used and remanufactured products**
- ◆ Establishment of new **ecodesign requirements**

Digital Product Passport - DPP



Digital register

By 19 July 2026, the EU Commission will establish a secure register containing data on products, traders, and production sites



European Commission Web Portal

This portal will allow users to search, compare, and access digital product passports, ensuring continued availability of product data, even if the manufacturer discontinues operations

NEXT STEPS

By 19 April 2025, the EU Commission will adopt a Working Plan outlining priority products subject to the new ecodesign requirements.



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Sheet Educational 4

The product warranty



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The product warranty

New Products

All new products sold in Italy have a minimum guarantee of 24 months from delivery. This duration does not apply to goods purchased for business activities.

- During the guarantee period, any original defects can be remedied by replacement or repair (or, where not possible, with an agreed-upon price reduction).
- Spare parts: For durable goods, such as washing machines, spare parts must be available for 10 years beyond the date the production of the model ceases.

Used or Refurbished Products

- A minimum warranty of 12 months from the date of delivery applies to these products if they are sold by a professional (shop).

Warranty on Repair

- During the warranty period: currently, the duration of the warranty period does not change, but after the transposition of EU Directive 2024/1799 (deadline July 2026), a product purchased as new and repaired under warranty will benefit from a 12-month extension of the warranty.
- Outside the warranty period: repair carried out by a professional comes with a 24-month warranty on the replaced parts (only if they are new and supplied by the repairer).

What consumers can do in case of problems with the warranty or repairs:

1. Retrieve documentation: Proof of purchase (receipts, invoices), repair documents, and any correspondence with the seller, manufacturer, or repair centers.
2. Lodge a written complaint with the seller or the repairer.
3. If an agreement is not reached:

Seek the support of a consumer association (e.g., Altroconsumo).

Resort to out-of-court dispute resolution methods (details on the website <https://www.mimit.gov.it/it/>).

4. Judicial route: To be considered as a last resort only for cases where the amounts claimed are very high.



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Educational Sheet 5

Conscious consumption



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Conscious consumption

The right to repair not only benefits the environment, it also offers significant economic advantages. **Here is a projection of the expected savings over the next 15 years.**

FROM AN **ENVIRONMENTAL** PERSPECTIVE, THE STANDARD IS EXPECTED TO RESULT IN A SAVINGS OF:

Did you know that...?



18,5 million tonnes of greenhouse gas emissions



1,8 million tonnes of resources



3 million tonnes of waste



FROM AN **ECONOMIC** PERSPECTIVE, THE STANDARD IS EXPECTED TO RESULT IN A SAVINGS OF:



15,6 billion in savings for sellers and manufacturers



176,5 billion for consumers



+4,8 billion increase in investments in the repair sector



Some products are intentionally designed to **fail** or **become obsolete after a predetermined period** set by manufacturers. In certain cases, components are assembled in a way that prevents their removal or replacement.

PLANNED OBSOLESCENCE

In the 1930s, researchers at the chemical company DuPont developed nylon, an exceptionally strong synthetic fibre. **Perhaps too strong:** nylon stockings no longer laddered, leading to a decline in sales. In response, DuPont instructed its technicians to weaken the fibre they had originally engineered.

the average lifespan of computers has dropped



from **11** to just



4 years In three decades ?



Is there an International Repair Day? Yes, it's on the third Saturday in October



REPAIR CAFÉS

If there is one place that **embodies the circular economy**, it is the Repair Café. These **public spaces** (whether bars, shops, or courtyards) allow people to bring damaged objects to be repaired by volunteers, who provide both the skills and the necessary tools.

Items of all kinds can be brought in, from hair dryers and smartphones to washing machine circuit boards, blenders, and even wooden stools. Today, **there are approximately 3,000 Repair Cafés** worldwide, and their number continues to grow.



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Sheet Educational

6

Right to repair and green jobs



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Right to repair and green jobs

The right to repair will bring significant economic and environmental benefits. But that's not all: it will also stimulate employment, fostering job creation across various sectors.

As companies are obliged to guarantee the repairability of products, the demand for qualified technicians will increase, ranging from specialists in repairing household appliances and electronic components to professionals in component remanufacturing.

The logistics and distribution sector will also see growth, particularly in services related to the handling and transport of spare parts.

Furthermore, new businesses specializing in maintenance and the circular economy will emerge, fostering innovation among start-ups and independent artisans.



Finally, companies will have to invest in training and professional development, creating new opportunities for engineers, designers, and environmental consultants tasked with developing more durable and sustainable products. THE MOST IN-DEMAND PROFESSIONS WILL BE:



THE ECODESIGN PROJECT MANAGER

Helps companies develop products that minimize environmental impact while maintaining functionality, affordability, and quality.

Supervises the entire design, production, and marketing process to ensure compliance with environmental and social standards.



THE SUSTAINABLE INNOVATION MANAGER

Plans and manages the implementation of strategies that integrate sustainable practices within an organization.

Evaluates the environmental and social impact of business activities, developing action plans to improve sustainability, reduce waste, and optimize resource use.



THE ENVIRONMENTAL RESEARCH AND DEVELOPMENT MANAGER

Keeps the company strategy updated with scientific and technological innovations.

Works on improving production processes, materials, and overall sustainability, developing eco-friendly technologies and materials, and testing solutions to minimize the environmental impact of products and production processes..



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7

Resources for repair



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Resources for repair

Do you want to try repairing it yourself or are you looking for a Repair Café? Here are some links that might help you:

1. *Longue vie aux objets* – ADEME (National Map)

<https://longuevieauxobjets.ademe.fr/carte-reemploi-reparation-france/>

This is the official platform supported by ADEME (the French Agency for Ecological Transition). It provides a collaborative national map of repair services, reuse centers (*ressourceries* and *recycleries*), and sharing initiatives across France. You can search for places near you, filter by activity (repair, donate, reuse, exchange), and even suggest new locations.

2. *Repair Your Objects* – ADEME / French Government

<https://epargnonsnosressources.gouv.fr/reparer-objets/>

This official government website offers practical guidance on repairing instead of replacing products. It includes repair tips, diagnostic tools, directories, and clear explanations of the French Repair Bonus, a financial incentive that helps reduce repair costs for certain products.

3. *National Network of Ressourceries and Recycleries*

<https://ressourcerie.fr/>

This website represents the national network of nearly 300 nonprofit reuse centers in France. These organizations are major players in social and solidarity-based reuse, combining waste prevention, job creation, and community engagement. The site provides an organization directory, news, training resources, and advocacy tools.

4. *Reparons.org*

<https://reparons.org/>

A collaborative platform designed to bring together participatory repair workshops across France. It helps users find nearby repair events, book sessions, and discover community-based repair initiatives involving volunteers, associations, and craftspeople.

5. *France Nature Environnement (FNE)*

<https://fne.asso.fr/agenda/cycle-de-webinaires-sur-le-reemploi-et-la-reparation>

France Nature Environnement is the national federation of environmental NGOs in France. Its website features news, events, and webinar series dedicated to reuse, repair, and broader ecological transition topics.



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Resources for repair

Do you want to try repairing it yourself or are you looking for a Repair Café? Here are some links that might help you:

6. *Ecosystem* – Repair & Reuse for Electrical and Electronic Equipment

<https://www.ecosystem.eco/>

Ecosystem is a state-approved eco-organization focused on electrical and electronic equipment. The site provides guidance on repairing, donating, or recycling electronics, and includes a search tool for certified repairers under the “QualiRépar” label.

7. *Carteco* - Social and Solidarity Economy Map

<https://carteco-ess.org/>

Carteco is a collaborative map of social and solidarity economy (SSE) organizations working on ecological transition issues in France. It includes many repair workshops, reuse centers, and community initiatives.

8. *RREUSE* - European Network

<https://www.rreuse.org/our-network/network-map>

Although European in scope, RREUSE includes many French reuse and repair organizations. It is particularly useful for understanding the broader policy and social context of repair and reuse within the circular economy.

9: *Repairability Index*

<https://www.indicereparabilite.fr/>

Not a directory of repair places, but the official French reference for product repairability scores. It helps consumers compare products (electronics, appliances, smartphones, etc.) based on how easy they are to repair.



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Resources for repair

Do you want to try repairing it yourself or are you looking for a Repair Café? Here are some links that might help you:

iFixit is a company that sells repair tools and spare parts; on their website, you can connect with a community of repairers to get advice or consult the numerous repair guides available: <https://it.ifixit.com/>

Repair Cafe is a community of repairers that provides guides and advice for creating new Repair Cafés and a map of existing ones. Here you can find guides and forums for repairing various types of objects, statistics on repair activities, and much more: <https://www.repaircafe.org>

Repara is the website created within the framework of the REPair project by the spanish consumer association OCU; it contains guides for the repair and correct use of common household appliances: <https://www.deco.proteste.pt/reparacoes>

Reparar is the website created within the framework of the REPair project by the portuguese consumer association DECO PROteste; it contains guides for the repair and correct use of common household appliances: <https://www.deco.proteste.pt/reparacoes>

Restarters is a global network that supports repair communities; their website provides guides for those who want to approach repair and a wide selection of online resources on the topic: <https://wiki.restarters.net/Resources>

Right to Repair is the European campaign on the right to repair; on their website, you can find in-depth information on european regulations and links to organizations dealing with repair (including Repair Cafés): <https://repair.eu/it/>

Wiki repair is a database of repair guides to which users can contribute by adding or modifying content: <https://repair.wiki>



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Educational Sheet

8

Repair and reuse in the South Region



Repair and reuse in the South Region

In Marseille and surroundings, several non-profit repair and reuse organisations exist, in addition to repair professionals.

Repair technicians: the pros of "it can be fixed"

A broken screen, a temperamental toaster, or a squeaky bike? Repair technicians are professionals who bring your everyday objects back to life. Their job: diagnose the problem, replace the defective part, and extend the life of your devices. By using their services, you avoid waste and support the local economy. Some repair technicians are QualiRépar certified, which means you can benefit from the repair bonus with an immediate discount on your bill. Finding one near you couldn't be easier: www.ecosystem.eco.

Calling on a repair technician is a practical, economical, and much more eco-friendly solution than throwing everything away.

The repair bonus: repair smart instead of throwing away!

With the repair bonus, you can have many everyday appliances and items repaired at a lower cost. The principle is simple: you take your broken item to a QualiRépar-certified repairer, and a discount (from €10 to €60 depending on the item) is deducted directly from your bill. No complicated procedures, no forms to fill out. This scheme covers a wide range of items: household appliances, computers, phones, game consoles, electric bikes, textiles, household linen, shoes, etc., provided they are no longer under warranty and have been used normally. As well as saving money, you're doing your bit for the planet: repairing avoids waste and reduces CO₂ emissions. To find a repairer near you, simply consult the online directory of QualiRépar-certified repairers: www.ecosystem.eco. In short, it's a simple, useful, and eco-friendly solution!

Resource centers and recycling centers: a second life for objects

Resource centers and recycling centers are places where unwanted objects become new resources. People drop off furniture, clothing, appliances, books, and bicycles, which are then sorted, repaired, or transformed before being resold at low prices. The result? Less waste, more reuse, and great deals for everyone. These organizations promote more responsible consumption while creating local jobs, often in the social economy. Buying or donating at a resource center means actively participating in the circular economy... and proving that objects often have more than one life to offer! To find out where your nearest resource center is, visit: <https://ressourceriespaca.fr/>



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Repair and reuse in the South Region

In Marseille and surroundings, several non-profit repair and reuse organisations exist, in addition to repair professionals.

Repair Café Marseille – *Community Repair Workshops*

Repair Café Marseille is a volunteer-run nonprofit that organizes participatory repair workshops where people bring broken household items (electronics, textiles, toys, etc.) and learn to fix them with the help of experienced volunteer fixers. These events are free and aim to reduce waste and build sharing of repair skills within the community. [Repair Café Marseille](#)

Recyclerie Sportive Marseille Bougainville – *Sport Equipment Reuse & Repair*

Recyclerie Sportive is an association focused on collecting, repairing, and redistributing second-hand sports equipment (bikes, fitness gear, shoes, clothing, etc.) to make sport accessible for all while reducing environmental impact. It also hosts repair events and collaborative workshops that bring people together around reuse and sustainability. [Benevolt](#)

Zero Waste Marseille (Horizon Zéro Déchet)

While not exclusively a repair venue, this zero-waste nonprofit movement frequently supports and co-organizes repair and reuse events in Marseille (like collaborative reuse fairs and repair workshops) to encourage waste reduction and circular economy practices.



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RIGHT TO REPAIR GUIDE



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REPair PERspective project

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Educational Sheet 1

The right to repair:
what it is



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The right to repair: what it is

77% of EU consumers would prefer to repair their goods rather than purchase new ones, but often forego repairs due to high costs

(source: Eurobarometro

2020)

Each year, **35 million tonnes of waste** accumulate in the European Union, including a vast number of potentially repairable items that end up in landfills. This excessive waste generation threatens progress toward a circular and sustainable economy.



To counteract this, the **right to repair** directive ensures that consumers can repair their goods easily and affordably rather than having to replace them.



The regulation has been approved by the European Parliament, and the 27 EU member states must transpose the directive into their national legislation by **31 July 2026**.

Electronics is the fastest-growing source of waste in the EU

MAIN POINTS OF THE RIGHT TO REPAIR:

Repair obligation:

1. Manufacturers will be required to provide timely and affordable repair services while informing consumers of their rights. Additionally, legal warranties will be extended by one year.

Repairable products:

The law applies to products such as household appliances and electronic devices, though the category may be expanded. Consumers will also have the option to borrow devices or choose refurbished products.

Information on repair services:

Information on repair services: Consumers will receive a standardised European form to compare repair services, and an online platform will be developed to help locate local repair shops.

5.

Promoting affordable repairs:

Each Member State will be required to implement strategies to make repair services more accessible.

4.

Revitalising the repair market:

Manufacturers must ensure the availability of spare parts and tools at reasonable prices, and must not obstruct repairs, even those performed independently.

3.



Recycling policies in the EU vary from country to country. In 2021, Austria had the highest average e-waste collection among EU nations, reaching **15.46 kg per inhabitant**.



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Educational Sheet 2

The stages of the right
to repair standard



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The stages of the right to repair standard

The "Right to Repair" directive is part of a broader effort to develop European legislation aimed at promoting sustainability, reducing waste, and fostering a circular economy.

2015

Circular economy strategy

The EU launched its **Circular Economy Strategy with the goal of reducing waste and encouraging the reuse and recycling of products**. This strategy laid the foundation for the introduction of the right to repair legislation.

2020

Action plan for the circular economy

The EU introduced the **Circular Economy Action Plan (CEAP)**, which included measures to extend product lifespans and promote repair. This plan identified repair as a **key solution to reducing resource consumption and waste generation**.

2021

Proposal for a regulation on the right to repair

The European Commission proposed a series of regulatory changes to promote repair and reduce electronic waste. These included **requirements for manufacturers to design products with reparability in mind**, providing spare parts and repair manuals.

2022

The proposal

In April 2022, the European Parliament requested that the Commission submit a **legislative proposal for the right to repair long-lasting products**. The proposal was introduced in March 2023.

2024

Entry into force of the directive

On **30 July 2024, EU Directive 2024/1799 officially came into force**, establishing obligations for producers, encouraging product repair, and **making repairs more accessible and affordable** for consumers.

Reform of the ecodesign directive

The **ecodesign directive** was strengthened to align with the new right to repair legislation. The most recent legislation also focuses on **design**.



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Educational Sheet 3

The Ecodesign Regulation and the Digital Product Passport



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The Ecodesign Regulation and the Digital Product Passport

The ecodesign for Sustainable Products Regulation (ESPR)

This regulation introduces stringent requirements for the ecodesign of products placed on the EU market. **There's also a list of products not covered by the standard** (e.g. foodstuffs, medicines, plants, animals, and products of human origin).



MAIN OBJECTIVES

- ◆ To **encourage sustainable** design for nearly all goods on the EU market
- ◆ To fulfil the objectives of the **2020 Circular Economy Action Plan**
- ◆ To improve **energy efficiency** while reducing **environmental impact** by 2030
- ◆ Promoting **sustainable production** and **consumption models**

MAIN MEASURES

- ◆ A **ban on the destruction** of unsold product
- ◆ The obligation for large companies to **disclose information** about products disposed of The promotion of **used and remanufactured products**
- ◆ Establishment of new **ecodesign requirements**

Digital Product Passport - DPP

The **DPP** will provide the products concerned with a **clear identity**, enabling consumers, businesses, and authorities to access the relevant data more easily

Product origin, composition, durability, and traceability

Environmental impacts

Repair and recycling options

Availability of spare parts

A key feature of the regulation is the introduction of the Digital Product Passport, an information system **designed to track and document product sustainability**. It collects and provides essential data on various aspects, including:



Digital register

By 19 July 2026, the EU Commission will establish a secure register containing data on products, traders, and production sites



European Commission Web Portal

This portal will allow users to search, compare, and access digital product passports, ensuring continued availability of product data, even if the manufacturer discontinues operations

NEXT STEPS

By 19 April 2025, the EU Commission will adopt a Working Plan outlining priority products subject to the new ecodesign requirements.



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Educational Sheet 4

Conscious consumption



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Conscious consumption

The right to repair not only benefits the environment, it also offers significant economic advantages. **Here is a projection of the expected savings over the next 15 years.**

FROM AN **ENVIRONMENTAL** PERSPECTIVE, THE STANDARD IS EXPECTED TO RESULT IN A SAVINGS OF:

Did you know that...?



18,5 million tonnes of greenhouse gas emissions



1,8 million tonnes of resources



3 million tonnes of waste



FROM AN **ECONOMIC** PERSPECTIVE, THE STANDARD IS EXPECTED TO RESULT IN A SAVINGS OF:



15,6 billion in savings for sellers and manufacturers



176,5 billion for consumers



+4,8 billion increase in investments in the repair sector



PLANNED OBSOLESCENCE

some products are intentionally designed to **fail** or **become obsolete after a predetermined period** set by manufacturers. In certain cases, components are assembled in a way that prevents their removal or replacement.

In the 1930s, researchers at the chemical company DuPont developed nylon, an exceptionally strong synthetic fibre. **Perhaps too strong:** nylon stockings no longer laddered, leading to a decline in sales. In response, DuPont instructed its technicians to weaken the fibre they had originally engineered.

the average lifespan of computers has dropped



from **11** to just



4 years over three decades?

Is there an International Repair Day? Yes, it's on 19 October



REPAIR CAFÉS

If there is one place that **embodies the circular economy**, it is the Repair Café. These **public spaces** (whether bars, shops, or courtyards) allow people to bring damaged objects to be repaired by volunteers, who provide both the skills and the necessary tools.

Items of all kinds can be brought in, from hair dryers and smartphones to washing machine circuit boards, blenders, and even wooden stools. Today, **there are approximately 3,000 Repair Cafés** worldwide, and their number continues to grow.



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Educational Sheet 5

Right to repair and green jobs



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Right to repair and green jobs

The right to repair will bring significant **economic and environmental benefits**. But that's not all: it will also boost **employment**, fostering **job creation** across multiple sectors.

As companies become obligated to ensure product repairability, **demand for skilled technicians will rise**, ranging from appliance and electronics repair specialists, to professionals in component remanufacturing.

The **logistics and distribution** sector will also experience growth, particularly in services related to the handling and transport of spare parts.

Furthermore, **new businesses specialising** in maintenance and the circular economy will emerge, fostering innovation among start-ups and independent craftsmen.

Finally, companies will need to invest in **training and professional development**, creating new opportunities for engineers, designers, and environmental consultants tasked with developing more durable and sustainable products.

WHEN THE RIGHT TO REPAIR TAKES EFFECT,
THE MOST IN-DEMAND PROFESSIONS WILL INCLUDE:



THE ECODESIGN PROJECT MANAGER

Plays a crucial role in helping companies develop products that minimise environmental impact while maintaining functionality, affordability, and quality. This figure also ensures compliance with environmental and social standards, and oversees the entire process of designing, manufacturing, and marketing sustainable products.



THE SUSTAINABLE INNOVATION MANAGER

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THE ENVIRONMENTAL RESEARCH AND DEVELOPMENT MANAGER

Bridging scientific research, business strategy, and technological innovation, this figure focuses on improving production processes, materials, and overall sustainability, developing eco-friendly technologies and materials, and testing solutions to minimise the environmental impact of products and manufacturing processes.



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RIGHT TO REPAIR GUIDE



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Educational Sheet 1

The right to repair:
what it is



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The regulation has been approved by the European Parliament, and the 27 EU member states must transpose the directive into their national legislation by **31 July 2026**.



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Educational Sheet 2

The stages of the right
to repair standard



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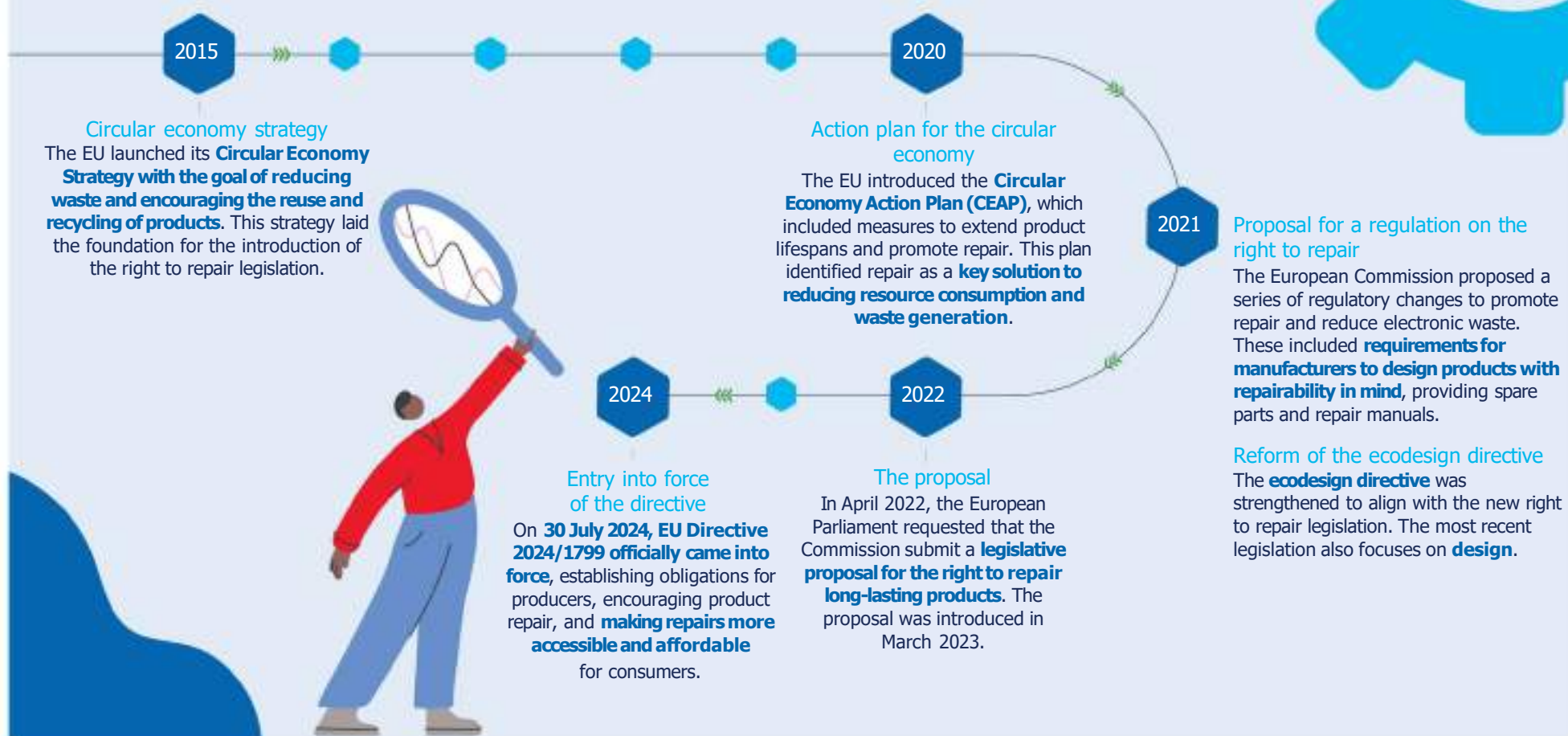


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The stages of the right to repair standard

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Educational Sheet 3

The Ecodesign Regulation and the Digital Product Passport



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Educational Sheet 4

Conscious consumption



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Conscious consumption

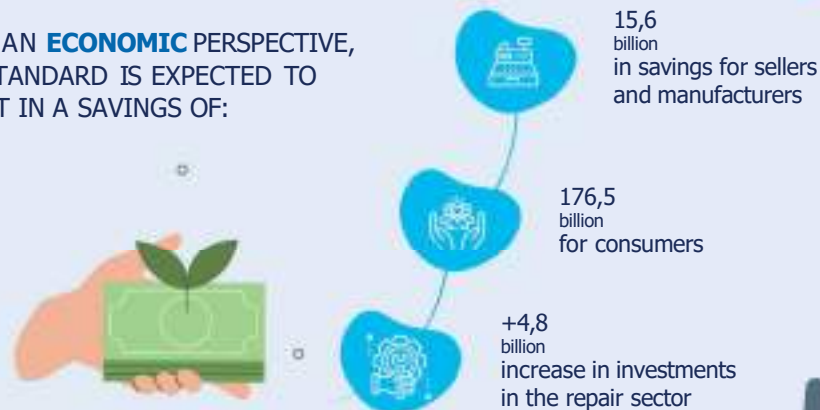
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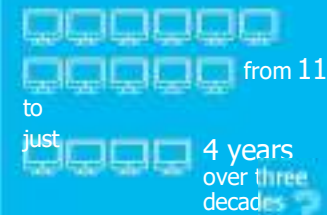


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Educational Sheet 5

Right to repair and green jobs



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