



The Extended Producer Responsibility

an effective tool for reducing the impact of waste on the planet



CITEO

Together, let's give our products a new life.

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In order to create a more sustainable world in which the circular economy plays a central role, all stakeholders need to do their bit.

Companies, local authorities, industrial recycling operators, charities and citizens all have a collective role to play.

Extended Producer Responsibility is one of the frameworks enabling such collaboration. Having first emerged in France, Germany and Sweden in the early 1990s, **EPR schemes have since been developed on all continents.**

EPR is underpinned by the principle **that producers must take financial and organisational responsibility for their products' end of life** through measures applied throughout their life cycle, from design to management of waste generated by these products. This individual responsibility is then shared and exercised jointly through a Producer Responsibility Organisation.

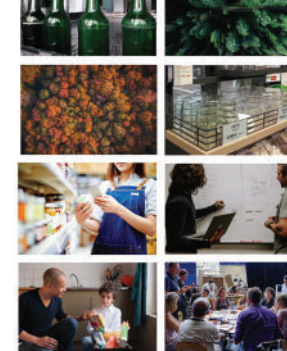
Citeo has been funding and implementing solutions for packaging and paper within this framework for over 30 years in France. Our work benefits the environment while also remaining cost-effective, with a focus on the **3Rs of reduction, reuse and recycling.**

Adding a further dimension to its work, **Citeo decided to become a mission-led company in 2020.** This new vision is reflected in our corporate purpose of encouraging and supporting economic stakeholders in developing production, retail and consumption practices that preserve our planet, its resources, biodiversity and the climate.

Of course, EPR is not the only solution that will be used to address these global challenges. It is nevertheless **an effective, practical tool that can be applied immediately.** Collectively, we need to use it wherever possible!

Jean Hornain
CEO of Citeo

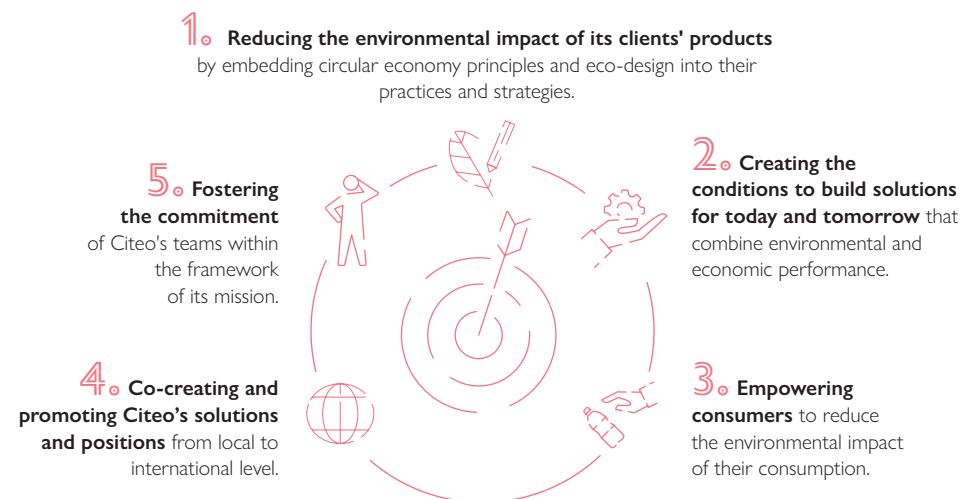
Citeo, a MISSION=LED company



Citeo has played a key role in sustainable development in France since 1992. Through the Extended Producer Responsibility (EPR) system, the company has developed expertise in eco-design, collection, sorting, recycling and public awareness in close collaboration with a wide range of stakeholders including client companies, local authorities, industrial operators, public authorities and stakeholders (at national, European and international level) and citizens.

To tackle the environmental crisis and speed up vitally needed change, Citeo seeks to encourage and support economic stakeholders in developing production, retail and consumer practices that preserve our planet, its resources, biodiversity and the climate.

Citeo is fully committed to achieving five objectives:



Our mission in 3 points

Reducing packaging and paper
through eco-design and reuse.

Facilitating the technical and industrial organization
of reuse and recycling.

Mobilizing citizens from a young age towards
eco-citizenship and responsible consumption.

Extended Producer Responsibility, a catalyst for CIRCULAR ECONOMY SOLUTIONS

EPR is a system that makes companies responsible for the environmental impact of the products they place on the market.

Companies can meet this responsibility through a **Producer Responsibility Organisation** to whom they declare the number of products they have sold annually and pay an **environmental contribution**. Producer Responsibility Organisations use funding for the packaging stream to organise and support eco-design, reduction, reuse, collection, sorting, recycling, and consumer engagement with responsible consumption practices and litter prevention, tailoring their response to local and national circumstances. **These different types of activities are also determined by the respective EPR streams**, since different products require different tools to achieve circularity objectives.

EPR offers three main benefits



Involving companies in the circular economy for their products, ensuring that they eco-design their products with a view to reduction and reuse, while also providing a large portion of the funding required to collect, sort and recycle them as new resources.



Pooling the costs of processing regardless of the different types of materials used by a stream.



Generating long-term dedicated funding for waste management to provide a reliable and predictable framework for investment, while also boosting its efficiency.



What is the circular economy?

The circular economy is a business model focused on sustainability produced and waste reduction. Unlike the traditional linear economy based on the pattern of 'extract, produce, use, dispose', the circular economy seeks to minimise the use of resources and maximise reuse, repair, and recycling of products and materials placed on the market. To achieve these goals, it encourages sustainable product design, extended product life spans and the creation of closed loops in which waste is transformed into new resources. Its aim is to create a more efficient and environmentally-friendly system, while also supporting innovation and economic growth.



However, this responsibility requires a **strong regulatory framework** devised by the government in coordination with all stakeholders to determine targets, obligations, penalties and costs that need to be covered. Implementation needs to be monitored and the transparency of activity reports is essential for generating trust in the system.

The impact of EPR for household packaging and graphic paper through Citeo & Adelphe in figures

14 BN
invested in 30 years.

65.5%
of household packaging is recycled.

60%
of graphic paper are recycled.

2.2 MT
of CO₂ avoided every year.

Sorting, the **1ST** eco-citizen gesture practised by the French.



Performance drivers for the 3R STRATEGY



As a Producer Responsibility Organisation for the packaging and graphic paper stream, Citeo focuses its work on the 3Rs of Reduce, Reuse, and Recycle. These form the basis of a system in which producers meet their environmental responsibilities at each stage of the value chain for packaging and graphic paper.

① REDUCE

- **Limiting the production** of packaging to what is strictly necessary (conservation, protection, information, transport of the product) without wastage.
- **Eliminating unnecessary packaging:** reduce the size and weight of any remaining packaging and improve its recyclability.
- **Incorporating recycled material** to limit pressure on resources.



Example of a pilot design project: toothpaste packaging

Citeo works on reduction pilots. This involves examining a product with potential for optimisation in order to identify any opportunities for reduction.

The aim: to encourage industry stakeholders to use these opportunities. Through a critical look at usage, functions and the impact of toothpaste packaging, Citeo was able to formalise 17 types of toothpaste packaging capable of meeting the requirements of the entire value chain. Eliminating the box, adding a QR code, eliminating the cap, shortening the screw thread, a shelf-ready design, etc. Every possibility is envisaged and tested, with a huge potential for reducing.



② REUSE

Moving away from single use towards reuse. This transition can be achieved by reusing pre-packaged products, refill, or bulk. To accomplish this, 39 million euros have been earmarked for reuse in 2023, 100 million in 2024, and 3 key actions are being taken:

- **building and/or consolidating knowledge:** to assess issues, make recommendations, identify solutions and validate concepts;
- **trialling, supporting and upscaling** solutions through equipment, digital and operational investment;
- **encouraging the adoption of these new practices** through communication and influencing campaigns aimed at consumers.



Gradual development of standard packaging ranges

Citeo is developing standard ranges of reusable packaging for the food service sector and for fresh products and beverages.

From 2024, the first standards will be offered to companies to develop their reuse offer.



③ RECYCLE

A central part of Citeo's historic remit, recycling is a key step enabling new resources to be made from packaging and paper that cannot be eliminated or reused. Citeo organises industrial facilities and works closely with the material streams and recycling stakeholders to develop materials' circularity, thereby also reducing the environmental cost of producing them and pressure on natural resources. Several key measures are being taken to develop recycling:

- **continued efforts to harmonize and simplify consumer sorting** and involve the public in responsible consumer practices;
- **developing in-home and out-of-home to collect more and** to ensure continual sorting;
- **modernising and streamlining sorting centres** in France to improve recycling of collected packaging and paper;
- **ecodesign and recycling streams** to meet the target of 100% recyclable plastic packaging by 2025.



Opening of the first secondary sorting centre in France to ensure the recyclability of all plastics

Citeo is developing new recycling streams for certain types of plastic packaging that previously had no or few solutions.

To address this issue, Citeo is coordinating the creation of sorting centres for the fine separation of the various resins from rigid plastic packaging to produce high-quality recycled material. Citeo and Bourgogne Recyclage opened the first secondary sorting site for rigid plastics in France in 2023. With its 30,000-tonne capacity, this plant separates seven plastics, such as the polystyrene (PS) used in yoghurt pots, so that it can be recycled into new yoghurt pots by 2025. €26 million has been invested in this project of which €20 million was provided by Citeo.

A commitment matching EUROPEAN AMBITIONS

The waste framework directive has introduced the EPR system at European level, laying down minimum general requirements to encourage prevention, reuse, recycling and recovery of waste. By the end of 2024, all EU Member States will be obliged to set up an EPR system for all packaging placed on the European market.

Citeo operates in a permanently evolving regulatory landscape that introduces conditions aimed at ensuring greater harmonisation and improving implementation of the circular economy within the EU.

In line with the EU target of climate neutrality by 2050 set forth in the Green Deal, the European Commission has introduced measures aimed at stepping up the transition to a circular economy in accordance with the Circular Economy Action Plan.

Through its contributions and work, Citeo supports the harmonisation of rules on packaging and packaging waste management within the EU as well as the introduction of essential new measures focused on reduction,

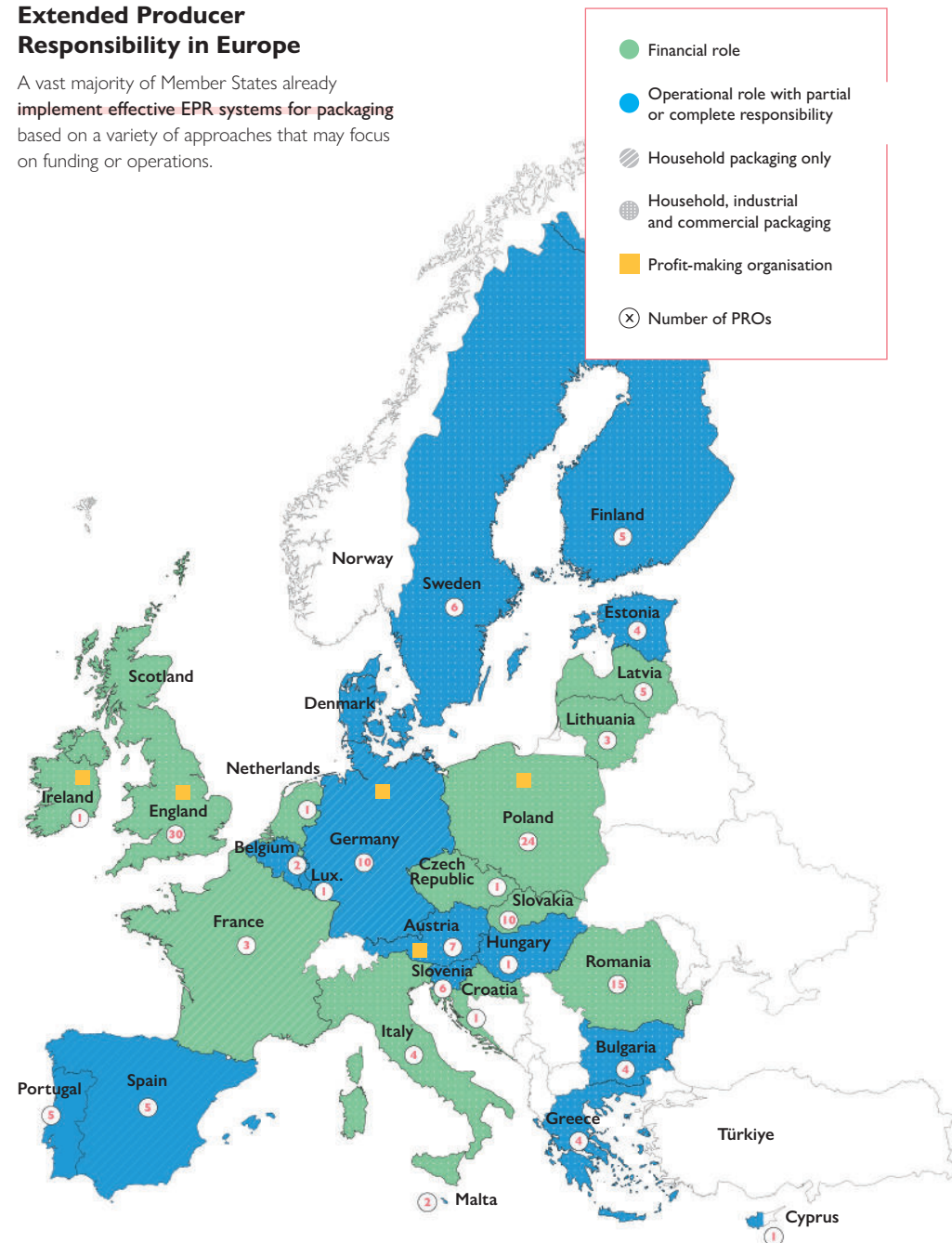
reuse and recycling. As such, the company plays an active role in monitoring and discussing key regulations.

Cooperation is central to measures taken by Citeo. Discussions among all stakeholders and commitment from all partners are essential drivers for implementing future projects and making tangible progress. To that end, Citeo maintains **close ties with other European Producer Responsibility Organisations** as a member of the European EPR alliance, PROsPA, and also collaborates with a **partner network**. Citeo is moreover a member of the Circular Plastics Alliance managed by the European Commission, which brings together various industry actors, organisations and stakeholders involved in the plastics value chain. Citeo shares feedback from France on the circular economy with other stakeholders and looks at initiatives conducted in other countries to identify best practices and help draw up shared targets on circularity at European level.



Extended Producer Responsibility in Europe

A vast majority of Member States already implement effective EPR systems for packaging based on a variety of approaches that may focus on funding or operations.



Source: Citeo according to the Early warning assessment related to the 2025 targets for municipal waste and packaging waste.

EPR, AN EXPANDING MODEL at global level

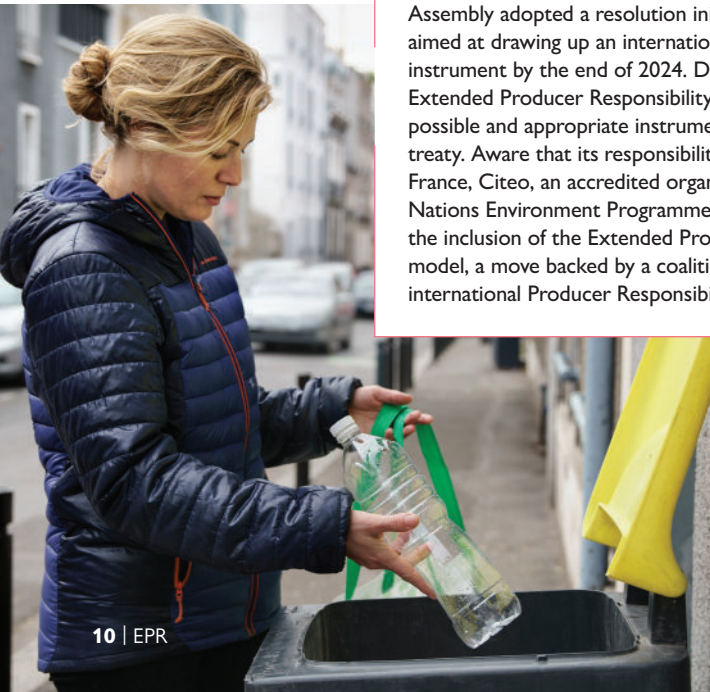
EPR may now be an effective solution for circularity and waste management at global level that can also be tailored to individual countries.

Since the 2000s, **EPR has gone global**. Regardless of variations in its model and objectives (compulsory vs. optional, geographic cover, packaging types), it has proved a useful system beyond Europe, the continent on which it emerged.

Including EPR in the international legally binding instrument on plastic pollution



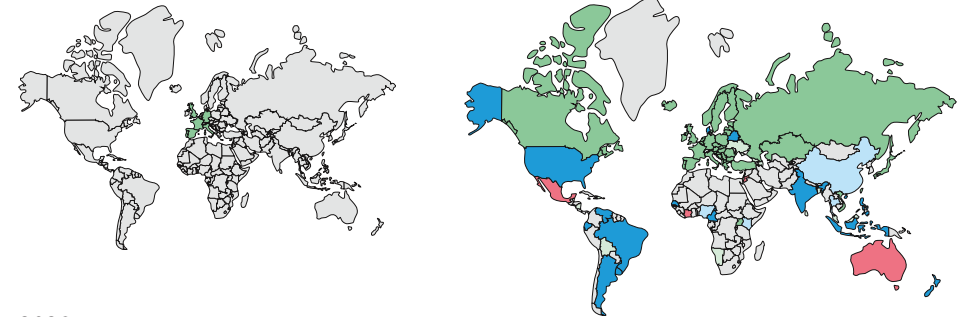
On 2 March 2022, the United Nations Environment Assembly adopted a resolution initiating negotiations aimed at drawing up an international legally binding global instrument by the end of 2024. During these negotiations, Extended Producer Responsibility was identified as a possible and appropriate instrument for implementing the treaty. Aware that its responsibility should not be limited to France, Citeo, an accredited organisation under the United Nations Environment Programme, has decided to advocate the inclusion of the Extended Producer Responsibility model, a move backed by a coalition of 40 European and international Producer Responsibility Organisations.



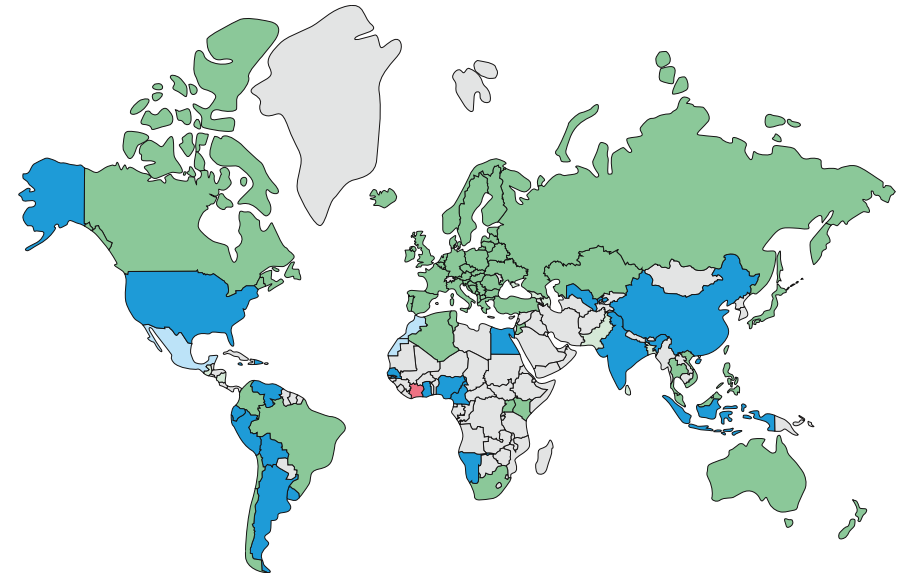
Development of EPR packaging worldwide

2000

2023



2028



- Mandatory EPR: specific legislation in place for packaging
- Voluntary EPR: subset of businesses engaged in a scheme not mandated by law
- Limited EPR: EPR limited in geographical/packaging type scope; in some cases, may not apply to consumer packaging
- Framework EPR: draft regulations exist calling for packaging EPR to be developed
- Emerging/under implementation: expected to deliver EPR legislation shortly

Source: Lorax EPI, EPR for packaging landscape – December 2023

CITEO & ADELPHÉ

HOUSEHOLD PACKAGING AND GRAPHIC PAPER*
KEY FIGURES 2022

CLIENT COMPANIES

46,422

client companies

Number of clients and principals under contract; a principal is associated with several agents

€917M

in funding
for the sectors

ECO-DESIGN

20,000

companies supported in their 3R strategy, accounting for more than 3.6 M tonnes of household packaging and graphic paper

17

prevention
and eco-design plans

with a sector-based approach, developed with professional organisations.

SORTING

72

kg/inhab.

of packaging
and paper
sorted

RECYCLING & ENVIRONMENTAL BENEFITS

HOUSEHOLD PACKAGING

65.5%

recycling rate

3.6M

tonnes of packaging recycled, i.e.

2.2 M tonnes less CO₂
equal to:

- 1 million fewer cars on the road
- 8,000 fewer Paris-New York return flights

GRAPHIC PAPER

60%

recycling rate**

1M

tonnes of paper recycled, i.e.

19 Bn litres of water saved,
equal to 6,400 Olympic pools filled with water

* Key figures based on the 2022 financial statement revised in Q3 2023, rounded up and consolidated for Citeo and Adelphe.

** Data provided for graphic paper based on tonnages marketed and recycled in 2021.



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our products a new life.

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