02/12/2024

Design 4 Recycling



The better we sort, the more we recycle

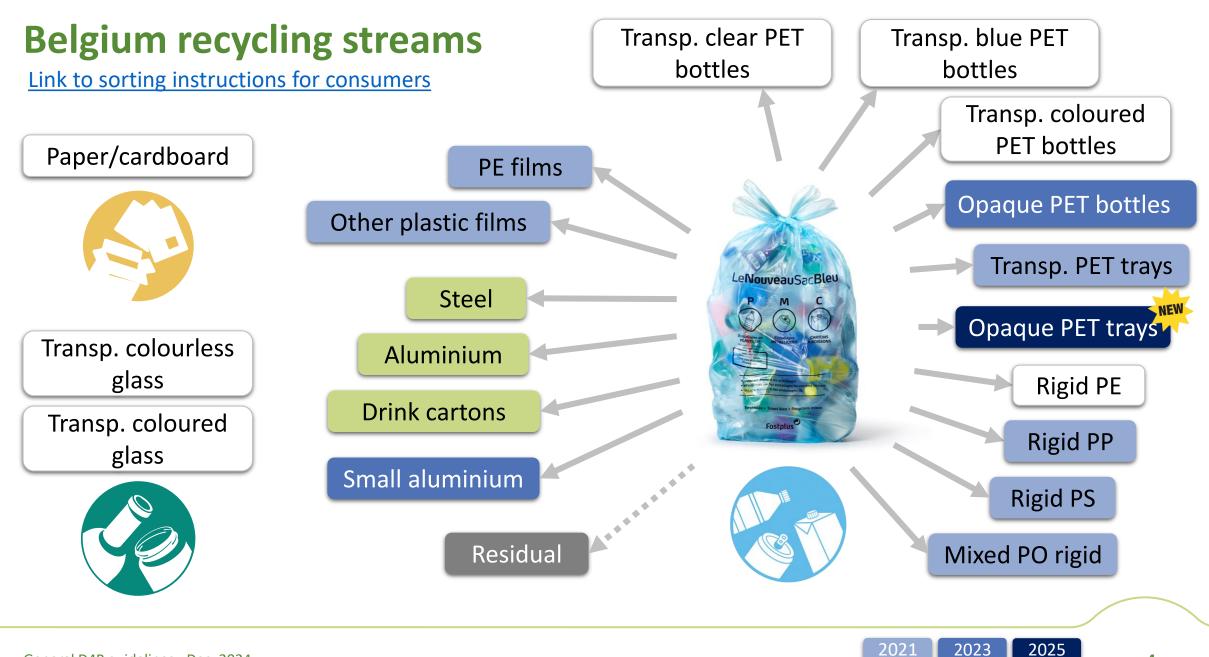
Introduction

- Goal: putting forward a recycling solution for 100% of the household packaging placed on the Belgian market.
- Take account of the current collection and sorting facilities in Belgium and the possibilities in terms of sustainable recycling channels available at the moment. This document will be adapted in the future when new collection, sorting or recycling opportunities come up.
- Fost Plus organizes Design for Recycling (D4R) workshops to advise on recyclability of packaging materials and the alternatives available on the market to make a packaging type or group recyclable. Furthermore, a packaging diagnostic in cooperation with Valipac can be organized on site.
- Questions concerning D4R can be sent via <u>this form</u>, where you will receive a tailor-made answer from one of our D4R experts.
- With the eco-modulation of <u>Green Dot fees</u>, packaging materials that are easy to collect, sort and recycle pay a lower Green Dot rate than packaging materials that are difficult to sort and recycle. Dissuasive fees apply to packaging that cannot be recycled or that interfere with the sorting and/or recycling process.

Current collection, sorting and recycling streams in Belgium



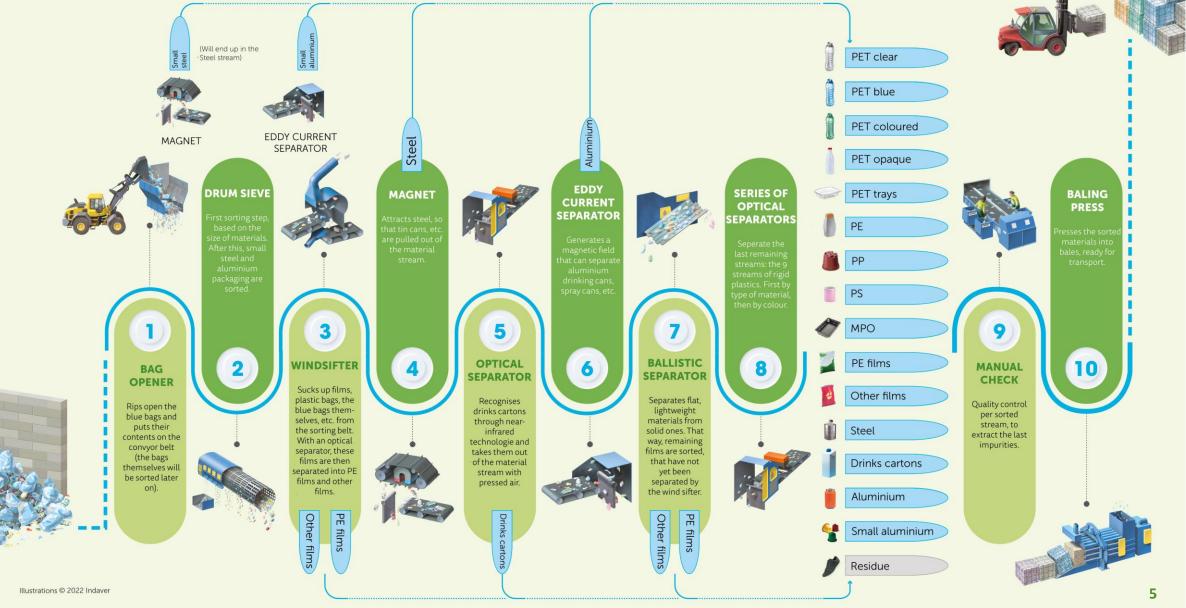
The better we sort, the more we recycle





PLASTIC PACKAGING, METAL PACKAGING, DRINKS CARTONS

THE SORTING PROCESS OF PMD



D4R: General rules



The better we sort, the more we recycle

Give preference to mono materials



Avoid packaging colored with carbon black

- Choose non-coloured packaging (natural colour of the packaging).
- Avoid black or dark colours for packaging made of plastic.
- If this is not possible, give preference to colours that cover as little of the packaging surface as possible
- Find a dedicated FAQ on dark plastic packaging containing carbon black on this page:

https://www.fostplus.be/en/members/sustainable-packaging#FAQ



Paper/cardboard

- For the moment minimum 85% fibre content and maximum one side covered with a liner (water accessibility needs to be guaranteed for recycling) **or** assessed as recyclable according to the <u>4evergreen protocol</u>
- Packaging needs to be clean to be sorted with the paper & cardboard (sorting rules)





Paper/cardboard combined with plastic

Pull tab with perforations



Separation plastic laminated film from cardboard (ex. 2)



Separation plastic laminated film from cardboard (ex. 1)



On-pack communication



Please note that in reality many consumers will not separate the different elements

If possible, foresee an option to separate the different layers

Drinks cartons

• For drinks cartons, give preference to the simplest shapes with as few additional components as possible (smallest possible plastic lids and bodies, for example).







Biodegradable or compostable plastics

- Avoid the use of biodegradable or compostable plastic materials in packaging. There is currently no sorting solution enabling them to be recycled. They may not be put in the organic fractions collected from households, either.
- Find a dedicated FAQ on this page: <u>https://www.fostplus.be/en/members/sustainable-packaging#FAQ</u>

Labels and sleeves

- Use sleeves or labels that cover a maximum of 70% of the packaging surface (container ≥ 50cl) or 50% (container < 50cl).
- If a full sleeve is necessary, add perforations that tear easily and add clear, visible messages encouraging consumers to separate the sleeve from the bottle or container.

Please note that in reality, many consumers will not remove the sleeve.

 Use labels that can easily be removed from the packaging and that do not break up into tiny pieces during washing.



Barriers, glues and adhesives, inks and pigments

- Use the right quantity of barrier necessary to protect the product
- Avoid using barrier substances containing chloride derivatives (PVC, PVDC) and aluminium layers sandwiched between the other layers of the packaging.
- Give preference to barrier materials such as SiOx, AlOx or EVOH at less than 5% of the weight of the packaging
- Fost Plus has become a supporter of Recyclass since 1/1/23
- For advise on glues, barriers, inks, combination of labels/sleeves/banderolles or other add-ons with packaging materials we mostly refer to Recyclass D4R guidelines: <u>https://recyclass.eu/</u>.
- You can send your questions via <u>this form</u> to receive tailor-made answers on your specific questions.

Glass Packaging

Color and opacity

- Opacity is a problem for recycling
- Black glass bottles colored in the mass are obstructive packaging, thus they are applied the highest Green Dot fee, see dedicated FAQ about obstructive packaging : <u>https://www.fostplus.be/en/members/services#FAQ</u>.



D4R advice

- The less opaque the better
- No quantitative threshold (yet)
- In doubt, contact <u>FERVER</u>



Hazy transparent bottles, transparent colored bottles or transparent colorless bottles are recycled

Glass Packaging

Labels & sleeves

- Avoid metallized labels
- The adhesive must be **water washable**
- Avoid full-body sleeves, especially if they cover the bottom of the bottle
- Avoid PVC sleeves





Closures

Avoid tethered closures in a different material

such as twist-off ceramic closures, or closures that don't require being removed to consume the product.



Glass Packaging

Tamper-proof additions to closures

Avoid aluminium that is stuck on the glass which is difficult to remove during recycling, and can lead to metal inclusions in the recycled glass creating visual and mechanical issues

Prefer paper, alu without glue or plastic that can be removed during the crushing or washing steps







Link with Green Dot fees

- The Green Dot fees are calculated in such a way that each type of recycled packaging material covers the cost of its recycling chain. This means that a lower Green Dot fee applies for packaging materials that are easy to collect, sort and recycle than for packaging materials that are difficult to sort and recycle.
- In addition, for packaging that cannot be recycled or that disrupt the sorting and/or recycling process, discouraging rates are applied.
- More info: <u>https://www.fostplus.be/en/members/green-dot-rates</u>

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