



Review of EPR for Packaging Waste in Belgium



Paper 3 Litter management

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Packaging litter is a significant global issue, and Belgium is transcribing the EU legislation on litter. In this paper we take lessons from the impact of existing litter initiatives, and make recommendations for a better litter strategy including roles for all actors involved.

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Summary

This paper is the third in a series with the goal of elevating the discussion on producer responsibility for packaging, pushing it to a higher level, and stimulating better policy making. In this paper, we explore one specific element of Extended Producer Responsibility (EPR) for municipal packaging and packaging waste in Belgium, namely packaging litter.

In 2019, the EU adopted the ambitious **Single-Use Plastics Directive** (SUPD, directive 2019/904) with the objectives to prevent and reduce marine litter, 80% of which begins on land (see Figure 1). Climate change and marine litter are inextricably linked, and the transboundary nature of marine litter makes it a global problem that the EU must play its part in preventing to be a standard setter for the world.

In particular, we investigate **the role that EPR organisations should play regarding litter**, making it clear that there is a role for EPR-organisations that is different than the role of authorities (e.g., regional governments and municipalities), but that authorities also need to put policy in place for EPR-organisations. Obviously, the consumer also has a key role to play, but **an integral approach is needed** where producers take responsibility for what they place on the market, and what happens to the waste at the end of the packaging's use phase.



*Figure 1: Litter collected at Blankenberge beach
- reducing beach litter is one of the keys to preventing
litter entering the marine environment*

Based on existing experience in the three regions in Belgium – Brussels, Flanders, and Wallonia – who are currently responsible for litter policy, **we compare the different approaches and make recommendations on a way forward**. In particular:

1. Current litter policy focusses primarily on citizen engagement – information, education, and doing clean ups. Education is needed, but this alone has been shown to have limited effectiveness in combatting litter and reducing it at the source. By focussing on action by citizens, business models from industry do not need to be adjusted, so it is in the interest of some parties to keep the focus on citizens. Future litter policy must be broader, with a clear division of roles between all of the key actors: citizens, authorities, and Producer Responsibility Organisations (PROs), including actions for producers to contribute to preventing litter in the first place.
2. This paper exposes a lack of good litter monitoring, which is really important for effective policy making. Litter monitoring needs to be done to a high standard, in a consistent way across the three regions; to distinguish between different types of litter (including both packaging and non-packaging); to be done using categories consistent with other data being reported; and to be reported transparently on an annual basis so that it can be tracked over time. This approach to litter data gathering is essential in order to determine EPR costs and to monitor litter against the objectives and metrics in the litter strategy.

We believe that **Belgium should apply the waste hierarchy to the litter strategy**. Citizens, or municipalities, collecting litter should not be the primary focus – this is too low down the hierarchy. 'Managing the waste' such as putting it in on-street litter bins or cleaning it up is obviously necessary, but the focus and way forward for PROs should be preventing the waste that is prone to becoming litter in the first place.

As such, at the top of the hierarchy, the role for the Belgian PRO responsible for municipal packaging, Fost Plus, should be to work with producers on preventing litter by changing their packaging and packaging systems, e.g., reuse systems should be supported, and a classic European return to retail DRS model which has proven itself to reduce litter should be put in place for single-use beverage packaging (that cannot be switched to reusable beverage packaging)

The packaging waste that cannot be prevented altogether should then be recycled where possible. On-the-go recycling should be funded by producers and improved to collect more packaging that might otherwise become litter. Municipalities should be responsible for emptying public bins, as they currently are, and collecting anything that does still become litter as a last resort. And finally, litter monitoring needs to be done in a way that is independent of producers that place the packaging on the market, in order to avoid any conflict of interest regarding, for example, monitoring the amount of packaging in litter.

It is Recycling Netwerk's view that **producers should not be the ones determining the types of litter actions undertaken by the authorities**. Setting the litter policy and monitoring it should remain the responsibility of the authorities. Fost Plus currently funds certain projects, like Mooimakers and Be WaPP, and then exert significant control over their activities, so the roles and responsibilities of producers and the authorities become blurred. Mooimakers should be free to say to citizens: 'help fight litter, refuse a single use coffee cup' or 'choose reuse', but that is impossible now with the involvement of producers.

Of course, that still leaves producers free to determine their own litter actions, where there are no specific ties to public authorities, for example: a national cleanup day that is 100% funded by industry and 100% independent from authorities. Existing projects of Fost Plus are limited to The Click, which is again a citizen engagement initiative. However, municipalities are already beginning to back out of this programme due to the lack of improvement to litter. Ultimately, producers need to take up their responsibility regarding what they place on the market, and not just shift the burden to citizens.

The transposition of the SUPD into Belgian legislation is currently going through the legislative process, and contains a levy for producers to fund litter management done by the authorities. We argue that **a 'simple' levy to be paid by the PRO should help to incentivize producers towards concrete action**, but an eco-modulated levy would be better. The fees that producers have to pay to cover the cost of litter should be eco-modulated so that producers that place more heavily littered packaging on the market cover more of the costs, motivating them to change their packaging and packaging systems as mentioned above. It is crucial that the levy or fees paid by producers reduce as litter reduces – but also that it remains the same or increase if litter does not decrease, otherwise there is no incentive to change the packaging placed on the market. And it is crucial that the fees paid to municipalities fully cover their actual costs.

If Fost Plus want to continue to lead the way for PROs in Europe, **they need to be working beyond just the minimum requirements**. Simply funding the status quo is necessary as a starting point, but is not going to reduce litter, so producers need to take responsibility by taking action. The real solution for litter that EPR provides is to encourage producers to design packaging – and packaging systems – that is less likely to end up in the environment, is easier to clean up if it is littered, and has a smaller impact on the environment if it remains there.

1. Introduction

This paper is the third of a series with the goal of elevating the discussion on producer responsibility for packaging, pushing it to a higher level, and stimulating better policy making. This series of papers is intended to inform policy makers in Belgium, and in Europe, to review EPR to make it more environmentally effective.

Legislative context

In 2019, the EU adopted the ambitious **Single-Use Plastics Directive** (SUPD, directive 2019/904) with the objectives “to prevent and reduce the impact of certain plastic products on the environment, in particular the aquatic environment, and on human health, as well as to promote the transition to a circular economy with innovative and sustainable business models, products and materials”¹. Climate change and marine litter are inextricably linked², and the transboundary nature of marine litter makes it a global problem.

According to the recitals of the SUPD “reducing marine litter is a key action for the achievement of UN SDG 14 which calls to conserve and sustainably use the oceans, seas and marine resources for sustainable development.

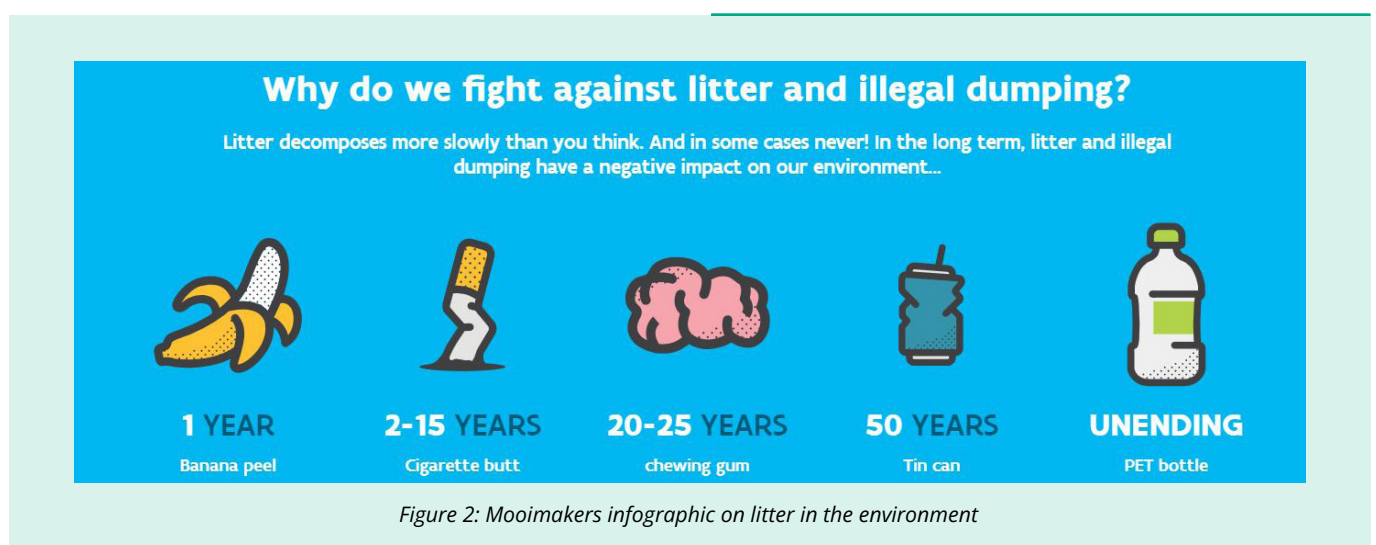
The Union must play its part in preventing and tackling marine litter and aim to be a standard

setter for the world.” About 80% of marine litter begins on land³, so the directive lays down a variety of measures in relation to commonly littered items that were historically made out of plastic, such as cotton bud sticks, cutlery, straws, stirrers, food and beverage packaging, tobacco products, gum, and cups (see Figure 2).

In addition to restrictions on placing certain items on the market, this directive (Article 8) establishes extended producer responsibility (EPR) requirements for littering of plastic food containers, flexible plastic packets and wrappers, plastic beverage containers, wet wipes, balloons, and tobacco products. Member States were required to transpose this directive into national legislation by 3 July 2021, but two years later Belgium is still finalizing the details to implement this directive.

Litter in Belgium

In Belgium, where waste management is a regional competence, the three regions (Brussels Capital Region, Flanders, and Wallonia) choose to work together on the transposition of the SUPD. They do so through interregional Cooperation Agreements (CA). This is already the case for the Cooperation Agreement of November 4, 2008⁴



1 <https://eur-lex.europa.eu/eli/dir/2019/904/oj>

2 <https://www.sciencedirect.com/science/article/pii/S0048969722028054>

3 <https://www.eea.europa.eu/publications/european-marine-litter-assessment>

4 Cooperation agreement of 04-11-2008 on the prevention and management of packaging waste, <https://www.ivcie.be/en/category/downloads-en/>

(Packaging CA) concerning the prevention and management of packaging waste, adopted by the three regions to implement parts of the Packaging and Packaging Waste Directive (PPWD, Directive 94/62/EC) and the Waste Framework Directive (WFD, 2008/98/EC). The Belgian regions are working on a **new CA on EPR for certain waste streams and litter** to transpose the SUPD⁵.

This new CA, which will be discussed further in the sections below, was first approved in principle by the Brussels Capital Region in December 2022⁶, by the Flemish government in December 2022⁷, and by the Walloon government in June 2023⁸. It is now going through the legislative process with further readings in each parliament.

In the new CA, litter is defined as a small piece of waste left behind, thrown away, or managed outside the containers designated for this purpose by a local government or another authority authorized for clearing the public domain. In other words, what we are talking about here is waste that is incorrectly disposed of, such as ground-based litter, and not waste correctly placed in litter bins or bags for regular waste collections. We are also not talking about large items, such as furniture and appliances, or large quantities of waste incorrectly disposed of as fly tipping.

In addition to implementing new EPR requirements for littered products (tobacco products, chewing gum, wet wipes and balloons), this new CA consolidates existing EPR for other products (electronics, oil and mattresses); lays the groundwork for future EPR on textiles, furniture, and diapers; and modifies the Packaging CA in relation to packaging waste. In particular, it **adds packaging litter to the responsibilities of the Interregional Packaging Commission** (in Dutch Interregionale Verpakkingcommissie, IVC), the government body responsible for overseeing and implementing packaging waste regulations. It will become the Interregional Commission for EPR.

In particular, in relation to the modifications to the Packaging CA, the new CA sets out levies to cover the cost of municipal and non-municipal packaging litter management, and the responsi-

bilities of the **Producer Responsibility Organisation** (PRO) for municipal packaging in article 13 of the Packaging CA are updated. Fost Plus⁹ is the only Belgian PRO responsible for municipal packaging. They are already involved in packaging litter management based on voluntary agreements, but the new CA formalizes their role based on the requirements of the new EU legislation. The role of Fost Plus is mainly a financing role, which will be discussed further in the Cost Coverage section below.

In this paper, we explore one specific element of EPR for municipal packaging and packaging waste in Belgium, namely the policy for litter, and its implementation. As we will see in the sections below, litter policy in Belgium generally focusses on citizen engagement – information, education, and doing clean ups. It has often been all about what citizens do, passing the responsibility on to the consumer. There has been very little focus on producer responsibility in relation to litter, such as changing products, packaging, or systems to reduce the likelihood of waste being littered.

In this paper we also look at **the role that EPR organisations should play regarding litter**, making it clear that:

1. there is a role for EPR-organisations that is different than the role of authorities (e.g., regional governments and municipalities), but that authorities also need to put policy in place for EPR-organisations; and
2. part of litter is packaging and part of it is not. Cigarette butts, for example, are out of scope, and so are wheel caps. Cigarette packaging, paper/plastic/metal/glass food wrappings, coffee cups and lids, other plastic cups, etc. are all in scope – and that is a significant amount.

Obviously, the consumer has a key role to play, but an **integral approach** is needed where producers also take responsibility for what they place on the market, and what happens to the waste at the end of the packaging's use phase.

5 The current version of the new Cooperation Agreement on EPR for certain waste streams and litter can be found here: <https://beslissingenvlaamseregering.vlaanderen.be/document-view/63983D52C2B90D4571CE8802>

6 Approved in Brussels on 1 December 2022: <https://publi.irisnet.be/web/download?pubKey=Pcd517672-ada3-4ef6-a572-ee3a6e3d30e0&pubLang=FR>

7 Approved in Flanders on 16 December 2022: <https://beslissingenvlaamseregering.vlaanderen.be/?dateOption=latest&endDate=2022-12-17T22%3A59%3A59.000Z&ministerFirstName=Zuhal&ministerId=5fed907ee6670526694a0714&ministerLastName=Demir&search=samenwerkingsakkoord&startDate=2022-12-16T09%3A00%3A00.000Z>

8 Approved in Wallonia on 8 June 2023: <https://www.wallonie.be/fr/acteurs-et-institutions/wallonie/gouvernement-de-wallonie/communiqués-presse/2023-06-08>

9 <https://www.fostplus.be/en>

2. Litter Landscape in Belgium

The **litter landscape in Belgium is very complicated**. In the sections below, we outline the current responsibilities for litter in the three regions – who is involved where and how it is tackled differently in the different regions – and conclude with a summary, pulling together best practice and lessons learned from each of the three regions into a recommended approach for packaging litter.

Brussels Capital Region

In Brussels, **the responsibility for litter collection is spread across three different tiers of government and organizations**. The 19 municipalities are responsible for keeping municipal roads in their territory clean; the government body Brussels-Propreté¹⁰ (in French, and also used in English; called Net Brussel in Dutch) oversees the cleaning of regional roads; and Brussels Environment¹¹ (called Leefmilieu Brussel in Dutch and Bruxelles Environnement in French) looks after the cleanliness of parks in the region. The approaches taken by these different organisations are rarely coordinated, and the larger number of boundaries between the territories means that areas often go uncleaned.

As we will see from comparisons to the other regions in the sections below, the situation in Brussels is worse than in the other two regions. Data on the state of litter in Brussels is hard to find, and there are no official statistics published by the Brussels Capital Region or Brussels Environment¹². According to the Brussels Times, **30,000 tonnes of litter is gathered from the streets of Brussels every year**¹³ – which is almost 25 kilograms per inhabitant per year – and in 2022, 460 tonnes of litter were gathered from parks¹⁴ – about half of a kilogram per inhabitant per year. However, it is not clear from these articles if this is only ground-based litter, or also includes the emptying of litter bins; if it includes all litter collected by all organisations; and neither Brussels

Times nor Brussels Environment have responded to clarification questions. So, there is a definite lack of transparency on the state of litter in Brussels.

In order to combat litter in Brussels, and coordinate and harmonize approaches, the clean.brussels¹⁵ strategy was launched in late 2022, and is a collaboration between a long list of actors from the local and regional government; local, regional, and national organisations; NGOs; civil society organisations; and the private sector. The strategy is for a sustainably cleaner region and consists of 14 objectives (see Figure 3) – eight of which are allocated to public authorities, four to users (e.g., inhabitants and visitors), and two to packaging producers (companies) – with 65 concrete measures that are to be taken.

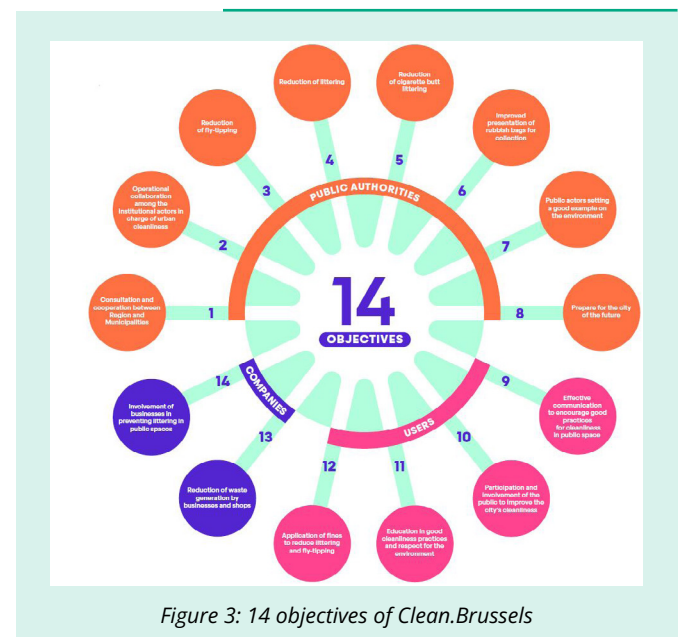


Figure 3: 14 objectives of Clean.Brussels

One interesting output that has already been published by clean.brussels is a **psycho-behavioural study** that was undertaken across 2020 and 2021. The study concludes that it is not useful (and there is no scientific evidence) to demographically profile 'unclean people'. Instead, it makes more sense to talk about occasions of uncleanliness, defined by the location and type of waste. Based on surveys and interviews, this stu-

10 <https://proprete.brussels/en/public-cleaning-operators>

11 <https://be.brussels/en/leisure-events-sports>

12 See for example the data published on municipal waste in Brussels: <https://environnement.brussels/citoyen/outils-et-donnees/etat-des-lieux-de-lenvironnement/dechets-et-ressources-etat-des-lieux-#dechets-municipaux>. Brussels Environment confirmed that they currently do not monitor any indicators in relation to litter as part of the resource and waste management plan (PGRD).

13 <https://www.brusselstimes.com/brussels-2/329273/making-brussels-clean-city-unveils-new-harmonised-approach-to-littering>

14 <https://www.brusselstimes.com/brussels-2/497447/still-much-to-do-460-tonnes-of-litter-collected-in-parks-last-year>

15 <https://clean.brussels/en>

dy identified nine priority occasions of uncleanliness, such as cigarette butts around tram and bus stops. It is interesting to note that eight of those nine priority occasions of uncleanliness relate to household or packaging waste, or cigarette butts; and they have all been carried forward into the clean.brussels strategy.

The **65 concrete measures included in the clean.brussels strategy** include varied actions in relation to the 14 objectives. Specifically for packaging waste, objective 4 is “to reduce the amount of litter such as food packaging on the ground in public spaces”, and the four measures (13-16) associated with this objective are:

13. optimising the maintenance and installation of **public litter bins** and other street furniture relating to urban cleanliness;
14. studying the feasibility conditions for introducing a **deposit system** for plastic bottles and drinks cans in Belgium, in collaboration with the Walloon and Flemish Regions;
15. intensifying communication about **alternatives to single-use food packaging**, with a view to reducing litter, in particular by promoting reusable water flasks and containers, for example during events and weekly markets; and
16. dealing with the presence of food and consumer packaging, etc. in the **aquatic environments** by establishing and improving infrastructure, carrying out studies, restoring vegetation, and awareness-raising initiatives.

One example of the ‘sea begins here’ awareness raising campaign can be seen in Figure 4. The tile used in this campaign are designed to last longer simply painting the sidewalk or using plastic stickers, both of which wear away and quickly look like litter or graffiti themselves. However, it is very small, and we are not aware of any educational campaign that accompanies it. In addition, it has not been installed next to each gutter, which is needed to get the maximum impact across the city. You can see a plastic fork and a cigarette butt in the drain, so significantly more investment is needed to make campaigns like this effective.

All of these measures contribute to **a set of objective urban cleanliness indicators**, in order to record lack of cleanliness quantitatively, identify problematic sites, define reduction targets according to waste type, and measure changes



Figure 4: Sea Begins Here tile on the sidewalk in central Brussels

in the level of cleanliness over time. Data sheets and a dashboard are being developed, but it is not clear if these will be available to the public or if they are only for the institutional actors involved. The long-term plan includes annual monitoring of progress on the strategic plan, but little information is available at the moment, and there is no contact information to engage directly with clean.brussels.

Flanders

In Flanders, the litter policy is the most harmonized of the three regions with key actors already collaborating. The policy against litter in Flanders is part of the policy framework that lies within the OVAM implementation plans (uitvoeringsplannen), the most recent one being the Lokaal Materialenplan 2023-2030¹⁶, which contains, for example, litter prevention measures. The previous 2016 implementation plan for household waste and similar commercial waste¹⁷ sets a 20% reduction target for litter in 2022 compared to 2013. This means that the total amount of litter on the ground in 2022 should not have been more than 14,000 tonnes (compared to 17,500 tonnes in 2013).

The 2013 baseline year was later changed to 2015 because the 2013 data was proven to be unreliable¹⁸. The tonnage went up from the 2013 measurement to the 2015 measurement, so the 20% reduction was maintained but the absolute tonnage targets changed. It could be argued that

¹⁶ <https://ovam.vlaanderen.be/nl/lokaal-materialenplan-2023-2030>

¹⁷ <https://www.vlaanderen.be/publicaties/uitvoeringsplan-huishoudelijk-afval-en-gelijkaardig-bedrijfsafval>

¹⁸ <https://beslissingenvlaamseregering.vlaanderen.be/document-view/5FD>

the baseline is still not properly understood, nor is any trend over 2017-2019-2021 measurements since then, which is discussed further below.

In 2016, OVAM (the public waste agency in the region of Flanders), Fost Plus, and VVSG (the association of Flemish cities and municipalities) jointly set up **Mooimakers¹⁹ – the Flemish initiative against litter and illegal dumping**. It was initially set up as part of a deal to postpone the introduction of a deposit system for cans and bottles²⁰, and in response to the litter reduction target set in the 2016 implementation plan. The original funding agreement for Mooimakers was between the Flemish Region and Fost Plus, Comeos, and Fevia²¹, and this funding fully covered the Mooimakers budget²². According to the VVSG, today, the financing of Mooimakers still lies largely with Fost Plus²³.

According to the Mooimakers website:

*“Mooimakers conducts research, stimulates knowledge exchange, organizes campaigns, and proactively supports all actors involved in **the fight against litter** and sets up infectious actions itself. Mooimakers is the driving force behind a social movement that everyone can be part of. We implement the policy on litter and illegal dumping.*

Mooimakers strives for a society where litter and

*illegal dumping are unacceptable. To achieve this, **we work together with everyone who wants to contribute to solving this problem**. We strive for a sustainable change in mentality and behaviour. By working on an integrated policy based on six pillars (participation - communication - infrastructure - environment - enforcement - prevention) we aim for a society without litter/illicit dumping!”*

However, unlike the clean.brussels strategy which allocates 2 of the 14 objectives to producers, **none of the Mooimakers pillars are about what producers could or should do differently with regards to commonly littered packaging** placed on the market, or systems to prevent and reduce littering. The six pillars are all about citizen (participation, communication, enforcement, prevention) or local government (environment, enforcement) actions. Most of the website is dedicated to encouraging individuals, companies, schools, and associations to do things like clean their sidewalks, organize a cleanup event or other action, or speak to a polluter if you see litter being thrown on the ground (see Figure 5). For example, a list of cleanup actions that citizens can get involved in is listed on the Mooimakers website²⁴. It can be concluded that the activities of Mooimakers are predominantly around litter clean up, and passes responsibility onto citizens.

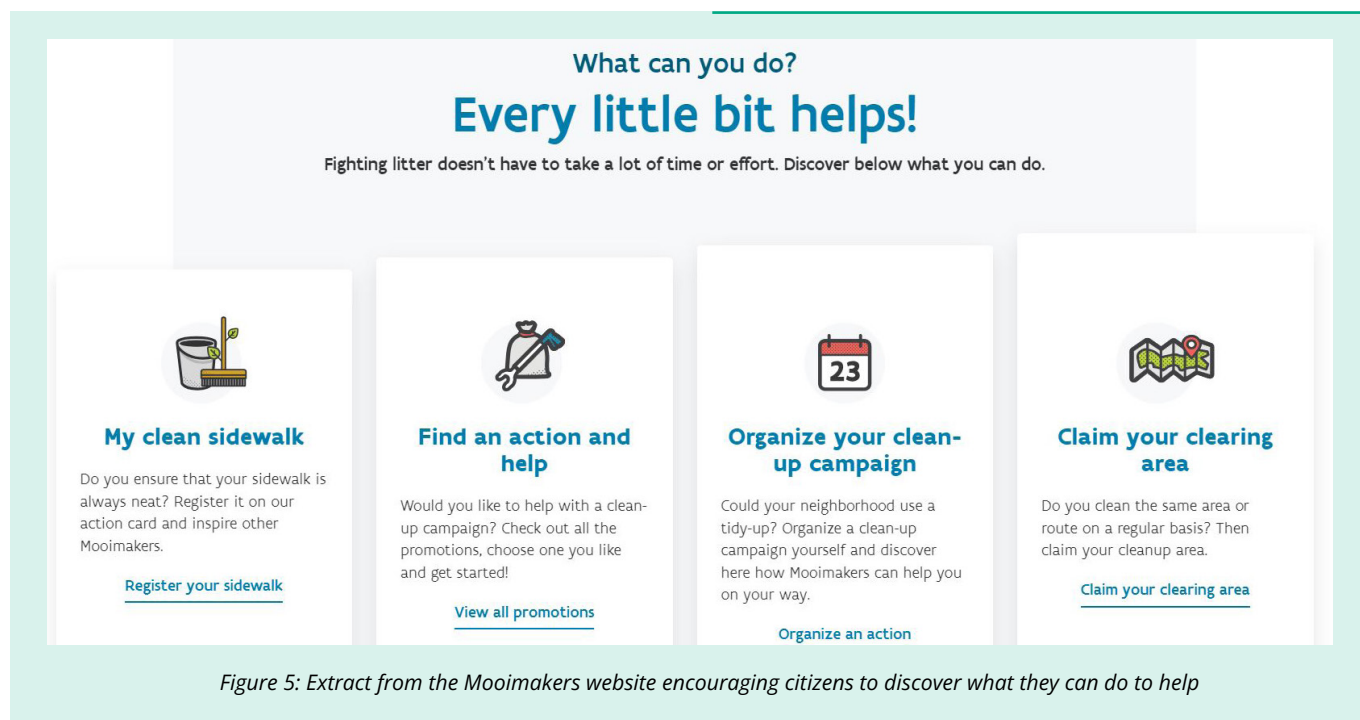


Figure 5: Extract from the Mooimakers website encouraging citizens to discover what they can do to help

19 <https://mooimakers.be/>

20 <https://corporateeurope.org/en/power-lobbies/2018/03/packaging-lobby-support-anti-litter-groups-deflects-tougher-solutions>

21 https://corporateeurope.org/sites/default/files/ovam_comeos_fost_plus_2016_agreement.pdf

22 <https://recyclingnetwerk.org/2017/10/04/overheid-moet-ambtenaren-zwerfvuil-laten-monitoren-zonder-inmenging-van-vervuilende-industrie/>

23 <https://www.vvsg.be/kennisitem/vvsg/zwerfvuilvergoeding-voor-lokale-besturen>

24 <https://mooimakers.be/opruimacties>

In addition to regional collaboration in Flanders, it can be said that monitoring of litter and reporting of data is the most advanced of the three regions. Annual waste arisings data²⁵ for the whole region is available, including categories for street sweeping, waste from litter bins, manual sweeping waste -- which includes litter -- and waste from clean-up of illegal dumping. And in 2022, they published the **OVAM litter fraction count 2019-2021**²⁶, which details the composition of ground-based litter based on a large-scale count of 29 fractions of litter at more than 6,500 locations on public land in Flanders.

In addition, every two years since 2015 OVAM has been publishing a detailed report on a survey of the quantities of litter and illegal dumping in Flanders²⁷. According to the most recent 2021 report, **18,171 tonnes of ground-based litter was gathered in Flanders in 2021** – about 2.7 kilograms per inhabitant per year, which is a fraction of the 25 kilograms per inhabitant gathered in Brussels. Even if the scope of this were expanded to that of the arisings data, including litter bins and waste from the clean up of illegal dumping, it would still only add up to 5.3 kilograms per inhabitant.

We note that reporting on litter is not yet completely standardised across Flanders, so categories of waste between the different sources are still somewhat inconsistent, with scope differences and the tonnages not yet aligning. However, **data reporting for litter is in the process of being standardised**, and from the reference year 2023 all local authorities must report to OVAM against the same set of categories, i.e., mechanical sweeping, manual sweeping, litter cleaned up by volunteers, waste from street garbage cans, and fly tipping, using a consistent methodology²⁸.

Finally, compared to the 20% reduction target relative to 2013 mentioned above, the 2021 litter tonnage of 18,171 is nowhere near the target of 14,000 tonnes in 2022, nor the target of 16,340 relative to the 2015 tonnage, and is in fact higher than the baseline tonnage of 17,500 in 2013.

These may not be exactly the right numbers to compare, depending on the scope which is not clear in either case. However, the Minister of the Environment, Zuhair Demir, is also quoted to say that “In 2015, the estimated amount of litter was 20,400 tons. In 2019 this was 22,641 tons. It is an illusion to think that we will achieve that 20 per cent decrease”²⁹. The increase in tonnage in 2019 triggered a new Flemish litter charter to be developed³⁰, and there was a decrease from 2018 to 2021. Nonetheless, Demir said the drop was below expectation and could have been related to the pandemic³¹, which suggests that **the impact of Mooimakers has not been sufficient to reduce litter**.

Wallonia

In Wallonia, Be WaPP is an organisation similar to Mooimakers in Flanders, and was also founded in 2016. **Be WaPP acts to improve public cleanliness** by developing actions aimed at reducing the presence of litter and illegal dumping, and had a target of reducing litter by 20% from 2016 and 2022, its six first years of existence. According to its website³², Be WaPP was created by Fost Plus, Fevia Wallonie and Comeos (two sector federations for companies that place packaging on the market). However, the 2016-2022 evaluation report³³ explains that it is the result of a partnership agreement between the organisations and the Walloon Minister of the Environment, and that the steering committee also contains representatives from the regional and local governments (i.e., SPW-ARNE, and l’UVCW), which contradicts the website. Be WaPP is partly funded by Fost Plus – business contributions accounted for just over 70% of the total amount invested in public cleanliness by Be WaPP in 2022 (see Figure 6), with public finance paying for the rest.

According to the Be WaPP website:

“Each year, Be WaPP develops and implements a large action program structured around 4 issues: expertise and knowledge sharing; synergies and mobilization of the different actors involved or

25 <https://ovam.vlaanderen.be/cijfers-huishoudelijk-afval-en-gelijkaardig-bedrijfsafval>

26 <https://www.vlaanderen.be/publicaties/fractietelling-zwerfvuil-2019-2021-eindrapport>

27 See for example the 2021 report: <https://www.vlaanderen.be/publicaties/zwerfvuil-en-sluikstort-2021>

28 <https://ovam.vlaanderen.be/nl/w/vernieuwde-bevraging-inzameling-zwerfvuil-voor-lokale-besturen>

29 https://www.nieuwsblad.be/cnt/dmf20220906_96699139

30 <https://mooimakers.be/partners/zwerfvuilcharter>

31 <https://www.vrt.be/vrtnws/nl/2022/10/14/nog-altijd-te-veel-18-000-ton-zwerfvuil-geruimd-in-vlaanderen/>

32 <https://www.bewapp.be/qui-sommes-nous/>

33 https://www.bewapp.be/wp-content/uploads/2022/10/20220711_Rapport-devaluation-2022-VF.pdf

2022	Expertise	Synergie	Changement de comportement	Économie circulaire	Total
Financement public	167.736 €	1.226.058 €	/	/	1.393.794 €
Contribution entreprises	1.868.178 €	1.002.599 €	443.038 €	54.324 €	3.368.139 €
Total	2.035.914 €	2.228.657 €	443.038 €	54.324 €	4.761.933 €

Figure 6: Extract from the 2022 Be WaPP annual report showing business contributions of €3.4M out of €4.8M – just over 70%

concerned by the public space; behaviour change including awareness, education, and enforcement; as well as the circular economy aimed at maximum recovery of waste from public spaces. This program is fully in line with the objectives set by Wallonia through the Walloon Waste-Resources Plan.

The objective is clear: to implement all means to achieve a significant reduction in litter and illegal dumping in public spaces with, as a consequence, the improvement of living together, the strengthening of the attractiveness of the territory, the preservation of the environment and the reduction of related societal costs.”

Just like Mooimakers, **most of the website is dedicated to litter clean up initiatives, and passes responsibility onto citizens.** Even the section dedicated to ‘businesses’ (see Figure 7) is about companies doing litter picking as a team-building exercise, not about what they might be placing on the market that causes litter. Interestingly, however, at the time of writing, the calendar has no upcoming events in it³⁴, so it looks like Be WaPP is no longer a very active organization. Only the

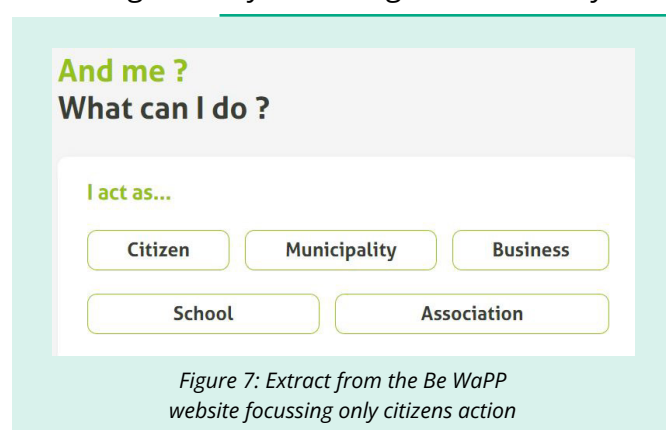


Figure 7: Extract from the Be WaPP website focussing only citizens action

annual big clean (the “Grand Nettoyage” in French) is organized annually by Be WaPP to mobilize citizens annually to pick up waste³⁵.

A 2021 survey of Wallonia residents³⁶ showed that **only around 50% of those surveyed were able to spontaneously identify Be WaPP when asked if they remember a campaign related to public cleanliness.** It also showed that, compared to previous surveys, a growing proportion of respondents say that these awareness campaigns no longer have any real impacts on their behaviour because they think they already do enough for public cleanliness. Respondents also said that a lack of education of other adults, adolescents, and children, and a lack of enforcement are to blame for uncleanliness.

Like Brussels, Wallonia only published very limited waste data, and the municipal waste data that is published³⁷ is too high-level to identify litter. We reached out to Service Public de Wallonie (SPW) and the spokesperson for the Minister for more information, and got some responses, but our questions regarding more detailed data were not answered. The data we were able to find are summarized below.

According to the Minister of the Environment, Nature, Forestry, Rural Affairs and Animal Welfare, **30,000 tonnes of litter and illegal dumping are gathered in Wallonia each year³⁸** – which is just over 8 kilograms per inhabitant per year – so more than Flanders, where it is about 5, but less than Brussels, where it is almost 25.

34 <https://www.bewapp.be/agenda/>

35 <https://www.bewapp.be/je-passe-a-laction/grand-nettoyage/>

36 <https://www.bewapp.be/wp-content/uploads/2022/02/Etude-Dedicated-2020-Vulgarisation.pdf>

37 http://etat.environnement.wallonie.be/contents/indicatorsheets/MEN_9.eew-sheet.html?thematic=b1275a06-3531-44d0-a8d4-42d3d9ddb93c

38 <https://tellier.wallonie.be/home/presse--actualites/communiques-de-presse/presse/dechets-sauvages--la-wallonie-responsabilise-davantage-les-producteurs-dans-la-prise-en-charge-des-dechets.html>

According to one news article, 1,000 tonnes of waste are collected from highways in Wallonia per year³⁹ – which is about 0.27 kilograms per inhabitant. According to the OVAM 2021 report on a survey of the quantities of litter and illegal dumping, in Flanders there were 940 tonnes of waste collected by AWW, the highways agency, which is only 0.14 kilograms per inhabitant. So again, **we can infer that the litter tonnages in Wallonia are higher than in Flanders, but probably not as high as in Brussels.**

In 2020 the SPW published a report on the composition of litter⁴⁰, which details the composition of ground-based litter based on a large-scale count of 36 fractions of litter at more than 330 locations. One interesting result in this report is that, other than packaging, they did not find any waste that is subject to EPR (WEEE, batteries, etc.). The results of the sampling are extrapolated to the whole of Wallonia, which makes it possible to take an initial snapshot of the situation, with the aim of comparing the results to future studies.

Finally, the 2016-2022 evaluation report mentioned above has some very limited data in. These data are used to conclude that the target of 20% reduction of litter over this time period was achieved, but **there are significant flaws with the analysis.** It compares only two litter studies undertaken in 2016 and 2021; no regular monitoring was undertaken to show a reducing trend, and two data points are not enough to show a robust decrease. A 2018 study was also mentioned, but undertaken using a methodology that was too different to include in the comparison; and the 2020 SPW study was not even mentioned. More harmonization of litter monitoring, like what is happening in Flanders, is definitely needed in Wallonia.

In addition, the study in 2021 was undertaken right after the annual big clean. The report states that the impact of this clean-up was not statistically significant. While this assessment forces one to doubt the effectiveness of the big clean itself, it is hard to believe that a large-scale clean-up would not bias the comparison to more favourable results in 2021 compared to 2016. The impact of the Covid-19 pandemic was also considered insignificant, with the arguments that there were

factors that both increased and decreased public cleanliness so there was a net zero effect overall. Without an actual time series of data, it is impossible to say if this is correct or not.

It is also notable that this report was not widely publicised in media outlets (other than the Be WaPP website and the Fost Plus blog), and that Wallonia is supporting the implementation of a Deposit Return System (DRS, discussed further below) to combat litter, which suggests that **the impact of Be WaPP has not been sufficient to reduce litter.**

Summary

The strategies and approaches of the three regions each have advantages and disadvantages. In particular:

- The clean.brussels strategy is the most clear in its objectives with a concrete set of measures to be implemented. However, the implementation of the measures, and the corresponding set of cleanliness indicators still lack coherence and direction.
- The approach taken by OVAM on data collection is the most advanced in the three regions, and the standardisation of the litter reporting currently underway is well thought out and detailed enough to distinguish between different types of litter that can be tracked over time. Brussels, Wallonia, and Fost Plus should draw inspiration from this so that litter data can be standardised across all of Belgium.
- The involvement of Fost Plus in funding Mooimakers and Be WaPP is a great start, showing producers taking financial responsibility on a voluntary basis. However, pushing all the responsibility of actually reducing litter on citizens, and focussing only on education and voluntary litter clean-up has proven to be unsuccessful in evaluation reports. The existing industry-funded initiatives do not address the role of producers in litter.
- The fact that the clean.brussels strategy, Mooimakers, and Be WaPP are initiatives of different combinations of producers, local and regional governments, NGOs, and citizens makes a big difference in terms of potentially different motives and accountability.

39 <https://paperjam.lu/article/1-000-tonnes-dechets-par-an-su>

40 <http://environnement.wallonie.be/dechets/documents/Analyse-des-dechets-sauvages-en-Wallonie.pdf>



Figure 8: Litter directly resulting from the recycling collection system put in place by producers. Even when citizens use the system correctly, bags can untie, rip, or spill, leading to packaging waste littering the streets.

- Only the clean.brussels strategy has any objectives for producers in it. For example, some litter is a symptom of the recycling collection system put in place by producers (see Figure 8), even when citizens use it correctly. Consumers have a key role to play, but an integral approach is needed where producers take more responsibility for what they place on the market, and what happens to the waste at the end of life.

From these lessons learned, we draw together suggestions for the future of the litter strategy in Belgium below.

Thus, the approach taken for future strategies for packaging litter in Belgium should learn from the experiences in the three regions, and carry forward best practice in order to have the biggest impact, quickly:

- Belgium should have a **harmonized litter strategy** that is agreed upon by the three regions.
- The strategy should set out **clear objectives for producers** in relation to reducing the tonnage and count of littered packaging.
- These objectives need to have **quantified measures** in order to evidence any improvements made (or lack thereof).
- The strategy, objectives, metrics, and indicators should be **set in collaboration with local and regional governments**, citizens, stakeholder organisations like NGOs, and producers. Producers should be involved and

(significantly) fund all activities related to littering of their products and packaging, but not have undue influence or control over the strategy.

- These objectives need to include measures for not only education of citizens and enforcement, but also **measures for producers** on changing the packaging and packaging systems they put on the market to reduce littering.
- Regions and municipalities should **independently measure litter** in order to track the performance against the objectives and metrics in the strategy. This should again not be controlled by producers, as a way to provide checks and balances between producers and the government.
- However, Fost Plus must work with regions and municipalities to **finance** the data gathering done by the regions, and this should begin now in order to have a picture of the 'baseline' situation before further investments are made. This is being done to some extent with Mooimakers and Be WaPP, but there still isn't a clear and consistent picture of the baseline situation across Belgium, so more funding is needed, which should be the responsibility of packaging producers.
- Data gathering needs to be done in a **standardised way in all three regions**. It should distinguish between different types of litter, including both packaging and non-packaging.
- Cleanliness indicators must be reported

transparently on an annual basis, and tracked over time in all three regions, or even at a municipality/intermunicipality level⁴¹.

- Authorities should monitor litter correctly and use it for **determining EPR-costs** (discussed further below), while EPR-organisations should use eco-modulation and set up specific interventions to reduce their packaging in litter.
- **If cleanliness does not improve** in relation to packaging litter, then more investment will be needed from Fost Plus and its members to change packaging systems and innovate to tackle the root cause in order to reduce litter.

There is a fine line between producers taking responsible for packaging litter in a way that engages them and motivates them to reduce litter, and producers controlling the litter strategy in a way that excessively influences the authorities' approach litter. **Financing of public authority-led campaigns or data gathering, for example, should not lead to influencing those initiatives.** Otherwise, it should be completely a private affair and clearly so, which is not the intention of the legislation.

It is clear that the current way of thinking has only gotten us to where we are now, and **more of the same is not going to help**, which is supported by the evaluations of current activities mentioned in the sections above. In addition, the evaluation report of 2016-2022 Be WaPP makes similar recommendations around more and better monitoring and evaluation, as well as better partnerships between the producers and the public sector in relation to litter. Implementing the best parts of the approaches from each of the three regions is needed to have a bigger impact more quickly. The environmental crisis demands that every actor takes a big step forward together – governments, producers (including PROs on their behalf), and consumers (including NGOs on their behalf).

41 See our recommendation in Paper 2 of this series (<https://recyclingnetwerk.org/2023/11/15/fost-plus-erkenning-paper-recyclage/>) regarding implementing a data monitoring system similar to WasteDataFlow in the UK. This could and should also be used to track litter tonnages against a standardized set of categories at the municipal level, like is being implemented in Flanders.

3. Role of Fost Plus in litter

Fost Plus announced a desire to adopt a new coordinating role in the management of litter back in a blog article December 2021, as an extension of the EPR that Fost Plus wants to fulfil for its members⁴². However, the white paper⁴³ referred to in this blog article barely mentions litter. It simply concludes in the final paragraph that Fost Plus wishes to assume this additional responsibility, and to also take on a management role in this context. **EPR could prove to be a real solution for litter**, but the challenge will be to find an effective and comprehensive litter management system that will deliver the best results at the lowest cost possible for citizens. Flemish municipalities are sceptical that Fost Plus organizing, managing, and financing the Belgian approach to litter is the right solution⁴⁴, so we begin by looking at existing initiatives undertaken by Fost Plus, and some of what is being proposed.

As discussed above, Fost Plus is one of the private sector actors involved in the clean.brussels strategy; and is involved in and funds both Mooimakers and Be WaPP in Flanders and Wallonia respectively; so, we won't discuss that further here. These regional initiatives predominantly push responsibility onto citizens, so here we investigate other litter-related activities that Fost Plus undertakes to see **how else Belgian producers are taking responsibility for the packaging they place on the market:**

- We start by introducing the **Click**⁴⁵ campaign, which is an app-based litter picking initiative (Figure 9).
- Then we summarise the **impact** that the Click has had in municipalities that participate (or have participated).
- **On-the-go recycling and litter bin sorting** are some other Fost Plus initiatives in relation to litter.
- We present a brief introduction to the **digital deposit return system (DDRS)** proposed by Fost Plus for beverage packaging, to reduce this category of litter.
- We conclude this section with a discussion of the **cost coverage** currently being developed in the context of the new CA.

The Click

The Click was first launched in 2020 in De Haan and is **an app that aims to establish a new standard for public cleanliness** by motivating members of the public and rewarding them for good behaviour. App users can scan every piece of packaging litter that is thrown in the correct bin with their smartphone to earn "Circular UCoins", which can be used for purchases at participating merchants.



The Click app

Make the Click in 1 minute:

- Download the free app on your smartphone or tablet.
- Create an account.
- Done! Scan or photograph litter or food and drinks packaging while out and about and collect Circular UCoins.

▶ Google Play

▶ App Store

Figure 9: Information from The Click website

42 <https://www.fostplus.be/en/blog/fost-plus-unveils-plans-for-litter-management>

43 <https://viewer.pdf-online.nl/books/azee/#p=1>

44 https://www.nieuwsblad.be/cnt/dmf20220728_91007325

45 <https://www.the-click.be/en>

Is the Click app available for international users?

You can use the Click app throughout the territory of Belgium. Would you like to use the Click app outside Belgium? Send an e-mail to theclick@fostplus.be

Figure 10: The Click FAQs page implies that international users can use the app in Belgium, but we found that it was not possible to download the app unless the user is registered in Belgium or Luxembourg

According to the website “Everyone can participate, anytime, anywhere” but when we tried to install the app the Google Play Store says “this app is not available for any of your devices.” We emailed Fost Plus to ask for clarification on what the phone specifications are to use the app, since it is not explained on the website (Figure 10), and it turns out that your play store has to be set to Belgium or Luxembourg in order to use the app. So, it can be concluded that **not everyone can participate**. Particularly in Brussels, where litter is the biggest problem, excluding a huge sector of the population that has only just arrived, is here temporarily, or does not have their play store changed to Belgium yet, has and will have a huge impact on the effectiveness of such an initiative.

Further, **evaluations of financial incentive schemes have long shown the impact to be minimal**. There is a vast array of academic research on the topic of incentive schemes, all with nuances and caveats, showing the results of incentives are only short term⁴⁶; can shift behaviour from one activity to another, can shift behaviour over time, or shift the location, rather than promoting more people to undertake the desired behaviour⁴⁷; and can increase risky behaviour⁴⁸ and cheating⁴⁹ to meet the requirements to receive the incentive.

One particular study⁵⁰ investigated the impact of **reward schemes** (a type of financial incentive scheme) for kerbside recycling, and showed that only 25% of people would be encouraged by such a scheme; the other 75% already recycled

without the need for financial rewards or incentives. This report concluded that there is much more evidence for the impact of deposit return schemes and pay-as-you-throw schemes than rewards schemes like The Click.

And in Belgium specifically, Fost Plus was already involved in an unsuccessful rewards system – Prime Retour – that was tested in Brussels and Wallonia. This pilot project involved machines being installed where residents could deposit metal beverage cans for a €0.05 reward, redeemable at a participating shop. In Brussels the project was abandoned after one year because there was no real improvement to public cleanliness, and the number of cans collected was not enough⁵¹.

From personal experience with this pilot in Brussels, none of the participating shops were anywhere near the machine that was installed in Place de la Monnaie (Figure 11); and the cost of travelling to a participating shop would have been disproportionate compared to the reward, which was capped at €5.00 per voucher.

Similarly, in Wallonia, the project was abandoned because the reward system did not contribute to a significant improvement in public cleanliness⁵². The Be WaPP evaluation report⁵³ echoes the results of the evaluations mentioned above. For example:

- Only 1% of the population of the participating municipalities returned enough cans to earn a voucher, and only 10% of the registered users were responsible for returning 60% of

46 <https://www.sciencedirect.com/science/article/pii/S0272494421001717>

47 <https://wol.iza.org/uploads/articles/238/pdfs/incentives-for-prosocial-activities.pdf>

48 <https://www.mdpi.com/2313-576X/8/1/17>

49 https://rady.ucsd.edu/_files/faculty-research/uri-gneezy/incentives-and-cheating.pdf

50 Eunomia (2014) Investigating the Impact of Recycling Incentive Schemes, <https://www.eunomia.co.uk/eunomia-and-serco-launch-recycling-incentives-report/>

51 <https://bx1.be/categories/news/le-projet-des-canettes-consignees-abandonne-par-la-region-bruxelloise/>

52 <https://recyclingnetwerk.org/fr/2021/10/18/la-prime-de-retour-sur-les-canettes-savere-etre-un-flop-couteux/>

53 <https://www.bewapp.be/transversal/primeretour/>

the cans, meaning that the reward scheme was not far reaching.

- Further, it was clear from the limited data in this report that people were returning not just littered cans. The report states that 1-2% of cans placed on the market are littered, and during the Prime Retour trial, 0.8% of the total cans placed on the market in Belgium were returned through only 19 municipalities.



Figure 11: Prime Retour machine on Place de la Monnaie in Brussels in April 2020

- Although a significant decrease in the number of cans on the ground was observed after a few months of project operation, compared to before the launch of the pilot project, it was impossible to demonstrate any lasting impact.
- Finally, it was noted that the majority of participants were people guided more by values and beliefs than by the attraction of remuneration, suggesting that participants were mainly people who already exhibited the desired behaviour with respect to public cleanliness.

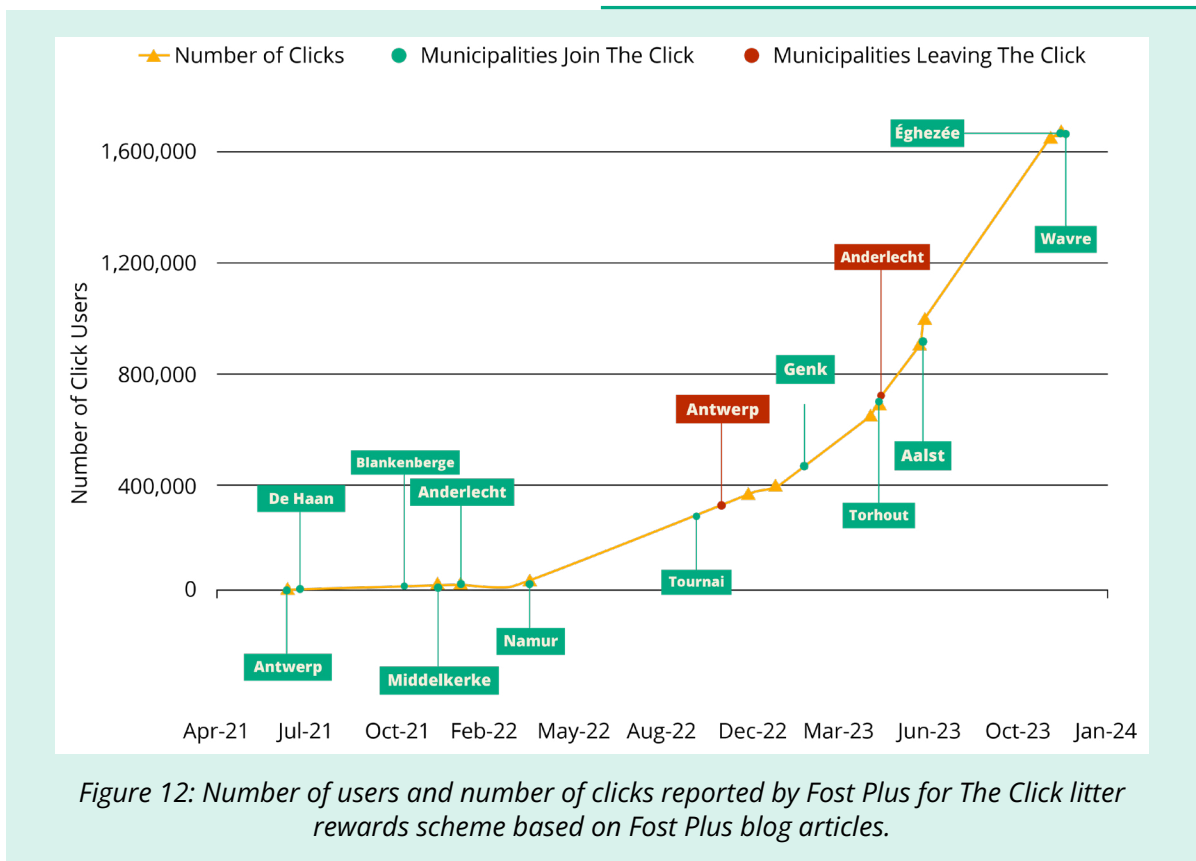
In summary, research on behaviour change has shown that **reward schemes have a tendency to favour people who already participate in the desired behaviours**. There are a few reasons for this:

1. **Awareness and access:** People who are already engaged in a specific behaviour may

have greater awareness of incentive schemes related to that behaviour. They may be more likely to know about the available incentives and have easier access to them. This can give them an advantage in terms of taking advantage of the incentives offered.

2. **Habitual behaviour:** Individuals who already participate in a certain behaviour have likely developed habits around it. They may find it relatively easier to continue or enhance their existing habits to meet the requirements of the incentive scheme. On the other hand, individuals who do not participate in the behaviour may face additional challenges in establishing new habits and adjusting their routines.
3. **Resources and support:** People who are already engaged in a behaviour may have resources and support systems in place that can help them maximize the benefits of the incentive scheme. They may have access to relevant information, tools, and networks that make it easier for them to participate. Conversely, individuals who do not already participate may lack these resources and support, making it more difficult for them to engage in the desired behaviour and take advantage of the incentives.
4. **Reward mechanism:** reward schemes typically miss out on two key ingredients: 1) there is no financial buy in from the consumer, compared to a deposit system where consumers lose money if the packaging is not returned (consumers are more prone to avoiding losing money than to making it) and 2) reward schemes typically have a very low reward because unlike a deposit, the reward is always a cost to the scheme.

To address this issue, **it is crucial to design incentive schemes that are inclusive and considerate of individuals who are not currently participating in the desired behaviour**. This can involve providing additional support, resources, and awareness campaigns to reach a broader audience and encourage participation. It is important to ensure that the incentive scheme is accessible to everyone, which The Click is not, and does not inadvertently perpetuate existing inequalities or biases.



Impact of The Click

Fost Plus has published 15 news items on their blog⁵⁴ in relation to The Click. These help to update stakeholders on the roll out of the campaign to more municipalities, and on how many people are using the app. We have extracted the data from these news items, shown in Figure 12. Here we can see a steady increase in the number of users and clicks over the time period from late-2021 to 2023. In the early period, the two time-series were closely tracking each other, suggesting users were installing the app, clicking an average of two times, and then not using it again. However, in the later part of the time series, as the programme was rolled out further and received more publicity, the average number of clicks per user has gone up to 12.

User engagement is obviously key in reducing litter in the streets and countryside in Belgium. According to The Click website, there are currently 12 municipalities involved in the campaign. Based on the data in the blog articles on the Fost Plus website, The Click was fully rolled out to municipalities with a total of around 1,000,000 Belgian residents – just over 9% of the population; this excludes municipalities like Liege, where The

Click a pilot project was run during the October Fair⁵⁵ and not a full roll out to the whole municipality. Figure 13 (on the next page) shows that the percentage of app users (as reported in the Fost Plus blog) is steadily increasing, as the percentage of municipalities involved in the programme increases.

However, extrapolating this out to 100% of municipalities being involved would result in a participation rate of 19% of Belgian residents. There is obviously a big jump between 9% coverage and 100% coverage, so extrapolating this far is unlikely to be completely accurate. Nonetheless, **engaging with only 19% of the population can hardly be considered a successful campaign against litter.** If only 19% of Belgian residents participated in blue-bag recycling, it would be a disaster. Particularly given the fact that, as discussed above, reward schemes like this are more likely to engage with people who are already aware of the issue of litter and possibly already habitually litter pick – people who do not knowingly or deliberately litter. The people doing most of the littering will probably be in the 81% who are not using the app.

Although Fost Plus celebrates each new municip-

54 <https://www.fostplus.be/nl/blog>

55 <https://www.fostplus.be/en/blog/fight-against-waste-in-favour-of-entertainment-foire-de-liege>

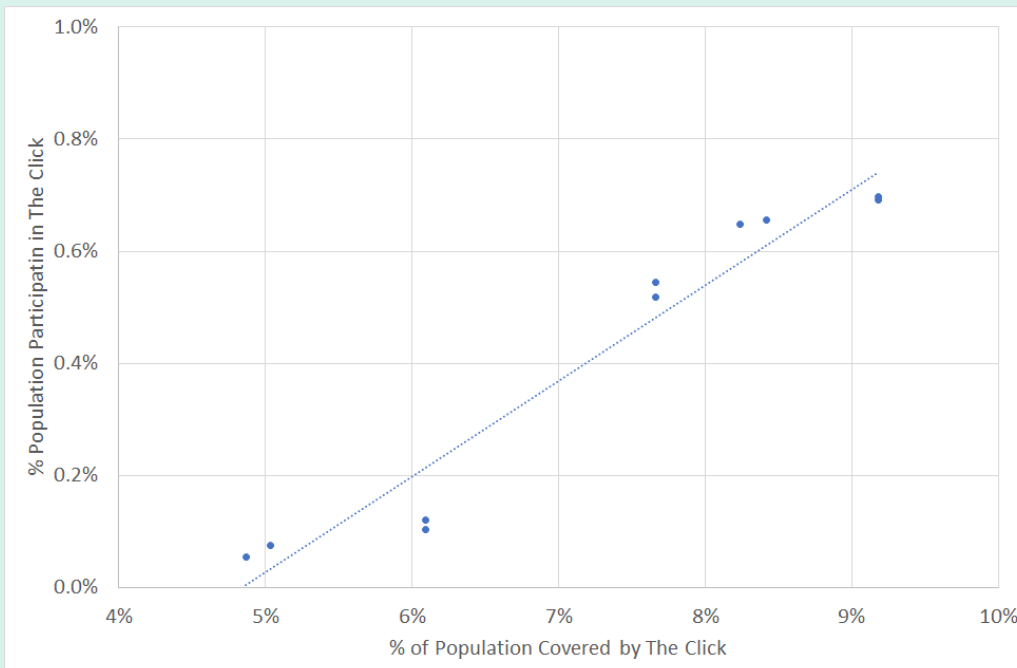


Figure 13: Percentage of the Belgian population participating in using The Click app compared to the percentage of the Belgian population living in the municipalities covered by the programme.

ality that joins The Click, some have in fact already decided to **discontinue their participation in the campaign**. Anderlecht quietly did not renew The Click contract⁵⁶, and Antwerp has openly finished the project⁵⁷. Antwerp reported that:

- litter did not decrease;
- recycling the waste in the public bins cost too much money;
- the number of clicks was not enough;
- it was probably people already correctly disposing of waste in public bins who used The Click (as discussed above); and
- the application did not encourage new people to use the public bins.

We have also heard informally that other municipalities are not satisfied with the Click either.

So, the question really should be: **what impact is the app having on the amount of litter itself?** Since litter data is so difficult to access at the regional level, let alone the municipal level, it is impossible for us to say what impact the app is having, and the way this is communicated at

the moment is misleading. Additional tonnes of recycling were attributed to The Click in a recent Fost Plus blog⁵⁸ - these tonnes are in fact due to pre-sorting (discussed further below), which can easily be achieved without The Click. It seems as though there are no results for The Click, so these are used instead.

To measure the success of The Click, **Fost Plus should be heavily investing in data gathering and litter monitoring**, in addition to communicating about the amount of users and clicks. For example, each municipality that participates should know how much ground-based litter their staff collected before the campaign. If successful, this should go down, while the tonnage collected in litter bins as a result of people using the app might go up. If municipalities do not have this data, then it would be in Fost Plus's interest to support municipalities in gathering this data, and monitoring it over time, to show that the amount of litter related to the packaging waste of their members is going down.

The VVSG⁵⁹ and OVAM⁶⁰ also states that there is

56 <https://bx1.be/communes/anderlecht/anderlecht-la-commune-abandonne-lapplication-click/>

57 https://www.nieuwsblad.be/cnt/dmf20221114_94160364

58 <https://www.fostplus.be/en/blog/click-fost-plus-reaches-milestone-of-one-million-litter-avoided>

59 <https://www.vvsg.be/kennisitem/vvsg/de-click-ee-effectief-instrument-tegen-zwerfvuil>

60 <https://beslissingenvlaamse-regering.vlaanderen.be/document-view/63A092F4DBF1CAF811021A2D>

not enough data available to determine if The Click is effective. Given the low participation, and the fact that two municipalities have already discontinued the campaign, it would not be surprising that this campaign has not been particularly impactful.

Litter Bin Sorting

As part of The Click campaign, **Fost Plus has set up a pre-sorting projects to remove plastic, metal and drink cartons (PMD) packaging from public litter bins.** This is also mentioned in the 2020 and 2021 Fost Plus activity reports⁶¹. In the summer of 2020, In the summer of 2020, the contents of the litter bins in De Haan – the first municipality to sign up to The Click – were taken to the Bruco Sambreville pre-sorting centre so that recyclable packaging could be separated from residual waste and included in the PMD recycling collected door-to-door. Since then, the waste from litter bins in other municipalities have also been pre-sorted as part of this pilot project.

According to the Fost Plus website and blog⁶², the pre-sorting initiative is a project in its own right. As mentioned above, however, tonnage separated for recycling is often wrongly linked to The Click. Fost Plus is obviously using The Click to source material for its pre-sorting project, but **the two initiatives are independent, and tonnage from pre-sorting should not be reported by The Click.** More transparency is needed with regards to the activities of Fost Plus pilots and projects, in order to not mislead stakeholders.

Mixed waste sorting can provide a valuable contribution to hitting municipal and packaging recycling targets, as was shown in a report by Eunomia on behalf of Reloop and Zero Waste Europe⁶³. However, this has diminishing benefits if selective collection is successful. For 2021, Fost Plus reported a recycling rate of 89.8% for all municipal packaging; and for PMD, this is broken down into 52% for plastic, 94% for aluminium, 105% for ferrous metal, and 73% for cartons. **If recycling rates are already this high, one could ask why Fost Plus would invest in expensive pre-sorting?**

In Paper 2⁶⁴ of this series, we discover that Fost Plus over states its recycling rates, and the recycling rate of PMD is actually only 59.1%, which already includes metal that is recycled from incinerator bottom ash (IBA), so the selective collection rate is even lower. This could explain why mixed waste sorting might be needed in Belgium to increase recycling. However, we question the cost effectiveness of this, and call for more transparency on costs and benefit in terms of tonnage.

In addition, **Fost Plus should focus on selective collection on-the-go, and work with municipalities and other organisations to install more PMC recycling bins to increasing selective collection rates,** as a priority over mixed waste sorting or relying on metal from incinerator bottom ash. Mixed waste sorting does not tackle the litter problem, but a lack of sufficient on-the-go waste collection infrastructure is one of the factors leading to ground-based litter. Producers need to fund the installation of new bins and the collection of waste from them in order to reduce litter.

This needs to be done in a way that *everyone* clearly understands what is expected in each bin. The visible coloured bags being installed by STIB⁶⁵ (see Figure 14) are good, but the icons showing what goes in each bin are too low; plus, visitors from neighbouring countries (Germany, France) expect plastic and metal packaging to go in the yellow bag or bin, not the blue one. It is not clear if Fost Plus is involved in installing the STIB bins, but they should be partially funding them, and providing better guidance on how to achieve the best results.



Figure 14: New recycling bins being installed by STIB in metro stations across Brussels

61 Historical Fost Plus activity report is no longer available on their website

62 <https://www.fostplus.be/en/projects/pre-sorting-public-waste-bins> and <https://www.fostplus.be/en/blog/pre-sorting-recovers-pmd-public-bins>

63 <https://www.reloopplatform.org/mixed-waste-sorting/>

64 <https://recyclingnetwerk.org/2023/11/15/fost-plus-erkenning-paper-recyclage/>

65 <https://www.rtbef.be/article/les-stations-de-la-stib-progressivement-equipees-de-nouvelles-poubelles-de-tri-11196076>

Digital Deposit Return System

You will notice that so far there has been **no mention yet of initiatives in relation to Fost Plus members changing the packaging placed on the market to reduce litter** at the source.

One way in which a growing number of countries is making producers responsible for their impact on litter is by implementing a Deposit Return System (DRS). This applies to a specific fraction of litter, namely beverage packaging (bottles, cans, and cartons). Fundamentally, DRSs work via an extra sum of money (e.g., €0.20) paid on a product when purchased and given back when the packaging is returned. This incentivises consumers to return their empty packaging rather than disposing of it in residual waste, which is often the only option on-the-go, or littering it. This also rewards people who collect littered packaging, as they can get the deposit back. There is a significant amount of evidence that DRSs reduce the occurrence of beverage packaging in litter by up to 90%⁶⁶.

Fost Plus has long been lobbying against implementing a DRS for beverage bottles and cans⁶⁷. PROs tend to lobby against DRSs for beverage packaging because some of the key, high value materials (e.g., PET bottles and aluminium cans), would be collected separately from the current municipal packaging and may no longer be in their remit⁶⁸. Interestingly, Fost Plus and its members could remain owner of the material, providing that they operate the DRS. But recent decisions by the Belgian regional governments (Brussels⁶⁹, Flanders⁷⁰, and Wallonia⁷¹) now mean that a DRS has to be implemented in 2025.

To this end, the new interregional Cooperation Agreement (CA) on litter (discussed in the introduction) includes adjustments to the levy in the case of a DRS being implemented. In addition to

the CPI (consumer price index) and five-yearly adjustments discussed above, the amount of the levy is to be reduced by 25% in the first full year following the introduction of a DRS for household beverage packaging, and then reduced by a further 5% in each of the six subsequent calendar years. **We strongly oppose this flat-rate reduction to the levy on implementation of a DRS. The reduction in the levy should be subject to the results, and not just implementation.** If a badly implemented system does not improve the collection rate of beverage packaging beyond the current rates, and does not reduce litter, then there should be no reduction to the levy.

In 2022, Fost Plus undertook their own feasibility study as part of the fourth pillar of their 'Every Packaging Counts' approach⁷², **proposing a Digital DRS** (DDRS, Figure 15). In a classic DRS, empty containers are returned to retailers where they are purchased to redeem the deposit, and a very pure stream of packaging is sent straight to the recycler; whereas in a DDRS – as proposed by the Belgian industry – the deposit is to be claimed via an app, and the material is recycled through existing infrastructure. Fost Plus has been underwriting pilots of their proposed system⁷³, and they say that "The smart deposit scheme is a flexible, modern solution linked to contemporary consumption trends out of home, which means that we are setting the trend in the fight against litter, as well." Fost Plus published a blog⁷⁴ officially stating their interest in DDRS the day after Zuhal Demir, the Flemish Minister of Justice and Enforcement, Environment, Energy and Tourism, announced that a DRS was unavoidable⁷⁵.

A study by Eunomia Research & Consulting identified **three key issues with the proposed system in Belgium**⁷⁶:

1. It is very unlikely that the system can be technically implemented, especially not in 2025;
2. although home scanners are proposed for households without smartphones, the DDRS would still exclude people, such as people

66 <https://recyclingnetwerk.org/2022/10/18/factsheet-het-effect-van-statiegeld-op-zwerfafval/>

67 <https://www.brusselstimes.com/43658/fost-plus-doesn-t-want-a-deposit-on-cans-and-plastic-bottles>

68 This depends on how the DRS is governed; in theory with a DRS the PRO could still become the owner of the material, but not necessarily so.

69 <https://maron-trachte.brussels/2023/05/26/la-region-bruxelloise-fait-un-pas-de-plus-vers-linstauration-du-systeme-de-consigne/>

70 <https://beslissingenvlaamsereregering.vlaanderen.be/document-view/63A4300FDBF1CAE811022815>

71 <https://tellier.wallonie.be/home/presse--actualites/communiqués-de-presse/presses/consigne-sur-les-canettes-et-bouteilles-en-plastique--le-gouvernement-soriente-a-ce-stade-vers-le-systeme-manuel.html>

72 <https://www.fostplus.be/en/projects/every-packaging-counts>

73 <https://www.fostplus.be/en/blog/together-for-a-smart-deposit-scheme-first-pilot-projects-start-in-flanders>

74 <https://www.fostplus.be/en/blog/digitalisation-and-cooperation-weapons-in-fight-against-litter>

75 <https://www.demorgen.be/nieuws/minister-van-leefmilieu-demir-wil-statiegeld-voor-blikjes-en-plastic-flessen-dat-lijkt-me-onvermijdelijk-bc22c6e9/>

76 <https://recyclingnetwerk.org/2023/10/16/nieuw-onderzoek-eunomia-digitaal-statiegeld-is-een-doodlopende-weg/>

What is the DDRS?

Operations from a consumer perspective

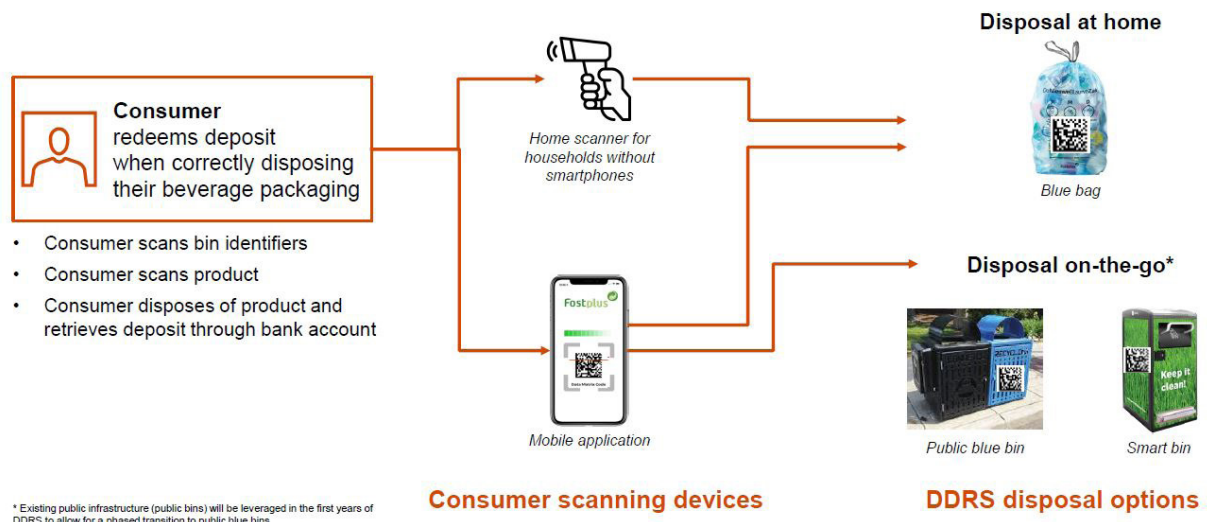


Figure 15: Fost Plus proposal for DDRS in Belgium

with handicaps, refugees, people without internet or a data signal, and elderly; and

3. the positive impact on the environment is uncertain, while the impact of a classical DRS has been proven to be strong.

The DDRS being proposed by Fost Plus has been widely criticized⁷⁷. It seems that the DDRS builds on The Click and Prime Retour campaigns discussed above, which we have already seen does not work to reduce litter and does not engage with the right sectors of the population; and lessons learned from the Be WaPP Prime Retour evaluation (in which Fost Plus was involved), such as that elderly people did not participate because of difficulties with a digital platform, are not being carried forward. Important lessons from these other initiatives have not been learned.

Finally, DRS is commonly considered a pathway to reuse. Reuse systems also often rely on a deposit to ensure that the used item is returned to be reconditioned and used again. This option is completely missing from the DDRS being proposed by Fost Plus, and there is no link to the existing DRS for reusable glass beverage packaging that already exists in Belgium. As discussed in Paper 1 of this series⁷⁸, **stepping away from single use and stimulating reuse is also a measure, just like DRS, that PRO's can promote, stimu-**

late, and implement. And stimulating reuse systems in Belgium will clearly also reduce litter.

Cost Coverage

Packaging producers currently contribute to the cost of litter in two ways: one is specified in the Packaging CA, and the other in the 2018 Fost Plus accreditation.

The Packaging CA includes a payment of EUR 0.50 per capita for the purpose of combatting packaging litter (Article 13, paragraph 4, point b). However, this amount is also intended to cover other costs, such as financing the policies of the regions on the prevention and management of packaging waste. In practice, because these funds are allocated to the regions, the municipalities responsible for much of the litter clean up do not receive much, if any, of these funds.

The 2018 accreditation includes an additional annual payment for glass recycling of EUR 0.12 per capita to contribute towards cleaning litter that accumulates around glass bring banks. This litter is a symptom of the collection system put in place by producers for packaging they put on the market, but this is the only money related in any

77 <https://www.brusselstimes.com/belgium/707974/deposits-on-cans-and-plastic-bottles-from-2025-digital-system-criticised> and <https://www.bruzz.be/economie/vijfenvijftig-steden-en-gemeenten-verzetten-zich-tegen-voorstel-van-digitaal-statiegeld>

78 <https://recyclingnetwerk.org/en/2023/10/11/fost-plus-paper-prevention->

way to litter currently received directly by each municipality or intermunicipality from producers. This is from Article 13, paragraph 2 of the 2018 Accreditation, which relates to the cost coverage of glass recycling. It covers a long list of costs related to additional activities regarding glass recycling collection, one of which is the “cleaning of bottle bank sites, including removal of litter.”

In addition, on a voluntary basis, Fost Plus is one of the private sector actors involved in the clean brussels strategy; and is involved in and funds both Mooimakers and BeWaPP in Flanders and Wallonia respectively.

However, this only covers a very small part of the actual cost of litter clean up incurred by the public sector. For example, it is estimated that the cost of litter clean-up and emptying public litter bins in Flanders is €164M⁷⁹, or €24 per person; and the cost of litter and flytipping in Wallonia is around €85M⁸⁰, or €25 per person. Obviously the scope of this is wider than just packaging litter, but it begins to show the discrepancy between what is currently being paid by producers, and what it actually costs to manage litter.

It can be concluded that until now, producers took very little financial responsibility for packaging litter, and the costs predominantly fall on the public sector. As discussed in the introduction, the new CA on EPR and Litter plans to address this, making producers responsible for the cost of litter management. Here, we discuss four aspects of the cost coverage for litter proposed in the new CA:

1. the total cost to be covered by producers,
2. sharing of this total cost between producers,
3. how this cost changes over time, and
4. the role of municipalities.

Total Cost to be Covered by Producers

79 <https://interafval.be/actueel/kost-zwerfvuil-vlaanderen-ligt-de-grootteorde-van-een-miljard>

80 <https://tellier.wallonie.be/home/presse--actualites/communiqués-de-presse/presses/dechets-sauvages--la-wallonie-responsabilise-davantage-les-producteurs-dans-la-prise-en-charge-des-dechets.html>

81 Specifically, Annex Part E Section I of the SUPD lists: containers used for food that is intended for immediate consumption, either on-the-spot or take-away, is typically consumed from the receptacle, and is ready to be consumed without any further preparation, such as cooking, boiling or heating; packets and wrappers made from flexible material containing food that is intended for immediate consumption from the packet or wrapper without any further preparation; plastic beverage containers with a capacity of up to three litres including their caps and lids, and composite beverage packaging including their caps and lids; cups for beverages, including their covers and lids; and lightweight plastic carrier bags.

82 <https://www.fostplus.be/en/blog/litter-cost-info-session-fost-plus-explains-allocation-key-and-cost-model>

83 <https://www.fevia.be/nl/nieuws/een-sup-plement-van-189-miljoen-trop-is-te-veel>

84 <https://www.fostplus.be/en/blog/sup-directive-no-clarity-yet-on-litter-bill>

85 The most recent cost estimation from the Netherlands totals €324M (€80M of which is for public garbage bins). For 2021 (inhabitants 17.53M) this equates to €18.48 per inhabitant (including the costs for the garbage bins) and €13.92 per inhabitant (excluding the cost for the garbage bins). <https://open.rijkswaterstaat>

The first version of the new CA, which was approved in principle on first reading by all three regions, included a levy of €189M to cover the cost to the regions and municipalities of household packaging litter. The second version currently going through the legislative process in the three regions has a reduced amount of €114M. The second version makes it clear that this is limited to covering the costs of litter for household packaging specified in the SUP directive⁸¹ and household canned beverage packaging. It is unclear how exactly this amount was calculated, so we also argue that more transparency is needed with regards to the calculation method for the levy (discussed further below).

Fost Plus works closely with industry federations (Comeos, Fevia, DETIC⁸²) **who actively lobbied against the initial sum of €189M**⁸³. In fact, Fost Plus itself also actively lobbied against the proposed approach, stating that “The Fost Plus Board of Directors believes that this approach would not bring about any (real) improvement in public cleanliness. It generates a financial flow from industry to local authorities without providing any guarantee of change or progress”⁸⁴.

Fevia quotes lower costs in neighbouring countries – without providing references – as one argument for why the costs in Belgium are too high. The original levy equates to €16.17 per inhabitant using 2023 population figures (not €16.50 as quoted by Fevia), and the most recent version of the levy reduces to €9.74 per inhabitant. We agree that the value in Belgium is at the high end of costs compared to other countries. However, it is difficult to compare as the scopes of the values are different, as are elements like staff costs, which play a significant role in the calculations:

- Netherlands €13.92 per capita⁸⁵
 - › includes all packaging (not just the plastic in the SUPD)
 - › is only litter in the environment (not waste correctly disposed of in on-street litter)

bins)

- Spain €10-13 per capita for street litter, €0.45-2.99 for beach litter, totalling €10.45-15.97⁸⁶
 - › includes all packaging (not just the plastic in the SUPD)
 - › is only litter in the environment (not waste correctly disposed of in on-street litter bins)
- UK €6.56 per capita⁸⁷
 - › includes all packaging (not just the plastic in the SUPD)
 - › includes, manual sweeping and picking, provision and servicing of litter bins, mechanical sweeping, management of the service, and may also include litter-related education and enforcement
- Germany €8.30 per capita⁸⁸
 - › includes only single-use plastic packaging and cigarette butts
 - › includes, manual sweeping and picking, provision and servicing of litter bins, mechanical sweeping, management of the service, and may also include litter-related education and enforcement
- Germany €5.40 per capita⁸⁹
 - › Estimate of the funds that will be paid by producers in the first year of implementation in 2025

It is interesting to note that for Germany in particular, the estimated funds that are to be collected in the first year of implementing the new legislation only cover 65% of the costs (€5.40 out of €8.30) that municipalities incur. So, comparing to these costs is not reasonable. The intention should be to cover the whole cost, plus fund improvements that lead to measurable reductions in the amount of litter in the environment, as per the intention of the EU legislation.

If this is the current cost of collecting litter in Belgium, then this cost should be fully covered by producers, and further investment is likely to be required to improve the situation before the costs can come down. Unlike what Fost Plus has

lobbied above regarding a levy having no impact, we argue that the levy should stimulate PROs to act in order to prevent future costs, in particular if the costs are shared among the producers of packaging that end up in litter the most. There may be room for improvement in the future if the levy is not enough to make producers act, but a flat-rate levy can be effective – it is up to producers to act to reduce litter and reduce the levy.

Cost Sharing

The cost sharing calculation that Fost Plus is proposing to use to distribute the levy among its members has been shared with members via sector federation webinars⁹⁰, but has not been shared with other stakeholders like NGOs or the general public. We contacted Fevia, who replied and said the webinars were only for members; and Comeos and DETIC did not reply to our requests.

As we argue in Paper 2 of this series on recycling, the way Fost Plus currently modulates the green dot fees simply passes the costs on to producers, and disregards the requirements to take into account durability, reparability, re-usability and recyclability of packaging. As such, **we argue a wider range of stakeholders should be engaged in the process of determining how the levy is distributed among producers**, and this should be transparently discussed rather than being determined behind closed doors.

For example, the fees could be eco-modulated per tonne or per unit for littered items, in addition to the standard fee for placing packaging on the market – effectively adding a further set of modulations to the existing producer fee structure. But there are many other ways in which the costs could be shared. By engaging with more stakeholders, it can be ensured that the fees are properly eco-modulated in such a way that there is an incentive to place packaging on the market that is littered less, or has a smaller impact if littered.

Cost Changes Over Time

n/open-overheid/onderzoeksrapporten/@258329/definitieve-bevindingen-kostenonderzoek/

86 Changing Markets and Break Free from Plastic (2021) More trash, more cash: Who is really behind the plastic crisis in Spain?, <http://changingmarkets.org/wp-content/uploads/2021/03/MoreTrashMoreCash.pdf>, Tables 2.1-2.3

87 WRAP (2021) Financial Cost of Packaging Litter – Phase 2 – Final Report, <https://wrap.org.uk/resources/report/financial-cost-of-packaging-litter-phase-2>, Table E2 converted to per capita using 2021 population of 67.33 million, and to EUR using an exchange rate of 1.15 EUR/GBP

88 <https://www.vku.de/presse/pressemitteilungen/archiv-2020-pressemitteilungen/einwegplastik-und-zigarettenkippen-in-der-umwelt-kosten-kommunen-jaehrl>

89 <https://www.dw.com/en/germany-plans-plastic-levy-to-fund-litter-cleanup/a-63623789>

90 <https://www.fostplus.be/en/blog/litter-cost-info-session-fost-plus-explains-allocation-key-and-cost-model>

It is crucial that the levy or fees paid by producers reduces if the amount of litter reduces

– otherwise there is no incentive to change the packaging placed on the market or for producers to act towards reducing littering behaviours of consumers. We acknowledge that this is very complex. As a starting point, the government has calculated the current cost of litter that producers have to cover based; and producers are now agreeing on how to share those costs.

In the future, we argue that the total cost of the levy cannot be decoupled from the cost sharing between producers, because one has an impact on the other. For example, if one group of producers reduces the littering of their packaging, then their costs should go down. However, if the total cost of the levy is fixed, then the cost to producers of other packaging has to go up in order to still cover the total cost of the levy.

Based on the current draft of the new CA, the amount of the levy is only adjusted annually based on the consumer price index (CPI), and at the latest by 2027 on the basis of an evaluation undertaken by the IVC and the regional authorities at the latest in 2025. **These evaluations need to be made publicly available, so all stakeholders can understand how the total cost is calculated.**

This evaluation will then be repeated every five years to ensure that the levy covers the necessary costs to provide the service. Given the speed that is needed to mitigate the climate crisis, **a five-yearly frequency is not enough to result in significant and timely changes.**

And it may be that there is a mechanism other than a levy that is more appropriate for making producers responsible for their packaging litter – one that links the total cost of litter management directly to the products and packaging placed on the market. Proposing such a mechanism is beyond the scope of this study, but it is likely that there is not yet enough detailed litter data available to implement any other mechanism. So, a starting point would be that significant financial investment is needed from Fost Plus and its members to support and work with local and regional authorities to gather data, and monitor litter on an ongoing basis.

Role of Municipalities

The Fost Plus Board of Directors said at the end of 2021 that “the role we aim to play is therefore one of coordination and intensive cooperation with local authorities, similar to what has been happening as regards selective collection for the past 30 years⁹¹.” In other words, **they may be planning to propose a cost coverage mechanism similar to that for packaging waste recycling collection**, where there is a reference cost for a specific collection scenario.

However, according to Interafval, municipalities are not sufficiently reimbursed for the collection of packaging waste and the reference costs should be 17.8% higher⁹². So, municipalities are not keen on a similar system being implemented for litter. For example, the VVSG does not want packaging manufacturers help determine how local authorities tackle litter (see Figure 16⁹³).

The Association of Flemish Cities and Municipalities (VVSG) will urge the Flemish government to pass on the costs of cleaning up litter to the producers of beverage packaging, cigarette butts and other products from 1 January 2023. It already costs them more than 144 million euros per year. According to the VVSG, it cannot be the intention that packaging manufacturers help determine how local authorities tackle litter.

Figure 16: Extract from a VVSG press release stating that they are not in favour of packaging producers and Fost Plus integrate litter management into its operations

91 <https://www.fostplus.be/en/blog/sup-directive-no-clarity-yet-on-litter-bill>

92 <https://interafval.be/actueel/gemeenten-onvoldoende-vergoed-voor-inzameling-verpakkingsafval>

93 <https://www.vvsg.be/nieuws/persbericht-lokale-besturen-vragen-om-zwerfvuilkosten-door-te-rekenen-aan-producenten>

A study on litter in the UK showed that a significant minority (37.5%) of authorities have difficulty meeting – or are failing to meet – their statutory requirements owing to budgetary constraints⁹⁴. Just walking around Brussels (see Figure 17) you can see that in Belgium the same is true – cleanliness standards are well below where they should be to properly protect the environment.

It is crucial that the costs paid to municipalities fully cover their actual costs, and further investments need to be made to improve the situation.



Figure 17: Overflowing litter bin at Kraainem metro station, and along the canal where there used to be a litter bin in Anderlecht

94 WRAP (2021) Financial Cost of Packaging Litter – Phase 2 – Final Report, <https://wrap.org.uk/resources/report/financial-cost-of-packaging-litter-phase-2>

4. The Way Forward

In 2017, Fost Plus identified public cleanliness (litter) as the third of five focus points for a circular packaging economy in Belgium (Figure 18), focussing on behaviour change among Belgian citizens, but so far there has been little impact.

3 Public cleanliness

We will continue our fight against litter, in cooperation with regional and local authorities. We support everyone who wants to contribute. We are in favour of an integrated approach to the problem, aimed at raising awareness and improving infrastructure, environment, participation and enforcement. The ultimate goal is a sustainable change in behaviour among all Belgian citizens.

Figure 18: Overflowing litter bin at Kraainem metro station, and along the canal where there used to be a litter bin in Anderlecht

One could argue that litter is a local problem, and the responsibility of consumers. They are the ones not disposing of their waste correctly, leading to the citizen clean-up approach taken by Fost Plus by funding **Mooimakers, BeWaPP, and The Click**. Citizens are an important stakeholder, but only part of the solution. This way of thinking has only gotten us to where we are now, and **more of the same is not going to help**. New approaches are needed to have a bigger impact more quickly. **The environmental crisis demands that every actor takes a big step forward** – governments, producers (including PROs on their behalf), and consumers – which is the intention of the SUPD and the new CA.

The intention of the SUP directive and of EPR for litter is to challenge the status quo; the intention is to reduce litter leaking into the environment, and thus to reduce its impact on it. It is clear that the amount of packaging waste being produced is not sustainable, so innovation is needed to tackle the root cause in order to reduce litter - **preventing the production packaging remains the best way to avoid it becoming litter**. Even the clean.brussels strategy is pushing to get companies to take responsibility as actors in urban cleanliness, stating that “waste prevention must become a key principle for economic actors: they must preserve resources by transforming the linear model into a circular model.”

If, based on their experience with recycling, producers and Fost Plus think that they can do this more effectively than is currently being done by municipalities, instead of simply funding the status quo, then a **concrete** proposal to this effect is welcome. The problem of litter needs effective solutions, like the classic European return

to retail DRS model which has proven itself. **The DDRS proposed by Fost Plus is not the solution**. We saw in this report that the DDRS seems to build on The Click campaign, which does not work to reduce litter and does not engage with the right members of the population; and a study of the Fost Plus proposal done by Eunomia concluded that a classical DRS would be much more impactful.

In conclusion, in relation to litter prevention, we would like to see the following:

- The **authorities should work together** to get a clear picture of the state of litter, to create a baseline to better inform the PRO and set up a more effective policy to combat litter.
- Data gathering needs to be done in a **standardised way**, to distinguish between different types of litter, both packaging and non-packaging, in all three regions; so that cleanliness indicators can be reported transparently on an annual basis and tracked over time. Flanders is the most advanced in their data gathering, and is standardising it across all municipalities. This should be used as a basis by Brussels and Wallonia to do the same.
- Belgium should have a **harmonized litter strategy** with a **clear division of roles between authorities and PROs**. Where we are with Mooimakers and Be WaPP is an unhealthy mix where producers exert too much control over litter policy in exchange for funding.
- There needs to be the right level of checks and balances, with the authorities doing **independent data gathering** to track the performance against the objectives and metrics in the litter strategy. This should not be controlled by producers, even if they fund it.
- Litter policy should stop focussing solely on citizen action via Mooimakers, Be WaPP, and The Click. Instead, **Fost Plus should invest in working with members to change products, packaging, or systems to reduce the likelihood of waste being littered**. Reuse and refill systems, along with classical DRSs, are proven to prevent waste and reduce litter, so these should be included in the key focus points for the next five years.

Regarding the reward system, The Click, and other future initiative, we suggest the following:

- If The Click campaign is continued, then it needs to be changed to **ensure that everyone can truly participate**, not only people with their app store in Belgium and Luxembourg. Designed incentive schemes need to be inclusive and considerate of individuals who are not currently participating in the desired behaviour, which The Click is not.
- In addition, since evaluations of financial incentive schemes have long been shown to have minimal impact, Fost Plus needs to **invest more in data gathering** to demonstrate the impact of The Click and other potential future initiatives. The numbers of users and clicks currently being shared are a great start, but more information is needed to demonstrate the impact of the app on the amount of litter and other related waste streams.

With regards to the new CA for EPR and litter, we argue that a 'simple' levy should be enough to incentivize producers towards concrete action. We are where we are, so from 2023 producers will have to pay the current cost of litter collection in Belgium. In the future:

- **the way that fees are shared between producers should be published**, a wider range of stakeholders should be engaged in determining the mechanism to set the fees;
- **the fees that producers have to pay to cover the cost of litter should be eco-modulated**. We argue in our paper on recycling, that the way the green dot fees are currently modulated disregards the requirements to take into account durability, reparability, re-usability and recyclability; this same mistake should not be made for litter fees;
- **it is crucial that the levy or fees paid by producers reduce as litter reduces**, but also remain the same or increase if litter doesn't decrease. Otherwise there is no incentive to change the packaging placed on the market;
- **the evaluations of the levy that are to be done by the IVC every five years need to be made public**, so that all stakeholders can understand how the total costs are calculated, and it may be that a five-yearly frequency is not sufficient to incentivise change at the speed needed to slow the climate crisis; and
- **it is crucial that the fees paid to municipalities fully cover their actual costs**, and that

further investments are made to improve the situation, otherwise nothing will change.

And finally, regarding implementing a DRS to tackle the beverage fraction of the litter stream:

- Fost Plus should work with the regions and other stakeholders to **implement a classic DRS**. This is a proven solution to reduce litter and increase recycling rates, without any of the limitations exposed by critics of a DDRS.
- Finally, **we strongly oppose the flat-rate reduction to the levy on implementation of a DRS**. The reduction should be subject to results, and not implementation. If a badly implemented system does not improve the collection rate of beverage packaging, and does not reduce litter, then there should be no reduction to the levy.

In this paper we have only talked about these aspects of litter based on Fost Plus's current activities. It can be concluded that there is a lack of responsibility being taken for littered items beyond beverage packaging. For example, the CA originally intended to include other packaging types, but was reduced in scope to align with only the scope of the EU legislation (plus metal cans). If Fost Plus want to continue to lead the way for PROs in Europe, **they need to be working beyond just the minimum requirements**. For example, why not include separate collection and circularity targets for packaging categories beyond just those for plastic beverage bottles (as required by Article 9 of the SUPD) in the next Fost Plus accreditation). This would demonstrate a true commitment to reducing their appearance in litter. We all know litter is not only beverage packaging, so we are not fooled that DRS will solve the litter problem. Belgium needs a broader approach to tackling the litter problem.

We believe that the approach to litter should follow the '**circular economy hierarchy**,' visualized in the 9R-diagram⁹⁵, just like all waste. The top strategies of the 9Rs framework move us towards a more circular economy by waste prevention and reuse – the subject of Paper 1. To this end, **the real solution for litter that EPR provides is to encourage producers to design packaging – and packaging systems – less likely to end up in the environment, is easier to clean up if it is littered, and has a smaller impact on the environment if it remains there.**

⁹⁵ https://www.researchgate.net/figure/The-9R-Framework-Source-Adapted-from-Potting-et-al-2017-p5_fig1_320074659

