

PLASTIC PACKAGING IN FRANCE

REDUCTION, REUSE AND RECYCLING POTENTIAL BY 2025

Summary

Context: targets for reduction, reuse, and recycling (3R) of single-use plastic packaging to be set by decree

French law stipulates that " France aims to achieve the phase-out of single-use plastic packaging by 2040. A reduction target, a reuse target and a recycling target are set by decree for the period 2021-2025, then for each consecutive period of five years."

A study to assess 3R potentials in support of the first five-year decree

To define the objectives of the first five-year decree, an evaluation of the 3R potentials was carried out with the different stakeholders. It includes:

- **An inventory** of single-use plastic packaging put on the market, and its recyclability
- The identification and assessment of 3R alternatives, leading to an assessment of their potential for deployment by 2025.

Studying packaging only makes sense with regard to the packaged product.

To identify the existing or potential 3R alternatives to single-use plastic packaging, a preliminary analysis of the expected functionalities of the packaging (with regard to the packaged product) was conducted. The potential for deploying these alternatives depends on their ability to fulfil these functions, e.g. in terms of consumer safety and product protection/conservation.

The analysis was carried out for 18 product categories, grouped into 4 families:

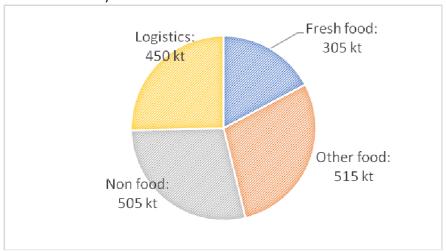
- Fresh food: meat, cold cuts, fish; dairy products; prepared meals; fruits and vegetables
- **Other food:** milk; waters; soft drinks, fruit juices; oils, vinegars, condiments; sweet groceries; salty groceries
- **Non-food:** hygiene, beauty, cosmetics; home care; professional liquid containers; miscellaneous (toys, tools, electronics, etc.)
- **Logistics:** secondary packaging; e-commerce packaging; rigid transport packaging; flexible transport packaging

This list covers about 90% of the quantities of household plastic packaging, and 70% of the quantities of industrial and commercial plastic packaging.

Plastic packaging in France

2.2 million tonnes of plastic packaging are put on the market each year, of which around 50% is household packaging, and 50% is industrial and commercial packaging.

Regarding the product categories covered by this study, the quantities of plastic packaging placed on the market each year break down as follows¹:



Quantities of plastic packaging placed on the market by product family

For each product category, the main types of plastic packaging used have been identified, and their current recycling rate assessed. The average recycling rate of packaging plastic household is **27%**². This performance mainly depends on:

- **The recyclability of packaging**, i.e. the existence of organisation and infrastructure that enable waste to be sorted, recycled and find outlets.
- **The collection rate**, i.e. the proportion of plastic waste separately collected (e.g. in the recycling bin for household packaging).
- To a lesser extent, the material efficiency in sorting and recycling facilities.

All other things being equal, the extension of sorting instructions to all plastic packaging waste (to be achieved by 2022) should "mechanically" bring this rate to at least 40%.

3R Alternatives to single-use plastic packaging

All alternatives contributing to the reduction of the amounts of plastics in single-use packaging, or to the improvement of its recyclability, have been considered³:

- Removal of packaging
- **Reduction of weight** (light-weighting, development of large formats, product concentration) ⁴
- **Re-use** (re-use by the consumer through bulk sales or refills for example, re-use by the packer in the context of deposit-return schemes for example)
- Material substitution (paper / cardboard, metal, glass and wood)
- **Improved recyclability** (simplification, ⁵substitution of non-recyclable plastic resins by recyclable resins, etc.)

¹ Detail is provided in the full report, p. 18-19

² Detail is provided in the full report, p. 28-31

³ Incorporation of recycled material, or substitution by « biosourced » or « biodegradable » plastics have not been considered as 3R alternatives, c.f. <u>full report</u> p. 41

⁴ Concentrated products (e.g. laundry detergents) allow to reduce the product's volume and therefore the amount of packaging.

⁵ E.g. single material packaging in substitution to multilayer/complex packaging.

The potential for reduction, reuse, and recyclability by 2025

Changing the packaging for fresh food products does not entail the same constraints as for dry food products, beverages, or non-food products. The available alternatives, their adequacy with expected functionalities, their level of maturity, and thereof their deployment potential, are vastly different. **Different products lead to different 3R potentials for packaging.** However, two main directions have emerged.

- 1. A consensus is emerging around the ambition to achieve 100% recyclable plastic packaging by 2025. This implies, in particular:
 - To phase-out single-use plastic packaging that is not, or will not be in the short-term, recyclable: complex plastic packaging⁶, expanded polystyrene household packaging, non-recyclable plastics (PVC, PETG, ABS, etc.)
 - To quickly develop recycling channels for packaging that may be recyclable in the short-term (PS yoghurt pots, flexible PP packaging)
- 2. A potential for reducing the quantities of plastic in single-use packaging of 20% on average, variable according to product categories⁷:
 - For products which require high barrier properties (meat, fish, milk, fresh dairy products), the potential is limited.
 - For food products that are less fragile or do not require long storage times, and for non-food products, the potential is higher.
 - Overall, at least half of the reduction can be obtained through reuse (bulk sale, deposit/refund, refills), the rest being obtained by reductions in unit weight, substitution by other materials, or even removal of certain packaging or packaging elements that are unnecessary, or particularly likely to be littered.

Categories	Reduction potential	Reuse potential (expressed as a share of the reduction potential)
Fresh food	15%	25%
Other food	18%	70%
Non food	36%	33%
Logistics and professional packaging	21%	71%
TOTAL	20%	58%

Towards the development of a national plastic strategy

The evaluation of the 3R potential in this study has several limitations:

- It is based, among other things, on a consultation with stakeholders, but the feedback obtained is not comprehensive, and is likely to better reflect the positions of the most important and/or most advanced companies, as well as those of the promoters of alternatives.
- The assessment of the environmental impacts of the various alternatives calls for caution: comparative environmental studies are rare, and, when they exist, they tend to focus on the carbon footprint, while certain issues associated with plastics (e.g. biodiversity or sanitary impacts) are poorly quantified. Moreover, the choices of methodologies and data may raise questions.

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⁶ I.e. composed of different layers of non-separable materials

⁷ Detail is provided in <u>the full report</u>, chapter 5

- The implementation of alternatives may require significant investments (up to the complete replacement of packaging facilities).

Therefore, the suggested orientations and the objectives set in the decree should be the subject of an **extended collective work, within the framework of the design of the 3R national plastic packaging strategy**. This work will describe the **accompanying measures** to be implemented, **the monitor framework**, and ways to **better take into account environmental impacts** (development of common life cycle analysis frameworks). The involved sectors will also be invited to take ownership of the 3R objectives by developing their own sectoral roadmaps.