2021 Activity Report

Investing in

the circular economy





The better we sort, the more we recycle

Key figures

Design4Recycling

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Innovation and digitalisat

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Recycling household packaging in Belgium

In 2021, Fost Plus recycled 89.8% of the household packaging put on the market by its members. These figures were calculated on the basis of the new, more stringent measuring methodology designed to ensure a level playing field in Europe.







Total recycling percentage

Fost Plus 2021 Activity Report (2

804.194 ton

Tonnes of packaging put on the market

How is the recycling percentage calculated?

The European Circular Economy Package provides a strict legal framework to reduce waste and introduces an ambitious long-term plan to encourage recycling. It also includes a new methodology to calculate the recycling percentage. In order to compare the different **European member states properly** in terms of the recycling goals, it is important to calculate in the same way in every country. Europe has issued guidelines for this. The various member states have to report to Europe using the new methodology for the first time by the end of June 2022 at the latest. These reports relate to the results for the year 2020.

A new measuring method

In concrete terms, from now on the recycling percentage will be calculated at a later point in the chain. Whereas the recycled guantities were previously measured upon leaving the sorting centres, this is now done when the recycling actually takes place. That is after any impurities and unsuitable substances have been removed from the sorted materials in the recycling centres. So we are talking about a new computation point.

Impact on the reported figures

This new computation point has an impact on the recycling figures of all European member states - including Belgium. Thanks to the high degree of purity of the collected and sorted packaging material that we deliver to our recycling partners, the new computation point has a relatively limited impact on most materials. Moreover, this does not only concern household

packaging. Industrial packaging is calculated in the same way. So companies that declare both household packaging via Fost Plus and industrial packaging via Valipac see this reflected in the recycling figures.

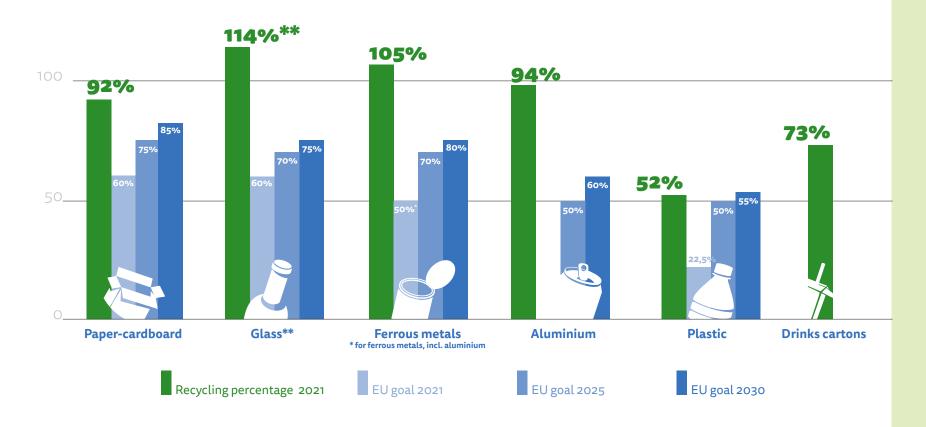
The new measuring methodology used to calculate how many tonnes are recycled has been approved by the Interregional Packaging Commission (IRPC). They in turn will consolidate the recycling figures for packaging waste, once these have been checked and validated, with a view to reporting to Europe.

Quantities of recycled packaging per inhabitant and per year



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Recycling percentage per type of material



**These percentages are the recycled quantities compared to the quantities our members put on the Belgian market. This means that the recycled quantities also include collected packaging materials put on the Belgian market by non-members or purchased by consumers abroad (border purchases).

And what about the Belgian recycling targets?

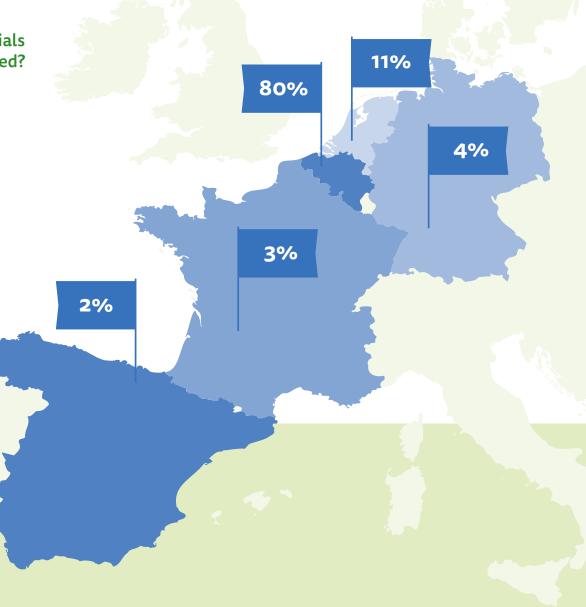
In the coming years we will report to the IVCIE using both the old and the new calculation method. Which calculation method will eventually be used for the assessment of the legal objectives of the Belgian Interregional Cooperation Agreement will be determined by the IVC in the new accreditation conditions, effective as of 2024.

Where are the materials collected recycled?

Excellent results at a low cost

€15

The selective collecting, sorting and recycling of household packaging waste costs about EUR 15 per person. For this, we achieve a recycling percentage of 89.8%, placing us among the best in Europe. This excellent result may be attributed to efficient collection systems that make it easy for everyone to take part, a uniform sorting message, a centralised approach to sorting and long-term recycling contracts.



€ 253.573.681

In 2021, Fost Plus had an operating budget of EUR 253.573.681. This mainly covers the costs of the selective collection, sorting and recycling of household packaging. The Fost Plus members bear these costs via the Green Dot. Key figures

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The New Blue Bag, a guarantee of success for the circular economy

The New Blue Bag has given a significant boost to the circular economy in our country. The expanded collection of PMD brings almost 100,000 additional tons of packaging materials to the market and attracts investment in local processing capacity. With five new sorting centers and five new recycling plants, Belgium is gradually becoming a true recycling hub in Europe.





"The circular packaging economy not only has a positive impact on the recycling figures, but also gives the local economy a boost."

Mik Van Gaever, COO

New Blue Bag for all Belgians

Friday, 1 October 2021 was a day to remember. That was the day when the New Blue Bag was introduced into the Idelux intermunicipal company (province of Luxembourg), so that all Belgians had access to the expanded PMD collection. It also means that after a transition period, we once again have a uniform collection scenario throughout the country, from Ostend to Arlon. Which in turn means that the composition and guality of the materials are the same everywhere, so that we can streamline processes in the sorting centres much better. It also makes communication about the sorting rules a lot easier.

The Belgians have clearly taken the new sorting message on board. The quantities collected are rising very fast towards the targets set. We can see that for the intermunicipal companies that have been active for more than a year, the figures are close to the 23 kg of PMD per inhabitant per year and sometimes even exceed it. Of course, there is still room for improvement. We are still seeing significant differences in the collection figures of individual regions and intermunicipal companies.

In addition, a recent survey shows that consumers still have doubts about whether certain types of packaging can be put in the PMD. For instance, the situation as regards plastic biscuit wrappers, plastic detergent bottles, aluminium lasagne trays, metal spray cans and toothpaste tubes remains unclear. So we are working hard to raise awareness further, in close collaboration with intermunicipal companies and local authorities. The national campaign launched at the start of 2022 also puts sorting top-of-mind again among the general public.



World Recycling Day: 1 in 2 Belgians sort their waste for recycling every day





Four new sorting centres operational

The expansion of the PMD sorting rules is impacting significantly on the entire chain that follows, and the sorting centres in particular. Whereas in the past, the number of types of plastic in the blue PMD bag was limited to two – PET and HDPE bottles and flasks – packaging made of polypropylene (PP), polystyrene (PS), PET trays and films have now been added. So we needed totally new, high-tech sorting centres able to sort all this plastic packaging properly by type.

In 2019, Fost Plus issued the first invitations to tender for five new sorting centres which are to sort the packaging from the New Blue Bag for the next nine years. Four of the five centres are now already fully operational: Indaver (Willebroek), Prezero (Evergem), Valtris (Couillet) and Val'Up (Mons). Construction on the final sorting centre, Sitel in Liège, began in November. This is scheduled to be operational by the end of 2022. Approximately 90% of the packaging that we collect via the New Blue Bag is already being processed in the new sorting centres.

They combine new and existing technologies, including drum sieves, wind shifters and infrared cameras, to sort the PMD packaging into fourteen uniform fractions, ready for further recycling. They also provide the necessary flexibility to be able to further refine and expand the collection scenarios in the future.

For instance, since 1 January 2022, metal spray cans have also been accepted in the PMD bag. Previously, only food and cosmetics sprays can were allowed in the PMD.

As recycling technologies and markets develop, the New Blue Bag can be opened up to additional packaging.



Recycling on Belgian soil

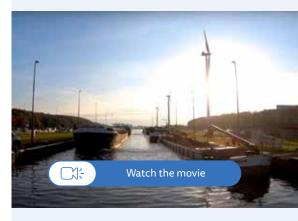
The packaging that we collect is recycled in Belgium and our neighbouring countries. For plastic packaging, however, the proportion was relatively limited. With the New Blue Bag, we are going a step further and attracting companies that want to invest in new recycling capacity here in Belgium. Whereas in 2020, just 9% of the plastic packaging was recycled in Belgium, the planned projects mean that this figure should rise to over 75% at short term.

In 2020, Ecoo in Houthalen-Helchteren invested in an extra recycling line for mixed plastics and mixed films from the New Blue Bag. In May 2021, the company began construction on a new recycling plant for polyethylene film, together with Biostoom Beringen. This is used, among other things for the outer packaging of drinks bottles or plastic bags. The new plant will have a capacity of 42,000 tonnes, including 25,000 tonnes from the New Blue Bag.

In Charleroi, construction work on FILAO, a plant for the bottle-to-bottle recycling of PET bottles, began in October 2021. This project involves cooperation between Veolia and Sources ALMA, a bottled water producer and market leader in Belgium. The plant has the capacity to recycle 40,000 tonnes of PET per year and serves as a model for the circular economy. Bottles that we collect and sort in Belgium are processed here to provide raw materials for new bottles that will largely be sold on the Belgian market.

In early 2022, we announced a fourth recycling plant in Belgium. This is being built in Neufchâteau by the Dutch company Morssinkhof Rymoplast Groep and focuses on complex PET packaging. Over the coming nine years, 10,500 tonnes of PET trays and 17,500 tonnes of PET bottles (including opaque PET) from the New Blue Bag will be recycled here every year, mainly to provide raw materials for new trays and bottles.

Finally, after a call for projects for the PP/HDPE fractions, in the first quarter of 2022 exclusive negotiations began for a fifth recycling plant on Belgian soil.



PROJECT IN THE SPOTLIGHT

Alternative transportation for PMD

Recycling packaging brings significant environmental gains. However, we must not be blind to the negative impact of certain activities in the recycling chain. For instance, we are thinking here of transporting the packaging collected by truck. In 2021, we looked into the possibilities for alternative means of transport.

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FILAO, a plant for the bottle-to-bottle recycling of PET bottles in Charleroi

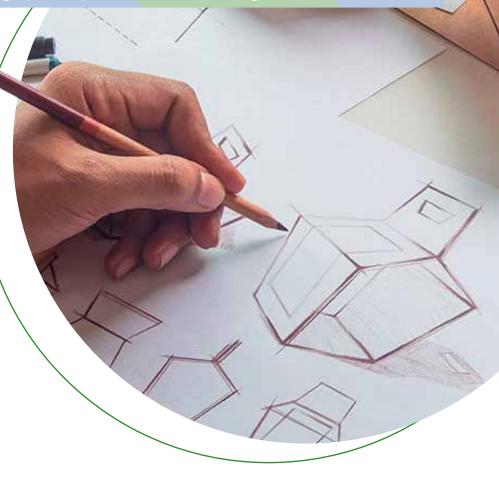
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Design4Recycling

By 2025, we aim to offer a recycling solution for all packaging put on the market. That's the ambition we set two years ago. The expanded PMD collection and the use of new technologies will definitely help us with this. In addition, however, it is of course important to take account of recyclability at the end of the life cycle right from the design phase. Through close cooperation with our members, we aim to systematically reduce the proportion of packaging that cannot be recycled or is difficult to recycle.



Fully recyclable packaging only by 2025

Belgian industry has committed, via the sector federations Comeos, Detic and Fevia, to put only fully recyclable packaging on the market by 2025. The quantity of nonrecyclable packaging on the Belgian market is currently estimated at approximately 2% of the total. Companies have significantly ramped up their efforts over the past few years, seeking more sustainable alternatives with better recyclability for many types of packaging. Our members can count on our support here. We analyse the declarations submitted by (big) members and identify the non-recyclable packaging in their portfolio. We discuss our findings with them and point out what alternatives are available. We also make the necessary arrangements for action plans to systematically replace this packaging with (more efficiently) recyclable alternatives. \rightarrow

→ Via 'Pack It Better', we compile all the knowledge and expertise on eco-design on one central platform, where companies and knowledge institutes can contact one another. The platform was set up in cooperation with Valipac, the organisation responsible for collecting and recycling industrial packaging.

Finally, we give producers the necessary financial incentives via the eco-modulation of the Green Dot rates. The more it costs to collect, sort and recycle a material, the higher the rate for that material. Under this system, companies that put packaging on the market that cannot be recycled or is difficult to recycle pay the highest rates for the processing of their packaging. This give companies a financial incentive to opt for alternatives that can be recycled more efficiently.



PROJECT IN THE SPOTLIGHT

Nestlé: Ricoré lid

Detectable by optical sorting

For its coffee products category, Nestlé has modified the colour of the lid of its famous "Ricoré" can, from black to light brown. This polypropylene (PP) lid could not previously be sorted in the sorting centres, and was therefore not recyclable.



PROJECT IN THE SPOTLIGHT

Delhaize: Tiramisu

Recyclable and made from recycled materials

Delhaize has made the packaging of its tiramisu more sustainable. The new packaging consists of a plastic pot in a cardboard outer cover. In addition, the PET pot is made of recycled material (r-PET), which means that the tiramisu packaging alone saves 1.5 tonnes of new plastic per year.

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Sorting, anytime, anywhere

Thanks to the New Blue Bag, we are now sorting more and better than ever at home. We want to extend this positive development out of home, as well. Because there is great potential here to recover packaging that still gets lost at the moment. At the same time, we are ramping up our efforts in the fight against litter.





"Despite the coronavirus crisis, we are still on track to achieve our ambitious goals for 2023."

Steven Boussemaere, Director Innovation & Business Development

Sorting at the workplace - logical, isn't it?

Despite the increase in working from home as a result of the coronavirus crisis, we still use a great deal of packaging at the workplace. What is more, a considerable proportion of this still ends up in the mixed industrial waste. It's a pity, because this is packaging that we can perfectly well sort and recycle together with PMD collected door to door. We increased our efforts still further in 2021. Based on a screening carried out together with Valipac, we wrote to around 60,000 companies that did not yet appear to have a contract with their waste partner for the collection of PMD. These efforts have yielded the necessary results. In the second half of the year especially, we noted a steady rise in the tonnages collected and an increase in the number of new contracts concluded.

Behind the scenes, we are working closely with the waste companies that are responsible for collecting PMD from companies. For instance, they can offer customers who sort a welcome bonus and they can receive an extra allowance for the additional tonnes that they collect compared with the previous year. In addition, we have recently granted them access to a network of 15 transfer stations where they can drop off the PMD that they have collected from their customers. Companies that want to start sorting PMD or improve their sorting results can go to sorterenophetwerk.be/ trierautravail.be for tips, advice and support material.

PROJECT IN THE SPOTLIGHT The army sorts PMD too

Florennes works with a private waste operator and has its own recycling park on site where all sorts of waste can be collected, including hazardous products. Household waste containers can be found in various places on the base and in the car parks, and the cleaning staff remove the waste from the offices.

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On the right track to meet our 2023 goal



Ready for life after coronavirus

In 2021, life was still largely governed by the coronavirus crisis. A lot of events were (again) cancelled, sports competitions took place behind closed doors and our out-of-home activities remained somewhat restricted. As a result, the many out-of-home sorting projects that we put on hold in 2020 remained on the back burner in 2021 as well. Fortunately, 2022 looks set to be much better. Various sectors are preparing to start up their activities again in full, from youth movements and amusement parks to football clubs and festival organisers. This is the signal for Fost Plus to breathe new life into our out-of-home sorting initiatives. Attention here is focusing among other things on filling stations, take-away restaurants and cinemas.

Over the past few years, we have developed a wide range of services and solutions in this field. For instance, we offer advice and support every step of the way: from communication and awareness-raising to practical implementation and reporting. In addition, they can often also rely on a financial contribution towards the costs of the infrastructure and collection. Finally, specific programmes have been developed for certain sectors such as health care and we are setting up a partnership to cooperate with maintenance firms and cleaning companies.

PROJECT IN THE SPOTLIGHT Janssen Pharma helps staff sort better

The Janssen Pharma site in Beerse employs over 4,000 people, working in different departments, from administration to research and development. The company put together a team that focuses entirely on a more sustainable waste policy. Among other things, the team draws up waste sorting procedures and makes practical recommendations for selective collection.

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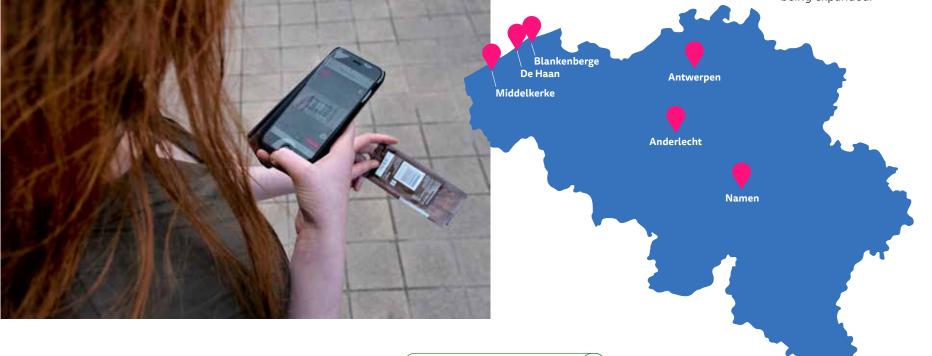
The Click makes further progress

Litter is a thorn in the side of everyone who cares for their living environment. We all want clean streets, parks and squares. With the Click, we aim to bring about a positive change in behaviour and at the same time recover as much material as possible that is currently lost.

Active participation of the general public

Via Mooimakers, Be WaPP and the partnership with Environnement Brussels and Net Brussels, we are already making a major contribution to the fight against litter. With the Click, we are adding an extra dimension to this. By rewarding members of the public for their good behaviour, we aim to make them 'click' to a sustainable shift in mindset. The concept is very simple. Via an app on their smartphone, consumers can scan packaging that they are using when they are out and about, or litter that they pick up and then throw it in the appropriate bin. In exchange, they collect digital points, known as Circular UCoins, which they can spend at local businesses. This way, we make the fight against litter a positive story and we create a win-win situation, including for businesses that can definitely use a helping hand after the coronavirus crisis.

The project entered its second year in 2021. After a successful pilot project in De Haan in the summer of 2020, the app was rolled out in two major cities – Antwerp and Namur – and three coastal municipalities: Blankenberge, De Haan and Middelkerke. Anderlecht was the first Brussel commune to sign up to the project, doing so in early 2022. At the start of May we already had almost 21,000 users who together clicked 43,000 times. In 2022, the project is being rolled out in many new places. Existing projects are being reinforced and where possible the operating area is being expanded.



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Key figures



Litter and Extended Producer Responsibility

Extended Producer Responsibility is to be significantly expanded in 2023. In addition to the collection and recycling of packaging, from then on producers will also be responsible for the costs of clearing up packaging that ends up as litter or in public rubbish bins and for the costs of communication and awarenessraising campaigns aimed at the general public. We see this as a unique opportunity to assume our role in society and, together with all the current players, make a contribution to a cleaner living environment.

For instance, we want to make maximum use of the expertise built up over the years within Mooimakers, Be WaPP and the Brussels-Capital Region. There is a great deal of knowledge to be found in the local authorities and intermunicipal companies as well. We want to pool this as much as possible in a policy that focuses on cooperation, efficiency and maximum recycling of packaging from litter.

PROJECT IN THE SPOTLIGHT

Recovering PMD from public rubbish bins

It is estimated that public rubbish bins contain between 20 and 25% of recyclable packaging materials. Just think of the cans and bottles that we empty on the go, as well as all other packaging that we would sort in the New Blue Bag at home. The contents of the rubbish bins now still end up mainly in the residual waste. Fost Plus wants to do something about this.



Since it is not always feasible in practice to collect PMD selectively in the street for example via sorting islands - we went in search of an alternative solution. For instance, we are testing our so-called pre--sorting processes in various towns, cities and communes. This involves sending the entire content of public rubbish bins to a specialised sorting centre where the recyclable materials are separated from the residual waste. This is done among others in Charleroi, Ghent and Leuven.

For this project, Fost Plus is working with Bruco, which specialises in sorting various waste flows and has a number of sites in Belgium. The waste from public rubbish bins is sorted in Sambreville, where the company has installed a brand-new high--tech sorting line with optical separators. The sorted PMD packaging is then taken to our usual sorting centres where it follows the same path as the packaging collected door to door.

Sorting, any time, anywhere

Innovation and digitalisation

Innovation and digitalisation are the cornerstones of the circular economy. Fost Plus therefore invests heavily in new technologies and systems. This is intended to ensure that all partners in the ecosystem can work together as well as possible and gear their activities to one another.





"Our basic systems generate huge quantities of data on all aspects of the recycling chain."

Laurence Havrenne, Chief Financial Officer

MyFost - the Fost Plus declaration 2.0

Every company that puts packaging on the Belgian market makes a financial contribution to the collection, sorting and recycling of their packaging. Every year, they submit a declaration to Fost Plus for this purpose. They indicate not only the quantity of packaging that they used during the past year, but also the materials it consisted of. This enables us to calculate an accurate contribution for each company, reflecting the actual processing costs.

Since the start of 2022, our members have been using a brand-new declaration system for this: MyFost. The system integrates the new reality of the New Blue Bag where far more packaging is selectively collected and recycled than was previously the case. This results in more diversified rates for these packaging types. Lower rates apply to materials that can be recycled more easily. In addition, the system offers the necessary flexibility to evolve in line with the rapidly changing packaging world. For instance, our members have recently started declaring Household Hazardous Waste via MyFost as well.

Finally, MyFost contains all the bells and whistles to be expected of a modern app. Users can log in via itsme, invoices are sent electronically and a great deal of online support is available to help them fill in declarations. Account has also been taken of the wide variety of our members, including very big and very small companies from markedly different sectors. MyFost contains features for every type of company that make life easier and help them submit their declaration correctly.



Conclusion

Data for optimal cooperation

Fost Plus is the driving force behind an extensive and varied ecosystem where different partners work closely together: intermunicipal companies and local authorities, producers and distributors, operators, sorting and recycling centres, etc. Optimal data exchange is crucial to gear all the activities in the recycling chain to one another as well as possible. Our basic systems generate huge quantities of data on all aspects of the recycling chain. What packaging is put on the market and what materials does it consist of? How much PMD do we collect from members of the public and how are the figures evolving over time? What is the quality of the materials collected and which packaging causes problems in sorting and recycling centres?

Thanks to Business Intelligence, we can use these data to take the right decisions and ensure that our partners can work together better. For instance, analyses of collection data help us to optimise the entire chain, from the organisation of the collection rounds to the forecasting for sorting centres and recycling plants. Insight into new packaging trends enables us to respond faster to new developments and adjust our policy where necessary.



PROJECT IN THE SPOTLIGHT Artificial intelligence in sorting centres

Our new sorting centres rank among the most advanced in Europe. But technology does not stand still, so we are constantly on the lookout for innovation. In 2021, for example, we looked into how we can use artificial intelligence to automate the quality control of the sorted materials. In the Indaver sorting centre in Willebroek we installed a self-learning camera system at the end of the process that can recognise certain packaging on the basis of photographs. In the pilot project we examined whether the system could be used to distinguish between transparent and non-transparent PET packaging.

Read the whole story



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Conclusion

Conclusion

Since the end of last year, everyone in Belgium has been able to sort their packaging in the New Blue Bag. So now we collect virtually all plastic packaging for recycling. What is more, we collect it from the public at home, so everyone can easily take part in the system. After all, for many people, sorting waste is the most concrete way to contribute to a cleaner world. The uniform collection system with a simple sorting message is therefore fundamental to achieving our goals to offer a recycling solution for all packaging that comes onto the market.





"The fight against litter will be a major priority for Fost Plus in the years to come. In our vision, a cleaner living environment goes hand in hand with better recycling."

Wim Geens, Managing Director Fost Plus

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Conclusion

Rather less visible to the public but at least as important is the development of a totally new infrastructure to actually recycle the packaging from the New Blue Bag. With five new sorting centres and shortly five new recycling plants on Belgian soil, we are also making a good contribution to the economy and employment in this country.

But there is still a lot of work to do. We are already looking to the future: can we collect even more fractions via the New Blue Bag? Can we sort even better and more precisely? Can we recycle better and produce a higher grade? Technology and innovation will play an important role here, from artificial intelligence in our sorting centres to digital watermarks on packaging.

In addition, Design4Recycling is becoming more important. Industry has committed to put only recyclable packaging on the market by 2025. That calls for a lot of effort from producers, but also the deployment of new recycling technologies. We are working closely with our members to remove the last non-recyclable packaging from the system.

Whereas we already sort fairly well at home, out of the home there is still a lot of work to be done. There is great potential to recover packaging that still gets lost at the moment. In 2021, the focus was on our large-scale campaign to encourage sorting at the workplace, among other things. In 2022, we aim to breathe new life into the projects that had to be put on hold because of the coronavirus measures.



The fight against litter is a major priority for Fost Plus over the next few years. As of January 2023, together with our members we will bear responsibility for the cost of litter resulting from packaging. This is the ideal time to look at ways of tackling the litter problem in an efficient, thorough and innovative manner. In addition, in our vision of a clean living environment goes hand in hand with extra recycling. The Extended Producer Responsibility underlines once again the important social role that we fulfil. As the driving force behind the circular economy, we help the public, companies and authorities to deal with packaging in a more sustainable way. We hope that in the coming years we can further extend this role and here, too, offer a response to a major social challenge.