

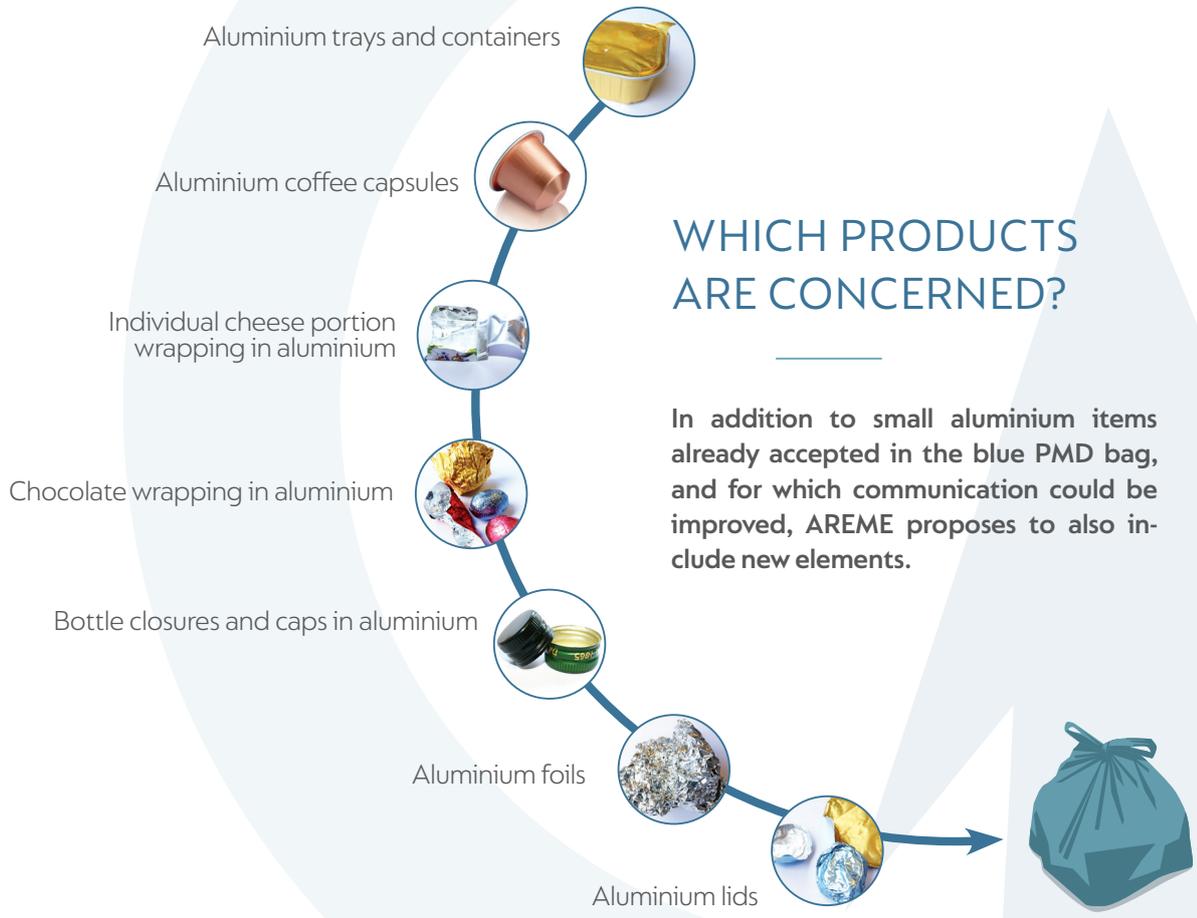
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Associatie voor de recyclage van licht metalen verpakkingen en items

Association pour le recyclage des emballages légers et objets assimilés en métal

Recycling more aluminium
through the separate collection
of packaging in Belgium





WHICH PRODUCTS ARE CONCERNED?

In addition to small aluminium items already accepted in the blue PMD bag, and for which communication could be improved, AREME proposes to also include new elements.

WHY?

Many products we consume daily, such as coffee, chocolate and individual cheese portions owe their conservation and the perfect preservation of their taste to their aluminium packaging.

AREME is a Belgian initiative gathering actors from the entire value chain of aluminium foil, and proposing a solution to improve the recycling of aluminium through selective collection of packaging in the blue PMD bag.

In the framework of the transition towards a circular economy adopted at the European level, and knowing that the economic and environmental benefits of aluminium recycling have been demonstrated, **AREME** works to improve the recycling of aluminium packaging, focusing on light aluminium packaging and other items perceived as packaging by citizens.



The properties of aluminium make it a material of choice for the circular economy. Aluminium can be indefinitely recycled without losing any of its physical and chemical properties.



Recycling aluminium saves 95% of the energy (and reduces greenhouse gas emissions to the same extent) as compared to its primary production.

HOW TO IMPLEMENT IT?

As one can see with the P+ project*, the extended collection and recycling of new items is the future. Adapting the current household packaging waste collection system in the framework of the P+ project incites us to also look at other packaging and items perceived as such by citizens. Indeed, if the sorting instructions and sorting centres are adapted to the new elements accepted in the PMD bag, why not synchronize our efforts and also collect and recycle more efficiently a larger amount of aluminium items? This extension of selective collection to additional aluminium items is already happening in other European countries such as Germany and France.

REINFORCE SORTING INSTRUCTIONS

Encouraging sorting by citizens through a clear and simple communication is necessary to improve the collection of light aluminium packaging and similar items. We therefore suggest to:

- Improve the existing sorting instructions regarding light aluminium packaging.
- Extend the sorting instructions to the above-mentioned packaging and items.
- Engage the brands involved so they also communicate about the sorting instructions of light aluminium packaging to their consumers.



ADAPT THE CURRENT SORTING AND RECYCLING SYSTEM

The existing equipment of sorting facilities will have to be adapted to sort the new fractions collected following the changes in sorting instructions in the framework of the P+ project*. As such technical investments will require many years to become profitable, it seems sound to already consider adaptations aiming at collecting and sorting also small aluminium packaging. This would also enable to sort small aluminium items already present in the blue PMD bag.

Collection, sorting and recycling scenarios for light aluminium packaging and items perceived as such by citizens are being discussed with Fost Plus, from both a technical and financial point of view. According to this study, the best solution seems to equip sorting centres with a second Eddy current separator to be installed on the belt conveying the smaller packaging rejected at the entrance of the sorting centre. Thanks to a magnetic field, it is then possible to sort the smaller aluminium items. Such machines are already in use in the sorting centres for the larger packaging fraction to sort, for example, aluminium cans and aerosols.

Today, these small packaging are either rejected at the entrance of the sorting centre or discarded by the citizen in the residual waste bag. In both case, they are sent to the incinerator**. For the small aluminium items, it would be efficient to treat them first by pyrolysis before the actual recycling phase starts in an aluminium remelting facility***.

* Belgian project aiming at widening selective collection to more plastic packaging.

** During incineration, the aluminium present in the packaging is partly oxidised (with energy recovery). The non-oxidised fraction can be recovered and recycled due to additional treatment of the incinerator bottom ashes.

*** Pyrolysis allows the recovery of the thin aluminium material in the form of aggregates, fragments, or powder without losing any material due to oxidation, as the applied process temperature stay well below the aluminium melting point of 660° degrees Celsius.

THE MANY BENEFITS OF THE PROJECT

Our goal is to divert towards recycling a waste stream that is today not selectively collected.

Our project aims at using the packaging collection and recycling scheme already put into place by Fost Plus to recover additional packaging and non-packaging aluminium items.

AREME has been working with Fost Plus on a calculation methodology in order to identify the costs of the project.

Aside from promoting moving up from incineration to recycling in the waste management hierarchy, a cornerstone of the European Union's waste policy, our project will also help municipalities save money. Indeed, **AREME** commits to cover the costs of the collection and recycling of these aluminium non-packaging items while using the PMD management system. The largest part of this contribution comes from Nespresso and Jacobs Douwe Egberts. Today municipalities pay for the management of these items, which are currently ending in the 'refusal' bin.

The new stream of material that our project will allow to sort, will be sold to recyclers and will get a second life!

CONTACT

www.areme.be

Elise Regairaz - elise.regairaz@areme.be

+32 (0) 491 51 23 28

MEMBERS OF AREME



NESPRESSO



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