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LOCAL MATERIALS PLAN

IMPLEMENTATION PLAN FOR MUNICIPAL WASTE 2023-2030

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LOCAL MATERIALS PLAN

Implementation Plan for Municipal Waste
2023-2030

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- 10 *Author:* Tom Creten, Ann De Boeck, Kathleen Schelfhout, An Van Pelt, Piet De Baere, Lieve de Greeff, Nico Vanaken, Gil Gram, Tijn Aerts, Jan Vanstockem
- 11 *Contact person(s):*
Tom Creten, tom.creten@ovam.be
Ann De Boeck, ann.de.boeck@ovam.be
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1 INTRODUCTION

You are about to read the Local Materials Plan 2023-2030. This plan is a new *implementation plan* as legally enshrined in the Flemish Materials Decree. It succeeds and replaces the implementation plan for household waste and similar company waste for the 2016-2022 period. It builds on the work done in the previous period, but also introduces important innovations. With this plan, we are taking another step towards an integrated policy around circular economy, by placing increased focus on prevention and reuse and by closing material cycles. In addition, the implementation plan continues to shape the more traditional waste policy. Important steps are still to be taken in terms of separate collection, for instance, which are given due attention in this implementation plan. Finally, final treatment and the prevention of litter and avoidance behaviour are other important policy issues.

This Local Materials Plan is very much in line with the Government of Flanders' climate ambitions. The [Flemish Energy and Climate Plan 2021-2030](#) of 3 April 2020 considers waste to be one of the key sectors in achieving greenhouse gas emission reductions. The sector's total emissions must fall at least from 2.3 Mt CO₂e in 2017 to 1.4 Mt in 2030. Additional measures were agreed on 5 November 2021, which should result in even higher emission reductions for the sector. The reduction in residual waste from both households and businesses is considered a key element towards achieving these emission reductions. The targets in this plan, especially those regarding mixed waste reduction, are therefore directly linked to the targets in the Flemish Energy and Climate Plan. Above all, the implementation plan specifies in concrete terms how we will achieve those targets and what actions and initiatives are being rolled out to that end.

The Local Materials Plan does more, however, than flesh out the waste sector's specific contribution to Flanders' climate policy. The waste sector itself has only limited impact on greenhouse gas emissions in Flanders (5% of non-ETS emissions). The indirect impact of a good waste and materials policy and of circular economy promotion at the local level, on the other hand, is much greater. By countering overconsumption through prevention strategies and by promoting reuse, repair, lifespan extension and shared use, less production is needed both in and outside Flanders without this jeopardising our prosperity. By 'dematerialising' our economy, we are consciously reducing the overall materials and carbon footprint of Flemish society through this Local Materials Plan.

1.1 SCOPE OF THE IMPLEMENTATION PLAN

This implementation plan covers the policy on household waste and part of company waste. Below, we describe exactly which types of waste are involved.

- Article 3 of the Materials Decree defines **household waste** as:

‘Waste originating from the normal activities of a private household and waste considered equivalent to this by order of the Government of Flanders.

Specifically, this covers the following types of waste:

- Waste collected separately from citizens and originating from the normal operation of households.
- Citizens’ non-separately collected household and bulky waste.
- Street refuse and sweepings, as this is equated with household waste in Article 4.1.1 of the Flemish Regulation on the Sustainable Management of Material Cycles and Waste (VLAREMA). This means that all litter cleared by or on behalf of a municipality or intermunicipal partnership is to be regarded as household waste.
- The waste originating from clearing fly-tips (Article 4.1.1 VLAREMA).
- Waste from street litter bins managed by the municipality or an intermunicipal partnership (Article 4.1.1 VLAREMA).

Art. 1.2.1. of the VLAREMA legislation defines mixed household waste as *‘the fraction of household waste that is not presented or collected separately’*. By definition, mixed household waste includes household waste and bulky waste. In addition, it includes the last three items (street refuse/litter and a fixed percentage of sweepings, waste from fly-tipping and from street litter bins) unless they are collected separately.

- Article 3 of the Materials Decree defines **operational waste** as:
‘Waste generated as a result of industrial, craft or scientific activities and waste assimilated to that by Government of Flanders Order’.

However, Article 22 of the decree also states that all waste must be classified as either household or company waste. ‘Industrial, craft or scientific’ activities should therefore be interpreted very broadly. All waste from businesses and organisations can de facto be regarded as company waste.

If, during the plan period, amendments to the Materials Decree or the VLAREMA legislation result in certain waste falling additionally under household waste or company waste, or in certain waste no longer being regarded as household waste or company waste, this shall also be immediately applicable to the present implementation plan.

To the extent that there are still grey areas, the Public Waste Agency of Flanders (OVAM) can determine whether waste is either household waste or company waste through a position statement. Such a statement may be published on OVAM’s website.

This implementation plan does not apply to all company waste. Only the following two subcategories of company waste fall within the scope of this implementation plan:

- Comparable company waste or ‘company waste comparable to household waste’ in full, as defined in Art. 1.2.1, §2, 54° of the VLAREMA legislation. This is “*company waste of a nature, composition, and quantity similar to household waste, generated as a result of activities of the same nature as activities of the normal operation of a private household*”;
- Similar company waste: this is the same waste as ‘comparable company waste’, but it originates from businesses and organisations in larger quantities than can be expected in a household.

In practice, the difference between these two subcategories of company waste is mainly important for the residual waste reduction targets of local authorities and for the division of tasks between public and private actors. This is discussed in greater detail below.

The combination of household waste, comparable company waste and similar company waste largely corresponds to the definition of ‘municipal waste’ in the European Waste Framework Directive. In principle, this implementation plan does not cover company waste of a nature and composition typically found in companies only, such as agricultural waste or industrial production waste. Exceptionally, however, this plan includes provisions pertaining to such waste, where it makes sense for the coherence of the plan.

In terms of policy scope, this implementation plan discusses the policy vision, targets, actions and initiatives for prevention, reuse, (separate) collection, recycling, final treatment and the prevention of litter and avoidance behaviour such as fly-tipping. In terms of final treatment, the plan also places great focus on capacity planning for incineration and landfill. This is an example of where the scope of the plan will extend beyond household waste and comparable and similar company waste, given the fact that other waste streams are also being treated in the same facilities.

The Local Materials Plan pays specific attention to the local level, especially for household waste management. The Materials Decree stipulates that local authorities have a duty of care for household waste and take on a directing role for this waste. This implementation plan provides the framework within which they can fulfil this duty of care and directing role. It comprises Flanders’ policy vision onto which local authorities can graft their own policies in the coming years and which they can give concrete shape to in their role on the ground.

1.2 NEED FOR THE IMPLEMENTATION PLAN

An implementation plan is a specific policy tool. On the one hand, it serves as an ‘ordinary’ policy plan in which the Flemish administration explains its vision, intentions, initiatives and actions for the coming years.

On the other hand, Article 18 of the Materials Decree stipulates that the implementation plan is binding on the Flemish administration and the local authorities.

Like other implementation plans, this Local Materials Plan meets several policy needs:

- It ensures **continuity** throughout Flanders' waste and materials policy. Given its binding nature, it is continuously monitored whether the actions and initiatives set out in the plan are being implemented. In addition, implementation plans usually succeed one another without interruption, so as to avoid policy stagnation.
- It creates policy **coherence**. The plan brings together various relevant aspects of policy and prevents internal discrepancies within the waste and materials policy.
- It ensures **uniformity**. Local authorities are key figures in the waste and materials policy. Because the plan is binding on local authorities, it offers all municipalities and intermunicipal partnerships general lines to adhere to, while still allowing them the flexibility they need to set local emphases.
- It offers an **outlook on the medium term**. The plan shows both companies and local authorities the policy that Flanders intends to pursue in the coming years, thus providing the necessary certainty to the parties involved.

1.3 DRAFTING PROCESS

This Local Materials Plan is the result of a careful process that began with the [review of the implementation plan 2016-2022](#), which was drawn up in 2020. The conclusions from that review served as input for this new plan. In addition, this plan is underpinned by a whole range of recent scientific and policy publications, the most important of which are listed in the bibliography in Annex 11.

The drafting of this new plan began in 2021. OVAM involved its stakeholders, such as federations of producers, waste management companies in this process. The consultation forums that monitored the implementation of the 2016-2022 implementation plan were also involved in the drafting of the new implementation plan. The new plan was discussed on the plenary consultation platforms of 21 January 2021 and 19 January 2022, and on other occasions. The three working groups (household waste, SMEs and final treatment) discussed the chapters relevant to them more elaborately during 2022.

A draft of the new plan was subject to public consultation from 1 June through 31 July 2022. The notice was published in the Belgian Official Gazette. During this period, the draft text was also presented to the local authorities during information sessions in each province. The public consultation procedure yielded 170 responses (including advice from the Minaraad, i.e. the Environment and Nature Council of Flanders). All comments were processed and included in a report to the Government of Flanders.

The Finance Inspectorate issued a favourable opinion on 2 December 2022. The budget agreement was received on 27 March 2023. Finally, the Local Materials Plan was adopted by the Government of Flanders on 26 May 2023.

1.4 LEGAL EMBEDDING OF THE IMPLEMENTATION PLAN

The plan and the associated drafting and approval procedure have their legal basis in Articles 17 and 18 of the Materials Decree. The implementation plan is a Government of Flanders plan. It is binding on all administrative authorities of the Flemish Region, the provinces, the municipalities and any public and private law institutions entrusted with public utility tasks regarding environmental policy. Duly substantiated derogations from the implementation plan are allowed for the provisions in Chapter 6 or for provisions from other chapters, provided this option is mentioned explicitly in the implementation plan. Such derogations are assessed and authorised or not by OVAM.

The Local Materials Plan constitutes the framework within which all parties involved carry out the tasks imposed by the Materials Decree. The plan also implements Articles 28 and 29 of the European Waste Framework Directive. It is submitted to the European Commission as a combined waste management plan and waste prevention programme.

1.5 DURATION OF THE IMPLEMENTATION PLAN

This implementation plan runs until 31 July 2030, but will remain in force until it is replaced by another plan. The duration of this plan will thus be slightly longer than that of previous plans (seven instead of six years). Because of its prolonged duration until 2030, the implementation plan runs parallel to the Flemish Energy and Climate Plan (Vlaams Energie- en Klimaatplan/VEKP), which also lasts until 2030, which is why the objectives of both plans are mutually aligned as much as possible. Moreover, 2030 is a pivotal year in terms of final treatment capacity, as a lot of permit periods will expire that year. A new plan in 2030 can take account of any relevant evolutions to the maximum extent possible. Finally, local elections will also be held in autumn 2030. By drawing up a new plan by mid-2030, the provisions of the new plan can be incorporated as much as possible in the new local administrative agreements.

As the new plan lasts longer than the previous plans, a thorough mid-term review will be carried out. This may also give rise to adjustments and new actions if necessary. Chapter 11 discusses that mid-term review in greater detail.

1.6 READING GUIDE

The Local Materials Plan is composed of 12 chapters. After this first introductory chapter, the second and third chapters outline the societal and policy contexts within which this plan takes shape. Chapter 4 discusses the objectives of this plan. It indicates *what* we want to achieve. Chapters 5 through 10 are the policy chapters. They outline *how* we intend to achieve the objectives set out in Chapter 4. Each chapter addresses a different policy theme. Chapter 5 discusses the prevention policy. Chapters 6 and 7 address the separate collection from households and companies. Chapter 8 discusses the recycling policy. Chapter 9 deals with the final treatment, incineration and landfill of waste, and Chapter 10 pertains to litter and avoidance behaviour. Chapter 11 deals with the monitoring

and implementation of the Local Materials Plan. Finally, Chapter 12 consists of annexes that form an integral part of this plan. Annex 3 provides an overview of the residual waste targets by municipality. **Annex 7 lists all the policy actions included in this plan with an indicative time frame and the stakeholders involved.** The text of the plan only mentions time frames and stakeholders for the actions in order to emphasise them. The plan-EIR and the socio-economic analysis associated with this plan are also attached in Annex 10. The plan-EIR examines the environmental impact of the Local Materials Plan and some key actions in particular. The socio-economic analysis maps the costs (and revenues, if any) of different actions as well as the associated job creation. The specific impact on local authorities is discussed in greater detail.

2 SOCIETAL CONTEXT

This implementation plan is drafted at a time when nobody can deny the great climate challenge, nor the manifest need to make the transition to a circular economy in that context. Circular policies at the local level can contribute towards reducing greenhouse gas emissions, improve local resilience and economic innovation.

More and more cities and municipalities in Flanders therefore want to do their bit for this circular transition. Some central cities in Flanders are already drawing up overarching circular policy strategies and setting up innovative partnerships to shape the circular future in the city. At the same time, a good local waste policy continues to be the foundation. Flanders still has important steps to take to also improve separate collection and to further safeguard the environment from litter and fly-tipping.

It is not Flanders' ambition to impose the circular economy from the top down through this Local Materials Plan. In fact, this would not even be possible. This plan does, however, provide a framework within which all local actors in Flanders can take steps forward. Pioneering local authorities and companies should be allowed to continue experimenting and scaling up their strategies. The plan also provides for a number of legislative and support initiatives that represent a clear shift towards dematerialisation and prevention of waste. All local actors are expected to engage in this shift in emphasis. Local authorities in particular are at the same time expected to continue to take steps forward in the more traditional waste policies that remain the foundation of every circular strategy.

Although there is growing awareness of the importance of the circular transition, this plan is also created in an era when a lot of societal trends are complicating that transition. For several years now, we have seen new trends in marketing strategies and (subsequent) consumption behaviour that actually increase waste generation. This is clearly illustrated by the rising out-of-home and on-the-go consumption and the consumption of ready meals. Another example is the evolution towards online shopping and the home delivery of products and meals. The COVID-19 pandemic has even reinforced the latter trend.

It also brought about other effects that cannot be ignored. For instance, we notice shifts in waste generation between the household and commercial sectors (due to the large number of people working from home), as well as effects on specific waste streams (e.g. the difficulties to export textiles) and on the composition of litter (e.g. the new emergence of face masks). In addition, COVID-19 has sparked a revival of some disposable products, often from the mistaken perception that disposables are more hygienic.

The economic consequences of the COVID-19 crisis and the Russian-Ukrainian conflict have at the same time exposed some of the weaknesses of today's linear economy, while immediately demonstrating the benefits of a more circular society. Long feeder lines make our economy vulnerable. Strategies

for creating economic prosperity without being dependent on production and raw materials from distant foreign countries may help us cope with future global crises. A European production with recycled raw materials and models based on lifespan extension, repair and reuse come to mind.

Today's societal context holds both opportunities and risks. The present plan aims to navigate between the obstacles and maximise the opportunities that present themselves. Although this implementation plan is an important waste and materials policy tool, it is only one piece of the puzzle needed to bring about the circular transition on the ground in the coming years. To realise the circular transition, action will be required in all policy areas and at all policy levels, and citizens and businesses too will have to make the switch. This Local Materials Plan includes key policy actions and initiatives within the scope of the decree, but it also provides a framework within which other actors can take up their responsibility.

3 POLICY FRAMEWORK

The Local Materials Plan does not stand alone, but takes shape within an existing policy framework. We take into account European obligations and other Flemish policy plans and regulations. Since the plan imposes a lot of obligations on local authorities, the local policy context is relevant as well. Below, we briefly outline the main policy developments at these levels. It goes without saying that cooperation with the federal level and with the other Regions is also recommended. We do not discuss the policies of the other Belgian entities in detail, but refer to them whenever relevant. Finally, we also discuss a number of policy choices from the previous implementation plan which we will continue to build on.

3.1 EUROPEAN POLICY FRAMEWORK

This plan should take into account the obligations and objectives set out in European policy plans and legislation. Below, the main European policy plans, directives and regulations are listed that have an impact and which we take into consideration. However, European policy is constantly evolving and significant adjustments are expected to be made to the below mentioned legal frameworks in the coming years. Actions and policy lines in this plan may be adjusted accordingly. Conversely, this plan may also serve as guidance for Flanders when taking positions in European discussions on the revision of directives and regulations.

European Circular Economy Action Plan & EU Green Deal

The [European Circular Economy Action Plan](#) is a pillar of the [European Green Deal](#) as well as a major component of the European Industrial Strategy. Through some 35 measures, the European Commission seeks to drastically reduce the environmental and climate impacts associated to our production and consumption patterns. It aims to double the circular use of materials in the next ten years and reduce the environmental footprint of European consumption.

The EU action plan shows us that many new policy initiatives are in the pipeline at European level in the coming years, which could still thoroughly influence the context in which this plan is being implemented. For example, the review of the European ecodesign requirements is to improve the durability, reusability, recyclability and reparability of products in key product value chains, make them free of hazardous substances, increase their recycled content and reduce carbon and environmental footprints. It concerns product groups such as electronics, ICT, textiles and furniture. EU strategies will also be put in place to promote circularity in a number of priority sectoral value chains.

The EU action plan focuses strongly on waste prevention. It aims to significantly reduce total waste generation. Other priorities include halving the amount of residual municipal waste over the next ten years and ensuring the uptake of the supply and demand of secondary raw materials. The export of plastic waste outside Europe will be limited and recycling capacity will be increased. Tracking of hazardous substances will be improved and

mandatory European public procurement criteria are to promote innovation and circularity. The EU will continue to lead the way to a circular economy at the global level and ensure that the transition is just and that it works for people, regions and cities.

Waste Framework Directive

This Local Materials Plan is submitted to the European Commission as a waste management plan and as a waste prevention programme as set out in Articles 28 and 29 of [the European Waste Framework Directive](#). As a result, the content of this plan must meet a whole set of requirements. It must, for instance, include measures ranging from promoting sustainable consumption models and reuse to improving separate collection to assessing (final) treatment capacity.

Another important element in the Framework Directive is the obligation for Member States to separate biowaste at source from 1 January 2024. The obligation for citizens and companies is anchored in the Flemish Regulations on the Sustainable Management of Material Cycles and Waste (VLAREMA), but the present plan translates this into practice in terms of the implementation of the separate collection of household biowaste by the local authorities.

The EU Framework Directive also requires that 55% of municipal waste is prepared for reuse or recycled. This is increased to 60% by 2030 and to 65% by 2035. Because of these targets and the new way in which they are being monitored, it no longer suffices to collect waste separately as much as possible, but the actual recycling must be monitored as well. The targets are reproduced in Chapter 4 of this plan.

SUP Directive and Packaging Directive

The 'EU Directive on the reduction of the impact of certain plastic products on the environment' (better known as the [Single-Use Plastics or SUP Directive](#)) requires Member States to take measures that should lead to a measurable reduction in the consumption of single-use plastic cups and certain food containers between 2022 and 2026. The SUP Directive also states that it is necessary for consumers to be properly informed about the availability of reusable alternatives and reuse systems, as well as about the negative environmental impact and the waste management of single-use plastic products.

The 'EU Directive on packaging and packaging waste' ([the 'Packaging Directive'](#)) also requires us to achieve an increase in the share of reusable packaging and of systems to reuse packaging. Moreover, the European Packaging Directive is under revision and will be even more ambitious. The directive may even be converted into a regulation, making its provisions immediately applicable to private actors as well.

These European initiatives give concrete shape to the shift towards prevention policies announced in the European Green Deal. The Local Materials Plan implements Europe's expectations regarding the prevention of single-use plastic products and packaging through three main tracks:

1. Introducing some additional bans on the use of obvious single-use products and packaging without any clear added value;
2. Adapting the interregional cooperation agreement on packaging waste in order to also impose prevention and reuse targets on packaging producers;
3. Creating a new market for reusable packaging or looking for other solutions to prevent single-use packaging. This is done in cooperation with the packaging industry through the Green Deal 'Anders Verpakt' (Green Deal 'Packaged Differently').

Concrete actions for these three tracks are discussed in Chapter 5, which devotes specific attention to packaging issues, as expected from waste management plans by Article 14 of the Packaging Directive. It goes without saying that, if the revision of the European Packaging Directive results in certain tracks or actions from Chapter 5 becoming impossible or irrelevant, adjustments can of course be made during the plan period.

The EU Packaging Directive also sets recycling targets for each type of packaging material. The Interregional Cooperation Agreement on Packaging Waste (interregionaal samenwerkingsakkoord (ISA) rond verpakkingsafval) was amended in 2020 to integrate these targets into the interregional legislation. The targets are reproduced in Chapter 4.2.

Finally, the SUP Directive requires the Regions to charge the litter costs for a number of single-use plastic products through an extended producer responsibility scheme. The Materials Decree extends that obligation to all products that have a significant impact on litter. An interregional cooperation agreement on litter is being developed with the other Regions and the Interregional Packaging Commission (IRPC) to actually implement this obligation. Chapter 10 of this Local Materials Plan mainly deals with the reporting requirements that are necessary for charging the costs.

Revision of the European Waste Shipment Regulation (EWSR)

At the end of 2021, the European Commission tabled a proposal to revise the EWSR. The review is in its final stage. The Council will finalise its position and then enter into dialogue with the European Parliament and the Commission. The Commission groups its proposals around three objectives:

1. Easing shipments of waste between EU Member States, with proposals such as:
 - an obligation to digitalise procedures;
 - the promotion of waste shipments between EU Member States to pre-consented facilities for recycling and reuse (PAF);
 - the establishment of EU level thresholds for contamination and to clarify the distinction between waste and used goods for specific waste streams;

2. Imposing restrictions on waste exports to third countries, including:
 - stricter rules on exports of green-listed waste to non-OECD countries;
 - the monitoring of those waste streams to OECD countries and mandatory independent audits of treatment facilities in third countries (OECD and non-OECD);
3. Introducing a set of measures to step up the fight against waste trafficking, including
 - reinforcing enforcement measures;
 - extending the powers of the European Anti-Fraud Office (OLAF).

Flanders is generally supportive of the Commission's proposals and has provided input to refine them. Exports of waste to non-industrialised countries in particular should be made more stringent.

3.2 FLEMISH POLICY FRAMEWORK

Coalition agreement and policy paper

The Government of Flanders is fully committed to the circular economy. The [Coalition Agreement 2019-2024](#) puts the focus on prevention strategies such as reuse and recovery, as well as on recycling as the final element of circular materials management.

The Flemish Minister for Environment and Spatial Development attaches some consequences to that in her [policy paper](#). The separate collection of waste for purposes of recycling must increase. Combined with prevention, this will lead to a decrease in the amount of residual waste, which should reduce the final treatment capacity. This implementation plan contains measures to that end.

Transition to a circular economy in Flanders

Circular Flanders (Vlaanderen Circulair) was launched in 2017 with the aim of shaping the transition to the circular economy in Flanders on the ground through a partnership between companies, civil society, knowledge institutes and governments. The push for circular entrepreneurship led to a lot of experiments resulting in new products, partnerships and business models. Circular Flanders also counts on the active commitment of local authorities. The local level is an explicit part of the lever 'Policy Tools' (see Figure 1) in the distribution of themes and the Circular Flanders approach. Still, the reality is that all substantive themes as well as other levers are present to a greater or lesser extent at the local and regional levels. Local authorities also participate actively on various fronts and within the different thematic work agendas.

By drafting future scenarios (roadmaps) and setting up intensive collaborations around the various levers and work agendas, Circular Flanders is looking for concrete commitments from companies, citizens

and authorities. The work agendas presented in spring 2022 in particular are the result of more than one year of preparatory work by promoters and stakeholders. Through the work agendas the key partners offer a strategic framework which a broad range of partners can use to make their own contributions: there is a vision of the future; the theme is clearly specified; gaps have been identified; and it is clear what work lies ahead. Those who put in efforts to implement an action, whether from a list in the work agenda or on their own initiative, are thus aware that these efforts serve a broader strategy.

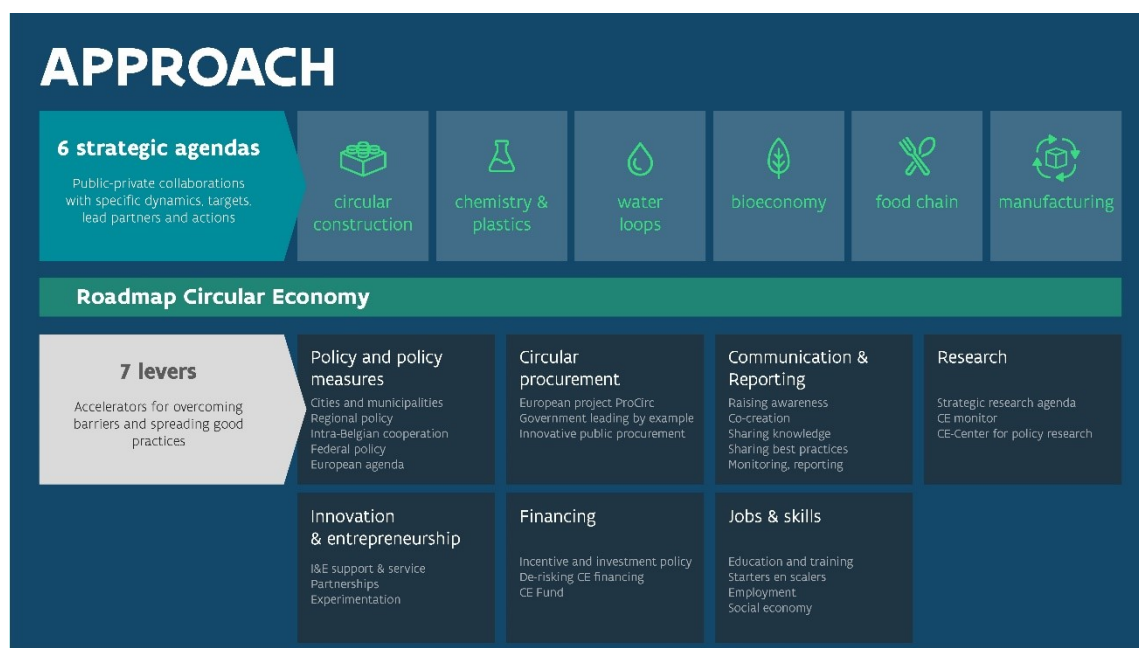


Figure 1: Roadmap of Circular Flanders with the identified work agendas and levers

Flemish Energy and Climate Plan 2021-2030 (Vlaams Energie- en Klimaatplan 2021-2030)

The implementation plan is an explicit part of the [Flemish Energy and Climate Plan](#), which lays down Flanders' climate targets until 2030. The Flemish Energy and Climate Plan mentions the waste sector specifically as one of the sectors in which greenhouse gas emissions must be reduced. The plan already sets several waste policy targets for the coming years. The reduction targets for residual waste from households and companies referred to in Chapter 4, which are to reduce waste incineration emissions, are particularly important in the context of this implementation plan. Further on in the plan we specify the measures needed to realise these targets to a large extent by the end of the plan period.

The link between climate policy and materials policy is more complex, however. After all, the climate challenge is not just a matter of direct energy consumption. High material consumption due to a linear economy is also a major indirect driver of high energy demand. A recent study by the Flemish Institute for Technological Research (Vlaams Instituut voor Technologisch Onderzoek/VITO) (2021a) shows that up to two-thirds of territorial greenhouse gas emissions are material-related. Another objective of the Flemish Energy and Climate Plan is therefore to reduce the material footprint in Flanders by 30%. Prevention strategies such as reuse, repair or sharing ensure that, as a society, we meet our needs with less use of materials. We will reduce our carbon footprint more by producing fewer (consumer) goods than by tackling the waste issue merely at the end of the chain.

Materials Decree and the VLAREMA legislation

The [Materials Decree](#) and the [VLAREMA implementing order](#) constitute the legal basis for closing material cycles in Flanders. Both legal texts were changed fundamentally in 2021. In fact, a new revision of the VLAREMA legislation is already in the pipeline in 2023.

Articles 17 and 18 of the decree are important because they contain both the substantive and procedural requirements of prevention programmes and implementation plans, which are thus fulfilled by drafting the Local Materials Plan. The articles are largely copied from the EU Framework Directive.

Finally, this Local Materials Plan contains measures that build on requirements from the VLAREMA legislation. For instance, Chapter 7 includes measures to strengthen the enforcement of sorting at source in companies, which is mandatory under the VLAREMA legislation. On the other hand, this plan frequently indicates that action will be taken during the plan period to adapt the VLAREMA legislation in accordance with the targets to be achieved.

Long-Term Vision on Final Treatment

The Coalition Agreement 2019-2024 and the Environment and Spatial Development Policy Paper state the desire to phase out final treatment capacity. On 8 December 2020, a communication was made to the Government of Flanders regarding a [Long-Term Vision on Final Treatment](#). Waste incineration capacity should decrease in line with residual waste reduction, as the incineration capacity is deliberately limited to the capacity needed to process the amount of residual waste generated in Flanders. Through the Local Materials Plan, we are further shaping this long-term vision, in particular the phase-out of final treatment capacity.

Other policy plans

The Local Materials Plan should also be considered in relation to other current waste policy plans, both implementation plans and prevention programmes. Currently, the following other plans are in force:

- [Implementation Plan on Plastics 2020-2025](#)

- [Action Plan ‘Food Loss and Biomass \(Residual\) Streams Circular’ 2021-2025](#)
- [Prevention Programme ‘Towards Circular Construction’ 2022-2030](#)

The Local Materials Plan is complementary to these other plans. In case of overlap, the present plan refers to the initiatives in the other plans.

This Local Materials Plan also contains much policy on packaging, including packaging found in litter. When drafting these passages, account was taken of the [Concept Paper ‘Packaging Policy and Litter 2.0’](#), which the Government of Flanders adopted on 20 July 2018.

3.3 LOCAL POLICY FRAMEWORK

Flanders acknowledges the great importance of the local level in the transition to a circular society. More and more local authorities are taking matters into their own hands to develop circular policy strategies and to motivate local actors to engage themselves. In fact, the local level lends itself perfectly for this, as it is the level closest to the citizens that keeps its finger on the pulse of local companies and associations.

The role of the local authorities is possibly even more crucial in the more traditional waste policy. The Materials Decree gives local authorities the task of rolling out household waste policies on the ground. The municipalities and intermunicipal partnerships are responsible for the separate collection in practice and at the same time raise citizens’ awareness of the importance of sorting at source. In addition, local authorities play an important role in waste prevention and are partly responsible for household waste treatment.

A lot of municipalities are organised in intermunicipal partnerships to implement the waste policy. Intermunicipal partnerships for waste come in different shapes. Sometimes the role of the intermunicipal partnership is limited to the practical implementation, whereas the municipalities themselves continue to set the policy for their territory. In other cases, a significant degree of policy coordination takes place between the municipalities of the intermunicipal partnership, sometimes complemented with management transfer. This usually creates great uniformity within the partnership in terms of waste policy.

There is also a trend of mergers of municipalities. Seven new merger municipalities were created in 2019. Even after that, several municipalities expressed their desire to merge in the future. The Government of Flanders is pursuing an active incentive policy, so even more mergers are expected to take place in the coming years.

This plan takes these administrative changes into account as much as possible. For instance, when setting municipal mixed waste targets under Title 4.3.5, we explain what to do if mergers take place or if intermunicipal partnerships change composition.

3.4 POLICY CHOICES FROM THE PREVIOUS IMPLEMENTATION PLAN

Finally, the Local Materials Plan builds on policy choices from the previous implementation plan.

3.4.1 Customisation for local authorities

Flanders has a wide variety of cities and municipalities. What works well in Herstappe is not necessarily the best approach in Antwerp or vice versa. The type of policy pursued sometimes also strongly depends on the role that has been assigned to an intermunicipal partnership. With this in mind, the previous implementation plan considered 'customisation' to be of paramount importance. Mixed waste targets were chosen based on the profile of the municipality. Although the Government of Flanders sets the policy framework for meeting these targets, the local authorities have a lot of discretion in the day-to-day implementation to achieve their specific targets. Another aspect of customisation is the support for municipalities. The previous plan period therefore introduced bespoke tools such as the visitations of municipalities struggling to meet their mixed waste targets, the benchmark tool that allows local authorities to measure themselves against comparable municipalities, and the learning networks of VVSG-Interafval.

This implementation plan continues the focus on customisation. Local authorities retain their flexibility that is based on the concrete reality in their municipalities. The customised tools have proven their added value and will continue to be used during this plan period, subject to some adjustments. The Belfius classification in the previous plan period did, however, lead to great complexity due to the introduction of 16 clusters. Partly for this reason, we have simplified the municipal classification in this plan. We discuss this in greater detail under Title 4.3.2. Furthermore, the present implementation plan has a high level of ambition. Customisation remains the guiding principle, but in order to realise the ambitions and not to increase the complexity of the waste policy, a number of innovations will also be implemented in Flanders in a uniform manner whenever necessary. The options for the local collection of biowaste, for instance, are limited to a few options in this plan.

3.4.2 Division of tasks between public and private actors

3.4.2.1 Household waste

Local authorities are subject to a **duty of care** for household waste in accordance with Article 26 of the Materials Decree. They are thus responsible for the front-line collection of household waste streams and the waste streams generated as a result of avoidance behaviour. Citizens have the right (and duty) to dispose of their waste in a simple and correct manner. The local authorities provide an organised network of door-to-door collections, collection points and civic amenity sites. This implementation plan further specifies the duty of care and identifies the different types of household waste for which local authorities are obliged to set up a collection system. As part of their duty of care, the municipalities also raise awareness among their residents, ensure that citizens present their waste correctly in a separate manner, have the option to take charge of the collection and treatment themselves (in-house or through outsourcing), intervene if the collection or service provision by other actors is not done correctly and ensure the cleanliness of the municipal territory.

To fulfil this duty of care, local authorities must also have the opportunity to take control of household waste management themselves. This **directing role** also stems from Article 26 of the Materials Decree, which stipulates that household waste collection shall be governed by municipal regulations. Through these municipal regulations, the municipality can either allow or prohibit parallel (private) circuits for household waste collection.

The Flemish authorities have the following vision on this directing role:

- Parallel circuits are in principle not allowed for the household waste streams for which the local authorities are obliged to set up a collection system in accordance with their duty of care and the provisions in this implementation plan, unless such a circuit is explicitly authorised by the provisions of this plan or by the local authority, or when authorisation by OVAM is provided for in this plan or in other regulations.
- However, some types of waste may be subject to an acceptance obligation for producers, as set out in the Materials Decree. As a result, producers can set up their own collection systems for these types of waste. They are, however, obliged at all times to cooperate with the municipalities for the collection of household waste, unless stipulated otherwise in the VLAREMA legislation.

The directing role of the municipalities is being challenged in a number of specific situations. Pilot projects on innovative collection systems among citizens on the one hand and educational projects by schools and associations on the other are positive projects that can be promoted, but require a framework. In addition, flats and other multi-family dwellings sometimes require a specific approach in which private collectors can play a role, albeit within the contours of the municipality's directing role for household waste. These specific situations require more explanation.

Pilot projects on innovative collection systems

Local authorities can test innovative forms of separate collection through pilot projects, in which cooperation with private collectors can generate added value and even be encouraged. Such projects are subject to requirements, especially if the pilot project represents a derogation from the method and frequency of the collections required of local authorities under this plan. Chapter 6.1.1 further specifies these conditions.

Collection by schools and associations

In the context of projects promoting circular economy awareness, schools and associations can separately collect household waste streams using a bring system. This requires authorisation from the local authority, except for batteries and waste electrical and electronic equipment (WEEE). The local authorities monitor these collection methods from their municipal duty of care. They can take enforcement action in case collection sites are misused or polluted.

In the event where the local authority must give authorisation, it is obliged to impose at least the following requirements on those collection systems:

- Extensive awareness-raising on prevention, reuse and separate collection shall take place for each stream.
- Collection shall be limited to a maximum of two different streams per year.
- Small volumes may be collected permanently, but the collection by means of containers shall be limited to a maximum of two weeks per year.
- The waste shall be collected and stored in an appropriate location and in appropriate packaging and/or waste containers. The nuisance for the environment, the surrounding area and the local residents shall be kept at an acceptable level.
- The waste shall be regularly disposed of for treatment with respect for the treatment hierarchy.
- Initiators shall cooperate with a registered waste collector, dealer or broker.
- The collection data shall be reported to the local authorities that shall in turn comply with all the registration and reporting requirements for this data.

Annex 1 of VLAREM II, Section 2 provides for exceptions to the integrated environment permit for the storage of waste. This may include awareness projects by schools and associations, subject to authorisation from the municipality or intermunicipal partnership. Exceptions 6 and 8 stipulate more specific requirements for batteries and very small WEEE.

Flats, student accommodation and other multi-family dwellings

Waste from flats, student accommodation and other multi-family dwellings is household waste. A customised approach is sometimes required, for instance because of the smaller living areas. This tailored approach may arise through interaction between the local authority, the client and a private collector, but can only be adopted following the prior consent of the local authority. Sorting at source and the pay-as-you-throw (PAYT) principle must be respected even then. Local authorities are urged to make private collectors aware of this and OVAM as well points this out to private collectors. Public cleanliness is another point of focus. Private collectors are also obliged to make data on the quantities collected available to the local authorities. Local authorities must actively request this data from private collectors as they are, in turn, required to include these quantities in their household waste reports.

3.4.2.2 Company waste

The duty of care does not apply to company waste. Waste producers have to make their own arrangements and the municipal authorities are under no obligation to take care of the collection of this waste. In some cases, local authorities are *allowed* to collect or

accept waste from companies, whether or not under specific conditions. The difference between *comparable* company waste and *similar* company waste that we introduced earlier is relevant here.

Comparable company waste

It may be more efficient for SMEs with limited quantities of company waste to use existing municipal collection systems. The intervention of a private partner for limited quantities of separately collected waste fractions may represent a high cost and may not be the most suitable choice from a logistical point of view. The implementation plan allows local authorities to give companies access to their household waste collection channels (door-to-door, bring system at short distance or civic amenity sites) for limited quantities. Naturally, companies are free to conclude a contract with a private collector of their own choice, regardless of the availability of municipal channels.

As this explicitly concerns comparable company waste, this scheme only applies if the nature, composition and quantities are comparable to the amount of waste generated by an average household. It is prohibited under this scheme to offer companies or organisations larger or more receptacles than offered to citizens residing in single-family dwellings. An actual limitation is put in place for mixed waste of maximum three 60-litre mixed waste bags per fortnight or, in case of a weight-based PAYT scheme, one container of 22.5 kg of mixed waste per fortnightly collection. Larger quantities no longer fall within the scope of the term 'comparable' commercial mixed waste. Municipalities that only collect comparable mixed company waste can do so under the rules and tariffs that apply to mixed household waste collection. The quantities collected are therefore recorded as mixed household waste and are included in the calculation of the municipal household waste target.

To enable companies with small quantities of sporadically generated waste to also comply with the sorting obligation, municipalities are asked to allow SMEs on their territory access to the civic amenity sites for separately collected waste streams of comparable company waste. If they do so, they must, however, set the maximum quantity of waste to be presented by company for each waste stream to ensure that the quantities actually remain comparable to household waste. In addition, local authorities are not allowed under this scheme to accept larger quantities from companies at civic amenity sites than they would from citizens. The collection through mini recycling centres is also possible under similar conditions.

Similar company waste

Local authorities wishing to collect similar company waste (i.e. a larger quantity than can be expected in the normal operation of a household) can only do so if the level playing field with the private sector is guaranteed. For this reason, local authorities must charge companies the full actual cost of collection and treatment. This also applies to the acceptance of larger

quantities of company waste at civic amenity sites (for SMEs). For packaging waste (plastics, metals and beverage cartons (pmd), paper and cardboard, and packaging glass) that is subject to a take-back obligation and for waste that is subject to an acceptance obligation, the local authorities may only charge that part of the cost price for which they do not receive any remuneration from the recognised body or management body.

Cross-subsidisation between the collection and/or treatment of household waste on the one hand and company waste on the other is prohibited for local authorities collecting and/or treating similar company waste. Cross-subsidisation is understood to mean any situation in which (part of) the collection and/or treatment cost of the company waste is covered by public funds (subsidies, taxes, etc.). To make sure that cross-subsidisation does not occur, OVAM will monitor the accounts of these local authorities and report on them to the Government of Flanders.

If local authorities collect similar mixed waste from companies, they must also draw up a contract in accordance with Articles 4.3.2 and 6.1.1.4 of the VLAREMA legislation. They must also comply with all the rules regarding mixed waste collection of companies that apply to private collectors, in particular Section 5.5 of the VLAREMA legislation. Similar mixed company waste must only be collected in the same round (or in the same container in the case of bring systems) as mixed household waste if this is registered by means of a weight-based PAYT system. In other cases, similar mixed company waste must be collected in a separate round (or through a separate container in case of bring systems) to allow for an accurate registration. Similar mixed company waste is not counted in the mixed household waste rates and does therefore not count towards achieving the municipal residual waste targets.

4 TARGETS AND INDICATORS

In this chapter, we define *what* we want to achieve through this implementation plan. We put forward concrete quantitative and qualitative targets. We will also be monitoring some data as indicators, without immediately attaching a target to them. Although we know the direction we want to take, the topic is too novel or the impact of the policy is still too unclear to attach a concrete target to it. This chapter concludes with a table that clearly lists all the targets and indicators. This fourth chapter does not address *how* we intend to achieve the targets. This is discussed in Chapters 5 through 10.

4.1 PREVENTION AND REUSE TARGETS

Prevention is the foundation of the circular economy. Firstly, waste should be prevented as much as possible. This will deliver the greatest environmental gain and is essential to realise our climate ambitions. Flanders therefore considers prevention to be a top priority for the 2023-2030 period. Reuse is a type of prevention that requires specific policy attention. Sharing and repair are also important waste prevention strategies.

The targets and indicators in this plan reflect the growing importance of prevention. We are monitoring more data than in the previous plan period. Besides general data on prevention and recycling, we are also monitoring specific product groups that are of policy interest. From now on, we are considering the reuse market as a whole in terms of reuse and not just the reuse shops.

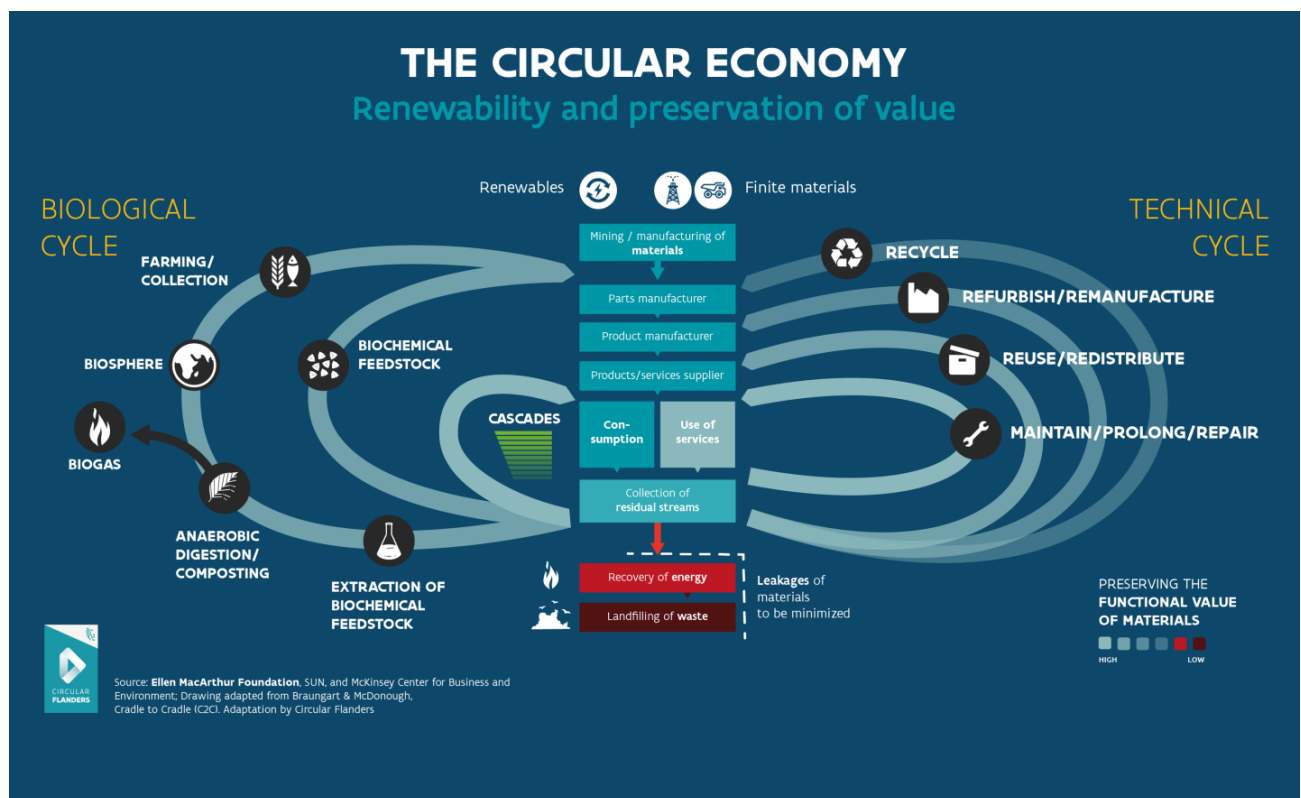


Figure 2: Butterfly diagram of the circular economy, inspired by the Ellen MacArthur Foundation

Within the framework of the Circular Economy Monitor in Flanders ([CE-monitor](#)), many more indicators are being monitored and more indicators will be developed in the coming years that map the circularity of our society. Although not all those indicators are mentioned in this plan, the research conducted is of great value and complements the targets and indicators around prevention and reuse that are being monitored in this plan.

4.1.1 General monitoring of prevention

Flanders aims to achieve an **absolute decoupling** between the total amount of waste generated and economic and population growth. This means that the total amount of waste generated remains the same at most, even if the economy or population continue to grow. We are not only monitoring household waste from now on, but also similar company waste, as well as the total of the two combined. The total amount of waste generated remains at least stable, but a turnaround is preferably initiated to bring it down. The logic of an absolute decoupling follows from the climate policy, which this plan is an explicit part of. The climate targets are also formulated as an absolute reduction in greenhouse gas emissions that Flanders must achieve, regardless of any growth in the population or economy. Prevention is the best possible strategy to that end, as it reduces greenhouse gas emissions to zero at both the production and waste stages. In addition, we avoid emissions in raw materials extraction and logistics.

Barring very unexpected events, the population in Flanders will continue to grow in the coming years. On 1 January 2021, [Flanders had a population of 6.65 million](#). Statistics Flanders projects that Flanders' population will rise to [6.9 million](#) by 2030. This means that it will grow by approximately 250,000 people during the plan period, which is an increase of almost 4%. If we want the amount of waste generated to remain at a constant level, every resident of Flanders will therefore have to generate less waste to compensate for the population growth. This represents a decrease of approximately 13 kg per capita calculated on the basis of the average waste generation in the 2018-2020 period (approximately 2.4 million tonnes, see below). Combined with shrinking family sizes and an ageing population, this could very well lead to a possible increase in waste from individual packaging and (medical) care.

Economic growth presents an even bigger challenge in the context of prevention. Not only the number of people is rising, (so far) the economy (GDP/capita) continues to grow as well. We are thus faced with the task of achieving a **dematerialisation** of the economy, by increasing our prosperity without consuming additional raw materials and materials to achieve this.

When monitoring the total amount of household waste generated, two waste streams are excluded from the data from now on: construction and demolition waste, and green waste that is collected entirely separately (from the VFG fraction). An increase in construction and demolition waste is not necessarily a negative thing. Within the framework of the energy and climate policy, the policy aims to achieve a renovation wave, which will inevitably generate more construction and demolition waste. Green waste, on the other hand, is highly dependent on weather conditions and less so on the policy pursued. Moreover, from a climate and biodiversity policy perspective, the policy encourages depaving, both in the public space and to make gardens more climate-robust. This too may generate additional green waste. More municipalities will collect VFG waste in the coming years as a result of this implementation plan. Municipalities whose citizens could so far only present their garden waste as a completely separate fraction will see a partial shift from that garden waste to VFG waste. Because VFG waste is kept within the prevention target, this may cause the total amount of household waste generated to increase in the first few years. This will be taken into account when evaluating the achievement of this policy target, and attention will be paid to this specific issue when monitoring the target.

Because this plan aims for an absolute decoupling, it is unnecessary to link this with household consumption expenditure (or employment for company waste), as was the case in the previous plan period. Because we exclude a number of waste streams, we would also have to exclude the consumption related to those waste streams to make such corrections. This makes the calculations needlessly complex and offers little additional information, because our goal is clear: to keep the total amount of household waste and similar company waste generated under control and preferably reduce it.

For similar company waste, we are currently working with the amount of post-consumer company waste based on data provided by Valipac in accordance with Article 18 of its accreditation. This is multiplied by the estimated amount of pmd collected from Flemish companies on the basis of the Belgian data from Fost Plus. Metals are also excluded for similar company waste in addition to green waste and construction and demolition waste. It is currently impossible to differentiate between production waste from metals and post-consumer metal waste. Although only the latter falls within the scope of similar company waste, the former carries much more weight. The separate collection of kitchen waste in the 2020-2021 period is not yet included in the total rate for similar company waste either. This will normally be the case in the future following the introduction of OVAM's new materials information system 'MATIS' (see Title 4.7). Just like with the generalised collection of household biowaste, this may temporarily cause a small increase in the total amount of waste generated by companies.

The average of the total amount of waste generated for the three consecutive years 2018, 2019 and 2020 is taken as baseline measurement to make the predetermined prevention target sufficiently robust and smooth out any accidental annual fluctuations. In summary, we can formulate the overall prevention target as follows:

The total amount of waste generated in Flanders shall remain at least stable at 2,376,000 tonnes of household waste and 1,956,000 tonnes of similar company waste by 2030. Preferably, an absolute decrease is even achieved.

The exact tonnages mentioned as baseline measurement in the target can still be fine-tuned by OVAM in the coming years, as a lot of changes are currently being made to collect (even) better data. The introduction of MATIS (see Title 4.7) and possible shifts due to the generalised collection of biowaste from companies and households in particular will have an impact.

4.1.2 General monitoring of reuse

4.1.2.1 Targets for the reuse sector

Reuse is a specific part of prevention. The previous implementation plan focused on the reuse shops, setting them a target of 7 kg of reuse per capita by 2022. This target has not been achieved. Because sector analyses have shown that the potential is actually there, the target on reuse in reuse shops has been increased anyway.

The reuse shops shall achieve 8 kg of reuse per capita by 2030.

The reuse sector receives grants from the Flemish authorities. These grants are in part calculated on the basis of the annual mandatory reporting of results on shop sales by the reuse shops. The data is analysed, verified and corrected where necessary on behalf of OVAM. Individual results are also processed into detailed sector results for purposes of monitoring, policies and surveys at the internal, external and European levels.

The measurement and registration methods of reuse shops are still open for improvement, which is why we are taking a number of initiatives in consultation with HERWI!N.

ACTION 1: HERWI!N, the reuse shops and OVAM are working together to further professionalise and optimise the measurement and registration method of the flow of goods:

- During the plan period, we work to keep the list of items, product groups and average weights up-to-date.
- We examine and evaluate the units of measurement for smaller items. We look at how to determine the content or volume of a set or receptacle for multiple items and the associated average weight. For example, questions are raised as to whether a set of cutlery counts as one item or several items and what the average weight of such a set is.
- We consider the option of the (mandatory) use of actual rather than average weights for certain product groups.
- We work on efficiency, ease of use, correctness and completeness in registrations and reports.
- We look at how to measure reuse using different parameters. In this context we consider the number of items and the turnover as control factors. The increasingly light, small and compact furniture, appliances and household goods made of lighter materials distort the result in terms of weight in a negative way.
- We coordinate the registration and measurement with the other Regions.

A minimum reuse percentage was imposed on reuse shops in the previous plan period. This is important to prevent the creation of a parallel circuit for waste. The target is therefore retained, but electrical and electronic equipment (EEE) is excluded from now on. The reason is that EEE is very specific because this product group is subject to reuse criteria. As a result, it is not always possible to unambiguously determine the actual reusability when doing a visual check for reuse.

Reuse shops shall continuously achieve an average reuse rate of 50% for collected goods during the plan period, except for electrical and electronic equipment.

At the same time, estimating the reusability remains a key point of focus. Several goods that are not accepted by reuse shops, for example, sometimes still get a second life through giving platforms. It is therefore important that reuse shops continue to focus (in part) on reuse and not on maximising revenues from sales. From this point of view, it is important that reuse shops can also look into how giving channels can play a role or how even less obvious stuff can be sold, including at very low prices. The motivation should not be to maximise revenues from sales by only selecting goods that can be sold at high(er) prices or that will almost certainly be sold.

4.1.2.2 Broader monitoring of reuse

In Flanders, reuse does not only take place through reuse shops, which is why the total reuse in Flanders of textiles, furniture, EEE and the category 'Other' (household goods, books, etc.) will also be monitored from now on. These product categories enter reuse through the reuse shops, but clearly also through other channels. Since 2021, the European Commission also requires three-yearly quantitative reports on total reuse.

Although it is currently impossible to perfectly measure the reuse of these items, estimates are useful. The same methodology will be used for this as in the [study by Delanoeije & Bachus \(2020\)](#), which is based on a citizen survey. According to this methodology, Flanders reported 34 kg of reuse per capita in 2021.

When considering the total reuse of consumer products, this includes both the formal channels (reuse shops, other shops, the Internet, etc.) and informal channels (flea markets, family and friends, giving platforms, etc.). We continue to monitor total reuse and make it grow. Setting a hard target is not recommended here because the government by no means has an impact on all channels and product groups and these channels do not always require government intervention. According to the study by Delanoeije & Bachus (2020), 30% of textile reuse is reported within the circle of family and friends. Again, it is being examined whether it would be possible over time to also express reuse in items.

Another interesting rate from the same study is the extent to which a second-hand purchase prevents a new purchase. Currently, this applies to only about 30% of second-hand purchases. Presumably, this is strongly related to the specific product group and the channels. Reused furniture, for instance, will

usually replace new furniture, but this is much less the case for textiles or household goods, for instance. Formal (pay) channels will also lead to more replacement than informal (free) channels. However, reuse is only effective as a prevention strategy if it actually replaces the purchase of new products.

Flanders shall monitor the reuse of consumer products as an indicator and, in particular, reuse that replaces new purchases.

4.1.3 Product-specific monitoring of prevention

Besides general monitoring, we also want to monitor prevention and reuse for a number of specific product groups. Without setting hard targets, we generally aim to reduce the production and consumption of these product groups. Over time, this could lay the foundations for moving towards real targets for prevention and reuse at product level, including, for example, in the context of EPR schemes (see also Title 5.2.1). We now first discuss the product-specific monitoring of prevention and after that of reuse.

By 2030, Flanders shall aim to decrease:

- the quantity of single-use plastic food containers placed on the market that are used for food products intended for immediate consumption (cf SUP Directive);*
- the quantity of single-use household packaging placed on the market (923,000 tonnes in 2020 reported for Belgium by the IRPC);*
- the quantity of single-use commercial packaging placed on the market (907,000 tonnes in 2020 reported for Belgium by the IRPC);*
- household textile waste.*

Article 4 of the SUP Directive requires single-use plastic food containers to be monitored and a measurable reduction in their consumption to be achieved by 2026. To comply with this requirement, we need to map how many of these products are placed on the market. The household packaging management body will have to provide the necessary data to that end in the future. In view of the next accreditation, Flanders will make sure that a possible shift to single-use alternatives composed of materials other than plastics is mapped and prevented as well. The SUP Directive also calls for a reduction in single-use plastic cups for beverages. Following the market ban on disposable plastic cups for beverages that was subsequently issued by the federal government ([RD of 9 December 2021 on single-use products](#)), a shift to single-use cups made of other materials must be equally prevented.

More generally, the ambition is to reduce the total amount of single-use packaging placed on the market. The aim is to not only achieve an overall decrease, but also a decrease by type of material. In 2020, 923 ktonnes of single-use household packaging and 907 ktonnes of single-use commercial packaging were placed on the Belgian market. A regional breakdown of this data is not available, but since packaging policy is very much coordinated at interregional level (through the IRPC), we assume that the different Regions follow the same trends.

Figure 3 shows an upward trend for both household and commercial packaging placed on the Belgian market. Commercial packaging experienced a temporary decline due to the 2009 banking crisis, but picked up again afterwards.



Figure 3: Evolution of the quantity of single-use packaging placed on the Belgian market (household, commercial, total) over the 2008-2020 period (2008 index) (Source: IRPC, Packaging Directive reporting).

When looking at the different packaging materials in Figure 4, we find that an upward trend is recorded for paper and cardboard, plastics, wood and, to a lesser extent, glass. The quantity of metal packaging and other packaging placed on the market (including cork, textiles, porcelain and composite packaging) decreased in the 2008-2019 period.

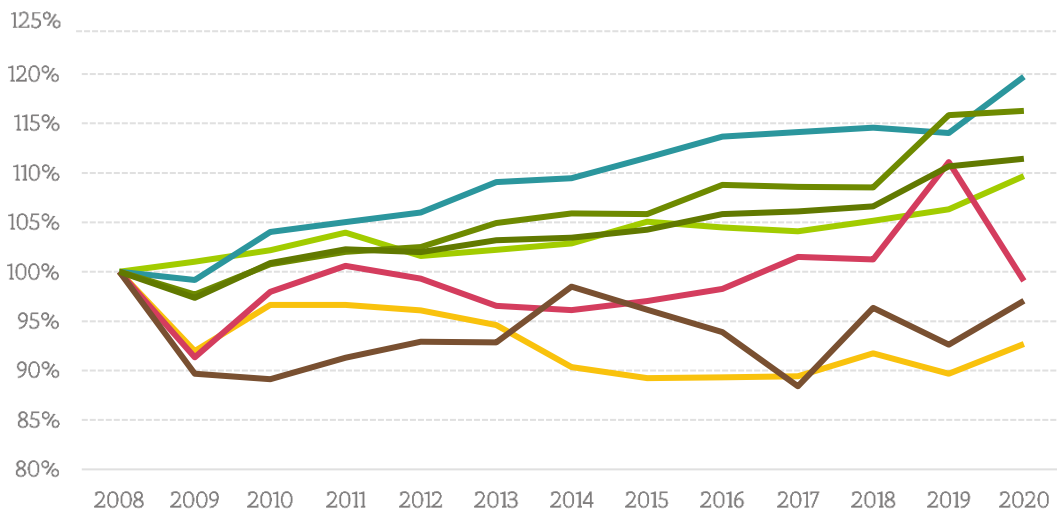
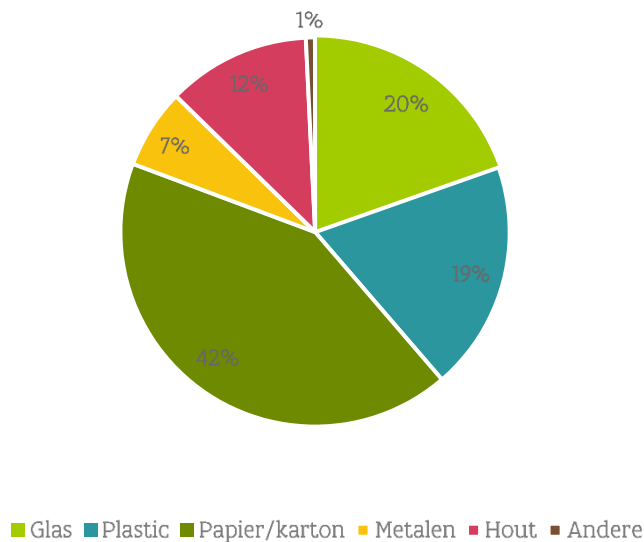


Figure 4: Evolution of the total quantity of single-use packaging placed on the Belgian market (household and commercial) over the 2008-2020 period (2008 index), broken down by material (Source: IRPC, Packaging Directive reporting).

When estimating trends by packaging material, the distribution between the materials is important as well. As shown in Figure 5, paper and cardboard represents the highest share in terms of weight percentage in the total quantity of packaging placed on the market (42%), followed by glass (20%), plastics (19%), wood (12%) and metals (7%). Other packaging is negligible.



Glas: Glass – Plastic: plastic – Papier/karton: paper/cardboard – Metalen: metals – Hout: wood – Andere: other

Figure 5: Shares of the different materials in the total quantity of single-use packaging (household and commercial) placed on the market in Belgium in 2019 (Source: IRPC, Packaging Directive reporting).

Besides a strong focus on packaging, we also want to monitor the prevention of household textile waste. This waste stream is becoming increasingly important and has a huge environmental impact. Since textiles are not subject to an EPR scheme (for now), no data is available on textiles placed on the market, which is why we are monitoring the amount of waste generated. Both separately collected textiles and textiles in residual waste are important in this context. The rate of the total amount of textile waste generated will be estimated at the beginning of the plan period. If additional rates will be available for textiles placed on the market within the framework of a future EPR scheme for textiles, those rates can also be monitored as an indicator of prevention.

4.1.4 Product-specific monitoring of reuse

We are monitoring a number of specific product groups for reuse as well. Currently, the policy aims for an overall increase in reuse and no product-specific policy is in place. In addition, the rates for reuse are merely projections. Nevertheless, the monitoring of specific product groups provides valuable information to further inform policy.

Flanders shall monitor the reuse of the following specific product groups throughout the plan period:

- furniture: reuse estimated at 12.99 kg/capita in 2021*
- household textiles: reuse estimated at 4.32 kg/capita in 2021*
- electrical and electronic equipment: reuse estimated at 2.88 kg/capita in 2021*
- household goods+ (household goods, books, multimedia, etc.): reuse estimated at 13.70 kg/capita in 2021*

We can monitor these consumer products through the methodology used in the aforementioned study by Delanoeije & Bachus (2020). For products such as furniture, EEE and household goods (including books), it makes more sense to monitor their reuse rather than prevention indicators, such as the amount of waste generated by these product groups, as it concerns so-called 'slow' waste streams. Policy measures to extend the lifespan or make furniture more easily repairable only have effect after several years. A prevention target for the amount of furniture in the waste phase is therefore not so relevant during the plan period. Textiles are a bit of an oddity. It is a waste stream that perfectly lends itself to reuse and is therefore definitely worth monitoring in this context. Moreover, owing to the trend of fast fashion, textiles reach their end of life increasingly quickly and are not a 'slow waste stream', which means that prevention measures can still have effect during the plan period. Also, textile reuse certainly does not always involve replacing a new purchase. It therefore makes perfect sense to monitor both the prevention and reuse of textiles so as to get an overall picture of the waste stream. For this reason, textiles are being monitored within the context of both the product-specific prevention indicators and the reuse indicators.

4.2 ACTUAL RECYCLING TARGETS

Waste that cannot be prevented (for now) should obviously be collected as correctly as possible for the purpose of recycling. What is new in this implementation plan is that we will be monitoring the actual recycling of municipal waste from now on. Separate collection is not an end in itself, but should lead to high-performance

and high-quality recycling. It is therefore important to better monitor collected waste streams down to treatment level. The focus is thus no longer just on reducing residual waste, but also on improving recycling itself. This fits within Flanders' policy vision, but is also a consequence of European expectations. Flanders has copied the targets for municipal waste recycling from the European Framework Directive in this Local Materials Plan.

Flanders shall achieve the following recycling rates for municipal waste relative to the amount collected:

- 55% recycling by 2025
- 60% recycling by 2030
- 65% recycling by 2035

The European definition of municipal waste (copied in the Materials Decree) is very much in line with the scope of this implementation plan and roughly equals the sum of household waste and comparable and similar company waste. In 2021, 68.3% of household and comparable company waste was delivered to a facility for purposes of recycling or composting. However, the European Commission adapted a number of definitions and calculation rules to calculate these new targets. We will from now on base ourselves on these European rules for the monitoring of targets. Based on the new calculation rules and if we also consider similar company waste, the recycling rate for municipal waste is estimated at 56% for the year 2020. This means that the 2025 target should normally be achieved, but additional efforts are still required to meet the 2030 and 2035 targets.

The European Packaging Directive contains separate targets specifically for packaging, which were translated and partly refined in the [Interregional Cooperation Agreement on Packaging Waste \(Interregionaal Samenwerkingsakkoord Verpakkingen/ISA\)](#). The ISA states that, by 2021, a 90% recycling rate by weight must be achieved for packaging made of glass, paper/cardboard, beverage cartons and ferrous metals. The rates for aluminium and wood packaging are 75% and 80%. The 2020 figures (IRPC, 2022) show that all these targets are easily met, with the exception of beverage cartons. This is due to the fact that the new European calculation rules have a great impact on this packaging material. This can be explained, among other things, by the relatively high degree of product residues in beverage cartons and because the polyaluminium fraction is often not recycled. In the context of the 2023-2030 plan period, however, the plastic packaging targets in particular are relevant. By 2021, 50% of plastic packaging had to be recycled by weight, which should be achievable based on the 2020 rates (46% for household and 59% for commercial plastic packaging). ISA sets even higher rates for this waste stream by 2023 and 2030, which still present a great challenge during the plan period:

65% of household plastic packaging shall be recycled from 2023 onwards. This rate shall be increased to 70% by 2030. 55% of commercial plastic packaging shall be recycled from 2023 onwards. This

rate shall be increased to 65% by 2030.

MATIS, i.e. OVAM's new materials information system launched in late 2021, collects the required data from the collection of municipal waste up to the input into the recycling process. By the end of the plan period, MATIS will expand to include waste streams outside of municipal waste (industrial production waste, construction and demolition waste, etc.). As a result, more questions about recycling may possibly be answered.

Composition analyses (see Figures 6 and 7) show that residual waste from households and companies still contains a lot of recyclable waste. For this reason, the Government of Flanders put forward a target in the energy and climate plan to reduce the recyclable fractions in residual waste. We have copied that target here as well:

The amount of recyclable waste in residual waste shall decrease by 75% by 2030.

We measure this target against the latest composition analyses carried out for household and commercial residual waste. However, this target should not result in a shift of non-recyclable material to the separate fractions, but should lead to the actual recycling of this waste. In that context, the figures below show the huge importance of the biowaste fraction in household waste (Figure 6) and (to a lesser extent) in mixed company waste (Figure 7). Although good recycling options are available, biowaste still appears to be very much present in residual waste, which is why this implementation plan devotes much attention to this waste stream.



Figure 6: Results of the 2019-2021 household residual waste composition analysis

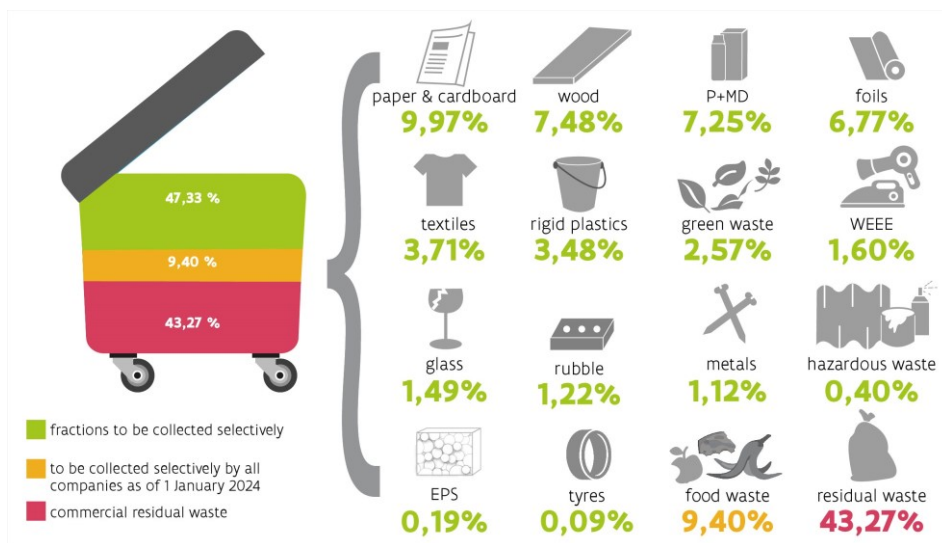


Figure 7: Results of mixed company waste rolling containers, 2022 composition analysis

4.3 MIXED HOUSEHOLD WASTE TARGETS

4.3.1 Flanders' ambition

The previous implementation plan pursued the ambition to reduce mixed household waste (including comparable mixed company waste collected through the household circuit) at the Flemish level from 155 kg per capita in 2014 to 138 kg by the end of 2022. This represented a decrease of about 11%. The amount of waste dropped year after year. In 2019, it amounted to 143.5 kg per capita. In 2020, however, residual waste suddenly rose sharply to 147 kg per capita. There may have been a COVID-19 effect at play, with a boom in at-home consumption. In 2021, residual waste took another strong dive, bringing the latest rate at 140 kg per capita and putting the 2022 target in sight. A final evaluation of the residual waste targets (including per municipality) will be carried out in 2023.

The Flemish Energy and Climate Plan further raised the level of ambition for the reduction of mixed household waste. The Government of Flanders decided that the rate should continue to drop to 100 kg per capita by 2030. To achieve that, residual waste must decline linearly by 4.7 kg per capita every year from 2020 onwards. The level of ambition of this target is not to be underestimated, as it represents a decrease of more than 30% compared to the 2018-2020 period.

Mixed household waste, including comparable mixed company waste collected through the household circuit, shall drop to 100 kg per capita at the Flemish level by the end of 2030.

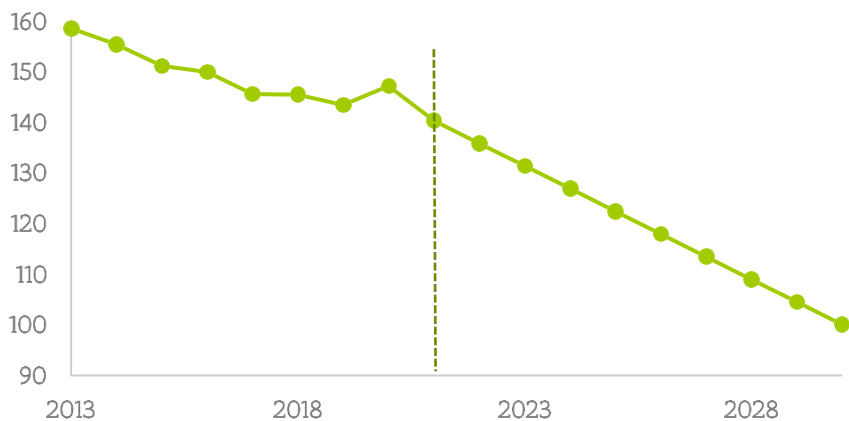


Figure 8: Pathway towards 100 kg of mixed household waste per resident of Flanders

4.3.2 Classification of municipalities

Because of the socio-economic profile or demographic factors, municipality A may produce more residual waste per capita than municipality B, despite the fact that they pursue a similar policy. The target of 100 kg per capita by 2030 is therefore not feasible for every municipality. Some municipalities will achieve a lower rate, while others may perform slightly better. This is another aspect of the customisation that is the basic principle in this plan.

This problem has been dealt with in various ways throughout the years. In the pre-2016 period, one single residual waste target was put in place for each municipality. However, a rather complex system of local correction factors existed. Because this system led to many discussions and made benchmarking between municipalities difficult, a more objective classification of municipalities was chosen in 2016, i.e. the Belfius clusters. Local authorities were very familiar with this system. This classification, developed by Belfius Bank, relies on an extensive set of socio-economic and demographic factors to break down Flanders into 16 clusters of similar municipalities.

An important step forward was taken thanks to the Belfius clusters. The clusters not only offered customisation based on a municipality's profile, but also made it much easier to benchmark comparable municipalities against each other. It was clear from the early onset of the plan that the relevance of the Belfius classification for municipalities' residual waste generation needed to be further examined and evaluated. Together with the global evaluation of the implementation plan in 2020, a comprehensive statistical analysis was therefore conducted of this classification.

The analysis again showed that setting the same residual waste target for all Flemish municipalities is not a good idea. The differences between the municipalities must be taken into account. On the other hand, the analysis also revealed that the Belfius classification into clusters is too far-reaching to still be relevant for the residual waste rate.

Although many clusters have a different socio-economic or demographic profile, this does not justify a statistical difference in the residual waste rate. For other clusters, it does. The clusters with statistical relevance for the residual waste rate are clusters 15 (large and regional cities), 16 (coastal municipalities) and 9 (municipalities in the urban periphery with economic activity and an increasing number of young people). The statistical significance of the other clusters disappears following a correction for a number of policy variables. In cluster 9, the urban peripherality probably mainly plays a role. However, there are municipalities in the other clusters as well that are also on the periphery of a city, but where the effect disappears because they are in a cluster with fewer urban municipalities. Therefore, we only retain clusters 15 and 16 and a ‘main cluster’ with all the other municipalities. Still, when assessing their residual waste rates, we will take into account the extent to which a municipality is located near a (major) city.

During the previous plan period we asked Belfius Bank for an even more far-reaching, substantiated subdivision of the large and regional cities for cluster 15, because the cities were still too different in terms of waste policy. This resulted in three separate sub-clusters. In reality, that subdivision raised even more questions instead of contributing to a logical breakdown of efforts. In fact, Flanders has only two really big cities with populations over 200,000, namely Antwerp and Ghent, which are also faced with the typical metropolitan issues that affect waste policy. Bruges has an additional specific problem of millions of tourists contributing to residual waste generation every year. Antwerp, Ghent and Bruges are therefore considered separately from the other cities in cluster 15 from now on.

Ostend is a specific case. As a city it was part of cluster 15 in the Belfius classification. However, Ostend is also situated on the coast. Since both coastal tourism (especially second-home owners) and Ostend’s urban character play to its disadvantage in keeping its residual waste rate under control, we have decided to move Ostend from cluster 15 (cities) to cluster 16 (coastal municipalities) for the present plan period. The evaluation study of the Belfius clusters also presented this as a logical choice. Table 1 summarises the new classification in municipalities for mixed household waste targets applied during this plan period.

Main cluster	All municipalities outside clusters 15 and 16
Cluster 15A	Antwerp
	Ghent
Cluster 15B	Bruges
	Aalst
	Genk
	Hasselt
	Kortrijk
	Leuven
	Mechelen

Cluster 16: coastal municipalities	Roeselare
	Sint-Niklaas
	Turnhout
	Blankenberge
	Bredene
	De Haan
	De Panne
	Knokke-Heist
	Koksijde
	Middelkerke
Nieuwpoort	
Ostend	

Table 1: Renewed classification of municipalities for mixed household waste targets

4.3.3 Residual waste target by municipality

We can set a residual waste target for each cluster based on the level of ambition at the Flemish level on the one hand and an optimised classification of municipalities on the other. During the previous plan period we used the median within the cluster for this. This is no longer possible, given the high level of ambition of Flanders' residual waste target in 2030. To reach 100 kg per capita by 2030 at the Flemish level, we must reduce residual waste by around 30%. We take the planning target from the previous period as the starting point, because the fact remains that if half of the municipalities within one cluster managed to achieve a specific residual waste rate, it means this was a realistic target for all the municipalities within that cluster.

We therefore choose to impose on clusters 15a, 15b and 16 the cluster target of decreasing the residual waste rate by 30% compared to the respective targets from the previous 2016-2022 implementation plan. The main cluster is an amalgamation of several clusters from the previous plan that had different targets at the time. You can therefore not simply assume that a 30% reduction will be achieved. We make sure, however, that the target of the municipalities in the main cluster remains within a range of between a (rounded) 20% and 40% decrease compared to their target from the previous plan. Furthermore, the main cluster's target is determined on the basis of the fact that we should finally arrive at 100 kg of residual waste per resident of Flanders by 2030.

By using the target from the previous plan period as the basis, we make sure that municipalities reap the benefits of their past efforts. Consequently, municipalities that did not meet their targets during the previous plan period will have to do better than a 30% reduction.

Municipalities will be able to achieve part of the reduction in the residual waste rate thanks to actions at the Flemish level. Those actions originate from this and other plans for which the responsibility lies very much with the Flemish authorities and which have an impact on the residual waste rate of each municipality. We selected the following actions on which we base this 'Flemish share':

- Action 23: acceptance obligation for disposable diapers and separate collection from households (-5.6 kg)
- Action 38: Introduction of EPR schemes on new product groups, especially textiles (-3 kg)
- Several food loss prevention initiatives from the action plan 'Food Loss and Biomass (Residual) Waste streams' (-2.37 kg)

The reductions in kilograms are estimated in the plan-EIR (see Annex 10). The sum of the three actions is 11 kg. We assume that a further reduction of at least 2 kg can be achieved through a series of other actions at the Flemish level, some of which are also calculated in the plan-EIR (including optimisations at reuse shops, the adaptation of the incineration ban and the possible realisation of an EPR scheme for furniture). We therefore set the 'Flemish share' at 13 kg.

Municipalities themselves must thus take the necessary actions to meet their cluster target, minus the 13 kg achieved through actions at the Flemish level. That additional 13 kg is explicitly linked to the realisation of a number of actions promoted by the Flemish authorities. As a result, the municipalities must only achieve the final 13 kg reduction, if the above (or equivalent) actions have actually been implemented at the Flemish level by the end of the plan period.

Some municipalities today already have a very good residual waste rate compared to the other municipalities within their cluster. Municipalities whose residual waste rate was maximum 13 kg above the cluster target in 2020 are expected to at least retain their 2020 residual waste rate and achieve the minimum reduction of 13 kg (subject to the implementation of actions at the Flemish level).

The above methodology (including the reduction of 13 kg at Flemish level) leads to the below mentioned final cluster targets by 2030 for the reduction of mixed household waste and comparable mixed company waste collected through household channels:

Per capita target by 2030:

- *Main cluster: all the municipalities outside Clusters 15 and 16: 90 kg*
- *Large and regional cities (Cluster 15A): 135 kg*
- *Large and regional cities (Cluster 15B): 111 kg*
- *Coastal municipalities (Cluster 16): 181 kg*

The above cluster target is not relevant for 53 municipalities that already have very high scores. They must initially retain their residual waste rate at the same level and reduce it by at least 13 kg per capita by 2030 compared to 2020 (Flemish share).

All other municipalities that achieve a decrease in their residual waste rate to below this target during the plan period must also keep their residual waste rate at the same level.

Annex 3 provides a general overview, listing all the Flemish municipalities and the residual waste rate that each of them must achieve by 2030 for each cluster. It is also indicated for each municipality whether the regular cluster target or the municipality's own target applies. In addition, the annex offers greater insight into the calculation. If all the municipalities meet their target, we will reach 100 kg of residual waste per capita at the Flemish level. When monitoring local residual waste targets, not only the hard result will be looked at, but the efforts of local authorities and any specific local factors (e.g. influence of a nearby metropolis) will be taken into regard as well. See also Title 6.6.

Another important adjustment compared to the previous implementation plan is that the litter cleared and the separately collected waste from fly-tipping no longer count towards the municipal residual waste target. This is a logical adjustment for separately collected fly-tipped waste, as it is not residual waste. The litter cleared (including the proportion of sweepings regarded as litter) is excluded to avoid perverse effects. It would be wrong to punish a local authority that has a higher residual waste rate because it wants to keep its streets clean by clearing litter.

OVAM measures Flemish mixed household waste by asking to report the quantities of waste collected. From now on, local authorities, management bodies and private partners do so quarterly in MATIS. As a result, separately collected fly-tipped waste will automatically disappear from the residual waste rate when it is sorted out at the civic amenity site or when a separately collected fraction is sent to a processor. Municipalities must record the quantities of litter cleared separately and report them annually (see Chapter 10), so that they can be removed from the residual waste rate.

However, this litter still exists even when it is removed from the municipal residual waste target, which is why it is still included in the calculation of the total mixed household waste rate for Flanders. It goes without saying that policies to reduce litter continue to be important throughout Flanders, and local authorities have a prominent role to play in this (see Chapter 10) as well. In practice, however, the impact on the total residual waste rate will be very limited, as it represents only a small proportion of mixed household waste. The residual waste rate is driven almost entirely by household and bulky waste.

4.3.4 Residual waste target by intermunicipal partnership

It was a deliberate choice to impose bespoke residual waste targets on the municipalities. A big city is simply not comparable to a small rural municipality. On the other hand, most local authorities cooperate within a waste intermunicipal partnership to implement their waste policy.

The evaluation of the previous implementation plan showed that a number of waste intermunicipal partnerships argued in favour of setting a target per intermunicipal partnership rather than a target per municipality. This makes sense for waste intermunicipal partnerships in which the municipalities have made a major management transfer and waste policy is coordinated within the intermunicipal partnership. It is asked to be able to make the target 'solidarity-based' in such cases.

We want to enable customisation here as well. This may indeed be a useful approach in some waste intermunicipal partnerships. Table 2 shows the target for each waste intermunicipal partnership. This target was arrived at on the basis of the population-weighted average of the targets of each municipality within the intermunicipal partnership.

The participating municipalities of an intermunicipal partnership may opt to replace their individual targets with the target at intermunicipal level. They have to officially notify OVAM of this. The following conditions apply:

- The application must be made in the first two years of the plan period.
- All the municipalities of the intermunicipal partnership must approve the decision ‘to make the target solidarity-based’ and sign the application.
- The intermunicipal partnership must submit a clear policy plan to OVAM, indicating the policy measures it will take to achieve the intermunicipal target. This may be part of the existing business plan or be an amendment to it.
- The submitted policy plan must contain a clear vision that is supported by all the municipalities regarding the use of the main policy tools that affect the residual waste target, such as pricing and the collection frequencies of the different waste streams. In doing so, harmonisation is aimed at across the territory of the intermunicipal partnership. A management transfer should also take place to some extent for the operational tasks regarding the local waste policy. This not only places the responsibility for the target with the intermunicipal partnership, but also gives it the actual tools to achieve this target.

OVAM will assess whether the above requirements have been met and, based on that, give its approval (or not) to make the target ‘solidarity-based’. In that case, the target stated in Annex 3 for these municipalities lapses and is replaced by the target at intermunicipal level stated in Table 2. That target must then only be met at the intermunicipal level and not by each separate municipality. Still, this does not alter the fact that all the municipalities are bound to meet this target together at the intermunicipal level.

Intermunicipal partnership	Residual waste target in kg/capita by 2030
Aarschot	90
Antwerp	135
EcoWerf	83
IBOGEM cvba	90
IDM	90
IGEAN milieu & veiligheid	90

ILvA i.g.s.	95
IMOG	97
INCOVO	90
INTERRAND	90
INTERZA	90
Intradura	90
IOK Afvalbeheer	88
IVAGO	132
IVAREM	96
IVBO	125
IVIO	90
IVLA	90
IVM	90
IVOO	158
IVVO	117
Knokke-Heist	181
Limburg.net	93
MIROM Menen	90
MIROM Roeselare	97
MIWA	87
Sint-Genesius-Rode	90
VERKO	90

Table 2: Intermunicipal mixed household waste target by 2030

4.3.5 Adjustment of targets throughout the plan period

Halfway the previous plan period, Belfius Bank reviewed its classification, resulting in a recalculation of the municipalities' targets as well. This required an adjustment to the plan, with the entire official procedure having to be completed again, including a new public consultation. To prevent this from happening during the present plan period, we anticipate expected evolutions that could again have such an impact.

The Belfius classification is reviewed every ten years. A new adjustment is expected in 2028. The current plan period runs until mid-2030, which means adjustments will only be relevant for a short period of time. Moreover, only adjustments to clusters 15 and 16 are of importance. Because adjustments to these clusters are very unlikely, we will not take into account any reclassification of the Belfius clusters nor will we adjust the residual waste target accordingly.

There are other issues, however, that may affect the residual waste target of municipalities and intermunicipal partnerships. These are mainly administrative reforms at the local level. For instance, there is the evolution towards mergers of municipalities. It is very likely that new municipal mergers will take place during the next plan period as well. A merger between Tongeren and Borgloon, for instance, is planned by 2025.

Ham and Tessenderlo have also expressed a desire to merge, and Borsbeek wishes to join Antwerp. In such a case, a new target automatically enters into force for the merged municipality, which is calculated on the basis of the population-weighted average of the targets of the original municipalities.

Such mergers between municipalities may affect the boundaries of a waste intermunicipal partnership. However, there may be other reasons why a municipality decides to leave its waste intermunicipal partnership or join a new one. If, for whatever reason, the boundaries of a waste intermunicipal partnership change throughout the plan period, the target is automatically recalculated at intermunicipal level. This is done on the basis of the new weighted average of the individual targets of the different municipalities belonging to the renewed intermunicipal partnership. If (certain) municipalities had decided within their original intermunicipal partnership to make their individual residual waste targets solidarity-based and to set a binding intermunicipal target instead, that choice will have to be reaffirmed in accordance with the newly calculated intermunicipal target. Again, it suffices to submit an official notification to OVAM, signed by all the participating municipalities of the intermunicipal partnership, including the new municipalities. Until this notification, all the municipalities fall back on the individual municipal targets stated in Annex 3.

4.4 MIXED COMPANY WASTE TARGETS

The previous implementation plan put forward a 15% reduction for mixed company waste by 2022 compared to 2013. Mixed company waste continued to rise, however, until 2019. The total amount of mixed company waste was estimated at 951,903 tonnes in 2018 and 947,643 tonnes in 2019. Several policy initiatives were taken during the 2019-2022 period, including stricter regulations on collection and an increase in levies on the incineration of mixed waste from companies. In 2020, the amount of mixed company waste fell to 886,885 tonnes for the first time in a long time. However, the COVID-19 pandemic also struck that year, which had a severe impact. 2021 was another COVID-19 year, yet with significantly shorter and less severe lockdowns. Nevertheless, mixed company waste continued to drop to 871,967 tonnes (provisional figure). The measures from the previous plan thus seem to be having an effect, which will normally continue to last. The impact of the increased levies on (mixed) company waste to be incinerated, for example, will only become visible in the 2022 figure. Nevertheless, there is still great potential to further reduce mixed waste, and more efforts are needed.

We also base our target to further reduce mixed company waste on the Flemish Energy and Climate Plan 2021-2030. That plan aims to reduce mixed company waste by a 'percentage similar' to that of mixed household waste, where some 30% must be reduced compared to the 2018-2020 period in order to reach 100 kg per capita. For this reason, the following target is put forward for commercial residual waste:

Mixed company waste shall decrease by 30% by 2030 compared to the 2018-2020 period.

To achieve a 30% reduction compared to the average residual waste rate of the years 2018, 2019 and 2020 (928,810 tonnes), mixed company waste must be reduced by 278,643 tonnes. We will then arrive at 650.167 tonnes of residual waste by 2030. Mixed company waste is being monitored provisionally on the basis of the rates that Valipac must report within the framework of its accreditation. Monitoring will take place through the MATIS monitoring system, as soon as that system has been finalised. At the beginning of the plan period, this different way of monitoring may give rise to shifts in rates that are independent of actual shifts. We take this into account when reporting on the target.

So far, only residual waste collection has been monitored. Due to the new rules on mixed company waste collection and treatment in the VLAREMA 8 legislation, a number of actors from the sector are currently investing in post-sorting of commercial residual waste. We need to map these quantities as well. Waste that is still removed from residual waste through post-sorting and does not have to undergo final treatment can then be counted towards meeting the 30% target. OVAM will examine how these quantities can be counted reliably. This may involve additional reporting obligations for waste sector actors.

ACTION 2: OVAM will map the quantities of waste that are post-sorted from mixed company waste and do not undergo final treatment, in order to consider them towards the mixed company waste target. OVAM is examining the best way to do so and will legally embed additional reporting obligations for this purpose, if necessary.

The general target may also be supplemented by sectoral targets during the plan period, following consultation with sector federations. Such sectoral targets can serve as guidance for new initiatives.

This plan sets separate targets for mixed household waste and commercial residual waste, because it concerns separate collection circuits and because the policy tools are different. Nevertheless, the targets may be affected by shifts between the two circuits. To detect such shifts, OVAM always considers the total residual waste rate (household and mixed company waste combined) during monitoring. In addition, residual waste targets can also be influenced by unintentional shifts to separately collected waste streams. This happens when citizens or companies dispose of non-recyclable waste with the separately collected waste streams (e.g. to avoid higher tariffs) in contravention of the sorting message. This is obviously not the way to reduce residual waste rates. That is why, during the plan period, OVAM will also pay attention to the monitoring of non-recyclable residue collected from separately collected waste streams for various streams.

4.5 FINAL TREATMENT TARGETS

Policies around prevention, separate collection and recycling should ensure that as little waste as possible is sent for final treatment. This means that Flanders should prepare for a phase-out of

waste incineration. Nevertheless, there will still be waste that cannot be prevented or recycled during this plan period and which should subsequently be incinerated responsibly or, if there is no other option, be landfilled. That is why a separate policy on final treatment with its own targets still features largely in this Local Materials Plan. The targets for this policy are rather qualitative in nature and are explained here.

As long as there is still waste to incinerate, the capacity we maintain should be as efficient as possible with minimal environmental impact. Other criteria also play a role in the assessment of incineration capacity, e.g. technological advancements, geographical spread, mobility, etc. The Flemish Energy and Climate Plan states above all that greenhouse gas emissions from waste incineration in Flanders must fall by 25% by 2030¹, in connection with the planned reduction in the quantity of residual waste that is presented for incineration.

Greenhouse gas emissions from waste incineration in Flanders shall fall by 25% by 2030 compared to 2017.

Waste incineration capacity follows the amount of residual waste and recycling residues generated in Flanders. Only when the quantity of combustible waste presented in Flanders has declined structurally will the waste incineration capacity be proportionally phased out. This is how we prevent both capacity shortages and structural overcapacity. Furthermore, Flanders should retain sufficient capacity of its own, even for waste not covered by the principle of self-sufficiency, and not become too dependent on capacity outside of Flanders.

The available quantity of combustible waste presented and the incineration capacity shall remain in balance during the plan period.

Landfill capacity also continues to be aligned with the quantity presented. According to the European Waste Framework Directive and the Materials Decree, landfilling remains the least desirable method of final treatment. Nevertheless, landfills are still the necessary final step for waste for which landfilling is the most appropriate treatment option from an environmental point of view. Landfilling is still necessary specifically for non-recyclable, non-combustible waste and in the event of emergencies. We continue work on the phase-out of other (combustible) waste that is still being landfilled today. Waste is therefore only landfilled when absolutely necessary, in line with the treatment hierarchy.

¹ The Flemish Energy and Climate Plan (VEKP) estimates the total greenhouse gas emissions from the waste sector at 2.3 Mt CO₂ eq. on the basis of data from 2017. Waste incineration represents 58% of emissions, which is the largest share and corresponds to 1.3 Mt CO₂ eq. A 25% reduction corresponds to a (rounded) maximum of 1Mt CO₂ eq. in 2030. As the VEKP starts from data from 2017, the Local Materials Plan (LMP) also uses it as reference year for the target.

4.6 AVOIDANCE BEHAVIOUR TARGETS

Despite the well-developed waste system in Flanders, there are unfortunately still types of avoidance behaviour, with citizens (consciously or unconsciously) avoiding the existing collection channels. This involves littering and fly-tipping.

As far as litter is concerned, both the amount of litter cleared and the number of pieces of litter on the ground are being monitored. The amount of litter cleared is strongly influenced by the clearance frequency. If litter is cleared less frequently, one could get the impression that the litter situation has improved. That is why the number of pieces of litter on the ground are being monitored as well. This gives an idea of the state of cleanliness in certain locations, which is also affected by clearing operations, albeit in a different way. In this case, the timing of the count may have an impact. If counting is done just after clearing, less litter will be found. The combination of both indicators is therefore needed to obtain a good overall picture of the litter situation. Targets are linked to both indicators.

The following target applies to the quantities cleared:

The total amount of litter cleared from the ground shall decrease by at least 20% by 2030 compared to 2023.

The above target concerns the amount of litter cleared from the ground on an annual basis by local authorities, provinces and Flemish public sector bodies, measured by weight. Until 2022, this was estimated through extrapolation based on a survey of a sample of municipalities. The quantities reported by the Flemish public sector bodies and provinces were then added to this. As of 2023, this plan requires all those actors to annually register through an online questionnaire that is used at the beginning of each year to request data on the previous year. The 2023 data will be available as baseline measurement in the first half of 2024².

Because of the major changes that are in the pipeline with regard to the litter policy, and in particular the introduction of the deposit refund scheme (see Chapter 10), it is as yet unclear whether the above target is ambitious enough. For this reason, special attention will be devoted to this specific target in the mid-term review of the Local Materials Plan (see Chapter 11), and it will be examined whether the target can be tightened up.

As far as the number of pieces is concerned, the following target is put forward:

² To get an idea of the order of magnitude of litter quantities, the estimated quantities of litter cleared for the years 2015 through 2021 are listed here: 2015: 20,400 tonnes; 2017: 20,448 tonnes; 2019: 22,641 tonnes; 2021: 18,171 tonnes.

The number of pieces of litter per 100 m² for the following type environments shall decrease by 20% by 2030 compared to 2023:

- *motorway car parks*
- *waste collection points*
- *public transport stops*
- *main structural roads*
- *centre streets*
- *pedestrian shopping streets.*

For all other type environments measured, the number of pieces of litter per 100 m² shall not increase significantly by 2030 compared to 2023.

This target provides an insight into the cleanliness of Flanders. This is determined through an annual count of the number of pieces of litter in the public domain. A sample in the different type environments is used as basis for the measurement. This methodology was tested in 2022. To have a solid foundation, 2023 is therefore used as reference year. The data from this baseline measurement will be available in spring 2024³.

It goes without saying that Flanders also aims to reduce fly-tipping. However, this implementation plan does not include a concrete target for this because the quality of the fly-tipping data is not consistent enough. To increase the data quality to the point where meaningful targets can be linked to it would require big adjustments to be made and huge costs to be incurred. OVAM, in consultation with the local authorities, will explore during the plan period to what extent a separate registration and reporting of the amount of fly-tipping is feasible.

Action 3: OVAM and the local authorities jointly examine the feasibility of a separate registration and reporting of the amount of fly-tips cleared.

We already expect local authorities to submit reports, specifically on the amount of waste fly-tipped at textile containers. Currently, some local authorities do, whereas others do not. We are aiming for harmonisation in this context. There are three possible scenarios:

- In a first scenario, the municipality itself clears the fly-tip around the containers. In this case, the municipality registers the fly-tip in MATIS under the code 'GE_vuil' (GE_garbage). The textile collector registers the textiles in MATIS (code TT).

³To get an idea of the number of pieces of litter per type environment, the medians of the values for the years 2017-2020 are listed here. These values are based on an analysis of litter counts that were part of the former Cleanliness Index score, corrected for the measurement method. The results are not available per surface area but per running metre of measurements carried out according to the methodology of the Cleanliness Index.

Motorway car parks: 106 pieces per 100 m; waste collection points: 74 pieces per 100 m; public transport stops: 56 pieces per 100 m; main structural roads: 41 pieces per 100 m; centre streets: 41 pieces per 100 m; pedestrian shopping streets: 40 pieces per 100 m.

- In a second scenario, the collector clears the fly-tip, but takes it to the civic amenity site or a municipal depot. In this case, the municipality also registers the fly-tip in MATIS under the code 'GE_vuil'. The textile collector registers the textiles in MATIS (code TT).
- In a third scenario, the collector itself clears the fly-tip. In this case, the collector registers both the textiles (code TT) and the fly-tip (code 'GE_vuil') in MATIS.

The fly-tip that is in the container and is already sorted out at the site of the textile container is registered by the municipality or textile collector (depending on the above scenarios) under the code 'GE_vuil'. If the fly-tip in the container is transported, together with the textiles, to a treatment site for sorting, the textile collector registers this fly-tip together with the textiles under the code TT. The treatment site will therefore also have to register its incoming and outgoing waste and material streams in MATIS.

In scenario 3, OVAM assigns the rights to register the collection of fly-tips in MATIS under the code 'GE_vuil' to the collector. The municipality can always check what collectors have registered in MATIS for their municipality.

In the first two scenarios, the municipality can also separately collect/dispose of the fly-tip that belongs to a separate fraction. In this case, the municipality does not register that fly-tip under the code 'GE_vuil', but under the specific waste code for separate waste collection. That fly-tip is not counted towards the residual waste rates (see also Title 4.3.3).

In the first two scenarios, the fly-tip can be disposed of together with household waste or bulky waste. In this case, the municipality does not have to register the fly-tip separately as 'GE_vuil', but as part of the household or bulky waste collection. This is of course counted in the residual waste rates.

4.7 OVERVIEW AND MONITORING OF TARGETS AND INDICATORS

Table 3 provides a complete overview of all targets and indicators covered in this fourth chapter. It is also indicated how each target or indicator will be monitored.

TARGETS AND INDICATORS	Monitoring
Prevention and reuse	
<i>The total amount of waste generated in Flanders shall remain at least stable at 2,376,000 tonnes of household waste and 1,956,000 tonnes of similar company waste by 2030. Preferably, an absolute decrease is even achieved.</i>	Monitoring through Valipac and MATIS
<i>The reuse shops shall achieve 8 kg of reuse per capita by 2030.</i>	Data from Herw!n
<i>Reuse shops shall continuously achieve an average reuse rate of 50% for collected goods during the plan period, except for EEE.</i>	Data from Herw!n
<i>Flanders shall monitor the reuse of consumer products as an indicator and, in particular, reuse that replaces new purchases.</i>	Methodology of Delanoeije & Bachus (2020)
<i>By 2030, Flanders shall aim to decrease the quantity of single-use plastic food containers placed on the market that are used for food products intended for immediate consumption (cf SUP Directive).</i>	Methodology established by the European Commission within the framework of the SUP Directive.
<i>By 2030, Flanders shall aim to decrease single-use household and commercial packaging placed on the market in its totality and by material type.</i>	Data from IRPC
<i>Flanders shall aim to decrease the total amount of household textile waste by 2030.</i>	Sum of separately collected textiles and textiles in residual waste based on composition analyses.
<i>The total reuse of furniture, textiles, EEE and household goods+ is monitored as an indicator.</i>	Methodology of Delanoeije & Bachus (2020)

Recycling	
<i>55% of municipal waste collected shall be actually recycled by 2025, 60% by 2030 and 65% by 2035.</i>	Methodology established by the European Commission, monitoring through Valipac, MATIS and other sources
<i>65% of household plastic packaging shall be recycled from 2023 onwards. This rate shall be increased to 70% by 2030. 55% of commercial plastic packaging shall be recycled from 2023 onwards. This rate shall be increased to 65% by 2030.</i>	Monitoring through reporting by Fost Plus, Valipac and individual parties responsible for packaging to the IRPC, which carries out inspections
<i>The amount of recyclable waste in residual waste shall decrease by 75% by 2030.</i>	Estimate based on composition analyses for household waste, mixed company waste and bulky waste
Mixed household waste and comparable mixed company waste	
<i>Mixed household waste, including comparable mixed company waste shall drop to 100 kg per capita at the Flemish level by the end of 2030.</i>	Monitoring of the collected quantities through MATIS
<i>Individual reduction targets for mixed household waste, including comparable mixed company waste, for each Flemish municipality, to be realised by 2030</i>	Monitoring of the collected quantities through MATIS
<i>Reduction target per intermunicipal partnership for mixed household waste, including comparable mixed company waste, to be achieved by 2030.</i>	Monitoring of the collected quantities through MATIS
Similar mixed company waste	
<i>Mixed company waste shall decrease by 30% by 2030 compared to the 2018-2020 period.</i>	Monitoring of collected quantities through Valipac data and/or MATIS
Final treatment	
<i>Greenhouse gas emissions from waste incineration in Flanders shall fall by 25% by 2030 compared to 2017.</i>	Monitoring of the quantity presented on the basis of environmental tax returns, reports 'Tariffs and Capacities'
<i>The quantity of combustible waste presented and the incineration capacity shall remain in balance during the plan period.</i>	Monitoring of the quantity presented on the basis of environmental tax returns and of capacity on the basis of permits, reports 'Tariffs and Capacities'

Avoidance behaviour	
<i>The total amount of litter cleared from the ground shall decrease by at least 20% by 2030 compared to 2023.</i>	Annual reporting by municipalities, provinces and relevant Flemish public sector bodies
<i>The number of pieces of litter per 100 m2 for 6 major type environments shall decrease by 20% by 2030 compared to 2023. There shall be at least no significant increase for other measured type environments.</i>	Counts in the public domain, contracted out through a study by OVAM

Table 3: Overview of all the targets and indicators of the implementation plan and the envisaged monitoring

OVAM is developing a new digital registration system for waste generation and treatment (MATIS). Several targets and indicators will be better monitored during this plan period as a result. The way we collect data on waste and materials today is outdated in some respects and no longer always provides the data we need. On the one hand, European regulations impose new or modified reporting obligations and, on the other, policies also have other demands, e.g. with regard to closing cycles, using recycled materials, exporting waste, etc. Moreover, our world is becoming increasingly digital and more technical possibilities are available to track waste and materials digitally.

Through MATIS, OVAM is working on a digital registration system that is automatically fed by the waste registration management systems of waste collectors and processors. Data on quantities of waste and materials, their properties, treatment method, origin and destination thus end up in one single central system. This allows for waste to be traced from collection through to the treatment chain and to its input in the recycling operation (or incineration or landfill).

MATIS replaces the household waste survey for municipalities and provides a response to the new European calculation method for municipal waste recycling targets. From now on, municipal authorities or intermunicipal partnerships in charge of waste management report in MATIS or delegate other bodies to do so. In the latter case, they inform OVAM of any changes to these delegations before the start of the reporting month. They do, however, remain responsible for the accurate and timely reporting of this data. In the slightly longer term, MATIS will also replace parts of the Integrated Environmental Annual Report (Integraal Milieujaarverslag/IMJV) on waste and materials from companies.

Even independently of MATIS, new insights may arise, new methods may be developed or new data (sources) may become available during the plan period. In that case, the monitoring method could, in the end, differ from the method suggested in this chapter. Naturally, this will be limited to situations that really require it or offer clear added value. Just like in the previous plan period, OVAM publishes reports on its website that pertain specifically to the progress of the various targets in the Local Materials Plan and always uses the latest available data for this purpose. These reports will always include the necessary explanation on the sources and methods used.

5 PREVENTION

Chapters 5 through 10 are the policy chapters of this implementation plan. Whereas Chapter 4 indicates *what* we want to achieve, the policy chapters indicate *how* we intend to do it. This first policy chapter deals with prevention, which is a top priority in the Local Materials Plan. The measures in this chapter contribute primarily to our specific targets regarding prevention and reuse, but they have a positive impact on most other targets as well. Through prevention, we can go part of the way towards reducing mixed household waste and mixed company waste, which at the same time fosters the continued phase-out of final treatment. Moreover, prevention reduces waste in litter and fly-tipping. By focusing on prevention and reuse, we thus kill several birds with one stone.

In addition, we can lower the climate and environmental impact more strongly through prevention than through separate collection and recycling, which only reduce the impact at the end of the chain because less waste needs to be incinerated. Through prevention strategies such as lifespan extension, shared use, reuse, repair and the prevention of overconsumption (e.g. fight against food loss), we not only prevent waste incineration, but also reduce the production of certain (consumer) goods at the beginning of the chain. And we do so without compromising our prosperity. Strong prevention policies even offer economic opportunities, because the reuse, sharing and repair sector is booming and developing a lot of innovative activities. Consumer perception has also changed entirely. It is cool to reuse, repair and share stuff, especially among young people. By focusing on these strategies, we are consciously and thoughtfully reducing the material and carbon footprint of Flemish society through this Local Materials Plan.

This chapter discusses several general actions and initiatives that encourage prevention and reuse in general. In addition, we pay attention to the product groups that we are also monitoring specifically in terms of prevention and reuse indicators (see Chapter 4). A lot of actions have a prevention effect in both households and companies, which is why no specific distinction is made between the two.

Although Chapters 6 through 10 deal with other topics, we will still frequently refer to this chapter on prevention. Measures regarding prevention and reuse can indirectly influence other targets. The same goes for certain policy decisions in other areas that can have indirect positive or negative effects on prevention and reuse. We should, therefore, always consider the impact of policy decisions regarding separate collection, recycling and avoidance behaviour in particular on prevention and reuse. Prevention should be a point of focus when using policy tools in all the components of the circular economy.

5.1 COMMUNICATION, AWARENESS-RAISING AND EDUCATION

Communication and awareness-raising on waste prevention, with a focus on repair, sharing and reuse, should receive at least as much attention in the future as communication on separate collection. It makes sense to look for partners to strengthen the message and better reach specific target groups. This is perfectly illustrated by the KWIT campaign, which will continue over the next few years and focuses on various prevention themes.

OVAM intends to continue on this path in the coming years. Possible themes include the promotion of washable diapers and other reusable hygienic materials, the prevention of textile overconsumption, the importance of quality textiles, shared use, the promotion of repair activities and reusable alternatives to packaging, food waste, waste prevention in on-the-go consumption and the reuse of toys. New campaigns will also concentrate on specific target groups and profiles and use customised channels for that purpose.

ACTION 4: OVAM structurally integrates communication on prevention into the strategic choices set out in its multi-year communication plan and into the annual planning. In this context, it pays attention to collaboration with partners and takes targeted actions towards specific target groups where necessary.

In addition, other Flemish public sector bodies can be actively engaged to help promote prevention. We are thinking of the Flemish Public Broadcaster (VRT) and the Flanders Audiovisual Fund (VAF), for instance, to show practices such as shared use, reuse and repair as standard options and logical choices in series, cooking programmes or films. Public perception of litter can still be improved as well.

Education also helps to teach sustainable attitudes and bring about behavioural change. Education is the acquisition of competencies and skills through teaching and training. Sustainable behaviour and circular thinking are best taught from an early age and repeated later in life. Although it is important to embed these themes in lessons, education can also take place in a more accessible manner at work, at home, during leisure time, in club life, in the municipality and during informal moments at school.

Education is a broad topic involving many actors. OVAM wants them to pick up on prevention and sustainable use of materials and provides them with the necessary expertise on these topics. In 2020, OVAM developed the [‘kenniswijzer educatie’ \(education knowledge guide\)](#) for this purpose. This is a separate section on the OVAM website that contains inspiration for education, training and awareness-raising. The provision has also been disseminated to the Flemish education sector via the ‘KlasCement’ website.

In the coming years, OVAM will hold regular consultations with actors and partners developing educational offerings. We will make sure that the broader education field, pupils and students find their way to our resources and information in an even more structural and tailored manner.

ACTION 5: OVAM continues to expand the education knowledge guide and keeps the information up-to-date. OVAM promotes the knowledge guide in a structural and tailored manner to actors active in education and training.

OVAM and the Department of Environment and Spatial Development have set up a specific collaboration for 'MOS, duurzame scholen, straffe scholen' (MOS, sustainable schools, strong schools) and in particular around the #MissieMinder (#MissionMinder) action day on the topic of waste. They have also been closely collaborating for years within the framework of the Ecocampus project. Since September 2021, the various educational initiatives within the Department of Environment and Spatial Development have been merged into the 'Duurzaam Educatiepunt' (Sustainable Education Point). The good collaboration between OVAM and the Department is continued.

Raising awareness around specific products is also useful. Today's washable or reusable diaper, for instance, is an efficient and comfortable product that offers a sustainable alternative to disposable diapers. Disposable diapers today account for 7.5% of household waste generated in Flanders. Washable diapers are not only comfortable to use, but also better for the environment and cheaper. Washable diapers also support a child's potty-training process.

Users do not have to purchase washable diapers themselves, because a diaper laundry service also exists in Flanders. Childcare settings or private parents rent a set of diapers according to their child's age. The diaper laundry service collects the dirty diapers and delivers a set of clean, industrially washed diapers.

Washable diapers are increasingly used in childcare settings, but they are certainly not standard practice yet. If the childcare setting does not allow reusable diapers, this may pose practical problems for parents who make a deliberate choice to use them.

ACTION 6: OVAM consults with the nursery sector and Kind&Gezin (Child & Family Agency) to further promote washable diapers among parents and in nurseries.

Other reusable hygienic materials such as incontinence briefs, reusable bed pads or reusable wipes can also reduce the amount of mixed waste generated.

5.2 LEGISLATIVE INITIATIVES

5.2.1 Promoting prevention in extended producer responsibility (EPR) schemes

Most EPR schemes still focus on separate collection and recycling today, whereas Article 21 of the Materials Decree explicitly provides the possibility to take measures to increase the number of products placed on the market that are suitable for multiple use or are easily repairable. It is useful to increasingly focus on this and to set separate relevant targets in EPR schemes.

This is certainly necessary for packaging. A lot of packaging is avoidable or replaceable by reusable alternatives. The European SUP and Packaging Directives force the Regions to take measures to reduce single-use packaging.

ACTION 7: The Government of Flanders seeks to amend the interregional cooperation agreement on packaging waste to achieve explicit prevention targets, which packaging producers of both household and commercial packaging must meet and which should lead to a reduction in single-use packaging on the market.

There are opportunities for other product categories as well, but the situation is different. For some product categories, it is not the producers themselves who can provide repair or reuse. We have other actors in mind for this, such as (but not necessarily limited to) reuse shops. In these cases, prevention targets in EPR schemes can be linked to financing systems for these actors, if this is necessary to achieve preset targets on reuse or a longer lifespan, for instance. Initial steps are already being taken in a number of schemes. The covenants with Recupel (WEEE) and Valumat (mattresses) contain separate targets for recycling through reuse shops. They can serve as inspiration for other waste streams. Lifespan extension as a prevention strategy should also receive more attention in EPR schemes.

ACTION 8: OVAM undertakes several initiatives to more fully embed prevention, lifespan extension, reuse and repair in both new and existing EPR schemes:

- Whenever necessary, OVAM ensures a clear delineation of terminology in function of the EPR. In terms of reuse, for example, the question arises as to whether only product reuse should be considered for targets, or component reuse as well, which is important in terms of repair. The actors that qualify for targets and compensation should be specified as well.
- OVAM is examining for which EPR schemes it would be relevant to strengthen prevention, reuse, repair and lifespan extension. It considers existing EPR schemes (batteries, WEEE, etc.) for this, but also potential new product groups that could be included under an EPR scheme and where these strategies are relevant. Besides the potential of prevention strategies in households, we are also looking at the potential in companies whenever relevant. We are also learning from developments elsewhere in Europe, and in our neighbouring countries in particular.
- OVAM is conducting or commissioning research into how targets for these new strategies as well as compensation for certain actors can be more strongly embedded in law for the relevant waste streams. One option is to amend Article 21(4) of the Materials Decree to establish fair compensation for repair and reuse. Another option is to directly formulate targets for each waste stream in the Flemish Regulations on the Sustainable Management of Material Cycles and Waste

(VLAREMA). A third option is to create a reuse and repair fund that is fed from various EPR schemes and compensates actors in the reuse and repair economy.

- Besides the fundamental issue of targets and compensation, it is also examined how preconditions in EPR schemes can be reinforced. We have in mind, for instance, obligations in covenants and accreditations to spend a certain share of the communication budget on prevention strategies; a mandatory reporting of data on prevention, product lifespan and repair and reuse; making repair activities more affordable, and preconditions for a better service in case of repair.
- Feasible option will be coordinated with the other Regions and anchored in relevant legislation.

5.2.2 Reuse in household goods services by mainstream actors and reuse shops

Household goods services are of all times. Everyone is faced sometimes with a property or buildings that need to be partially or completely vacated following a move, death or forced eviction for example. Each household goods service has its own specific organisation. Some focus purely on the most saleable items, whereas others completely unburden the client and are paid for taking all the household goods with them. Depending on the service's business model, items are subsequently sorted to a greater or lesser extent and end up in sales halls, antiques markets or even reuse shops.

In any case, we assume that the companies involved also benefit greatly from as many goods as possible being sold or reused and finding their way into the 'second life' market. The regulations on sorting out waste are becoming stricter, and the charges for incinerating or landfilling mixed waste are increasing, which means this will cost more.

The premise should be that all eligible goods are orientated towards reuse, even if their market value is limited. This applies to mainstream private actors, but definitely also to reuse shops or other social economy actors entering this market. We also encourage collaboration between both types of actors for such activities to maximise the potential for reuse.

Where waste arises anyway, the existing legal framework raises questions. It concerns, among other things, the dividing line between the waste producer and the waste collector, dealer or broker, which is not always clear. Questions also arise as to the origin of the waste: when is it household waste and when is it company waste? Furthermore, in some cases, household goods services are hardly or not reconcilable with the legally enshrined principles of sorting at source. For those fractions that are actually collected as waste, the method of collection should in any case jeopardise recycling to the least possible extent. Post-sorting may also be subject to conditions with a view to maximum material recovery.

We are consulting with the household goods services and reuse shops to see whether we can find a solution to these challenges and how we can ensure that reusable goods (both saleable goods and goods eligible for giving channels) shall not be regarded as a waste stream.

ACTION 9: Together with the reuse shops and household goods services, OVAM is looking for ways to further shape the reuse potential (both of saleable goods and of goods that can still be used through the giving economy) and the elimination of possible ambiguities.

5.2.3 Bans on use of single-use products

In recent years, a number of bans on use were included in the Flemish Regulations on the Sustainable Management of Material Cycles and Waste (VLAREMA). Those include the ban on free single-use carrier bags, the provisions on disposable catering materials and the ban on fruit stickers. Bans on use are an important tool to achieve prevention. There is additional potential to ban the use of disposable products in cases where this involves unnecessary material use or feasible reusable systems exist.

Several 'Green Deals' are currently also in place that serve as roadmaps for the private sector to voluntarily take initiatives to make their sector more sustainable. The Green Deal 'Anders Verpakt' (Green Deal 'Packaged Differently') is about prevention and reuse of packaging. The Green Deal 'Duurzame Zorg' (Green Deal 'Sustainable Care') also contains a section around waste prevention and recycling in the care sector.

The option of bans on use or other legal initiatives for these two sectors is therefore framed within the outcomes of the Green Deals. Based on the experiences and discussions within these roadmaps, supported legal initiatives may be put in place in dialogue and consultation with the sector. At the same time, bans on use may also serve as a 'big stick' if voluntary initiatives yield insufficient results or do not generate results fast enough. Article 4 of the SUP Directive indeed states that there should already be a quantifiable consumption reduction of food packaging and cups by 2026. OVAM's 2021 survey entitled 'Preventie- en sorteergedrag van de Vlaamse bevolking – Kwantitatieve en kwalitatieve bevraging' (Prevention and Sorting Behaviour of the People of Flanders - Quantitative and Qualitative Survey) also showed that citizens estimate that the waste they generate at home could be reduced if supermarkets would offer more packaging-free products.

ACTION 10: During the next plan period, we will introduce new bans on use for a number of single-use products. To this end, we develop a programmatic approach, selecting several single-use products with a high impact on the amount of waste and/or litter at the beginning of the plan period, based on the necessary research. In consultation with the sectors concerned, we consider where a ban on use would makes sense, on what timescale and under what modalities. We take the results of the 'Packaged Differently' and 'Sustainable Care' Green Deals into consideration for packaging and for the healthcare sector.

5.2.4 Imposing sustainable alternatives as an option

Instead of imposing bans on use, it sometimes makes more sense to make it mandatory to offer sustainable alternatives as an option. One example is tap water as an alternative to packaged beverages. Potable tap water can at least be expected to be available in certain public places, e.g. on the seafront, or in skateparks, shopping streets, municipal sports centres, schools, etc.

Within the framework of the transposition of the European Drinking Water Directive, the Flanders Environment Agency (Vlaamse Milieumaatschappij/VMM) is working on a new Flemish Drinking Water Order. In implementation of Article 22 of the (draft) Order, public water suppliers will in any case be working to make drinking water available in public places in the coming years. The VMM is following up on this in terms of policy. Local authorities, VVSG-Interafval and OVAM can provide input for this from the specific angle of the waste issue.

ACTION 11: The VMM involves OVAM and VVSG-Interafval in the stakeholder consultation around improving access to drinking water and promoting its use. This stakeholder consultation takes place in the context of the (new) Flemish Drinking Water Order. The further roll-out on the ground will therefore take place in synergy with this Order. In case insufficient progress is made in terms of waste prevention, an additional initiative will be introduced through the VLAREMA or other (Flemish) legislation.

5.2.5 Policy on the distribution of advertising material

Today, citizens who do not want to receive advertising material can put a sticker for this on their letterboxes. There are two types of stickers: the NO-NO stickers (no advertising material and no unaddressed post) and the NO-YES stickers (no advertising material, but only unaddressed post). The sector is committed to respecting these stickers.

It distributes the stickers through post offices of the Belgian postal company bpost. Local authorities can also distribute stickers stating 'no advertising material', which they order through bpost and collect from a post office of their choice. The sector reports annually on the number of stickers distributed, the number of letterboxes with a NO-NO or NO-YES sticker, the number of complaints and the number of tonnes of paper distributed.

Thanks to the stickers, people have a clear choice, which is a good thing. However, a lot of citizens do not really make a choice, but choose the default option, which means they do not use a sticker. As a result, these citizens currently get (a lot of) advertising material in their letterboxes, even though they may not be interested in it. This creates an unnecessary amount of paper waste. During the next plan period, the above principle will therefore be reversed. The VLAREMA legislation will be amended so that only people who explicitly indicate it by means of a sticker will receive printed material in their letterboxes. They can still receive unaddressed post, unless they also explicitly refuse this by means of a sticker.

ACTION 12: The Government of Flanders will amend the VLAREMA legislation to reverse the sticker principle. Only citizens with a YES sticker will receive advertising material.

5.2.6 Ban on the destruction of (re)usable goods

About 30% of clothes produced worldwide are never sold. [The French government estimates](#) that between 10,000 and 20,000 tonnes of unsold textiles and EUR 180 million worth of hygiene and beauty products are destroyed each year. Only rough estimates are available across all the sectors. In France, government sources report EUR 630 million worth of destroyed products; in Germany, even EUR 7 billion worth of goods are destroyed annually ([Deutsche Welle, 2020](#)). In any case, it involves huge quantities. It mainly concerns unsold stocks and goods purchased from online shops that are being returned.

Ökopol carried out an [analysis](#) of the problem in 2021, listing the main reasons for large-scale destruction:

- companies wish to retain brand image and prices or protect intellectual property;
- products are damaged due to shipment or else as well as returns;
- costs related to reprocessing, rebranding or donating products are higher than for destroying products;
- overproduction is cheap.

In Flanders, there is an incineration ban on recyclables. However, a lot of goods turn out not to be recyclable and are incinerated anyway. Recycling goods that are still perfectly (re)usable is also a form of destruction and wastage that is in flat contradiction to a circular economy based on the materials hierarchy. It will therefore be examined during this plan period whether a ban on the destruction of certain (re)usable goods is desirable and how best to implement it. European initiatives that are being launched around this topic will be taken into consideration. The necessary legislative initiatives will then be initiated, preferably via the VLAREMA legislation.

If this proves possible and useful, we will introduce a ban on the destruction of (re)usable goods, specifically for three promising product categories:

- care and hygiene products and medicines
- clothing and shoes
- electronics and household electrical appliances

These categories were selected because there is evidence that they are being destroyed on a large scale, because they have great environmental impact and/or because a lot of people cannot afford them. Additional products may be considered at a later stage.

ACTION 13: It is tried to prevent the destruction of goods that are still perfectly usable through legislative initiatives. To that end, OVAM initially follows the path proposed by the European Commission and, where necessary, will look into additional measures for three priority waste streams: care and hygiene products and medicines; clothing and shoes; electronics and household electrical appliances.

When developing this, we need to pay attention to the legally correct definition of (re)usability and to possible reporting and enforcement. Experiences from other European countries and initiatives at EU level will be taken into consideration and stakeholders will have the opportunity to provide input.

5.3 REUSE SHOPS

Reuse shops in Flanders have been an important pillar of Flanders' waste and materials policy since the 1990s. They are committed to waste prevention by promoting product reuse. In addition, they create employment for low-skilled and long-term unemployed people. The reuse shops offer a job, training and future prospects to some 6,000 people who have few opportunities on the mainstream labour market. The success of the reuse shops is linked to the number of available and skilled employees from the target group, for whom resources are provided through the adapted work decree and through other social and local employment programmes. The reuse shops also combat poverty by offering cheap quality goods to people with limited budgets.

Reuse shops must adopt waste prevention as their basic principle. This means that maximising profits on goods should not be the priority. To promote reusability as much as possible, collaboration with giving channels should be considered as well. Reuse shops still too often do not accept goods because they are 'not saleable' (e.g. because a seat or cupboard is slightly damaged, stained or scratched). Referral to a giving channel may offer a solution here.

The collaboration with the local authorities that is enshrined in Article 5.1.7 of the VLAREMA legislation is important. OVAM supports these collaborations and offers a model agreement and a calculation model for this purpose. The calculation model shows the type of compensation a local authority can pay for the services of a reuse shop. Unfair competition with the mainstream market must at all times be prevented.

The reuse shops have been recognised and supported by the Government of Flanders since 2005. They have a specified catchment area for the collection of reusable goods from citizens and companies. They register incoming goods flow and sales on a daily basis and submit annual reports to OVAM. The purpose of reuse shops is to deliver local reuse. Goods should therefore be sold or presented within the catchment area to the maximum extent possible. For this reason, initiatives such as presenting specially selected goods at specialised auctions or through specialised auction sites abroad are not allowed.

To achieve the 8 kg reuse target by 2030, OVAM will continue to support the reuse shops and Herw!n through communication and knowledge sharing. Joint initiatives are also being taken to explore, test and optimise existing and new collection methods and channels. The

evaluation of various projects and actions shows that collection actions and methods tailored to specific target groups and for specific product groups are a success. Especially when combined with repeated awareness and communication campaigns. The collaboration between the reuse shops and local authorities, schools, associations and management bodies around extended producer responsibility will be strengthened as well. At the same time, it will be examined how reuse shops can also take part in giving channels. After all, the final purpose should be that as many goods as possible are reused (not that they can be sold).

ACTION 14: Herwin, the reuse shops and OVAM are joining forces to optimise existing collection channels and develop new collection channels and methods. They will also explore alternative ways to present reusable goods that cannot be (so easily) sold through giving channels.

Since the previous plan period, OVAM has been conducting visitations to reuse shops that have relatively low reuse rates compared to the sector's average. These visitations will be continued. Action plans are drawn up on the basis of discussions between the reuse shop concerned, OVAM and the local authority. These may include measures such as additional or improved communication, the additional collection of reuse goods through civic amenity sites, collaboration with other local actors, digitalisation initiatives, the development of repair activities, etc.

ACTION 15: OVAM supports reuse shops that have relatively low reuse rates through visitations.

5.4 SUPPORT AND GUIDANCE

5.4.1 Circular procurement

Contracting authorities undertake to award public contracts that generate societal added value. This societal added value may be to choose and guide towards solutions that contribute to meeting the objectives of this Local Materials Plan through their public contracts. They would do well to embed this commitment in their procurement policy with concrete priorities, where relevant.

This policy can be put into practice, for instance by integrating the [sustainability criteria that are established for certain product groups](#) into their contract documents to the extent possible. Some criteria relate to circularity, lifespan and use phase extension, recyclability, packaging waste reduction and the reduction of the use of polluting and toxic substances.

5.4.2 Grants

Several relevant subsidisation channels can be oriented increasingly towards prevention and reuse. The calls launched by Circular Flanders are an important channel. Any future calls will of course

further prioritise the inner circles of the circular economy (see Figure 2), including prevention, reuse and repair.

In addition, there are the 'half a euro project grants'. Innovative projects around packaging prevention and reuse have been eligible since 2021. Although local authorities can avail themselves of these grants, they still do so insufficiently.

ACTION 16: OVAM and Fost Plus promote the submission of innovative projects around prevention and reuse for half a euro project grants.

Furthermore, Flanders Innovation & Entrepreneurship (Vlaams Agentschap Innoveren & Ondernemen/VLAIO) awards important grants to businesses in Flanders. The 2019-2024 Economy Policy Paper provides for an evaluation of the effectiveness and efficiency of the Strategic Transformation Support and the Ecology Premium with a view to their optimisation. This will allow these tools to maximise their contribution to the internationalisation of Flemish innovation and the attraction of knowledge-intensive foreign investments. The Strategic Transformation Support was adjusted following a review. The sustainability aspect became more important in the review, requiring the project to contribute to water or energy consumption reduction and/or the circular economy and/or climate targets. The preparation of a climate plan has therefore been mandatory since early 2022. That plan outlines the company's approach to climate neutrality by 2050, taking into account the objective of the Flemish Energy and Climate Plan. Such an approach may include deploying circular strategies. In the next phase, the Ecology Premium+ and the Strategic Ecology Support will also be used in a more targeted manner to address the climate challenge.

Business consultants from VLAIO's Business Pathways Team (team Bedrijfstrajecten) continue to focus on supporting companies that want to commit to the circular economy and bioeconomy. VLAIO is also strongly involved in Circular Flanders, and OVAM and VLAIO have been working together well around the circular economy for a long time already.

ACTION 17: When awarding grants to companies, the Government of Flanders wishes to take increased account of societal challenges and, in particular, the need to increase sustainability and to tackle the climate challenge. Previous pathways will be built on, but the Ecology Premium+ and the Strategic Ecology Support will be reformed as a minimum. VLAIO is developing an approach in consultation with OVAM to also consider the importance of circular strategies.

Finally, we ask local authorities to support the purchase of washable diapers or the use of a diaper rental and laundry service. A lot of local authorities offer a one-off premium to young parents, which is often justified as a contribution towards the waste costs of disposable diapers. It makes more sense to subsidise the purchase of washable diapers to replace or at least complement this one-off premium. A set of washable diapers is not cheap to buy. Although the purchase pays off when the diapers are reused for a next child or sold on to others, the initial cost is often a barrier. A local grant may be helpful in this case. Local authorities could also offer grants for a diaper laundry service and financially support nurseries that use washable diapers. Currently,

no less than 98 local authorities award some type of grant to young families for the purchase of washable diapers (or for a rental and laundry service). Our ambition is to have half of the Flemish municipalities do so by the end of the plan period.

5.4.3 Support for the circular economy for and by local authorities

At the local level, there is great enthusiasm and support for the circular economy. In some cities, the circular economy is already a key pillar of policy. In many other municipalities, this is rather limited to references to circular principles in other policy themes. An overarching strategy for the circular economy is often still lacking at the local level, and a lot of local authorities do not have sufficient time or knowledge to take up additional themes and tasks beyond their regular economic, sustainability and environmental policies.

ACTION 18: To support local authorities, Circular Flanders is initiating programme activities aimed at increasing knowledge and support and stimulating actions and policy development. The VVSG and VVSG-Interafval are fully involved in those activities from their connecting and supporting role towards the local authorities.

The programme activities aim to strengthen and deepen knowledge, actions and policies on the local circular economy. This should enable more local authorities to move towards actual achievements. Both frontrunners and local authorities that still need to take initial steps are challenged and supported through knowledge sharing, learning pathways, concrete project-based guidance or thematic deepening. The programme activities will be complementary to already existing customised tools from OVAM for local authorities (see Chapter 6) as well as aim for cross-fertilisation.

Even apart from the policy, a lot is going at the local level in terms of new circular initiatives and business models. Fruitful bottom-up initiatives are emerging in both the social and mainstream economies, which are focused, for example, on shifts from goods to services. A lot of citizens' initiatives are also being taken that are aimed at repairing and sharing products. DIY libraries, material banks, shared mobility, giving initiatives and the like are becoming more commonplace. Creating societal added value is at the heart of those initiatives. They combine concrete strategies to reduce the material footprint with the promotion of neighbourhood-level social interaction, volunteering or the employment of groups that are more distant from the labour market. The initiatives are also important because they make the circular economy concrete and tangible for citizens in their own neighbourhood.

Support for concrete initiatives is definitely recommended, both by the local and the Flemish level, but is not straightforward. Precisely because they are mostly organised from the bottom up, they involve a very wide range of initiatives and organisations with often very different needs.

Work can be done on demand at the local level. We encourage local authorities to respond to requests for support and to continue and further develop successful forms of collaboration. This may involve financial support, but most certainly does not always have to. Citizens' initiatives, startups

or associations also need logistical help, physical space, communication support or information on legislation. We encourage local authorities to make new residents aware of existing initiatives.

Furthermore, it is especially useful at the Flemish level to gain greater insight into the range of initiatives, which is why OVAM and Circular Flanders will make an inventory of the various existing (types of) initiatives during this plan period. This should enable better and more targeted support over time, as well as identify any gaps. The goal should be an area-wide coverage of repair and sharing initiatives in Flanders, so that every Flemish citizen can experience in practice at the local level how the circular society is taking shape.

ACTION 19: Local authorities are committed to sharing and repair initiatives in their city, municipality or region. OVAM and Circular Flanders make an inventory of the (types of) repair and sharing initiatives with a view to adequate future promotion and support and an area-wide coverage of these initiatives in Flanders.

Circular Flanders, the Department of Work and Social Economy and the ESF Fund also support 12 socio-circular hubs under the 'Circular Werk(t)' (Circular Work(s)) project until the end of 2023. Those hubs are a point of contact for local entrepreneurs who want to build a bridge between the circular and the social economy. The hubs establish targeted contacts between those mainstream local companies and the social economy and adapted work companies through networking events, training and coaching. A learning network is also attached to this to explore how collaboration can continue to be promoted after the project has ended.

ACTION 20: The Flemish and local authorities build on the 'Circular Work(s)' project to continue to promote collaboration between mainstream companies and social economy companies and supported work companies in the area of circular economy.

Finally, local authorities can also take small-scale actions. In 2021, OVAM had 2,500 Flemish people surveyed about their sorting behaviour and waste prevention, supplemented by five focus groups. In this survey entitled 'Prevention and Sorting Behaviour of the People of Flanders - Quantitative and Qualitative Survey', respondents give a number of general prevention tips that local authorities can quite easily act upon. They think, for instance, of organising second-hand fairs and flea markets and lending out tools for free or for a small fee.

5.4.4 Events

Small and large events have substantial environmental impact. Organisers can take a myriad of measures regarding mobility, materials use, waste management, catering, water and energy to minimise an event's ecological footprint. Besides the separate collection of mandatory waste fractions, organisers can work on waste prevention, the origin of the products and materials offered and reuse, and use products from recycled materials. OVAM

supports event organisers in all these sustainability areas, but waste prevention is the priority focus.

This support currently already involves the following initiatives:

- The website groenevent.be shares tips, advice and examples of good practice relating to any environmental aspects associated with the organisation of an event. OVAM offers a free event scan on its website. This is an online tool to measure and improve the environmental impact of an event. OVAM constantly promotes and updates the presented information.
- OVAM gives general advice to private organisers and local authorities.
- OVAM offers intensive support to local authorities: cities or municipalities that are interested are assisted to make their events more sustainable. The focus is on the process-based guidance of one single event, which serves as an example for other events in the municipality or region. In this way, sustainability is embedded in the local authorities' events policy.
- The guidance for sustainable events will be extended from the music sector to other sectors such as sports, culture, youth and media. To that end, OVAM is working together with other relevant Flemish public sector bodies, such as the Sports Flanders Agency and EventFlanders. At the local level, OVAM continues to work together actively with Flemish local authorities, intermunicipal partnerships and organisers.
- For purposes of the implementation of legislation on catering equipment, OVAM makes examples of good practice of events available on its website in an inspiring manner. Attention is paid, inter alia, to the practical implementation of return systems, the type of material, the expected cost price, etc. The enforcement of legislation by local authorities is supported as well. OVAM also maintains contacts with caterers, beverage providers and brewers on reusable solutions.

ACTION 21: During the plan period, OVAM continues to provide the necessary tools and support to organisers to make events more sustainable. In doing so, OVAM builds on existing initiatives but will also continue to innovate, deploy new tools and expand the scope of the type of events.

5.4.5 Food loss prevention and domestic cycles

A separate implementation plan entitled '[Action Plan on Food Loss and Biomass \(Residual\) Waste streams Circular 2021-2025](#)' is in place that shapes the policy on food loss and domestic cycles for biowaste and lists the necessary policy initiatives and actions. However, the policy of this specific implementation plan also contributes substantially towards the targets set out in the Local Materials Plan, such as the general prevention target, the mixed waste reduction target and the phase-out of incineration capacity. It also furthers the general climate targets of the Government of Flanders, which is why we will briefly discuss it.

Food loss prevention is extremely important. The 2019-2021 household waste composition analysis estimated the proportion of food loss in household waste at 20% or 157,000 tonnes in 2020. The climate impact of food loss at household level is [estimated at emissions ranging between 466,000 and 673,000](#).

[tonnes CO2 eq per year](#). **Preventing food loss** not only reduces mixed waste, but also increases raw materials efficiency and lowers the environmental and climate impact of the entire food chain.

A **domestic cycle** implies 'aiming to close the organic cycle at home'. This means that, in addition to preventing food loss, garden and kitchen leftovers generated at home are given a useful purpose within the same home context by using or reusing them (e.g. to feed chickens) or by treating and composting them in a qualitative manner at home. Mulching and in-house compost are major contributors to carbon accumulation in private gardens. The 2021 [CurieuzeNeuzen \(Curious Noses\) survey](#) showed that the top layer of gardens in Flanders contains an average of 2.5 kg C/m², which comes down to 68,000 tonnes of carbon when extrapolated. The carbon content in the top layer of lawns averages 2.2%, placing it between the average field (1.2%) and natural grassland (3.8%).

Action programme 1.7. of the Action Plan on Food Loss and Biomass (Residual) Waste streams Circular 2021-2025 contains three concrete actions to further promote and support domestic cycles. The non-profit organisation Vlaco vzw plays an important role as a promoter in this context. The goal is to maintain the proportion of the population composting at home at least at the same level by 2025 (42% in 2018), paying particular attention to the quality aspect of home composting. In this context, biowaste collection requires a well thought-out tariffs policy that encourages quality home composting, while providing people who are not home composting with a low-threshold alternative to separately present garden waste. We elaborate on this in Chapter 6.

6 SEPARATE COLLECTION OF HOUSEHOLD WASTE

Separate collection remains a key theme in this implementation plan as well. It is necessary to achieve the mixed waste targets set in relation to the Flemish Energy and Climate Plan 2021-2030. Prevention and reuse help reduce the mixed waste rate, but the separate collection of new waste streams and the optimisation of existing separate collections are necessary as a complement to reduce mixed waste and the associated greenhouse gas emissions. Chapter six elaborates on the separate collection from households. Chapter seven discusses the collection of company waste.

Our society continues to evolve. Increasing urbanisation and the evolution towards smaller types of housing make it difficult sometimes to store the various waste fractions. Moreover, people in urban areas are less likely to have a car, which makes a visit to the civic amenity site less self-evident. Another challenge is the growing number of less mobile citizens due to the ageing population.

Nevertheless, Flanders still performs well in terms of separate collection. If we want to sustain and further improve this performance, good basic policy is indispensable, combined with customisation given the large demographic and other differences at the local level. We must continuously search for the best possible collection systems.

6.1 WASTE STREAMS TO BE COLLECTED LOCALLY

6.1.1 Waste streams to be collected and their minimum frequency

Table 4 indicates the waste streams for which a local authority is obliged to ensure that citizens can offer these waste streams separately. The table also shows the channel and minimum frequency with which they are obliged to do so. It lists the mandatory collections through door-to-door collection or short-distance bring systems as well as through the civic amenity sites. Local authorities may choose between door-to-door collection, a short-distance bring system or a combination of both for household waste, paper and cardboard, plastics, metals and beverage cartons (pmd), glass, textiles and VFG waste. The trade-offs at play between those two systems are explained under Title 6.2.1. We elaborate on the broader policy on civic amenity sites under Title 6.2.2.

The separate collection of additional waste fractions may become mandatory during the plan period. This is always done following a thorough review of the additional separate collection, using ecological and economic parameters and considering at all times the impact on the service provision

Waste streams		Mandatory minimum frequency of door-to-door collection	Short-distance bring system allowed as an alternative to door-to-door collection	Mandatory at every standard civic amenity site
Household waste		At least monthly	Yes	No
Paper and cardboard		At least monthly	Yes	Yes
Plastics, metals and beverage cartons (pmd)		At least every fortnight	Yes	No
Glass		At least monthly	Yes, at least one container per 700 residents and mandatory separation between white and coloured glass	No
VFG (incl. kitchen waste) OR VF (incl. kitchen waste) + separate fine garden waste		At least every fortnight OR VF at least every fortnight + at least monthly fine garden waste	Yes - VF: yes - Fine garden waste: no	- VFG and VF: no
Fine garden waste		Depending on choice for VF or VFG collection	/	Yes
Prunings		/	/	Yes ⁴
Tree stumps		/	/	Yes
Bulky waste		On demand, at least twice a year ⁵	No	Yes
Textiles		At least four times a year	Yes, provided at least one container per 1,000 residents	Yes
WEEE		/	/	Yes
Metals		/	/	Yes
Wood	Untreated (A)	/	/	Yes

⁴ Prunings may also be collected together with fine garden waste at the civic amenity site if necessary, provided the disposal frequency of the fine garden waste is respected. This disposal frequency is weekly during the period from April to October and monthly during the period from November to March (see also Title 6.2.2.1).

⁵ When collecting bulky waste door-to-door, citizens should also be able to present waste that must be selected collectively through the civic amenity site, if they are unable to bring this waste themselves due to its size or weight. Naturally, such waste must be sorted out afterwards and be sent for recycling. For this reason, such waste need not be reported under the mixed waste rate.

	Uncontaminated, but treated (B)			Yes ⁶
	Contaminated and treated (hazardous/C)			No
Reusable goods		On demand, continuously	No	No
Flat glass		/	/	Yes
Rigid plastics		/	/	Yes
Small hazardous waste		/	/	Yes
Frying fat and oil		/	/	Yes
Pure stone rubble		/	/	Yes
Other construction and demolition waste		/	/	Yes
Non-friable asbestos cement		/	/	Yes (scheme 10 km) ⁷
Mattresses		/	/	Yes (scheme 10 km) ⁸
Cork		/	/	Yes

Table 4: Mandatory waste streams to be collected with minimum frequency and collection method

Local authorities are free to collect other fractions separately as well. Because more and more fractions are collected in a separate manner, the minimum service for household waste can be further phased out. For this reason, the minimum frequency for door-to-door collection is lowered from fortnightly to monthly. We also ask local authorities to actually limit household waste collections on the ground. For a lot of municipalities, a fortnightly collection (or even less) may prove sufficient in most neighbourhoods.

This plan imposes a mandatory door-to-door collection of VFG or a door-to-door collection of the VF fraction on the one hand and fine garden waste on the other. This is explained in greater detail under Title 6.1.2. The mandatory collection of cork at civic amenity sites is new as well.

We also encourage local authorities to trial new collection methods through pilot projects that aim to reduce mixed waste quantities and ensure good quality separately collected waste streams. Pilot projects that test 'smart cities' technology to improve service provision, make collections smarter and optimise them in logistical terms and reduce the ecological footprint of waste management are welcomed as well. Collaboration with private collectors may be an added value in this regard.

⁶ Uncontaminated treated wood may also be collected together with untreated wood at civic amenity sites. Separately collected untreated wood, on the other hand, must always be sent to material recycling.

⁷ Non-friable asbestos does not have to be accepted at every civic amenity site. It suffices that 90% of residents have access to a civic amenity site for this fraction within a 10 km radius of their home. See also Title 6.2.2.3 Number of civic amenity sites.

⁸ Mattresses do not have to be accepted at every civic amenity site. It suffices that 90% of residents have access to a civic amenity site for this fraction within a 10 km radius of their home. See also Title 6.2.2.3 Number of civic amenity sites.

Local authorities have a directing role in household waste pilot projects. Private parties can develop such projects, provided they have the local authority's approval. However, those pilot projects are subject to a number of conditions:

- The pilot project must aim for quality service provision.
- The collection rates must flow through to the local authority, which must in turn comply with all its registration and reporting obligations.
- The project must allow all the citizens falling within its scope to participate to the maximum extent.
- The Interregional Packaging Commission (IRPC) and the household packaging management body must be involved in household packaging projects.
- The project must be properly reviewed. Following this review, it may be decided to either continue or discontinue the project or to make adjustments. That information must be shared with OVAM.

The mandatory streams to be collected and the imposed minimum collection frequencies may be derogated from in specific circumstances, for example in the context of such pilot projects. Derogations from the provisions of this chapter must be requested from OVAM through a reasoned dossier showing clear added value or necessity. The IRPC and the household packaging management body must also be involved in household packaging collection.

6.1.2 Biowaste collection

In January 2022, 227 of the 300 Flemish municipalities did door-to-door collection of either VFG or of green waste on the one hand and kitchen waste (the VF fraction of the VFG) on the other. In the other 73 municipalities, citizens can only sort green waste, whereas kitchen waste is still disposed of with the household waste, unless citizens home-compost this waste themselves. Because European regulations require Flanders to remove all biowaste from mixed waste by 31 December 2023 and in order to meet its own mixed waste reduction and recycling targets, this plan introduces the general obligation for local authorities to offer citizens a separate collection of all biowaste. Consequently, the breakdown into VFG and green regions in the previous implementation plan on household waste and similar company waste, lapses.

ACTION 22: Every municipality will offer citizens the possibility to present all biowaste separately by 1 January 2024 at the latest. This will be done in accordance with the provisions of this plan.

Reasoned derogations from the separate collection are possible until 1 January 2026 and will be assessed and either authorised or not by OVAM.

For purposes of this plan, OVAM commissioned an environmental and economic cost-benefit study of six biowaste collection and treatment scenarios (RDC, 2021). The study also examined the effects of the tariffs policy on citizens' sorting behaviour.

According to the study, the largest decrease in household waste can be expected from the door-to-door collection of VFG in bins. If all the Flemish municipalities were to switch to VFG, the household waste rate at the Flemish level could fall by 8.2 kg/capita/year. This is to be regarded as a minimum potential, generating about 50,000 tonnes less household waste (and mixed waste as a result).

However, the real potential is greater, because even in municipalities where VFG is already being collected today, too much of that waste is still being disposed of as household waste. Accompanying measures elsewhere in this plan will help generate gains there as well. The stronger ambition of the Flemish Energy and Climate Plan 2021-2030 may serve as upper threshold. It puts forward a 75% reduction in the recyclable fraction of mixed household waste by 2030. In 2020, people in Flanders produced 147 kg of mixed waste on average, 119 kg of which was residual waste. The 2019-2021 residual waste composition analysis shows that no less than 47 kg of that waste is recyclable biowaste. If 75% of that 47 kg is indeed removed from residual waste, mixed waste generation will thus be reduced by 35kg. This means that, by eliminating biowaste from mixed waste to the maximum extent, we can achieve 75% of the target towards 100 kg of mixed waste per capita per year.

The **generalised collection of VFG in bins** thus represents the largest reduction potential for household waste. Moreover, that scenario delivers the greatest environmental benefit, provided predigestion combined with post-composting is chosen as treatment method. For this reason, this collection and treatment scenario is imposed as a standard on local authorities. Although that scenario involves economic costs that may be higher than for other scenarios, the socio-economic analysis accompanying this plan shows a clear net benefit for local authorities. This only applies, however, if the collection frequency of household waste is changed to two weeks in municipalities that currently do this collection on a weekly basis, and by taking into account falling waste incineration costs. Moreover, this is a calculation across all the municipalities, which means the calculation may be different for individual municipalities.

Only the following other scenarios are allowed as an alternative:

- **VFG collection in bags in urban centres.** Only the centres of the cities in clusters 15A and 15B qualify for this. Less densely populated urban districts (such as sub-municipalities or less populated urban districts) do not come under the possible exception. Collection in these districts must be done in bins. Municipalities outside clusters 15A and 15B are still allowed temporarily to collect VFG in bags, but must switch to bins by 2027 at the latest.
- **Limburg.net's Optimo pilot project.** This pilot project has been testing the simultaneous collection of six separate waste fractions since 1 January 2022. The pilot project is limited to 34 Limburg municipalities and the city of Diest in Flemish Brabant⁹. Kitchen waste and food leftovers are collected in a 17-litre bag and garden waste is collected in 50-litre bags. Prunings are also collected against payment of a volume-based tariff. The pilot project will be evaluated in 2024 based on a new

⁹ Alken, Beringen, Borgloon, Bree, Diepenbeek, Diest, Genk, Gingelom, Halen, Ham, Hamont-Achel, Hasselt, Hechtel-Eksel, Heers, Herk-de-Stad, Herstappe, Heusden-Zolder, Hoeselt, Houthalen-Helchteren, Kortesseem, Leopoldsburg, Lommel, Lummen, Maaseik, Nieuwerkerken, Peer, Pelt, Riemst, Sint-Truiden, Tessenderlo, Tongeren, Voeren, Wellen, Zonhoven and Zutendaal.

household waste composition analysis in the pilot area and other criteria regarding the quality and recycling rate of the kitchen waste and food leftovers collected.

- **Door-to-door collection of kitchen waste and food leftovers (VF) combined with door-to-door collection of fine garden waste.** Bins must be used to collect fine garden waste, whereas the collection receptacle for the VF fraction can be freely chosen. The collection frequency is shown in Table 4. The obligation to provide an additional door-to-door service for fine garden waste (and not just through the civic amenity sites) is necessary to offer people who do not home-compost a low-threshold and user-friendly alternative. In these circumstances, the local authority will have to pay particular attention to a duly considered tariffs policy for this fine garden waste. This is the only way to reach a good balance between, on the one hand, promoting quality home composting and, on the other hand, preventing people who do not home-compost from disposing of garden waste together with the household waste, fly-tipping, engaging in illegal incineration or composting in a non-quality manner in their own garden. Local authorities opting for this collection scenario must conduct a composition analysis of their household waste, while collecting results for at least two seasons (winter/autumn versus spring/summer) during the period from autumn 2025 to spring 2026. Those composition analyses must use a methodology comparable to the composition analyses of household waste at the Flemish level. Based on those composition analyses and the results of separate collection in terms of quantity and quality, this collection method will be evaluated in each area during the mid-term review, as stated under Chapter 11. The evaluation will compare the presence of biowaste in the household waste of the municipalities opting for VF collection against the household waste of the (current) VFG municipalities.

In all scenarios (except for the Optimo pilot project), the door-to-door collection of VF or VFG waste can be replaced by a short-distance bring system, provided this is embedded in a system where citizens can present different fractions in the same place (system of sorting lanes) in their neighbourhood and the points of focus concerning bring systems under Title 6.2.1 are taken into account.

The requirements for treating the collected kitchen waste and food leftovers under the derogation scenarios are clarified under Title 8.4. The costs of the composition analyses to evaluate these derogating collection scenarios must be borne by the local authorities or intermunicipal partnerships concerned. If the mid-term review shows that the alternative collection methods do not sufficiently reduce the proportion of biowaste in household waste or if other shortcomings are identified, the standard collection system (VFG) in bins will be imposed.

6.1.3 Diaper collection

OVAM subcontracted four studies in the 2020-2021 period to analyse the recycling potential for diapers in Flanders. Each of the studies involved relevant domestic and foreign actors.

The first study (Gaasbeek, 2018) generally explored opportunities for making diaper product chains circular. The second study (VITO, 2021b) aimed to establish end-of-waste criteria

for recycling plants to ensure that the output streams can serve as raw materials in new products that are safe for humans and the environment. This was followed by a [third study](#) (VITO, 2022) that developed an analytical framework that allowed diaper recycling output streams to be analysed for the presence of pathogens, medicines and hormones. The [fourth study](#) (RDC & Thingit, 2021) compared different separate collection methods for diapers with a view to the possible introduction of a legal obligation, based on a societal cost-benefit analysis.

Based on that research, the Flemish authorities have provided support for the construction of a pilot installation for diaper waste recycling. If such an installation offers sufficient advantages in terms of diaper recycling, the introduction of an acceptance obligation will be considered.

ACTION 23: If an effective recycling option is operational that yields greater societal benefits than costs, an acceptance obligation for diapers will be introduced during this plan period, so that 80% of diapers can be disposed of for recycling by 2030.

Lessons learnt from previous studies and pilot projects will be taken into account for the introduction of an acceptance obligation, if any. The separate collection of diapers should lead to efficient recycling, but should also take into consideration logistical optimisation and social aspects such as the necessary discretion in the case of incontinence diapers. These practicalities can be resolved, but deserve due focus during roll-out. In addition, producers will have to consider recycling ('design for recycling') already at the diaper design stage when introducing an acceptance obligation.

An important note to be made in the context of this action, however, is that the same or at least a similar decision is required in the Walloon and Brussels-Capital Regions, since such an acceptance obligation is introduced at interregional level.

Hygienic material makes up about 10% of household waste. Diapers are the main fraction, but residual waste also includes sanitary towels, tampons, make-up wipes and currently also face masks. Our ambition, over time, is to also remove those fractions from residual waste. This can be done through separate collection, but also, and in particular, by promoting prevention.

6.1.4 Asbestos collection

The Government of Flanders aims to make Flanders asbestos-safe by 2040. The Action Plan on Asbestos Removal assigns a key role to local authorities in unburdening citizens and raising their awareness. All the local authorities voluntarily signed the commitment to help implement the asbestos removal policy and the 2034 and 2040 milestones laid down by decree at the local level.

To implement the path towards an 'asbestos-safe municipality', almost all the local authorities offer a subsidised project for the door-to-door collection of household quantities of non-friable asbestos in 2023. OVAM takes on a coaching role in this context and facilitates the exchange of good practices. Local authorities combine these 'projects for collection at source' with the collection of asbestos cement

at civic amenity sites. Both participating citizens and local authorities are very satisfied with these projects, as they contribute directly to making buildings asbestos-safe. The Government of Flanders will continue to financially support the local authorities for local asbestos projects for citizens, such as the door-to-door collection, during this plan period.

To fulfil their exemplary role, local authorities can also join their own collection of asbestos cement for the quantities of asbestos-containing waste generated by their own municipal building stock. This applies especially to buildings that accommodate children and youth organisations, because juvenile lungs are particularly sensitive to asbestos fibre exposure. The terms and conditions for asbestos collection at civic amenity sites are elaborated under Title 6.2.2.

Local authorities inform their citizens at least annually about asbestos, mentioning the free collection option at the civic amenity sites and, if applicable, the door-to-door collection options. They also provide a webpage on their website with information on asbestos and links to the website of the intermunicipal partnership and OVAM's website asbestinfo.be.

6.1.5 Residual waste collection

6.1.5.1 Household waste services

The expansion of the pmd fraction in the previous plan period and the separate collection of biowaste contribute to a decrease in residual waste and subsequently also to the prevention of waste incineration and the associated material loss and CO₂ emissions. The lower generation of residual waste per household also allows the collection frequency of residual waste to be reduced. A lower collection frequency is important as a nudging tool to further encourage citizens to sort properly and as such generate even less residual waste. Moreover, it makes municipal waste collection less expensive.

For this reason, we ask local authorities to limit door-to-door waste collection to maximum one collection every fortnight whenever possible. This frequency will probably suffice for a lot of municipalities, but probably not in all the neighbourhoods of municipalities that have many high-rise buildings (cities, coastal municipalities), for instance. If a local authority decides to collect residual waste on a weekly or even more frequent basis anyway, it makes sense to consider collecting the VFG (or VF fraction) door-to-door at least weekly as well, in order to prevent that fraction from ending up in the residual waste. VF(G) is indeed a fraction that citizens prefer to dispose of quickly because of odour and other nuisance.

What matters is that a reduction in the collection frequency of residual waste must always go hand in hand with a sufficiently frequent collection of separately collected waste streams. Respondents from the OVAM study 'Prevention and Sorting Behaviour of the People of Flanders - Quantitative and Qualitative Survey' (2021) confirm that this encourages them to sort even better.

Besides collection frequency, the collection receptacles are important as well. 28% of respondents from the OVAM survey (2021) indicate that incorrect sorting behaviour sometimes follows from wanting to 'fill up' the

collection receptacle for residual waste. In terms of VFG, 34% even stated that this is why they sometimes add that waste to the residual waste. It therefore certainly makes sense to provide residual waste receptacles with different volumes, customised to the volume of residual waste that is expected to be generated by the different types of households.

Companies must not present more than 180 litres or 22.5 kg of mixed company waste per fortnight as comparable mixed company waste. For this reason, it is no longer allowed from now on to offer new receptacles for mixed company waste larger than 180 litres to this target group if the waste is included in the household circuit as 'comparable company waste' and no weight-based PAYT system is applied.

6.1.5.2 Incineration ban

During collection, attention is often paid to the quality of separately collected waste streams, whereas, in the case of residual waste, anything the waste producer presents is accepted. Yet the incineration ban in Article 4.5.2 of the VLAREMA legislation prohibits the disposal for incineration and the incineration of mixed household waste that has not been collected in accordance with the sorting rules.

The incineration ban also represents a problem to us. In theory, even the last shred of paper or the last PET bottle in residual waste could be a violation of the incineration ban. That is why the VLAREMA legislation provides a comprehensive set of rules for mixed company waste that collectors of such waste must adhere to in order to prevent sorting errors among their customers. If they follow these rules, the waste may be disposed of for incineration, even if it sometimes still contains waste that does not belong in residual waste.

It is impossible to copy these rules for mixed household waste, as they contain a lot of elements that are irrelevant or even impossible to implement in the household circuit. Nevertheless, mixed household waste should also be collected as correctly as possible. And if collection is done correctly, there should also be legal certainty that the residual waste may then be sent incineration.

The set of conditions will therefore be totally different for the household circuit. It is important for mixed household waste, for instance, that municipalities apply the legal tariffs for residual waste and bulky waste. Municipalities must also provide for the collection of all the separate fractions required by this implementation plan (see Table 4).

ACTION 24: OVAM, together with VVSG-Interafval, is working out a set of conditions to be met for the collection of household (residual) waste and will subsequently adjust the incineration ban in the VLAREMA legislation.

Linking a set of conditions for the collection of household (residual) waste on the one hand and the incineration ban on the other has numerous advantages. Firstly, these conditions allow us to ensure that less waste is incorrectly disposed of in residual waste. Secondly, it increases the legal certainty for local authorities and waste incineration plants when incinerating residual waste. Finally,

it also strengthens enforcement of the implementation plan, as the set of conditions may include some of the most essential obligations from the implementation plan. Failure to comply also means violating the incineration ban, which may lead to severe sanctions.

6.2 COLLECTION CHANNELS

6.2.1 Door-to-door collection or short-distance bring systems: assessment framework for local authorities

In Flanders, most local authorities organise door-to-door collection for residual waste and various separate waste streams. The bring method for glass and textiles, on the other hand, has since long been widespread.

Due to increasing urbanisation, the evolution towards more compact types of housing and the policy evolution towards car free or low car centres and neighbourhoods, some local authorities have increasingly opted for short-distance bring systems in recent years. The bring system applies to various waste streams, whether or not in combination with the standard door-to-door collection. Waste facilities of high-rise buildings are also moving in that direction. Property developers are increasingly opting for underground waste collection systems or are required to do so by virtue of municipal or spatial regulations. Table 4 indicates that the bring system may only replace door-to-door collection for the fractions of residual waste, paper and cardboard, pmd, glass, textiles and VFG or VF waste. Complementary bring systems are also allowed for other fractions.

Whether or not underground containers are desirable as bring system in a particular neighbourhood and under what form, depends on many factors and is a long-term choice, given the cost and the change in behaviour that is required of citizens. Key factors are described below and serve as an assessment framework for local authorities.

1. Make a deliberate choice for complementary or replacement systems

A bring system can be complementary to door-to-door collection. This mainly offers advantages in tourist areas where housing units are rented out for short periods of time, for regions with many second-home owners and for student cities. Regardless of when they leave, these people can lawfully dispose of their own waste through the bring systems, whereas the service to permanent residents remains the same. In other regions, this complementary bring system is mainly an 'extra' service, but less necessary.

A bring system can also replace door-to-door collection. Users have no say in the matter and must dispose of the waste themselves, but can do so whenever they want to. Such systems are especially useful in densely populated areas, in places that are difficult to access by collection trucks and in high-rise buildings. Such a system eliminates the need for waste rooms in blocks of flats, for example.

2. Monitor the quality of separately collected waste streams

It is up to the local authority to maintain the quality of the collected waste streams. Following the implementation, the emptying, transshipment, sorting centres, etc. need to be frequently monitored in terms of quality. In addition, adjustments need to be made and feedback should be given to citizens.

The size of the columns and the insertion openings have an effect on the quality of the collected waste streams. Small openings where each piece is thrown in separately (e.g. for pmd) ensure a better quality, but sometimes increase fly-tips as it is more difficult to throw in larger pieces. With larger openings, there is less fly-tipping, but small filled bags are sometimes thrown in that are not recognised as pmd in the sorting installations and subsequently end up in the residue to be incinerated.

Good quality requires repeated, tailored communication that also focuses on non-native speakers. On-the-spot information, possibly by means of stickers at the throw-in opening, appeals to citizens' sense of responsibility. Personal and intensive communication (possibly even through home visits by waste coaches) yields the best result. Challenges at district level are another option. Sometimes, enforcement will be required to counter wrong sorting behaviour and fly-tipping. Municipal administrative sanctions (gemeentelijke administratieve sancties/GAS) are an option, always in combination with proper and intensive communication.

Ideally, an underground container also contains a sensor for the filling rate, complemented by a blocking sensor for paper and cardboard. Frequent emptying of the residual waste container (fixed frequency or tailored/on demand) reduces the likelihood of a full container and hence the temptation to dispose of residual waste with other fractions or to fly-tip. Containers are usually emptied when they are filled up to 50% to 80%.

3. Consider the cost

Underground bring systems, on average, cost more than door-to-door collection, despite any potential savings in staffing costs. The exact difference depends on many factors to be taken into account. The cost of a bring system is therefore not to be underestimated. Apart from the cost for the systems, costs should be taken into account for the installation, a cleaning and emptying truck, the administrative follow-up (registration and payment system), monitoring, communication, etc. Other factors that play a role are the waste fraction (wet or dry determines the cleaning frequency), the tariffs for citizens (free of charge or volume- or weight-based), scale (number, distances) and costs to keep the environment clean.

The main factor that can tip the cost in favour of bring systems is the population density. In case of a high population density, a large part of the population can be reached with a limited number of sorting lanes.

4. Think about service delivery

A bring system allows people to choose when and with what frequency they dispose of their waste. This advantage becomes more important given the evolution towards ever smaller living spaces and thus less storage space. Bring systems can also be considered for sites with a lot of temporary accommodation so that second-home owners, students and tourists also dispose of their waste correctly, regardless of when they leave. Bring systems can also encourage residents to offer waste more separately. This is especially true if citizens have to put in more effort for residual waste, for instance because the bring system is the only option for that waste.

Bring systems allow citizens more flexibility, but require extra commitment. The walking distance for citizens to a bring system should therefore preferably be no more than 200 metres, especially for replacement systems. In addition to good on-site accessibility, including for wheelchair users, practical support may be needed for older and less mobile citizens. This can be done, for instance, through additional, less frequent door-to-door collection, e.g. for specific target groups.

Pre-analysing local sorting behaviour and involving citizens from the start can provide important information for a system that is tailored to the neighbourhood. Communication with citizens should ideally start even before the plans have been worked out in concrete terms. Early involvement will increase support for the project. Following the actual implementation, ambassadors can then help inform and convince local residents.

5. Monitor the cleanliness and surroundings

The design of the space is important, and so are social control and good lighting. These factors have an impact on the cleanliness around the bring system. Ambassadors or other systems that boost ownership and responsibility are helpful as well.

An advantage of bring systems is that rubbish bags are no longer torn by birds (especially gulls), cats or other animals. Compared to above-ground bring systems, underground bring systems also cause less visual nuisance, attract less fly-tipping and cause less noise nuisance during glass collection. However, litter and fly-tipping near bring systems cannot be prevented and frequently cause more nuisance than door-to-door collection. That is why sufficient attention needs to be paid to cleanliness, which will also ensure that people participate in a more correct manner.

Frequently cleaning the inside and outside of the columns (especially for VFG or VF collection) helps to keep the surroundings clean and reduces litter and fly-tipping. A weekly check or cameras also help to take quick action where necessary.

6. Develop a policy around access and tariffs

The opening hours of bring systems have an impact on participation, but also on fly-tipping behaviour. Depending on the location, wider opening hours can thus be either advantageous or disadvantageous.

Access control or identification helps keep the quality high, as it leads to a sense of responsibility and control among citizens.

In addition, a financial contribution from the user results in a greater sense of responsibility and more correct use. As with other systems, the tariffs policy should help ensure that citizens are motivated to prevent and sort waste. Moreover, the tariff for bring systems in a complementary system should be the same as for regular door-to-door collection (or possibly more expensive) and always be in line with the minimum tariffs (Annex 5.1.4 VLAREMA).

Payment systems for underground containers are currently limited to coins and charged badges. Payment cards may be added to that in the future. Payment apps and QR codes will also be an option in the future, but far from all citizens have smartphones or know how to use such applications.

6.2.2 Collection at civic amenity sites

Besides door-to-door collection and short-distance bring systems, civic amenity sites remain an important pillar of successful separate collection. However, especially in urban centres, the standard civic amenity site is not easily accessible to all citizens. The OVAM survey of citizens (2021) shows the need for more communication about the sorting rules and tariffs that apply at civic amenity sites. Providing additional (permanent, temporary or mobile) mini recycling centres for the most common waste fractions in addition to the standard civic amenity sites enhances citizens' comfort and the service provision. Still, citizens shall always have access to a standard civic amenity site where all the mandatory waste streams are accepted.

6.2.2.1 Waste fractions at civic amenity sites

The waste fractions that must be collected as a minimum at a standard civic amenity site are shown in Table 4. Local authorities are free to collect more waste streams at the civic amenity site than those listed in the table. Some fractions are explained in greater detail below, as there are certain points of focus to keep in mind. Local authorities may also choose to accept comparable company waste in accordance with the conditions listed under Chapter 3.4.2.

VFG and/or residual waste may be collected at a civic amenity site under strict conditions imposed through the integrated environment permit. The tariff applied at the civic amenity site must, however, at least equal the tariff charged for door-to-door collection.

Since the VFG fraction also includes kitchen waste, the storage of kitchen waste at the civic amenity site must comply with the requirements imposed by European Regulations 1069/2009 and 142/2011 on animal by-products. Civic amenity sites do not require approval under these regulations to store kitchen waste. However, the following elements must be in order:

- An approved disinfectant must be present.
- Receptacles must be labelled 'Category 3, not for human consumption'. If the receptacles themselves cannot be labelled, then the place of storage must be clearly labelled.

- Collection must be done by a registered carrier.

To guarantee the quality of the **green waste** collected at civic amenity sites, the following storage periods must be respected depending on the seasons:

- the storage period for fine garden waste is maximum one week in the period April-October and one month in the period November-March;
- the deadline for coarser garden waste such as prunings is limited to two months.

Transport to a licensed green composting facility is mandatory. Prunings and fine garden waste must not be shredded together into mulch material (see also [Circular of 26 May 2004](#)). This circular remains the starting point, as long as the VLAREMA legislation does not contain any specific rules on the conditions for using wood chips as ground cover.

Sometimes, there is a local need for a practical and inexpensive destination for **deceased pet animals and roadkill** in order to combat fly-tipping of animal waste, among other things. A separate collection site for animal waste at the civic amenity site is a low-threshold solution, but not an obligation.

Local authorities are not obliged to collect **waste** for which cooperation with local authorities is voluntary (e.g. car tyres) **under the acceptance obligation**. In this case, they are not entitled to producer compensation, which means they can refuse this waste at the civic amenity site. An alternative option is that local authorities charge citizens presenting the waste for the acceptance of that waste. In that case, citizens should be made aware, however, that other free channels are available to dispose of that waste.

Civic amenity sites must not accept **old and expired medicines and gas cylinders**, except those entered on the list of small hazardous waste (klein gevaarlijk afval/kga). Medicines are collected through the pharmacists. Federations have set up a collection system for reusable gas cylinders at affiliated gas cylinder outlets. That system should be further promoted and, where possible, optimised.

ACTION 25: OVAM is engaging with the relevant sectors to make the collection of medicines and gas cylinders clearer and simpler for citizens.

Small hazardous waste (kga) is collected through the civic amenity site at the municipality's expense. There are **other hazardous wastes** that are rightly or wrongly accepted at the civic amenity site. Sometimes, often without even knowing it, civic amenity sites receive waste that could cause a fire in the compactor, e.g. gas cylinders, batteries, solar panels, fireworks, ammunition, nitrous oxide (laughing gas), etc. These fractions do not belong in the compactor. In some cases, it is even prohibited to accept these wastes by virtue of the permit of the civic amenity site. Civic amenity sites, as well as private processors, are increasingly faced with such risks and the associated insurance costs. During this plan period, additional efforts are made to prevent these risks. We inventory possible causes and look for customised solutions for citizens, local authorities and private processors.

ACTION 26: OVAM, VVSG-Interafval and Denuo are working together to reduce the risk of fire and other safety hazards at civic amenity sites and private processors. The necessary measures are being worked out, such as legal initiatives, as well as information for citizens and companies and practical tips for local authorities and processors. Police, fire and other security services are involved in this process.

Non-friable **asbestos** is accepted free of charge at civic amenity sites. However, a local authority can set quantity limits. The following quantity of asbestos must be collected as a minimum at the local authority's expense: 200 kg per household per year OR 1 m³ per household per year OR ten asbestos cement sheets per household per year. If the local authority wants to introduce a quantity limit, it can choose one of the three options above. As far as the collection of asbestos cement is concerned, the civic amenity site shall ensure that it complies at all times with the Circular of 18 December 2020¹⁰. To work in an asbestos-safe environment, site staff must be adequately trained and be able to take sufficient measures, in order to prevent exposure risks for themselves, local residents and site visitors. They are also able to recognise common asbestos applications so they can keep them out of the construction and demolition waste. In addition, the site staff in charge of the asbestos container at the civic amenity site shall have the knowledge to act in case of an asbestos incident at the site.

Collecting **goods for reuse** through the civic amenity site, in cooperation with the local reuse shop, is not mandatory but can be an additional service for citizens. However, experience shows that it is not always easy for site staff to distinguish between reusable, saleable or discardable goods. Discussions about this with citizens mainly concern large items. Some citizens prefer to dispose of them free of charge as reusable goods rather than paying for their disposal as bulky waste. To avoid those discussions at the civic amenity site, site staff can also choose to only accept smaller reusable items.

Finally, the collection of **bulky waste** at the civic amenity sites also requires special attention. In autumn 2020 and spring 2021, OVAM conducted a composition analysis of the bulky waste of 20 municipalities across Flanders (OWS, 2022b). Although the analysis was limited each time to one disposal container per municipality per season, it still yielded some remarkable results.

Bulky waste still contains large quantities of small waste, which does not fall within the definition of bulky waste. Small waste either belongs at home in the residual waste or in a separate fraction, which means this waste is not sorted correctly by citizens. Possible reasons why citizens still dispose of that waste as bulky waste are:

¹⁰ Circular on the amendment and update of the Circular of 27 August 2008 on the collection of asbestos cement at civic amenity sites in the Flemish Region

- Laziness: citizens do not sort the waste into bags or separate containers. Everything is disposed of (incorrectly) into the bulky waste container because it is the easiest solution.
- Lower tariffs than residual waste: citizens avoid the higher tariffs for residual waste through bulky waste.
- Ignorance of correct sorting behaviour.
- The definition of bulky waste refers to residual waste that is too large for the residual waste receptacle. Because residual waste receptacles are becoming increasingly smaller, more residual waste may fall within the definition of bulky waste. However, there is still a large grey area between the two.
- It is not always easy for site staff to engage in discussion with visitors.

ACTION 27: To reduce the amount of bulky waste and get citizens to sort better, additional attention should be paid to this waste stream at civic amenity sites. Therefore, OVAM and VVSG-Interafval will jointly take a number of initiatives to improve the collection of bulky waste at civic amenity sites during the plan period. The following elements will be addressed:

- We need to raise visitors' awareness of bulky waste and improve communication on this topic. To that end, we want to review the terminology (bulky waste, residual waste, mixed waste, large household waste, small and large residual waste, etc.) for purposes of a clearer and more uniform communication. We will also examine the implications of a change in terminology, if any, on the legislation (Materials Decree, VLAREMA, VLAREM, etc.).
- The latest composition analysis shows that bulky waste contains a lot of small waste, whether loose or in boxes or bags. This small waste, which fits into a residual waste receptacle, is not meant to end up in the bulky waste. On the other hand, fractions such as removed wallpaper or covers are sometimes difficult to dispose of into the residual waste receptacle due to their large quantities, especially in combination with the positive trend towards smaller residual waste receptacles. It may therefore be useful to still allow the disposal of some of these fractions into the bulky waste. Local authorities may choose this option if they so wish. On the other hand, it should be possible for site staff to check the contents of boxes or bags, either by emptying receptacles into the container or by using open or transparent receptacles.
- A more thorough check of the bulky waste container is important. This can be done by placing the container in a more visible space at the civic amenity site, which increases social control. Additional monitoring by site staff is recommended as well. Site staff must also be adequately trained to carry out checks. This is addressed during the training of the site staff and their supervisors, including through the Learning Networks (see Title 6.5.4).

In addition, the bulky waste container should not be a way for citizens to avoid the more expensive tariffs for residual waste. For this reason, it is important that local authorities align the tariffs for household and bulky waste to one another and prevent too large a differences.

The composition analysis also reveals interesting conclusions about the waste that is correctly disposed of into the bulky waste. Some of the bulky waste consists of large pieces of non-recyclable waste (furniture, sports and play equipment, children's seats, etc.) composed of materials (wood, plastic,

metal, textiles, etc.) that are difficult to disassemble and can therefore not be collected separately. To take those waste streams out of the bulky waste, these products could be designed differently so that the parts can be collected separately.

6.2.2.2 Development of mini recycling centres

Besides the standard civic amenity sites, which accept as many separately collected waste streams as possible, mini recycling centres can also offer added value.

Flanders does not yet have any experience with permanent mini recycling centres. Mobile installations, on the other hand, have already shown great benefits. They reach more citizens, including those who do not have a car or only a small one and those who would otherwise be harder to reach or motivate to correctly present their waste streams at the civic amenity sites. Collaboration between local authorities and local actors is useful to reach people. There is also more room for personal contact at a mini recycling centre, which means citizens can be better informed. Municipalities are not obliged to set up a mini recycling centre, but they represent great added value, especially for central cities.

A local authority that chooses to establish a mini recycling centre decides for itself which fractions are welcome. The quantities at mini recycling centres are in any case always limited to small quantities that can be brought in on foot or by bicycle. Furthermore, the same rules and conditions apply as for standard civic amenity sites, unless stated otherwise in the regulations.

6.2.2.3 Number of civic amenity sites

Municipalities can choose to operate civic amenity sites all by themselves, to cooperate with neighbouring municipalities, or to outsource the operation entirely to the intermunicipal partnership which they belong to. However, sufficient standard civic amenity sites must be available at all times which accept all the fractions, as outlined in Table 4. Mini recycling centres are not included. They can, however, significantly improve the service provision to citizens.

The number of standard civic amenity sites on the territory must meet one of the two standards below:

- The basic principle for intermunicipal civic amenity sites or other partnerships in which the civic amenity sites are accessible to all residents of the participating municipalities is that 90% of residents of the participating municipalities shall live within a distance of five kilometres as the crow flies from a standard civic amenity site. The network of civic amenity sites within a partnership can be optimised based on the above standard. As long as the standard is respected, not every municipality needs to have a civic amenity site on its own territory.
- The same standard can be used for municipalities that operate completely autonomously and where municipal civic amenity sites are only accessible to residents of their own municipality. If 90%

of the municipality's residents live within a distance of five kilometres as the crow flies from a municipal standard civic amenity site, the distance standard is met. On the other hand, the municipality working entirely autonomously can also opt for a residents standard. Municipalities with 10,000 to 30,000 residents must have at least one standard civic amenity site. Municipalities with more than 30,000 residents must have an additional standard civic amenity site for each started portion of 30,000 residents.

Municipalities with fewer than 10,000 residents must make arrangements so that all residents have access to a civic amenity site. Either they provide their own civic amenity site on their territory, or they make arrangements with the intermunicipal partnership to comply with the distance rule, or they work together with a neighbouring municipality. The distance or residents standard does not apply in the latter option.

Households do not frequently generate the fractions 'mattresses' and 'asbestos cement'. If citizens have access to several standard civic amenity sites, it suffices that these waste streams are accepted at only some of these sites. To determine which sites should accept these waste streams or not, the following distance standard applies: 90% of residents of the participating municipalities shall live within a distance of ten kilometres as the crow flies from a standard civic amenity site that also accepts mattresses and asbestos-containing cement waste. Local authorities must inform citizens at least annually (including through the paper collection calendar) about the disposal possibilities for those fractions. Sufficient communication must also be provided at the civic amenity sites.

To encourage the use of civic amenity sites, the sites must be easily accessible and guarantee a good service, which is why opening hours and staffing levels are crucial. Civic amenity sites must therefore be open at least one evening a week and on Saturdays.

6.2.2.4 Value of good site staff

An efficient operation and sorting at the civic amenity site depends on the skills of the site staff. The professional qualification for civic amenity site staff specifies the knowledge and skills site staff must have. It is important to offer proper support and guidance to site staff, in terms of both sorting rules and communication skills. Site staff should be sufficiently encouraged to address citizens to present their waste correctly. The thoughtful (re)placement of problem containers at the site and educational materials can also help site staff in the performance of their duties.

6.3 QUALITY OF THE WASTE STREAMS COLLECTED

6.3.1 In general

To guarantee outlets for separately collected waste streams, their quality needs to be monitored continuously. A good quality of the collected fractions often contributes to lower treatment costs, better recycling and a higher quality of the recycled materials.

Local authorities should therefore make sure that citizens know and respect the sorting rules. This need for information is in fact confirmed in the OVAM study mentioned earlier (2021). According to respondents, more information on the sorting rules (especially pmd and VFG), on the usefulness of sorting in general and on the possibility to present separately collected waste streams cheaper or free of charge at the civic amenity site could result in residents sorting more correctly. Waste coaches, actions tailored to a specific neighbourhood and collaboration with ambassadors are among the options for raising awareness and providing support. If necessary, GAS sanctions may be another useful tool.

The municipality or intermunicipal partnership also puts in place a quality control process. Besides the mandatory quality requirements to be met, it uses clear internal rules for the civic amenity site, organises training for site staff, communicates in a clear manner to citizens and makes sound contractual agreements with the processors.

6.3.2 Biowaste

Given the generalised introduction of separate biowaste collection, we focus on achieving the quality required for the collection of that particular waste stream. The treatment of biowaste into a usable end product is primarily determined by the purity of the input material. The pre- and post-treatment techniques used are important (see Title 8.4) as well. The higher the quality, the more outlet opportunities.

The type of contamination in the VFG and VF waste is similar and consists mainly of plastics, incorrectly sorted residual waste or compostable bags. Plastic contamination such as bags, coffee pods, tea bags and fruit stickers, in particular, have been found to be disruptive to quality. The contamination level of kitchen waste (VF-waste) is higher than that of VFG, which makes sense, as no to very little contamination is found in garden waste. The contamination in a VFG collection is thus 'diluted' by the G-fraction.

ACTION 28: Contaminants in biowaste must be reduced through interventions throughout the chain. We are therefore committed to starting or further implementing the following measures during this plan period:

- **Each year, local authorities actively raise their population's awareness about biowaste sorting rules. The non-profit-making organisation Vlaco vzw and OVAM support these initiatives, for example through communication material or the joint planning of awareness campaigns.**
- **OVAM is looking into the issue of non-compostable and non-fermentable coffee pads and tea bags together with producers and processors. This is connected to Action 7 of the Implementation Plan on Plastics.**
- **OVAM organises the actual enforcement of compliance with the provisions of Article 5.3.14.1 of the VLAREMA legislation (ban on fruit stickers) together with the supervisory authority.**

- **OVAM is working together with the treatment sector to develop new pre- and post-treatment techniques for VFG, food and kitchen waste at treatment level (see Title 8.4).**

Biodegradable and compostable packaging is not allowed in VF(G) waste. The collection receptacle offered by the local authority, specifically for the collection of VF(G) waste in the region, may consist of compostable material if the treatment plant is able and willing to treat it.

To ensure a qualitative treatment, the ‘contamination’ of the collected VF(G) must not exceed 2% (expressed in weight percentage). It is therefore important that local authorities make sure citizens respect the sorting rules and that they monitor compliance therewith. This is particularly important when the collection is done through bring systems (sorting lanes or civic amenity sites).

6.3.3 Stone rubble

Specific regulations apply to the quality of **pure stone rubble** at civic amenity sites. The maximum contamination percentage for pure stone rubble depends on the acceptance criteria of the debris crusher that treats it further into compliant recycled granules. Transport of the stone rubble as low environmental risk profile (LERP) gives the rubble crusher guarantees in terms of quality and origin of the rubble so that it can also be treated more cheaply. This transport as LERP rubble requires an external check by Copro or Certipro in accordance with guidelines that are yet to be developed. Failing that, the pure rubble is sent to a crusher as high environmental risk profile (HERP). If the rubble is not pure enough, the crusher is not allowed to accept it, even as HERP. Impure rubble must therefore first be sent to a sorting facility that has a ‘quality assurance system for rubble from sorting facilities’ (cf Annex 3 of the Unitary Regulations).

6.4 TARIFFS POLICY

6.4.1 Residual waste tariffs

Annex 5.1.4 of the VLAREMA legislation sets annually indexed minimum and maximum tariffs (the tariff range) for residual waste and bulky waste. The tariffs policy is a tool to motivate citizens to sort correctly, which is why tariffs should be sufficiently differentiated by waste fraction. Separately collected waste streams should be free of charge for citizens, or it should be possible to present them at lower tariffs than residual waste and bulky waste. As a result, the collection of separate fractions can sometimes incur additional costs for local authorities. For example, the treatment cost of VFG waste is almost the same as for residual waste, whereas citizens pay (much) less for it.

While the cost of the separate collection is deliberately kept low for citizens, the price of residual and bulky waste should be sufficiently high. Moreover, citizens have more and more sorting options. Part of the costs of separate collections for local authorities can also be covered by charging a higher tariff for residual and bulky waste.

The survey on their sorting behaviour (OVAM, 2021) shows that most respondents would sort better if there would be a bigger difference in tariffs between residual waste and separately collected waste streams. Respondents regard both a lower cost price for separately collected waste streams and a price increase for residual waste as options. They are, however, in favour of the social tariffs to support certain vulnerable target groups. They also welcome additional communication on the tariffs applied at civic amenity sites. This could be an incentive to sort better, especially for the worst sorting households.

Figure 9 clearly shows that the average resident indeed presents less residual waste in a municipality or city that charges a higher residual waste tariff. In addition, the figure indicates that, on average, less residual waste is presented in municipalities with a weight-based PAYT system than in those with a volume-based PAYT system. The weight-based PAYT tariff is calculated as the sum of a cost per kg, supplemented by a presentation or emptying cost that is also converted to an average additional cost per kg.

Naturally, there are many different and complex reasons for the lower quantity of residual waste that is presented. Although other factors come into play, the impact of tariffs is clear. The introduction of a tariff range has helped reduce residual waste over the past decades. The cheaper citizens can present residual and bulky waste, the more residual waste is generated. A striking element in Figure 9 is that there is mainly a gap with the municipalities with the lowest tariffs.

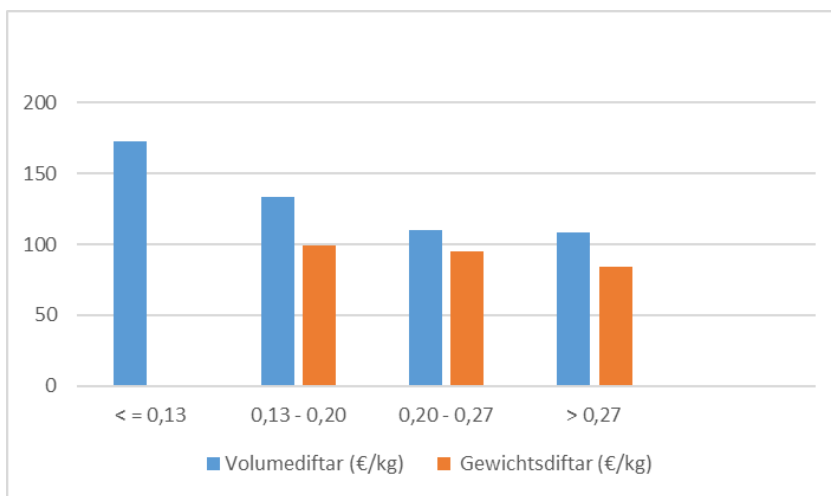


Figure 9: Connection between residual waste generation and residual waste tariffs in the different Flemish cities and municipalities (Source: OVAM, 2020 tariffs)

Volumediftar: volume-based PAYT – Gewichtsdiftar: weight-based PAYT

With these considerations in mind, we ask local authorities to scrutinise their tariffs policies in the context of the ambitious residual waste targets. Municipalities where residual and bulky waste tariffs are at the bottom of the range may, for instance, consider an increase at the time when additional biowaste is collected separately. As a result, the overall cost for citizens can remain the same. Municipalities working with a volume-based PAYT system may consider switching to a weight-based PAYT system.

The VLAREMA tariff range determines the minimum and maximum per weight (or converted per volume) for the total variable part of the tariffs. That total variable part consists of the cost per quantity of waste presented, plus any additional costs charged each time waste is presented (cost of emptying the container, door-to-door transport of bulky waste, etc.). Dividing the extra cost for each time waste is presented by the average weight presented results in the possible extra cost expressed per weight, making it easy to calculate the total variable part of the tariffs. Fixed costs, such as the rental cost for the waste container, fall within a fixed charge to citizens or within the general environmental tax and are therefore separate from the VLAREMA tariffs.

This means that, for the door-to-door collection of bulky waste, the additional cost for each time waste is presented must also be added to the tariff per quantity to calculate the total variable part. The quantities presented for this fraction vary more, however, than for residual waste. It is therefore more difficult to determine the average quantity in order to express the additional cost for each time waste is presented per quantity. Moreover, when bulky waste is collected door-to-door, a number of large recyclables can be disposed of as well (e.g. an old fridge). Those have to be sorted out afterwards, which also incurs costs. This aspect can also be considered in the cost of the door-to-door collection of bulky waste.

ACTION 29: OVAM, in consultation with VVSG-Interafval, is looking into how the total variable part of the tariffs can be determined as correctly as possible for the door-to-door collection of bulky waste.

If a bring system (sorting lane, civic amenity site) for residual waste is in place in addition to door-to-door collection, the tariffs for the bring system should be at least the same, or higher. Tariffs for tourists who use underground containers only once, for example, may differ from the regular tariffs for a municipality's own citizens who also pay fixed costs through fees and taxes. The tariffs for bulky waste at the civic amenity site do not have to be the same as the tariffs for door-to-door collection.

Local authorities can charge citizens a progressive tariff, with the first ten residual waste bags or first kilos of bulky waste per household being offered at a minimum tariff, for instance. Naturally, that progressive tariff must be at least the indexed minimum of Annex 5.1.4 of the VLAREMA legislation, including for the first quantities.

The study 'Prevention and Sorting Behaviour of the People of Flanders - Quantitative and Qualitative Survey' (OVAM, 2021) shows that additional communication on the tariffs used at civic amenity sites would be welcome. This could be an incentive to sort better, especially for the worst sorting households. In addition, respondents mention a reward strategy and a higher collection frequency for separately collected waste streams to provide additional incentives for sorting.

6.4.2 Allowances for citizens

Local authorities can offer specific target groups of citizens an allowance towards their waste costs. However, it is necessary to continue to encourage even those citizens to prevent waste or sort it correctly. Preconditions must therefore be provided in the VLAREMA legislation.

ACTION 30: The Government of Flanders includes preconditions for waste bill allowances in the VLAREMA legislation.

The allowances must not mortgage the general waste policy of the local authorities. It is therefore not desirable to merely offer support towards the residual waste costs. Instead, a switch to supporting prevention and separate collection is required.

A number of principles will be established when adjustments are made to the VLAREMA legislation. Social allowances instituted by a local authority are limited to two target groups. The first target group are citizens who generate an unavoidably larger amount of waste (e.g. residual waste) due to circumstances, such as a disorder or condition beyond their control. One obvious example is incontinence. The allowance should be proportional to the amount of additional waste generated due to the disorder or condition.

In addition, a local authority may choose to offer additional support to citizens who are struggling financially. The allowance may be granted automatically on the basis of an official financial status (benefit, file with the public centre for social welfare (OCMW), increased allowance, etc.). The local authority can (temporarily) supplement this list with people who are in a similar situation without this situation (already) having been made official (refugees, people in precarious divorce proceedings, etc.). It is important to clearly delineate the target group.

If a local authority chooses to provide support through the waste bill, it can do so by offering a limited number of bags, collections or a credit for residual waste. However, it is better to facilitate prevention and separate collection by offering a choice between different packages (e.g. a combined package for VFG waste + pmd or reusable diapers). Regulations should at all times encourage citizens to engage in prevention and separate collection, which is why it is not allowed to completely relieve citizens of their residual waste costs (neither residual nor bulky waste) by offering them support.

Allowances for all citizens or large categories of citizens who do not have a particular condition or are in a precarious financial situation are not allowed.

6.4.3 The municipality's own company waste and school waste

Waste generated by the local authorities' own services (both administrative and technical) is regarded as company waste. This includes waste from municipal buildings, market waste, beach waste, sewage and gully sludge, material from watercourse clean-up operations, ditch waste, cemetery waste, park waste and municipal green waste, waste from the demolition of engineering structures, roads and public buildings and septic tank sludge. For larger quantities, the specific rules on the collection of company residual waste from the VLAREMA legislation must be adhered to.

A specific regulation is in place for waste generated by schools. Since the Decree on complementary education policy at the local level (30 November 2007 - Chapter II, Sections II and III), the collection of school waste falls within the scheme of 'Other benefits'. Even if a municipality is responsible for the waste management of the schools for which it acts as the governing body, it is no longer obliged to take charge of the waste management of all the schools on its territory.

The operating funds that schools receive from the Flemish authorities are intended, inter alia, to pay for school waste management. This means, that a local authority does, in principle, not intervene financially. This also applies to municipal schools. The local authority receives operating funds from Flanders for those schools, which are used, among other things, to cover the cost of school waste management. If waste management is done through a municipal service, internal billing is advised to keep the financial picture transparent.

However, a school's governing body has the right to provide additional support for the operation of its own schools. This may be financial or material support, but also waste management support. The Decree on complementary education policy defines it as 'granting other benefits' to local authorities' own schools. A local authority can extend that 'other benefit' that was granted to its own schools to other schools. For example, a municipality may take charge of the management of the waste from non-municipal schools. The municipality can set criteria that schools must meet in order to be entitled to this 'other benefit'. In that case, no distinction must be made between the schools, in line with the principle of equal treatment set out in the School Pact.

6.5 GUIDANCE AND SUPPORT

In this section, we first discuss some tools that local authorities can use to further support citizens in terms of sorting behaviour. In addition, OVAM itself launched several customised tools during the last plan period to guide and support local authorities in their waste policies. These tools were evaluated positively and will therefore continue to be used during this plan period. Slight adjustments have been made, however, to a number of tools. Finally, the composition analyses are discussed as a type of policy support.

6.5.1 Support for citizens

Clear and repeated communication on the sorting rules remains necessary to maintain and even increase gains in declining residual waste. The citizens' survey (OVAM, 2021) provided a number of useful ideas that local authorities, inter alia, can capitalise on. There is still room for improvement, in particular for the extended pmd fraction and VF(G) waste. Citizens sometimes doubt about the correct sorting rules, especially for those two fractions. Giving citizens feedback on their sorting behaviour may help improve their behaviour. This can be done at different levels. For instance, on a personal level through a waste coach, or at a broader level through results of a local composition analysis.

The study shows that it is necessary to communicate about the importance of sorting and the subsequent path of the sorted waste. Respondents sometimes question the importance of sorting because they doubt whether the waste is actually always being recycled. They use this as a reason to not always sort correctly.

The paper waste calendar is the most frequently cited channel through which people wish to receive information, next to the website, the information newspaper and the online waste calendar. A lot of citizens would like a paper leaflet or information sheet to be attached to the bags when new sorting rules are introduced.

6.5.2 Benchmark tool

The benchmark tool that was introduced during the previous plan period allows local authorities to benchmark themselves against other municipalities and to learn from each other. The tool shows the waste rates, as well as discusses the policies implemented, taking into account the cluster classification. Good practices within the cluster are highlighted as a result.

The present plan changes the classification of local authorities into clusters. As a result, the benchmark tool will, in addition to an annual update with new rates, also be updated in accordance with the new classification. We also provide a link to MATIS, the new digital registration system for data collection for waste and materials.

The benchmark tool is useful for local authorities. Following the update, OVAM will again inform local authorities about its possibilities.

ACTION 31: OVAM updates the benchmark tool and links it to MATIS. OVAM, in cooperation with VVSG-Interafval, informs the local authorities again about the possibilities of the tool.

6.5.3 Visitations

During the previous plan period, great focus was placed on visitations to municipalities and intermunicipal partnerships that were still far from meeting their mixed household waste targets. It is difficult to map the outcome of this. A large number of processes have been initiated with both local authorities and intermunicipal partnerships. Some of them clearly have effect, whereas others will not generate an effect until the next few years. In response to the visitations, several municipalities started all kinds of actions such as the separate collection of VFG waste or the adjustment of tariffs or the door-to-door collection or the collection at civic amenity sites. Such changes require a great deal of time in terms of preparation, approvals, financing, design and realisation of required investments, and communication and awareness to citizens.

The visitations are continued, but some adjustments have been made. Although the focus remains on local authorities that are far from meeting their targets, more attention is also devoted to the level of the intermunicipal partnerships that can further optimise waste policy. At municipal level, the primary focus will be on local authorities with a high number of residents, as these also have a clear impact on Flanders' total residual waste rate. Local authorities that are keen themselves and that can be expected to still make progress can be focused on as well.

ACTION 32: OVAM continues its visitations. Municipalities and intermunicipal partnerships with a high potential for improvement and/or a great potential effect on Flanders' mixed household waste rate are prioritised.

6.5.4 Waste policy learning networks

The learning networks aim to reduce the municipalities' mixed household waste rates and boost local circular economy. This is done by sharing knowledge and initiating and strengthening mutual connections. The target audience are municipalities and intermunicipal partnerships, both the employees and politicians.

OVAM organised an initial learning network for the central cities in 2017. Since 2019, the learning networks have been running at full speed, with VVSG-Interafval taking charge of the coordination. Sessions often also take place digitally since the COVID-19 crisis. A total of 88 sessions already took place (until the end of 2022).

Half of all the municipalities participated at least once, often following a visitation by OVAM or another confrontation with the high mixed household waste rates. All the intermunicipal partnerships as well already took part in the learning networks, albeit with a different frequency. A survey among the local authorities shows that non-participants argue that their mixed household waste target is not a priority or that they spend their limited time and resources on themes like climate or litter and illegal dumping.

Therefore, the learning networks may be optimised by:

- extending the pathways with room for deepening in more or less fixed groups;
- establishing a clearer link between residual waste targets in the learning networks and topical themes such as climate;
- involving the right people responsible within the local authorities for the specific topic on the agenda (purchasing department, town planning department, communication department, etc.) to the maximum extent;
- creating a larger variety in work forms (training, work visits, etc.).

According to the survey, the learning networks succeed in fulfilling their inspiring role and in critically evaluating and adjusting their own operation, even if the actual impact is not always immediately visible and harder to quantify. For this reason, municipalities and intermunicipal partnerships welcome the continuation of the learning networks.

ACTION 33: The learning networks are continued and further optimised. VVSG-Interafval continues to act as the coordinator.

6.5.5 Coastal waste working group

The coastal waste working group brings together all actors dealing with waste and litter along the coast (municipalities, intermunicipal partnerships, province, etc.) to exchange experiences and initiate joint actions along the entire coastline to reduce (residual) waste. It acts as a learning network that is focused on the coast and its specific waste issues.

This working group is also the steering group for the 'plastic free coastline' action from the C-MARTLIFE project that runs until 2027. The aim is to drastically reduce beach litter through a combination of communication and beach clean-up and prevention actions (cigarette butts, drinking water fountains, etc.).

6.5.6 Partnerships

Local authorities have been crucial and strategic partners since OVAM's inception. However, the term 'local authority' masks the diversity of the local policy level, which includes (central) cities, municipalities, as well as intermunicipal partnerships and other intermediary structures. OVAM has had an OVAM partnership (OVAM-SV) with a number of (central) cities for about ten years now. The partnership is a crucial part of a coordinated, overarching OVAM policy towards and with local authorities that is based on integration, innovation, customisation and practical implementation.

The main objective of the OVAM-SV is to work together as equal partners in the long term and as such create a win-win situation. Within the framework of the waste, materials and soil policies, OVAM and the local authorities address complex societal problems at the local level. Mutual trust is a basic requirement to that end.

The partnership seeks to facilitate collaboration between the different OVAM divisions and also take the cooperation with the various (central) cities to a higher level. The OVAM-SV is a voluntary partnership that focuses on actual achievements.

Currently, partnerships are in place with Aalst, Mechelen, Eeklo, Kortrijk, Dendermonde, Ghent, Antwerp, Turnhout, Roeselare and Sint-Niklaas. In line with the philosophy of a partnership, annual consultations are also scheduled with the other (central) cities.

ACTION 34: OVAM continues the ongoing partnerships and sets up annual consultations with the other (central) cities as well.

In addition, OVAM will examine during the plan period whether other, smaller cities and municipalities can enter into a partnership. This could possibly take a different form: temporarily, per group of municipalities, or per intermunicipal partnership. Municipalities that can work together on different themes are focused on specifically, for instance local authorities that are not meeting their residual waste targets, but at the same time have high ambitions regarding waste policy and circularity and also face major challenges in terms of soil policy.

Important preconditions for the expansion of the partnerships are definitely the willingness of cities and municipalities and the availability of staff at OVAM and the authorities to take up this task.

6.5.7 Residual and bulky waste composition analyses

OVAM commissions composition analyses on a regular basis. This allows us to map the further potential for prevention and especially separate collection. A new composition analysis will be carried out of both household and bulky waste during this plan period. The residual waste composition analysis will run in the 2025-2026 period in order to be able to assess the effects of the generalised biowaste collection from an early stage onwards. The bulky waste analysis is likely to be conducted in 2027.

ACTION 35: OVAM will have a new composition analysis of residual and bulky waste carried out during this plan period.

6.6 MONITORING AND ENFORCEMENT OF OBLIGATIONS IMPOSED ON LOCAL AUTHORITIES

6.6.1 Enforcement of mixed household waste targets

The targets per municipality listed in Chapter 4 must be achieved by 2030. However, the intention is to do so in a partnership between the local and Flemish authorities. After all, local authorities also depend on the policy choices made at the Flemish level and the (ambitious) implementation of the actions for which the Flemish authorities are responsible.

OVAM will continue the active guidance of local authorities with high mixed household waste rates through visitations (see Title 6.5.3). When evaluating the waste targets, OVAM primarily assesses the actual policies on the ground. Local authorities that have well-thought-out waste and materials policies and take action are judged differently from local authorities that have no or inadequate policies and show no initiative to make adjustments. The latter local authorities will be reminded of their responsibility when the mixed household waste rates are published.

When evaluating mixed household waste targets, OVAM will also take into account the extent to which actions have already been implemented for which the Flemish authorities themselves are responsible ('Flanders' share' of the targets), as the local authorities have less or no control over these actions. Especially the municipalities that are already performing well at the start of this implementation plan will not be able to achieve a further reduction so easily without steps also being taken at the Flemish level. Moreover, some municipalities may benefit more from the Flemish actions than others, because of specific local factors. Those factors are also taken into account in the evaluation.

6.6.2 Enforcement of the VLAREMA tariffs and obligations under the plan

While local authorities do not always have complete control over whether or not they meet their mixed household waste targets, they can always be held accountable for complying with the more concrete obligations set out in this plan and the VLAREMA legislation, such as the obligations to provide separate collections to citizens and to correctly apply the tariffs for household and bulky waste. OVAM supports local authorities in their policies through grants. If local authorities do not comply with those concrete provisions, they will not be eligible for support under the OVAM grant order.

OVAM is working closely together with the Agency for Home Affairs (Agentschap Binnenlands Bestuur/ABB) to specifically ensure compliance with the VLAREMA tariffs and the provisions regarding residual and bulky waste tariffs laid down in this plan.

ACTION 36: OVAM is working together with the Agency for Home Affairs (ABB) to ensure that taxes and fees that do not comply with the Flemish waste and materials legislation are adjusted.

Pursuant to Article 12, 6° of the Environmental Enforcement Order, OVAM can also exercise supervision of:

- *“The collection and presentation of household waste by individuals, as organised by the municipality”;*
- *“Compliance with sectoral implementation plans for the management of material cycles and waste”.*

Just like for the objectives, OVAM aims to have the binding provisions of the implementation plan complied with in the first place in consultation with the relevant authorities. If such consultation does not lead to a solution that respects the provisions of this plan, OVAM will use its supervisory tools.

Finally, a link will be established between the incineration ban and a set of criteria that a quality collection of (mixed) household waste must meet (see Title 6.1.5.2). As stated earlier, binding provisions from the plan may also be taken into consideration for this. As such, we will be developing an important additional enforcement tool.

6.7 EXTENDED PRODUCER RESPONSIBILITY (EPR)

Extended producer responsibility (EPR) is and remains an important tool for separate collection and recycling. It means that the costs of separate collection and recycling are charged to the waste producers, based on the ‘polluter pays’ principle.

Several EPR schemes are currently in place for varying household waste streams. Thanks to those EPR schemes, producers make sure that separate collection channels are established for citizens and/or they compensate local authorities to provide these channels. This is regulated through accreditations or covenants with producers, which usually involve annual reports on collection and recycling results. OVAM closely monitors those results.

A relatively new EPR scheme is that for mattresses, for which a covenant was concluded with Valumat in December 2020. The current covenant runs until the end of 2028. OVAM is closely monitoring the implementation of that covenant as well. Normally, the Flemish covenant will be converted into an interregional accreditation during its term. During that conversion, OVAM will devote particular attention to an in-depth evaluation.

ACTION 37: OVAM evaluates the EPR scheme for mattresses. The focus is on the results achieved. If the predetermined results are not achieved, OVAM will examine the underlying reasons for this, such as the effectiveness of the collection channels.

Possible new EPR schemes are being worked on during this plan period. Textiles are another priority besides the diapers already mentioned under Title 6.1.3. Diapers are still very much present in residual waste, which is why they qualify for this. Textiles are a useful waste stream because, despite a good separate collection, too many textiles are still incinerated or exported in unclear circumstances due to a lack of outlets in Belgium and Europe.

Secondly, we are exploring whether an acceptance obligation could generate added value for other product categories. Composite furniture, for example, often ends up entirely in bulky waste because it is difficult to disassemble. This problem also occurs with regard to sports and game equipment, which makes repair and recycling difficult.

As stated in Chapter 5, these waste streams hold great potential for prevention strategies such as lifespan extension, repair and reuse. For this reason, they will definitely be considered for a new EPR scheme, if any.

It is not possible to address all the waste streams at once. A new EPR scheme comes about in collaboration with the other Regions and is a long process. It is important that not only the household waste from the waste streams is included in the EPR whenever relevant, but also the company waste (see also Chapter 7).

ACTION 38: During the plan period, OVAM is working on new EPR schemes for the separate collection and recycling of household waste streams that today still end up in residual waste and/or are treated in a manner that is of insufficient quality. Textiles are also a priority besides diapers. Secondly, OVAM is examining whether an acceptance obligation could also generate added value for other product categories, such as furniture.

Existing EPR schemes are also continued, of course. We will raise the targets for separate collection and recycling where necessary and will further tap the potential of prevention, reuse, repair and lifespan extension where possible. Specifically following the expansion of the p-fraction in pmd, there is still work to be done to clearly

communicate the new sorting message for this waste stream to citizens. This is something Fost Plus will have to pay attention to in the coming years, and it will also be an important element in the new accreditation.

7 SEPARATE COLLECTION OF COMPANY WASTE

In recent years, policy has made great strides in terms of the separate collection in companies. The legal sorting obligation for companies, which has been in place for a long time already, has been systematically extended to several waste fractions over the past years. There is also a trend among companies to collect different recyclable fractions together. A growing number of 'receptacle in receptacle' type collections are done, for instance. The best-known example is the foil bags that are disposed of in the paper and cardboard container, but other combinations occur as well. So-called 'multi-containers' are another option, with several recyclable waste streams being disposed of in one single container. The VLAREMA legislation allows this under certain conditions, provided the fractions are eligible and high-quality recycling is not jeopardised.

When we talk about encouraging separate collection or sorting at source in this chapter, we also mean such innovative collection schemes. The essence is that these recyclable fractions do not come into contact with residual waste. If they do, waste streams become too contaminated and high-quality recycling is jeopardised.

Awareness-raising, communication and support for separate collection in companies have already been invested in for years. As a result, a lot of companies are already sorting well and are even getting better at it. Communication efforts are being fine-tuned. The first part of this chapter discusses the initiatives that are ongoing in this context.

Still, a lot of companies are still lagging behind. The practice of presenting all waste in one residual waste container is still too widespread among many (smaller) companies. We indicated under Title 4.4 that the residual waste rate in companies increased rather than decreased until 2018. As a result, policymakers, companies and actors involved in waste management will have to step up a gear if we are to meet our 30% reduction target for mixed company waste by 2030 compared to the 2018-2020 period. In a second part, we therefore present a number of (new) legislative initiatives, including economic incentives that should make sorting at source more rewarding.

The last part of this chapter focuses on enforcement as the final element of company waste policy. In the previous plan period, the VLAREMA legislation was supplemented with a new legal framework for the collection of residual waste in companies. The main purpose was to allow enforcement at waste producer level to concentrate on the companies that are lagging behind. For this reason, we discuss a number of actions to also realise that targeted enforcement on the ground in the coming years. In addition, all collectors must comply with the new regulations. Again, this requires enforcement.

7.1 COMMUNICATION, AWARENESS-RAISING AND SUPPORT

7.1.1 Communication campaigns

For years already, OVAM has been launching communication and awareness campaigns towards companies about the legal sorting obligation. These campaigns have proved successful in the past, but have reached their limits. Meanwhile, motivated companies have jumped on the bandwagon. Naturally, some form of general communication about the sorting obligation remains important because new companies continue to be created that hire new employees. However, we are also getting a better idea of which sectors are doing better or worse through the data collected by Valipac as part of its accreditation. We use that information for targeted communication towards sectors with a large quantity of residual waste and/or a substandard separate collection. Another ambition is to increasingly align public sector communication and the communication actions of waste collectors towards their customers.

ACTION 39: OVAM continues to communicate towards companies and raise their awareness about the sorting obligation. Besides general communication, OVAM conducts targeted communication towards specific sectors with great potential.

7.1.2 Sector-specific approach

A selection is made of sectors with potential for improvement on the basis of the results of the 2021-2022 composition analysis and the annual Valipac data on separate collection. That selection may be reviewed regularly during the plan period. This approach allows us to inform target groups in a more targeted manner and to set up projects together with sectors to raise awareness of sorting at source.

Initially, the healthcare (through the Green Deal 'Sustainable Care'), education and hospitality sectors will be addressed. These are sectors with great potential and where contacts have already been made. We will also look at sectors with a specific link to 'on-the-go' consumption or 'semi-public spaces'. Petrol stations, and in particular those along motorways, for example, are places where a lot of waste is generated and there is a risk of littering.

Furthermore, the mandatory separate collection of biowaste from companies will be generalised from 1 January 2024, which, until now, only applied to a selection of sectors and companies. Specific attention should therefore also be devoted to the sectors where this generalisation could have a strong impact.

Cleaning services in companies are an important link in sorting at source. Sometimes, waste streams are sorted in the workplace, but are still thrown together in the same container at a later stage. This is another point of focus in the sector-specific approach.

Sectors sometimes also face practical barriers to sorting. OVAM engages in dialogue about this in its sector-specific approach and looks for concrete solutions together with the stakeholders, whenever possible. Sometimes, the local level is involved as well. For example, we ask local authorities to take into account that containers for separate collection may (temporarily) occupy public roads. This is particularly true for sorting at construction sites.

ACTION 40: OVAM further develops its sector-specific approach, while focusing on communication and practical solutions for sorting at source in cooperation with the relevant waste producers and the collection sector. Priority sectors are healthcare, education and hospitality.

7.1.3 Cross-sectoral approach

We will communicate rather broadly on the sorting obligation for companies, together with cross-sector stakeholder groups, such as Voka (Flanders' Chamber of Commerce and Industry), Unizo (Organisation for the Self-Employed and SMEs) and VMx (professional organisation for environment professionals). At cross-sectoral level, initiatives are also being monitored where company waste is collected collectively at a business park. The joint organisation of waste management, in particular for waste fractions of which only small quantities are generated, can make separate collection more cost-effective.

7.1.4 Cirkeltips

In 2018, OVAM launched the online platform [Cirkeltips.be](https://www.cirkeltips.be). 'Cirkeltips' offers companies concrete tips and examples of practice to improve their separate collection, as well as to generally make their materials management more sustainable in an efficient manner. In addition, companies can use it to access the waste data they reported through the Integrated Environmental Annual Report (IMJV). That data also allows them to compare their waste and materials management with other companies using a benchmark module. In early 2022, another module was added that allows waste producing companies to keep their waste register via Cirkeltips.

ACTION 41: OVAM continues to give feedback to companies to make their materials management more sustainable and expands the Cirkeltips user base as much as possible. The benchmark function in Cirkeltips is being fine-tuned to increase its relevance for individual companies.

Within the framework of MATIS, i.e. the new waste and materials data collection system, OVAM is examining whether Cirkeltips can make the data reported by processors and collectors available to waste producing companies.

7.1.5 Mixed company waste composition analysis

OVAM regularly commissions composition analyses of mixed company waste. This is important to map the further potential for prevention, and for separate collection in particular. Composition analyses of mixed company waste are even more complex than those of mixed household waste. A completely accurate picture would require statistically relevant sampling by sector, company size, company location, etc. However, such an approach is extremely expensive. For this reason, OVAM has hitherto used a pragmatic approach that only generally monitors the presence of waste to be sorted in residual waste.

The latest sorting analysis did take a step forward, however. Thanks to extra budget from the European C-Martlife project, a number of specific sectors were also mapped, and some additional waste streams, such as food losses, were included in the analysis. OVAM is planning another composition analysis in 2026. It will use the same methodology as the 2021- 2022 composition analysis as much as possible, so that we can compare results.

ACTION 42: OVAM will have a new composition analysis of mixed company waste carried out during this plan period.

7.2 LEGAL INITIATIVES AND ECONOMIC INCENTIVES

7.2.1 Promoting separate collection in companies through EPR

We need to monitor both the household and company circuits for waste streams under EPR schemes. In the past, efforts seemed to be mainly focused on households. This used to be the case for pmd, for instance, which is why the latest accreditation of Fost Plus included specific targets for the separate collection of pmd 'out-of-home' and in companies in particular.

ACTION 43: Flanders wants to include both new and more stringent targets for collection from companies in the next accreditation of the household packaging management body, which is expected by 2024.

When covenants or accreditations are renegotiated and new waste streams come under an EPR scheme, efforts will also be required from both households and companies when the waste stream is generated.

7.2.2 Correct collection formulas

Today, sorting is not rewarding enough for companies. Additional separate collection usually costs money, whereas the reduction in residual waste is not always visible in the bill. This is owing to the so-called 'subscription formulas' used by some company waste collectors. In these formulas, payment is made per collection, and the exact amount of waste does not affect the price. This means that it costs a company just as much to present either a half-full or a full residual waste container. This creates an incentive to fill the residual waste container to the maximum, if necessary with waste that should actually be sorted at source. The cost of residual waste remains the same, while the cost of an additional separate collection is saved.

Such collection formulas are not correct. Each collection is definitely subject to fixed costs; costs that are not related to the quantity of waste presented. On the other hand, there is also a variable cost. This is most certainly the case for the incineration charge, which could be charged directly to the customer, but also for the treatment costs for post-sorting. Moreover, thanks to companies presenting less residual waste, more companies can be served per collection round, which results in an optimisation in terms of logistics.

ACTION 44: The Government of Flanders amends the VLAREMA legislation to ensure the application of correct collection formulas in companies. To give companies a stronger financial incentive to sort, the VLAREMA legislation will be amended to regulate tariff formulas for the collection of residual company waste by law. If containers are used for the collection, collectors will be required to weigh the residual waste for each collection. The weight of residual waste collected must from now on also be communicated to customers for each collection. In addition, tariffs will have to be based at least partly on weight.

The plan-EIR associated with the Local Materials Plan shows that this action enables us to cover about a quarter of the path towards the residual waste reduction target of 30% of companies. This makes it the measure with the highest impact in this chapter. Moreover, the socio-economic analysis shows that this measure clearly generates net economic benefits.

7.3 ENFORCEMENT

Work was done during the previous plan period to enhance responsibility for collectors and their customers. The role of mixed waste collectors has been strengthened via the VLAREMA legislation. From now on, they must inform their customers more extensively about the sorting obligation. Collectors must also visually check mixed waste containers for sorting errors, and provide a proper signal to customers, every time they make a sorting error. In some cases, collectors must reject containers because of sorting errors, or post-sorting must be done to correct the sorting errors at source. The costs incurred for doing so will be charged to the customers. Since the quality of materials is lower in post-sorting than in sorting at source, waste producers are still in violation. For this reason, collectors must at all times record the sorting errors detected at source as non-conformities in a register. That register allows enforcers to conduct more targeted inspections of sorting at source in companies that keep making sorting errors.

Local authorities have an explicit role in enforcing the sorting obligation in companies. Local enforcers have the authority to carry out inspections in companies and draw up official reports. The Enforcement Division of the Department of Environment and Spatial Development has the same authority, but focuses on Class 1 companies. As a result, inspections in all other companies and associations is largely dependent on the efforts of local authorities. Given their important role and the fact that enforcement is crucial as the final element of policy, we require each local authority to make additional efforts to inspect sorting at source in companies on their territory. It is important to always include the aspect of sorting at source in all inspection and enforcement actions carried out in companies. Inspections of sorting at source specifically are of course encouraged, if possible.

ACTION 45: In the 2024-2027 period, local authorities will be asked to carry out at least 1 annual inspection of separate collection per 100 companies operating on their territory. In the 2028-2030 period they will be asked to increase that effort to at least 1 annual inspection per 50 companies operating on their territory.

The number of inspections requested is a target, not an obligation. Annex 4 lists the annual target for each municipality. If all municipalities make this effort, 10% of all Flemish companies will be inspected in terms of separate collection by the end of the plan period. Municipalities will have to report on the inspections to OVAM. OVAM determines how this is to be done, but tries to couple it to existing reports such as the online survey 'Gemeentelijk afval-, materialen- en bodembeleid' (Municipal Waste, Materials and Soil Policy).

Local enforcers are not alone in this. Both OVAM and the Enforcement Division will start working on the non-conformity registers of collectors and pass on data on the companies that are eligible for inspection. The Enforcement Division will also advise local authorities on how to carry out inspections in practice. OVAM will answer questions about the interpretation of the legislation.

ACTION 46: The Enforcement Division of the Department of Environment and Spatial Development and OVAM both provide a single point of contact to assist local authorities in their local inspections of the sorting obligation in companies.

Moreover, the Enforcement Division of the Department of Environment and Spatial Development hired two enforcement officers through the 'Half a Euro' work plan in the 2021-2022 period, who focus exclusively on sorting at source in companies. The emphasis is on the sorting at source of household packaging generated in companies, viz. pmd. This represents an important additional capacity. If this operation is evaluated positively, the initiative will be continued and even extended. Otherwise, adjustments will have to be made. Through the 'Half a Euro' work plan, we are in any case appropriating the resources needed to strengthen the enforcement of sorting at source.

ACTION 47: With regard to the sorting at source of household packaging generated by companies, Fost Plus, OVAM and the Enforcement Division will together ensure that more enforcement will be carried out of sorting at source in companies in the coming years using the resources of the 'Half a Euro' work plan.

In addition to inspections at waste producers, enforcement should also be carried out at mixed waste collectors. Collectors that disregard the new rules of the VLAREMA 8 legislation (more stringent since 1 January 2023) on mixed waste collection in companies engage in unfair competition vis-à-vis collectors that do comply with the rules. Compliance with those rules is therefore a specific point of focus in the coming plan period. In addition, efforts will be made to track down completely unregistered collectors.

ACTION 48: OVAM and the Enforcement Division of the Department of Environment and Spatial Development further strengthen their collaboration to enforce compliance with the rules on mixed waste collection in companies. OVAM will carry out the necessary administrative inspections within its powers to track down non-compliant collectors. This includes requesting and checking the non-conformity registers of registered collectors. OVAM will pass on suspicions of poor compliance to the Enforcement Division for purposes of on-site inspections. In turn, OVAM will receive periodic feedback on enforcement actions to further shape policy.

8 RECYCLING

Extensive separate collection is not an end in itself and is only effective if sufficient sorting and recycling capacity is built up to achieve high-quality recyclate. In addition, outlets for recyclate should be supported. This chapter discusses the initiatives that are being taken to that end.

8.1 RECYCLING HUB

In 2021, the Government of Flanders supported a project within the framework of the Flemish Resilience Recovery Plan to develop [Flanders as a recycling hub](#). The Government earmarked EUR 30 million, and several projects were funded following a call in 2021 and another in 2022. Several of those investments are still ongoing and their impact will become clearer in the coming years.

Recycling projects that convert both local and imported waste into raw materials were eligible for support. It concerned investments in novel innovative pretreatment techniques, new recycling installations or the innovative expansion of existing installations. Adaptations of production processes to treat recycled materials were eligible as well. The ambition was to create substantial environmental gains in proportion to the support provided. This may be environmental gains in the form of residual waste reduction, detoxification of the cycle (e.g. asbestos destruction) or reused quantities of recyclates.

The government chose to support large-scale projects. The funds are intended for companies willing to make substantial investments (at least EUR 500,000) in innovative recycling techniques. The granted support amounts to up to 35% of the additional cost of the innovative technology compared to a conventional technology, with a maximum support amount of EUR 3 million.

It was provided for at the start of the calls that OVAM would carry out an evaluation of the effects of the subsidised projects (overall environmental gains, contribution to the circularity of the Flanders' economy, anchoring of business activities and associated employment, etc.) and the remaining potential for investment.

ACTION 49: Based on the concrete projects submitted within the two calls of the 'recycling hub' support mechanism, OVAM evaluates the impact of this support mechanism on the recycling sector and advises on the desirability of further structural support.

8.2 SYMBIOSIS PLATFORM

OVAM launched the online symbiosis platform in 2020 to replace the existing offline database. The symbiosis platform encourages companies to share information about their residual waste streams to subsequently look for higher-value uses. In this way, residual waste streams and primary raw materials

are replaced by secondary or recycled waste streams to the maximum extent. As such, the symbiosis platform contributes to closing material cycles by encouraging companies to focus more on by-product streams. The Flemish Institute for Technological Research (VITO) has currently been commissioned by OVAM to facilitate specific cases of industrial symbiosis.

OVAM intends to further roll out the symbiosis platform to other areas in the coming years, more specifically to bio(mass) waste streams from green management, construction materials and textile waste streams. An increased focus on reuse by professional users will be explored as well, with a view to boosting the number of users and achieved matches. In addition, the platform may serve as a basic platform for exchanging information with other platforms to more easily achieve a critical mass of supply and demand. OVAM continues to work on functionalities to increase the usage by and added value for companies.

ACTION 50: OVAM further develops the symbiosis platform, focusing on integrating additional waste streams and reuse, increasing the number of users and matches and incorporating new functionalities.

8.3 PROMOTING USE OF RECYCLED MATERIALS

Several initiatives have been launched in recent years to promote use of recycled materials. The VLAREMA legislation, for example, contains several provisions that prohibit the use of certain products without a minimum share of recycled content. This topic is also addressed in the accreditations of Fost Plus and Valipac. For example, Fost Plus must achieve a 25% bottle-to-bottle recycling rate for clear and blue PET bottles, and the use of recycled content in new packaging is also a point of focus in Valipac's accreditation. This policy will definitely be continued during negotiations on the next accreditations.

In this context, we also refer to OVAM's other implementation plans, viz. the actions in the Plastics Implementation Plan 2020-2025 and the Action Plan on Food Loss and Biomass (Residual) Waste streams Circular 2021-2025.

8.4 BIOWASTE TREATMENT

This plan pays much attention to the separate collection of biowaste. Consequently, the treatment of that separately collected biowaste and the outlets for the resulting recycling products also deserve appropriate attention.

8.4.1 Quantity of VFG waste presented and treatment capacity

The treatment capacity of the nine VFG processors in Flanders was almost fully utilised in 2020 and 2021. More home consumption due to the COVID-19 measures and a wet summer caused a high quantity of VFG waste to be presented.

By mainly putting forward the VFG scenario for biowaste collection in this plan, we expect the quantity of VFG waste that is presented to continue to rise on a structural basis as well.

Nevertheless, some existing VFG processors will scale up their capacity considerably in the 2022-2024 period. They can largely cover the initial increase in the VFG waste presented. In addition, municipalities in the Optimo pilot project will send the collected kitchen waste to wet fermentation plants until at least the end of 2024. This limits the quantity of VFG waste that is additionally presented and must be treated in the period up to and including 2024. And yet, overall capacity may be an issue. Table 5 shows the estimated shortage of VFG processing capacity for the coming years. Detailed calculations can be found in Annex 5.

Year	Capacity	Minimum quantity presented (tonnes)	Minimum shortage (tonnes)	Maximum quantity presented (tonnes)	Maximum shortage (tonnes)
2022	367,200	390,630	-23,430	404,965	-37,765
2023	387,200	394,092	-6,892	413,183	-25,983
2024	409,200	448,820	-39,620	543,164	-133,964
From 2025 onwards	409,200	448,820	-39,620	543,164	-133,964

Table 5: Table showing current and future estimated shortage of VFG treatment capacity in tonnes

When calculating the expected quantity of waste to be presented, both a minimum and a maximum scenario were estimated. This depends on the collection scenarios chosen by the local authorities (bins with a volume-based PAYT system versus bags). In 2023, we expect a treatment capacity shortage of min. 7,000 tonnes to max. 26,000 tonnes, which could potentially be absorbed through technical and organisational flexibility. Meteorological conditions present an additional uncertain factor, which can greatly affect the quantity presented. In terms of capacity, we take into account VFG composting both with and without pre-fermentation. Although the preferred scenario is VFG with pre-fermentation, it is allowed for the time being to process VFG waste in VFG composting plants without pre-fermentation, given the tight capacity. Currently, five out of nine VFG treatment plants already use the technology of pre-fermentation with post-composting.

We expect the shortage to rise from 2024 onwards, creating an additional treatment capacity need of 40,000 to 134,000 tonnes. Based on the average capacity of a treatment plant, this corresponds to one to three additional plants to be constructed from 2024 onwards. This does not yet take into consideration the potential affiliation of small producers of commercial kitchen waste and food leftovers to the public VFG collection. Based on the commitments in the coalition agreement and the Flemish Climate and Energy Plan, the pre-fermentation with post-composting of VFG waste will be further developed. This requires the necessary budgetary commitments in terms of financial support to realise this additional capacity. The Flemish authorities take up this commitment and will actually pursue a subsidisation policy to expand the capacity. The funds required to that end can be drawn from the Flemish Climate Fund. VFG treatment plants to be newly built will be licensed solely on the condition that they opt for pre-fermentation with post-composting.

8.4.2 Quantity of kitchen waste presented and treatment capacity

Separately collected kitchen waste and food leftovers from households and companies can be treated in wet fermentation. To aim for a high level of recycling for these fractions as well, kitchen waste and food leftovers may only be treated in wet fermentation that achieves the same level of nutrient and organic matter recovery as in pre-fermentation with post-composting. This implies that fermentation installations that dispose of their thin digestate fraction in a biological water treatment installation cannot be considered equivalent. For this reason, kitchen waste and food leftovers from households may not be treated in such installations.

The contamination level of collected kitchen waste and food leftovers is a second major point of focus. Title 6.3.2 elaborated on pollution prevention during collection. In addition, kitchen waste and food leftovers must be pretreated (depacked/purified) prior to use in wet fermentation. The outlet possibilities for digestate are mainly limited by the digestate quality and the recovery rate of the nitrogen content of the fractions. It is also advised against transporting kitchen waste and food leftovers from households to fermentation plants without post-treatment. In early 2023, Flanders has one fermentation installation with post-treatment to remove plastic contamination from the digestate. In addition, kitchen waste and food leftovers can be treated in a VFG composting installation or a VFG pre-fermentation installation with post-composting.

8.4.3 Quantity of green waste presented and treatment capacity

The annual green waste treatment capacity is more than sufficient to treat the green waste presented. Given the smooth sale of green compost, a demand for additional treatment capacity for green waste will be readily met.

8.4.4 Sale and quality of end products

Flanders produces approximately 340,000 tonnes of green compost every year. Green compost is generally very easily sold and can enjoy a diverse customer base, which reduces commercial risks. About 150,000 tonnes of VFG compost are sold annually. Although the prospects for the sale of VFG compost are positive as well, they are less pronounced than for green compost and will mainly be determined by climate adaptation and climate mitigation incentives. For example, the European Carbon Farming Initiative supports farmers to store carbon in their soils.

A further reduction in the contamination levels of end products is crucial to enhance end-users' confidence in compost and digestate quality. The efforts listed under Title 6.3.2 should improve the quality of the collected waste streams. However, the contamination present also requires the waste to be pre-treated or post-treated.

With regard to wet fermentation, OVAM is studying which waste streams cause the greatest plastic contamination and which treatment technologies are best suited to reduce plastic contamination in the digestate. Optimisations are still possible at the level of the depacking installation and post-treatment is still necessary at fermentation level. Tests carried out under the Optimo pilot project and by Vlaco should provide greater insights. A framework of agreements is being developed, cf Action 1.9.2 of the Action Plan on Food Loss and Biomass (Residual) Waste streams Circular. This can also improve sales and correct pricing.

The quality target for compost is based on weight percentages. Impurities larger than 2 mm must remain below 0.5% of the weight on dry matter. Stones larger than 5 mm must remain below 2% of the weight on fresh matter. This traditional method of determining impurities on the basis of weight says little about the visual contamination level, as fine plastics, including foils and fruit stickers, weigh very little and are often very much present in the end product. For this reason, the non-profit association Vlaco vzw is working on an additional quality target within the C-martlife project for compost carrying the Vlaco label.

9 FINAL TREATMENT

Waste that cannot be prevented or recycled must still be incinerated or, in the worst-case scenario, landfilled. We indicated in Chapter 4 that, when doing so, we want to retain a balance between the amount of waste presented and the treatment capacity, limit CO₂ emissions, and prefer incineration to landfilling for the waste streams sent for final treatment. In this chapter, we first explain the general policy strategy and basic principles we use to achieve these objectives. Next, we elaborate more specifically on the incineration and landfill policies.

9.1 STRATEGY

The strategy around final treatment from the previous plan period is continued, with an additional focus on a more equal treatment of similar company waste and household waste. The strategy implies that Flanders chooses to dispose or recover Flemish mixed municipal waste (MMW) as much as possible at one of the closest suitable facilities. The aim is to ensure the same high level of protection of the environment and public health for the treatment of MMW from companies as for MMW of household origin. This means that MMW from companies as well must in the first instance be treated in Flanders.

To limit the export of Flemish MMW for incineration we apply:

- the principle of self-sufficiency for mixed municipal waste from households, and from companies if this is collected together with mixed waste from households, based on Article 16 of the European Waste Framework Directive, in combination with Articles 3(5) and 11(1)(i) of the European Waste Shipment Regulation;
- the principle of proximity for mixed municipal waste from companies that is collected entirely separately from household waste, based on Article 16 of the European Waste Framework Directive and Article 12(1)(k) of the European Waste Shipment Regulation.

For more details on the legal underpinnings of these principles, please refer to Annex 6. The principles of self-sufficiency and proximity can only be derogated from when the MMW has undergone a substantial change. The strategy of the principles of self-sufficiency and proximity will also serve as guidance for Flanders when taking positions in European discussions, so that its own mixed municipal waste can be treated as close to home as possible.

An important precondition for imports of waste for incineration is that they can always be limited if the treatment of Flemish waste in Flemish incineration plants is jeopardised.

9.1.1 Definition of mixed municipal waste

The concept of 'mixed municipal waste' was introduced by the European Waste Framework Directive and copied in the Materials Decree. The official definition from the decree reads as follows:

"household waste, as well as company, industrial and institutional waste similar in nature and composition to household waste, except the fractions listed in the Annex to Decision 2000/532/EC under 20 01, which are collected separately at source, and the other wastes listed under 20 02 of that Annex."

The framework directive also explicitly states that "Municipal waste does not include waste from production, agriculture, forestry, fishing, septic tanks and sewage network and treatment, including sewage sludge, end-of-life vehicles or construction and demolition waste".

In concrete terms, this means that the following waste streams are covered by the term 'mixed municipal waste' (MMW):

- Mixed household waste;
- pmd (plastics, metals and beverage cartons) waste and the sorting residue of this pmd-waste;
- waste from other sources (companies), where such waste is similar in nature and composition to waste from households;
- residual fractions from the sorting out of recyclable materials from the above waste streams. The residual fraction from the sorting out of MMW also falls under MMW if a waste treatment operation does not substantially change its properties. The concept 'substantial change' is defined under Title 9.1.4;
- residual fractions from the sorting out of recyclable materials from separately collected waste streams of households and companies. Household and company waste that must be collected separately in accordance with the VLAREMA legislation may yield residual fractions after sorting. As a general rule, separately collected waste streams deserve separate treatment and material recovery. They are not be collected as 'mixed' waste as such, but the sorting residues actually belong to the mixed residual fraction of household or company waste. Again, the principle applies that if the composition of the residual fraction has changed substantially, this fraction is no longer covered by the term MMW.

9.1.2 Principle of self-sufficiency

The principle of self-sufficiency is fleshed out in the same way as during the previous plan period. All waste disposal operations, as defined in Article 4.2.1 of the VLAREMA legislation, are therefore by definition subject to the principle of self-sufficiency, regardless of the nature of the waste.

The status of mixed municipal waste incineration can be derived from the guidelines for the calculation of the R1-D10 codes, as set out in Article 4.2.2. of the VLAREMA legislation. If the competent authorities disagree on the status of the destination and the classification of the waste treatment upon import and export, the strictest interpretation shall apply.

If it concerns recovery through incineration with energy recovery (R1 or R12/R1 or R13/R1), the principle of self-sufficiency shall apply in the following cases:

- It concerns mixed household waste.

- It concerns comparable and similar mixed company waste collected together with mixed waste from households.
- It concerns residual fractions (sorting residues) generated by sorting out mixed household waste and commercial residual waste, if that mixed company waste was collected together with household waste.
- It concerns residual fractions from sorting out separately collected waste streams of household origin and of commercial origin, if those commercial separate wastes were collected together with the household separate wastes.
- It concerns mixed municipal waste of commercial origin that is collected entirely separately from waste from private households, but that is insufficiently sorted out as imposed in the VLAREMA legislation.

The principle of self-sufficiency does not apply if the wastes have undergone a substantial change (see Title 9.1.4).

As for the joint collection of household and company waste, the Waste Framework Directive defines the concept of 'collection' very broadly. "Collection means the gathering of waste, including the preliminary sorting and preliminary storage of waste [...]." The likelihood of physical mixing or combination is the ultimate criterion. If a facility is licensed to store, tranship and/or sort both household and company waste, the principle of self-sufficiency shall also be applied to the company waste, even if that waste was collected separately from household waste prior to transhipment or sorting.

9.1.3 Principle of proximity

In order to guarantee a high level of protection of the environment and public health, Flanders chooses, during this plan period, to maximise the treatment of MMW of purely commercial origin in one of the closest appropriate installations, in addition to the MMW covered by the principle of self-sufficiency. Since the nature and composition of MMW of commercial origin does not differ from MMW of household origin, and it is processed in the same installations as MMW of household origin, the negative environmental impact of not treating it in one of the closest installations can be remedied in the same way as for the treatment of MMW of household origin. This means that the export of such waste streams is only allowed on condition that the closest (usually Flemish) waste incineration capacity is used to the maximum extent.

9.1.4 Substantial change

The principles of self-sufficiency and proximity may be derogated from for mixed municipal waste that is destined for incineration with energy recovery (R1 action), originates from private households and other producers, and has undergone a waste treatment operation in Flanders that meets the following cumulative conditions:

- the waste no longer contains fractions that require separately collection in accordance with the VLAREMA legislation. This means that recyclable waste has been sorted at source or post-sorted in accordance with the provisions of the VLAREMA legislation;

- the waste undergoes a waste treatment operation that produces fluff or pellet, which *substantially changes* the properties of the waste.

The concept of *substantial change* is defined as follows:

- Fluff must be obtained after having passed through a sorting installation aimed at maximum, high-quality material recycling. Or fluff must be the result of biological drying (aerobic composting) with maximum separation of the ferrous and non-ferrous fractions.
- Fluff shall have at least a calorific value of 15 MJ/kg and must be homogeneous in quality (calorific value, moisture content, composition) so that it can be used as a fuel in a co-incineration plant.
- Fluff must meet the aforementioned criteria and the other acceptance criteria of the specific co-incineration plant (dimensions, heavy metals and other elements such as chlorine, sulphur, nitrogen, etc.) in accordance with OVAM's recommendations. Pellet is defined as pressed fluff.

Even if the mixed municipal waste has undergone a substantial change and has been converted into fluff or pellet, it is still waste. It does not lose that status because of the substantial change.

9.2 QUANTITY OF COMBUSTIBLE WASTE PRESENTED AND INCINERATION CAPACITY

9.2.1 Waste streams determining the quantity of waste presented

The waste presented includes:

- combustible mixed household waste and mixed company waste that is landfilled;
- mixed household m waste and mixed company waste that is incinerated;
- mixed household waste¹¹ and mixed company waste that is exported to be sorted out for purposes of incineration or direct incineration;
- combustible sorting and recycling residues generated during the sorting and treatment of household and similar company waste;
- refuse derived fuel (RDF);
- solid non-hazardous medical waste.

Given the focus on incineration of mixed waste in this implementation plan, the following waste streams are not covered by capacity planning:

- biomass wastes that are collected or sorted out separately;
- hazardous waste;
- pasty or liquid wastes;
- animal waste (animal fats and animal meal);
- (organic) sludge (wastewater treatment plant, food industry, textile industry, etc.);
- shredder and post-shredder residue;
- hazardous medical waste;

¹¹ Mixed household waste is covered by the principle of self-sufficiency and cannot be exported for sorting for purposes of incineration or direct incineration. This is only possible in case of an emergency, at which point that waste stream is also taken into account for determining the quantity of combustible waste presented.

- gaseous residues from chemical recycling for purposes of material recycling (R3 action) that are subsequently thermally valorised.

These wastes are treated in specific plants. If incineration is the only option, it is important that it is done as efficiently as possible. Under certain conditions, wastes can be treated with energy efficiencies that are typically higher than in incineration in a direct-fired setting. Moreover, a specific legal framework has been developed for certain waste streams, either through the VLAREMA legislation or through other actions or implementation plans.

9.2.2 Methodology for calculating the available quantity presented

The available quantity of waste presented for final treatment is mapped annually using the following waste quantities:

- the quantity of combustible waste, determinant for the quantity of waste presented (see Title 9.2.1), that is landfilled in Flanders;
- the quantity of waste, determinant for the quantity of waste presented (see Title 9.2.1), that is incinerated in Flanders;
- the quantity of waste, determinant for the quantity of waste presented (see Title 9.2.1), that is exported from Flanders.

Only the quantity of waste originating from and therefore produced in Flanders is included in the available quantity of waste presented. Quantities imported from the other Regions or from abroad are not taken into account.

The data is collected by OVAM via a digital desk. That desk is used for both the declaration of environmental levies and the reporting for purposes of the publication 'Tariffs and Capacities for Landfill and Incineration', which maps the waste quantities described above. All licensed landfills and incineration plants accepting third party wastes are included in this. In addition, the publication contains data on the relevant quantity of waste presented that is treated outside Flanders. The result is an annual market analysis of waste treatment in Flanders.

During the previous plan period, a distinction was made for the exported waste streams between exports to cement kilns and other exports for (co-)incineration. In practice, exports to the cement sector appear to communicate with other exports for (co-)incineration as well as with the treatment in Flanders. A possible consequence of not including these quantities in the quantity of waste presented is that no buffer capacity is currently provided for in Flanders to treat that waste in case the transport to the cement industry is eliminated. For these reasons, exports to the cement industry must also be included in the capacity exercise. Each year, OVAM calculates the available quantity of waste presented and the transport to cement kilns and reports thereon in the publication 'Tariffs and Capacities'. The publication is available on OVAM's website.

9.2.3 Overview of the available quantity of waste presented

The available quantity of combustible waste presented in Flanders is:

	2014 previous plan period (tonnes)	2018 (tonnes)	2019 (tonnes)	2020 (tonnes)	2021 (tonnes)
Residual waste, bulky waste, other	814,646	805,983	787,851	857,966	825,654
Non-hazardous company waste	985,788	958,877	961,409	971,129	1,069,079
Solid non-hazardous medical waste	13,139	15,370	14,066	14,834	15,661
TOTAL INCINERATION	1,813,573	1,780,230	1,763,326	1,843,930	1,910,394
Other combustible, non-hazardous, non-solidified waste	18,475	39,219	17,618	23,819	10,020
Combustible recycling residues	78,131	64,469	51,617	26,882	53,836
Combustible residual waste, bulky waste, other		0	3,929	1,608	815
TOTAL LANDFILL	96,606	103,688	73,164	52,309	64,671
Incineration in a waste incineration plant		122,813	172,062	201,190	161,648
Sorting out for incineration in a waste incineration plant		46,197	49,228	37,531	66,837
Other co-incineration		19,385	11,494	11,435	14,513
Sorting out for other co-incineration		9,599	21,610	2,614	86
TOTAL EXPORTS	157,242	197,994	254,394	252,771	243,084
TOTAL QUANTITY SUPPLIED	2,067,421	2,081,912	2,090,884	2,149,010	2,218,148
Exports to cement industry		167,619	147,662	168,704	123,371

Table 6: Quantity of presented combustible waste available in Flanders (excluding imported quantities)

Source: Tariffs and Capacities for Landfill and Incineration.

The quantity of combustible waste presented has each time increased over the past years. The increased quantity of household waste in 2020 and 2021 is likely owing in part to the effects of the COVID-19 crisis. It is not clear whether this trend will last.

9.2.4 Overview of the current incineration capacity

Flanders wants to strike a balance between the quantity of combustible waste presented, and produced, in Flanders and the treatment capacity at the Flemish level. For this reason, only the capacity of plants in Flanders is considered here.

The capacity planning only takes into account plants that are currently licensed to treat waste covered by the aforementioned quantity of waste presented. Plants that treat waste streams that are not covered by this quantity presented at the time of their licence, but subsequently want to switch to

waste streams that do, must obtain an adjustment to their licence for this. When assessing the licence amendment, the capacity planning specified in this implementation plan must be taken into account for those waste streams and quantities covered by the specified quantity presented.

The licensed capacity in Flanders in Table 7 is calculated based on the theoretical capacity of a standard calorific value of 10 GJ of the wastes and may therefore differ from the quantities actually incinerated. The actual capacity of an incineration plant in tonnes can indeed not be expressed unequivocally, as it depends on the calorific value of the wastes incinerated. For this reason, the actual capacity is also shown next to the licensed capacity. The actual capacity includes the quantities that are actually being treated in the specific plants (average quantity over the past three years). This means that both the actual calorific value of the incinerated waste is shown and the fact that other waste is also incinerated at these plants outside the scope of this implementation plan.

Stora Enso and Sleco are plants that treat waste streams covered by the capacity planning as well as other waste streams. Their licence only states the total licensed capacity, which is why the distribution of the actual mix presented is applied to the licensed capacity for these plants.

The following plants, and their respective theoretical capacities, are responsible for the incineration of the waste presented:

		Licensed capacity within the scope (tonnes)	Actually incinerated 2019 (tonnes)	Actually incinerated 2020 (tonnes)	Actually incinerated 2021 (tonnes)	Three-year average (tonnes)
Residual waste incineration plants	IMOG	85,000	64,842	68,502	63,582	65,642
	IVBO	207,500	156,680	173,341	173,975	167,999
	IVOO	78,000	57,123	56,722	62,388	58,744
	MIROM ⁽¹⁾	69,000	65,854	71,415	68,899	68,723
	IVAGO	101,500	100,043	101,212	96,912	99,389
	IVM ⁽²⁾	105,000	33,638	89,654	99,475	99,475
	ISVAG	159,000	138,070	127,823	132,340	132,744
	BIONERGA ⁽³⁾		99,181	80,112	0	/
	BIOSTOOM BERINGEN	200,000		100,920	211,714	211,714
	INDAVER ⁽⁴⁾	384,000	457,084	440,372	447,935	448,464
Specific incineration plants	SLECO ⁽⁴⁾ within the scope:	316,000 (466,000)	448,874 (681,687)	378,142 (609,430)	380,918 (631,845)	402,645 (640,987)

for company waste	(total:)					
	BIOSTOOM OOSTENDE	180,000	168,969	167,127	173,282	169,793
	STORA ENSO-WBO2 within the scope: (total:) ⁽⁵⁾	100,000 (300,000)	78,974 (275,815)	92,071 (288,660)	107,284 (276,430)	92,776 (280,302)
TOTAL operational capability (31.12.2021)	Within the scope: (total:)	1,985,000 (2,335,000)	1,869,333 (2,298,986)	1,947,413 (2,375,290)	2,018,704 (2,438,777)	2,027,138 (2,453,006)

Table 7: Incineration capacity in Flanders: theoretically licensed capacity versus real capacity based on tonnages actually incinerated, situation in 2021

(1) The capacity is shown at 10 GJ/tonne. Mirom is licensed to incinerate 75,000 tonnes/year, which involves waste of a lower calorific value.

(2) IVM's installation was out of service from May up to and including December 2019. The quantity actually incinerated in 2019 is therefore abnormally low and, even in 2020, the quantity of waste presented to this plant had not yet fully recovered. The quantities for 2019 and 2020 are therefore not included in the three-year average, which is why the total quantity of waste incinerated in 2021 is taken as the average.

(3) In 2020, Biostoom Beringen's new installation was gradually taken into service while mixed waste treatment at Bionerga was phased out. For this reason, only the licensed capacity of Biostoom Beringen is taken into account from 2020 onwards. Since neither plants were running at full capacity in 2020, this has an impact on the average quantity incinerated. This table therefore shows the total quantity incinerated in 2021 as a three-year average for Biostoom Beringen.

(4) Indaver and Sleco: the capacity of these plants is included in the licensing orders as a thermal capacity expressed in MW. This table shows this licensed capacity in tonnes with a standard calorific value of 10 GJ/tonne. Since the average calorific value of the supplied waste is less than 10 GJ/tonne, a larger tonnage is actually being treated at these plants, within the thermal capacity stated in the licence.

(5) The Stora Enso plant (WBO 2) incinerates its own waste in addition to third party waste. The quantity of own waste incinerated is not included in this total.

9.3 INCINERATION POLICY

The Flemish Coalition Agreement 2019-2024 states that *"We are all still dumping and incinerating too much waste; valuable raw materials that are lost and in whose production we have put energy."* As a result, reducing the quantity of mixed waste is a priority in Flanders' waste policy. Focusing further on the phase-out of mixed waste is the most obvious option to reduce the environmental impact of mixed waste treatment and/or increase its environmental performance. Only waste that is non-recyclable but instead combustible is eligible for final thermal treatment.

The study on residual waste treatment scenarios

(CE Delft, 2019) was updated during the previous plan period. After all, new waste treatment technologies may hold potential

for the circular economy. Based on this study, it can be concluded that the existing incineration capacity in Flanders is still a robust and environmentally efficient treatment method for mixed waste.

Alternative techniques aimed at the chemical breakdown of polymers (chemical recycling) with the intention of making new raw materials or fuels are currently not suitable (yet) for residual waste. However, such techniques are suitable and promising for homogeneous plastic waste streams that are separately collected or sorted out and that are not or difficult to recycle mechanically, provided they result in material recycling (and are not limited purely to energy valorisation). The plastic waste policy is included in the Plastics Implementation Plan.

9.3.1 Waste incineration capacity planning

Capacity planning for waste incineration follows the quantity of combustible waste presented. This means that the quantity of combustible waste presented must first have dropped structurally and substantially before a phase-out of capacity can even be considered.

9.3.1.1 Balance between the quantity of waste presented and the capacity

The balance between the waste presented and the capacity is monitored annually through the publication 'Tariffs and Capacities for Landfill and Incineration'. Based on the expected evolution in the quantity of waste presented and the current operational and/or licensed plants, a further expansion of the incineration capacity is neither necessary nor desirable at present.

Adding new capacity or expanding existing capacity can only be considered on condition that it can contribute to climate neutrality in the short term and insofar as it fits within the capacity that will still be needed in the longer term (2050). The trade-off between the quantity of waste presented and the capacity in a snapshot as used during the previous plan period is therefore not the only criterion here.

The re-licensing of incineration capacity will be assessed against a set of criteria that are still to be developed (see Title 9.3.2.4). Those will be linked to the climate targets, since all the existing incineration capacity must become climate-neutral over time.

Before we can actually start phasing out incineration capacity, efforts must first of all be made during the current plan period to further reduce the quantity of combustible waste presented. We want to achieve this in the first place by reducing exports for incineration outside Flanders, because Flanders wants to retain sufficient capacity of its own for wastes not covered by the principles of self-sufficiency or proximity and not become dependent on capacity outside Flanders. Conversely, the intention is not to further expand current incineration capacity in Flanders in function of current exports for (co-)incineration, including exports to the cement industry.

In the longer term, the climate targets will have to be met by actually phasing out incineration capacity and/or making existing treatment plants more climate-neutral.

9.3.1.2 Projections

To match capacity and the quantity of waste presented, we not only look at recent years, but also project the quantity of combustible mixed waste and recycling residues that will be available in the long term, as well as the incineration capacity needed to that end. This projection considers the current trends and the expected effects of existing and planned measures set out in this Local Materials Plan, as well as the targets we must meet, as specified in the Flemish Energy and Climate Plan. OVAM uses the projection of the quantity of waste presented and the capacity when advising on licensing applications for the expansion of existing capacity or the creation of new capacity.

This exercise was made for the first time in the Long-Term Vision on Final Treatment. It is important to pay sufficient attention to opening up waste incineration data in a transparent manner. This requires such a projection to be updated regularly based on the latest insights. The OVAM projection can then be used to better inform investment decisions by both intermunicipal partnerships and private processors.

ACTION 51: By 2026, OVAM will make an updated projection of the quantity of combustible waste presented and the available capacity in the short and medium terms, with an outlook to 2050.

9.3.2 Long-Term Vision on Final Treatment follow-up

The objectives of this implementation plan foresee a decrease in the quantity of combustible waste presented in Flanders. To the extent that the above is achieved, the existing incineration capacity will also have to be phased out over time. A Long-Term Vision on Final Treatment was drawn up during the previous plan period to elaborate that ambition. Work will continue during this plan period around the following themes from the follow-up of that long-term vision.

9.3.2.1 Economic tools for the benefit of recycling

By analogy with how landfilling of combustible waste was phased out, levies are also used at the end of the chain to reduce the mere energy valorisation of mixed waste. This should benefit separate collection and mechanical or chemical material recycling. The levies are intended to make mere energy valorisation more expensive than the more desirable treatment.

The current text of the Levies Section in the Materials Decree (Chapter 5, Section 2) requires a thorough review, in order to make it up-to-date, well-structured and easy-to-read. The review will also aim to optimise the steering effect of levies by reducing and/or differentiating the number of tariffs.

ACTION 52: OVAM, in consultation with the sector, will work on a text proposal for a thorough review of the Levies Section in the Materials Decree by the start of the new term of office (mid-2024).

In addition, it can be examined whether climate-neutral treatment (CCS/CCU: carbon capture and storage/utilisation) can be facilitated through differentiated levies. A lower levy for climate-neutral treatment can be introduced, for instance, to create a level playing field vis-à-vis conventional waste incineration. Another possibility is to include some or all of the CO₂ emissions from waste incineration under the EU Emissions Trading System (ETS).

Bringing waste incineration under ETS is only expedient if it would actually result in lower CO₂ emissions from waste incineration. The objectives set out in the materials policy and this implementation plan must not be jeopardised when doing so, because unlike the existing waste incineration levies, ETS is not intended as a steering tool for the treatment hierarchy. The potential impact of bringing waste incineration under ETS must therefore be thoroughly examined first based on all the relevant criteria.

9.3.2.2 Spatial optimisation of the final treatment capacity

The geographical spread of the final treatment capacity is important from the point of view of traffic congestion and the prevention of unnecessary waste shipments and associated emissions. On the other hand, new treatment techniques can only be realised in function of energy outlets or, in a future scenario, the use of the CO₂ released and/or products generated (chemical recycling).

If new landfill or incineration plants are still needed in the future at an entirely new site, they should be located in such a way that the waste can be transported using alternative modes of transport (rail, waterways, etc.) to the maximum extent. This should include sufficient guarantees that the proposed alternative modes of transport will actually be used. This is an ongoing point of focus, even for existing sites.

Similarly, if the incineration capacity is to be phased out in the future, an efficient geographical spread tailored to the waste presented and the energy needs can be one of the criteria for assessing whether or not the operation of a particular plant can continue or not. This requires a clear mapping of where the waste is generated and where there is a demand for energy, taking into account an energy valorisation hierarchy. By mid-2023, VITO will develop a dynamic energy atlas for waste incineration, which is to help policymakers choose the most suitable sites for incineration capacity of (residual) waste in Flanders, taking into account a number of criteria and preconditions (such as maximum energy efficiency, existing plants, available space, etc.).

9.3.2.3 Waste incineration with maximum energy efficiency and minimum environmental impact

The primary objective of waste incineration plants is to treat waste. The intended outcome is to recover the energy generated during the incineration process to the maximum extent possible with minimal environmental impact, in terms of both emissions and other environmental effects, including waste transport. VVSG-Interafval and BW2E, in consultation with OVAM, are working on a tool that will allow the various environmental effects to be assessed.

This energy should then be recovered in the most useful manner. To improve the energy efficiency of waste incineration, the main focus should be on heat and steam applications and less on electricity generation, because, energetically speaking, it is better to valorise heat than to convert steam into electricity.

Account should be taken of the fact that the quantity of waste presented for incineration is being further phased out and that the remaining mixed waste should be processed in a CO₂ neutral manner whenever possible. When constructing heat and steam networks, it is therefore important to make sure that other energy sources can be connected to the same network. In this way, total dependence on mixed waste incineration can be prevented with consideration of a hierarchy of energy valorisation. Flanders in any case wants to prevent the creation of excess capacity that would mortgage the closing of material cycles and the achievement of climate targets.

9.3.2.4 Set of criteria

Incineration capacity needs to be phased out in the coming years in function of a decreasing quantity of waste presented. The basic principle is that only plants that are compatible with a CO₂ neutral society in 2050 and achieve maximum energy valorisation will be permitted. To evaluate the existing plants, a proper set of criteria is required to assess whether a plant can continue to operate, or whether it should be encouraged to consider voluntary closure by means of an enabling tool.

That set of criteria should take into account, inter alia, the achievement of maximum energy efficiency with minimal environmental impact, the most efficient and effective energy application in view of climate targets, and a spatial optimisation of the incineration capacity needed in the longer term. Those criteria provide operators with a clear framework for future investments. They also form the basis for the policy regarding the licensing of incineration capacity needed for the period from 2030 onwards.

ACTION 53: OVAM is developing a clear set of criteria as basis for evaluating waste incineration plants in view of the climate targets. That set of criteria will be developed in consultation with all the stakeholders by the end of the term of office (2024).

9.3.2.5 Enabling tool for capacity phase-out

The closure of an existing plant may generate costs, including for remediation, debt write-off, employment reduction, etc. In addition, the waste has to be treated elsewhere, which is often more expensive than in an in-house plant. An enabling tool is therefore useful to encourage the voluntary closure of incineration plants. The combination of a reduced quantity of waste presented and the enabling tool should result in the voluntary phase-out of the least efficient capacity, taking into account all the relevant criteria. Such a tool should be examined and prepared during this plan period.

ACTION 54: By 2027-2028, OVAM will develop an enabling tool for the voluntary phase-out of incineration capacity.

9.3.2.6 Overview of foreign capacity

Flanders wants to prevent excess treatment capacity at all costs, as examples from abroad show that this is detrimental to the recycling sector. For this reason, Flanders has opted not to provide additional capacity to be able to treat all the Flemish waste in its own region. However, it is important to monitor these waste streams and foreign capacities in order to prevent Flanders from becoming too dependent on foreign treatment capacity at some point in time, in terms of both availability and possible excessive tariffs. However, the export of part of Flanders' waste can continue to play a bridging role for a certain temporary period, provided the aforementioned conditions are met, pending the realisation of intended reduction measures or potentially planned climate-neutral investments in treatment capacity.

To support policy, we make an overview of the situation in the other Regions, our neighbouring countries and countries with progressive waste policies, in order to be able to better situate Flanders' current position in terms of separate collection, capacity and key policy measures. In addition, a work method will be developed for monitoring the structurally available capacity outside Flanders on a more permanent basis. This capacity plays a role for the waste that falls within the scope of this implementation plan but is not covered by the principles of self-sufficiency and proximity. The current capacity of our most important neighbouring countries, expressed in tonnes of incineration capacity per million inhabitants, should be monitored as well.

ACTION 55: By 2026, OVAM will provide a work method for a more permanent monitoring of the relevant and structurally available incineration capacity outside Flanders.

9.4 LANDFILL POLICY

Landfilling remains the least preferred waste management option according to the European Waste Framework Directive and the Materials Decree. To reduce landfilling in Flanders, the Government of Flanders

is using several tools: landfill taxes, landfill bans and a moratorium on new landfills for household and similar company waste.

Nonetheless, landfills remain a necessary final option for those wastes for which landfilling is the most appropriate treatment method from an environmental point of view, viz. for non-recyclable, non-combustible wastes, and as a reserve capacity for emergencies. Landfill capacity will continue to match the quantity of waste presented in order to be able to ensure the necessary continuity for the treatment of these wastes.

In 2021, 682,057 tonnes of waste were still transported to Category 1 hazardous waste landfills and 428,777 tonnes to Category 2 non-hazardous waste landfills. The waste presented that is still to be landfilled consists mainly of waste streams not covered by this implementation plan. The main landfilled waste streams are soil cleaning residues, residues from post-shredding activities, other non-combustible and combustible recycling residues, contaminated soils, and bottom and fly ashes. In addition, a large quantity of hazardous waste and asbestos cement is landfilled.

9.4.1 Landfilling only non-recyclable, non-combustible waste

The landfill bans in the VLAREMA legislation are a tool to make waste treatment follow the waste treatment hierarchy. This is additionally supported by a levy rate that makes landfilling more expensive than (co-)incineration. Environmental levies are among the most effective tools that can be used to that end. Moreover, the recycling industry should be taken into account when setting levies. Imposing excessive levies on the landfilling of recycling residues could have negative consequences for the promotion of recycling.

In accordance with the provisions of the landfill bans, no combustible waste may be landfilled, with the exception of recycling residues from physicochemical soil remediation, as well as combustible recycling residues subject to a reduced landfilling levy. Derogations from the landfill ban were still granted during the past plan period for the following wastes and in the following situations:

- combustible wastes that cannot be incinerated for technical reasons;
- in the event of closure or insufficient capacity of the Flemish incineration plants and alternative processing plants and subject to prior approval by OVAM: the combustible wastes that are normally treated in these plants.

In 2021, a total of 11,260 tonnes was still landfilled at the full levy rate for combustible waste. Continuous monitoring shows that such derogations from the landfill bans will continue to be necessary during the next plan period, albeit to a decreasing extent.

In addition, the following combustible recycling residues are still being landfilled. For the time being, landfilling is still the best available technique for this waste, partly for economic reasons, and it is facilitated through a reduced levy. It concerns the following specific company waste:

- combustible residues from the clean-up of granules in the treatment of construction and demolition waste (in 2021: 26,525 tonnes);
- combustible residues from textile and rag sorting (in 2021: 1,913 tonnes).

Regarding the landfilling of combustible residues from the cleaning of granules from the treatment of construction and demolition waste, the reduced rate was reformed from 2022 onwards and linked to the following condition in Article 46, §2 of the Materials Decree:

“provided that the relevant company is sufficiently monitored by the certification body responsible for certifying the produced granules for the application of the reduced rate in accordance with OVAM’s recommendations. Monitoring by the certification body means that, in connection with the certification of the granules, it is monitored through the plant’s quality control that the granules are actually cleaned up and only the residues released in the process are disposed of at the reduced rate.”

The priority is thus to obtain pure recycled granules that can be used to the maximum extent to replace primary granules in high-quality applications. The granules must meet stricter requirements in terms of physical contamination (which is currently not yet the case) to be used in high-quality applications and to actually realise a circular economy.

ACTION 56: Landfilling combustible residues will be phased out as much as possible by the end of the plan period (2030), and be accompanied by an amendment to the Materials Decree, if necessary.

9.4.2 Landfill self-sufficiency

For the landfilling of waste, Flanders adheres to the principle of self-sufficiency, as laid down in Article 16 of the Waste Framework Directive and further elaborated in the Materials Decree, for both exports and imports.

In case of emergencies, the best solution should be sought for the waste to be disposed of. Possible alternatives should be assessed on a case-by-case basis. This involves examining the economic and practical feasibility of the following options:

- divert waste to free incineration capacity within Flanders;
- temporarily store waste prior to incineration in Flanders;
- divert waste to free incineration capacity within Belgium;
- export waste to incineration plants outside Belgium, as long as such exports are not in violation of the principle of self-sufficiency;
- transport waste to a licensed landfill within Flanders.

The following aspects, inter alia, are important when examining the economic and practical feasibility:

- the time limit within which the waste can be disposed of;
- the price for acceptance/treatment;
- the organisation of transport.

9.4.3 Landfill capacity planning

Landfill capacity continues to be aligned with the quantity of waste presented. Capacity planning applies only to Category 1 and 2 landfills that accept third party waste. OVAM monitors this annually in the publication 'Tariffs and Capacities for Landfill and Incineration', which is published on its website. In this publication, the remaining landfill capacity is calculated based on the quantity of waste presented to landfills in the past year.

Because sufficient landfill capacity is currently available, the Flemish authorities choose not to allow additional landfill capacity at new sites (moratorium on new landfill sites for mixed household waste and similar company waste). A new site is a site where no existing landfill has been licensed yet. Existing sites are those listed in the publication 'Tariffs and Capacities for Landfill and Incineration - Update up to 2020'. Mono-landfills for specific waste streams, such as asbestos waste, are not covered by the rule of not allowing additional landfill capacity at new sites. The Flemish authorities do not rule out an expansion of existing sites, but assess each application depending on the available landfill capacity, both within each landfill category (Categories 1 and 2 respectively) and at regional level.

A licensing application for additional landfill capacity is evaluated on the basis of the calculated residual capacity in the most recent publication of 'Tariffs and Capacities for Landfill and Incineration'. In this way, the landfill capacity continues to be aligned with the presented quantity. This methodology was elaborated in the vision paper '[de rol van stortplaatsen binnen het materialenbeleid](#)' ([The Role of Landfills within the Materials Policy](#))' (OVAM, 2012).

It is also important to consider mobility and geographical spread for landfills in order to contribute to the realisation of the Flemish Energy and Climate Plan 2021-2030 and to reduce traffic congestion by avoiding unnecessary long transports. More generally, we take all ecological aspects into account.

Based on the findings during the previous plan period, the policy of matching the capacity and the quantity of waste presented will be continued. The following additional aspects are considered in the capacity assessment:

- Additional capacity is assessed at the time of submission of the application, during the licensing procedure at first instance. This offers more legal certainty for long-term licensing procedures. The same moment of capacity calculation is taken into consideration again at each stage of advice provision and/or decision-making during the procedure (first instance, appeal, following annulment by the Council for Permit Disputes).
- To determine the maximum capacity, account can be taken of:
 - ensuring a sufficient geographical spread of the available landfill capacity. And more specifically, for a capacity that equals maximum five years of waste presented to the concrete site needed to ensure this geographical spread.
 - an optimisation of landfill capacity that gives rise to a limited expansion of the landfill capacity already licensed, within the landfill area already licensed. Limited expansion

is understood to mean a maximum expansion of 10% of total residual capacity within the relevant landfill category.

9.4.4 Temporary storage of waste at landfills

In addition to their function as final storage sites, landfills can act as buffers for incineration plants by temporarily storing combustible waste that is presented and intended for incineration in a specific section of the landfill with a view to regular disposal.

The time perspective of this storage prior to disposal is several months to one year. Such temporary storage does not qualify as 'landfill' according to the definition of 'landfill' (cf. Vlarem II Chapter 1.1). The objective is to make better use of existing incineration capacity by temporarily storing waste during periods when excess quantities of waste are being presented and then incinerating it during periods when less waste is presented. A prerequisite is that the environmental permit of the landfill must explicitly allow this.

The temporary storage of combustible waste is an exceptional measure in Flanders, as the extra intermediate step may increase the cost of treating combustible waste. Moreover, the landfill ban and provisions on environmental levies continue to apply in full. The waste can only be stored temporarily on condition that it can be actually incinerated within a short period of time. However, storage for more than one year is not recommended given the nature of the waste. The reasons for this are a possible degradation of the combustible wastes, making further treatment less interesting or even impossible. There is also a real risk of overheating and self-combustion of the waste. In terms of levies, the levy for the (co-)incineration of the waste is collected at the time when the waste is presented for temporary storage. The temporary storage is actually regarded as an extension of the storage bunker of the incineration plant.

10 AVOIDANCE BEHAVIOUR: LITTER AND FLY-TIPPING

The previous implementation plan based the policy on litter and fly-tipping on five pillars: awareness-raising and communication, infrastructure, surrounding environment, participation and enforcement. During 2021, the Flemish Minister for Environment and Spatial Development convened a 'round table on litter', resulting in the signing of a litter charter by the private and public bodies involved. The main focus was on prevention and enforcement. Prevention is a new fully-fledged pillar of litter policy, which is why the approach can now be described as a six-pillar approach.

ACTION 57: To realise the six-pillar approach, a platform such as Mooimakers will continue to exist to support any actors working to reduce litter and fly-tipping. This platform (hereafter referred to as Mooimakers) makes expertise, field support and financial resources available to local and supra-local authorities to optimise and professionalise their litter and fly-tipping policies.

The other major change compared to the previous plan is the transposition of the SUP Directive into Flemish and federal legislation. This means, among other things, that the municipalities' clean-up costs for litter and the operation of Mooimakers are paid by the producers of litter-prone products. A number of litter-prone products have also been defined whose use must decrease from 2023 onwards.

The present chapter first explains the policy for each of the six pillars for the coming years. Next, we discuss the expectations towards local authorities and some relevant Flemish public sector bodies.

10.1 THE SIX-PILLAR APPROACH

10.1.1 Pillar 1: Prevention

In the context of littering, prevention implies placing fewer litter-prone products on the market, making products less litter-prone or preventing waste products from being littered. The actions within this pillar link up closely with actions earlier on in the plan in the chapter on general waste prevention and reuse. It concerns in particular the actions around packaging prevention, such as the initiatives stemming from the Green Deal 'Packaged Differently' (Anders Verpakt), the events policy and the transposition of the SUP Directive.

10.1.1.1 Introducing bans on use of litter-prone products and imposing alternatives

We refer in this context to the various actions in Chapter 5. It specifically concerns Action 10 on new bans on use, Action 11 on public locations with drinking water and Action 21 on events. When implementing those actions, specific attention will also be paid to litter prevention.

10.1.1.2 Deposit return scheme

There has been much debate in recent years on the deposit return scheme to improve litter prevention. The Government of Flanders decided in July 2018 to couple the introduction of a deposit return scheme to the achievement of the targets set out in the [Concept Paper on Packaging and Litter Policy 2.0](#) by 2023. If these targets from the 2018 plan were still not met to a significant degree by 2023, the industry would be asked to organise a deposit return scheme or introduce a general reward system. It was decided in the end to bring this evaluation forward by one year, by the end of 2022. The evaluation prompted the preparation of a [Concept Paper on the Introduction of a Deposit Return Scheme in Flanders](#). The decision to introduce a deposit return scheme for beverage containers has thus been made on a political level. Discussions are now focused on the question under what form and modalities such a scheme will be implemented.

ACTION 58: A deposit return scheme for beverage containers will be introduced during 2025. To that end, a process will be initiated with the three Regions, the Interregional Packaging Commission (IRPC) and the beverage packaging industry.

10.1.2 Pillar 2: Awareness-raising and communication

Awareness-raising communication should lead to a shift in attitudes and behaviour and make it clear that leaving waste behind is socially unacceptable. Communication that intervenes at the time when the litter is created is therefore the most effective. This is referred to as site-specific communication. At the operational level, communication should take place through various messages and media and at various times.

We will work on more theme-based communication in the coming plan period. We are thinking of site-specific communication, enforcement communication and communication support for local press actions. Communication on the prevention of the use of litter-prone products is included as well.

ACTION 59: Mooimakers continues to launch awareness campaigns aimed at a shift in attitudes and behaviour towards litter and fly-tipping.

ACTION 60: Mooimakers informs partners and stakeholders in the fight against litter and fly-tipping and supports them through structural communication (newsletters, roadmaps, knowledge sharing, etc.) and communication products (posters, images, roadmaps, etc.).

10.1.3 Pillar 3: Infrastructure

The infrastructure pillar deals with the management of street bins as well as other receptacles such as cigarette receptacles or bottle banks. We facilitate the desired behaviour of disposing of waste in bins through a well-thought-out design of the public space using well-placed and efficiently managed bins on the one hand and an efficient sweeping policy on the other.

One of the spearheads of this is the litter bin plan. Mooimakers developed the digital web application 'Mijn Mooie Straat' (My Beautiful Street) to systematically monitor litter bins and other waste receptacles. Through that module, we aim to further professionalise the litter bin policies of local authorities that can also use other (in-house) tools to monitor litter bins. A litter bin plan should at least include the following process cycle:

- compilation of a litter bin inventory
- monitoring (fill rate, bin condition, misuse and cleanliness around the bin)
- reporting, analysis and adjustment.

We encourage local authorities to use a litter bin plan. To that end, we actively disseminate knowledge documents, such as installation criteria for litter bins and technical specifications on the 'ideal litter bin'. Each local authority is expected to have an (optimised) litter bin plan (see also Title 10.2.3) by the end of the plan period.

ACTION 61: Local and supra-local authorities use an updated litter bin plan, with support from Mooimakers. Local authorities can use the web application 'vuilnisbakkenplan' (litter bin plan) in 'Mijn Mooie Straat' (free of charge). They also receive support in the form of knowledge sharing, tailored information sessions and guidance, and financial support.

10.1.4 Pillar 4: Surrounding environment

The 'surrounding environment' pillar is not about infrastructure elements such as litter bins, but about the physical environment that can provoke littering behaviour, such as the degree of anonymity in the neighbourhood or the presence of damage and neglect in the area. Litter issues can be improved or reduced through regular maintenance and embellishment and by increasing social control. We therefore encourage and support local authorities to work with an efficient and effective sweeping and clearing plan.

ACTION 62: Local authorities and supra-local authorities ensure efficient and effective cleaning of the public domain. Mooimakers supports local authorities and Flemish partners in drawing up and optimising their sweeping and clearing plan.

In addition, different type environments face specific challenges for which targeted measures are best taken. We distinguish six litter- and fly-tipping-prone environments where interventions are often needed to improve public cleanliness. These type environments are also specifically monitored in terms of the number of items found (see Chapter 4):

- motorway car parks
- waste collection points
- public transport stops
- main structural roads (excluding motorways)

- centre streets
- pedestrian shopping streets.

ACTION 63: Mooimakers will keep the knowledge about the approach to the main type environments up-to-date through research and case studies and share this knowledge on a continuous basis.

Moreover, Mooimakers supports local authorities to also map other litter and fly-tipping hotspots and take measures. Mooimakers developed a module in for this as well in 'Mijn Mooie Straat'. That module offers various measures based on the existing situation. Thanks to the litter measurements before and after the implementation of a measure, local authorities gain insight into the effectiveness of that measure and the evolution of the cleanliness of the surrounding environment.

ACTION 64: Local and supra-local authorities ensure an effective approach to litter and fly-tipping hotspots. Local authorities can use the monitoring module within 'Mijn Mooie Straat' (free of charge). Mooimakers offers local and supra-local authorities support in the form of knowledge documents, information sessions, financial resources and tailored guidance.

10.1.5 Pillar 5: Participation

Participation creates ownership of the public space. It allows local residents, volunteers, associations and companies to be held accountable. Supporting and expanding the network of volunteers and partners makes efforts visible and increases the sense of ownership and recognition.

In recent years, Mooimakers developed a support offer to support and actively engage private litter volunteers, associations and schools in the fight against litter and fly-tipping. Most efforts are made through clean-up operations. The Mooimakers' online shop offers clean-up materials. Schools and associations can benefit from a financial reward system for their anti-littering efforts through 'Operatie Proper' (Operatie Clean). In addition, local authorities are supported and encouraged to develop structural volunteer actions around litter.

ACTION 65: Mooimakers continues to support and facilitate clean-up actions and also provides clean-up materials for this purpose.

ACTION 66: Mooimakers supports schools, youth associations and local authorities to actively participate and make efforts in the fight against litter, including by continuing 'Operatie Proper' and providing educational materials. Volunteers are activated and local authorities can shape a volunteer policy through the Mooimakers' volunteer module.

10.1.6 Pillar 6: Enforcement

Enforcement is the final element of the litter and fly-tipping policy. During this plan period, it should be made more visible on the ground that littering and fly-tipping will not be tolerated in any way. Enforcement

is considered in the broad sense here. It is not just about issuing fines but also about calling offenders to account and exerting social control.

For enforcement policies to be effective, enforcers on the ground should be able to free up sufficient time, but also know exactly how enforcement is to be implemented. There is a need for both training of enforcers and a clear framework. Mooimakers has already accumulated much experience in enforcement through research, surveys and case studies. That knowledge is unlocked through various communication channels.

Thirty enforcement officers of OVAM are working around litter within the framework of a temporary learning programme. During the plan period, it will be examined within the framework of the interregional discussions on a cooperation agreement around EPR and litter whether this can be financed in a recurrent manner, in order to further strengthen enforcement.

ACTION 67: Local and supra-local authorities enforce litter and fly-tipping policies efficiently and effectively.

ACTION 68: Mooimakers provides a support offer for local authorities and Flemish agencies with enforcement powers for litter and fly-tipping. Mooimakers shares knowledge, information and enforcement data through research, surveys and case studies. Local authorities can apply for guidance on optimising the local enforcement framework for litter and fly-tipping through the local support offer.

During the ‘Week van de Handhaving’ (Enforcement Week), extra attention was paid in recent years to the efforts made by local authorities, waste intermunicipal partnerships and Flemish agencies. Mooimakers provided the necessary support through an enforcement campaign as well as structural communication products . and will continue to do so.

10.1.7 Further elaboration of the six pillars

In order to achieve the above litter and fly-tipping objective and implement actions effectively and efficiently, the six-pillar strategy will be further elaborated in an ‘Operationeel Plan Openbare Netheid’ (Operational Plan for Public Cleanliness). That detailed operational plan is annually prepared or updated and discussed at the plenary consultation platform as a follow-up to the Local Materials Plan. The consultation platform subsequently issues an opinion.

The following strategic components are fleshed out in that operational plan to achieve the objectives regarding litter and fly-tipping:

- support for partners on the ground through projects, support pathways and the use of OVAM litter enforcement officers
- monitoring

- research, innovation and policy development
- active dissemination of good practices (through knowledge sharing, newsletters, etc.)
- collaborations and partnerships
- communication and education.

10.2 COMMITMENTS BY AUTHORITIES CLEARING LITTER

As a result of the transposition of the SUP Directive, authorities will be compensated by manufacturers of litter-prone products for their costs associated with litter. Eligible authorities are local authorities, Flemish public sector bodies that cover costs in the context of litter, and the five provinces. That compensation is subject to the obligation to make a minimum number of efforts to strengthen the policy against littering and fly-tipping.

The requested efforts involve:

- supplying data on litter quantities
- supplying data on the financial and personnel resources used
- minimal policy actions.

10.2.1 Data on litter quantities

Up till now, local authorities and other public sector bodies provided data on litter and fly-tipping on a voluntary basis. As of 2023, they are obliged to report annually on the quantities of litter cleared from the ground. Those reports allow OVAM to monitor the target at the Flemish level.

OVAM will specifically request data on the following waste streams:

- mechanically swept litter
- manually swept litter
- litter collected by volunteers
- other relevant waste streams, if any.

In addition, OVAM will ask how much waste was collected by means of street bins. Although waste from street bins is not regarded as litter, the placement of litter bins is an integral part of local litter policy.

ACTION 69: From 2023 onwards, the local authorities, the five Flemish provinces and the relevant Flemish public sector bodies report annually to OVAM on the quantities of litter cleared from the ground in accordance with the modalities set by OVAM.

10.2.2 Data on the financial and personnel resources used

During the plan period, local authorities, provinces and the Flemish public sector bodies must report on the financial and personnel resources used and on the associated costs within the framework of the litter policy if so requested by OVAM, the Interregional Packaging Commission (IRPC) or the Flemish authorities.

When waste intermunicipal partnerships carry out certain anti-littering activities, they must provide the necessary data on the use of both financial and personnel resources with a breakdown per municipality.

This information will be used to evaluate whether the compensation paid by manufacturers of litter-prone products requires updating. We will take into account the European guidelines on cost calculation and cost efficiency in such an update.

ACTION 70: During the plan period, the local authorities, the five Flemish provinces and the relevant Flemish public sector bodies report on the financial and personnel resources used and on the associated costs within the framework of the litter policy , when requested to do so.

10.2.3 Minimum policy actions

10.2.3.1 Local authorities

The present plan sets new litter reduction targets. Local authorities play an important role in meeting those targets and receive funds as a result of the implementation of the SUP Directive to conduct relevant policies. During the plan period, the following policy actions will be implemented as a minimum by local authorities as soon as SUP funds are available:

ACTION 71:

- **Each local authority has a litter bin plan by the end of the plan period or have optimised the existing plan.** Each local authority completes the entire cycle of a litter bin plan (baseline measurement, analysis, measures and impact measurement).
- **Each local authority maps litter- and/or fly-tipping-prone sites (hotspots) and takes measures to reduce the problem at those sites.**
- **Each local authority enforces policies against litter and fly-tipping effectively and efficiently through the GAS regulations and/or Article 12 of the Materials Decree.** All enforcement partners consult regularly to achieve the best possible enforcement process. Local authorities report to OVAM on their enforcement policy through the online survey 'Gemeentelijk afval-, materialen- en bodembeleid' (Municipal Waste, Materials and Soil Policy).
- **Local authorities include in their police regulations the necessary provisions to require specific private actors to place waste receptacles and clear the litter near their premises.** This involves establishments that sell or offer food, beverages, tobacco products or other consumer products with single-use packaging that can be consumed immediately outside the establishment. Temporary establishments (e.g. markets, fairs, etc.) must be included as well. These rules can be tailored to the local situation, so that the radius within which litter must be cleared as well as the method of collection can be adjusted.

Mooimakers will monitor the proper implementation of these minimal policy actions and the efficient spending of the funds allocated under the SUP Directive.

10.2.3.2 Flemish public sector bodies

Flemish agencies that manage and maintain public land should also make the necessary efforts to reduce litter and fly-tipping on their premises. Because the problem areas and type environments differ greatly, each Flemish agency includes specific priorities and actions against litter and fly-tipping in its in-house policy plan. The Flemish agencies aim to achieve Flanders' anti-litter targets as a minimum within their policy planning and on their premises.

ACTION 72: Mooimakers is developing an offer to support Flemish agencies in developing an efficient litter and fly-tipping policy. The cooperation is formalised in a cooperation protocol that outlines the priorities, commitments and agreements and covers the six pillars.

The Agency for Roads and Traffic (Agentschap Wegen en Verkeer/AWV) will make additional efforts specifically for two priority type environments, i.e. motorway car parks and regional roads:

- The AWV undertakes to install, during the plan period, semi-underground bins (including signage) at all Flemish motorway car parks without a concession agreement. Research commissioned by the AWV and Mooimakers shows that such a measure can significantly reduce the quantity of fly-tipping waste, without shifting the waste to surrounding hotspots.
- The AWV, in consultation with the local authorities, is reviewing current maintenance contracts for regional roads with a view to increasing cleanliness.
- The AWV implements efficient and effective enforcement of compliance with rules on littering and fly-tipping.

11 FOLLOW-UP OF THE LOCAL MATERIALS PLAN

During the plan period, the Local Materials Plan is followed up by the 'Overlegplatform Afval- en Materialenbeheer' (Waste and Materials Management Consultation Platform). The Consultation Platform monitors the progress of actions and decides on whether or not actions need to be adjusted. It meets at least once a year. OVAM holds the chairmanship and the secretariat.

The Consultation Platform is composed of representatives from the following organisations:

- OVAM
- Association of Flemish Cities and Municipalities (Vereniging van Vlaamse Steden en Gemeenten/VVSG) and Interafval
- Denuo
- Belgian Waste-to-Energy (BW2E)
- Social and Economic Council of Flanders (Sociaal-Economische Raad van Vlaanderen/SERV)
- Environment and Nature Council of Flanders (Minaraad)
- Fost Plus
- Herwin
- Bond Beter Leefmilieu (BBL)
- Vlaco
- Interregional Packaging Commission (IRPC)
- Comeos
- Valipac
- Flanders' Chamber of Commerce and Industry (Voka)
- Organisation for the Self-Employed and SMEs (Unizo)
- Belgian Food Industry Federation (Fevia)
- Horeca Vlaanderen
- Recupel
- Flanders Innovation & Entrepreneurship (Vlaams Agentschap Innoveren en Ondernemen/VLAIO)
- the office of the minister in charge.

Three working groups have been set up to follow-up the implementation of the various actions more closely for each theme:

- SME working group
- household waste working group
- final treatment working group

The Consultation Platform determines the composition of the working groups. The working groups decide for themselves how they organise their work and how frequently they meet. They report on their activities on the Consultation Platform.

As set out in Article 19 of the Materials Decree, OVAM may set up additional organisations to the Consultation Platform or the working groups during the plan period.

The Consultation Platform may decide to establish additional working groups or sub-working groups during the plan period. They can also decide to add more actions to the present plan. The meetings of the Consultation Platform and the working groups are not public.

Because this plan period is longer than usual, OVAM will review the Local Materials Plan halfway through the plan period. This mid-term review will be completed by the end of 2026 at the latest and may lead to adjustments being made to the plan during 2027.

ACTION 73: OVAM will conduct a mid-term review of the Local Materials Plan by the end of 2026. That review may cover all aspects of the plan, but will in any case pay particular attention to:

- the state of progress towards the targets;
- the possibility of refining the -20% target for litter cleared from the ground;
- the formulation of any additional actions if the targets are not on track;
- the results on household biowaste separate collection. First, we look at whether municipalities that opt for a separate collection of kitchen (VF) waste on the one hand and garden (G) waste on the other hand, succeed in getting the biowaste out of the residual waste to the same extent as municipalities collecting VFG waste. In addition, we review the performance of biowaste collection in all municipalities, regardless of the chosen collection scenario chosen;
- the extent to which residual waste is actually reduced in Flanders as envisaged in the present plan. This is done with a view to making adjustments to the plan, if necessary, for the further roll-out of the Long-Term Vision on Final Treatment and the introduction of concrete measures to align the incineration capacity with the (hopefully decreased) quantity of waste that is presented for incineration in Flanders.

Another review will be conducted at the end of the plan period, in the lead-up to the preparation of a new post-2030 implementation plan.

12 ANNEXES

ANNEX 1: GLOSSARY

For terms in the present implementation plan that are already defined in the Materials Decree or the VLAREMA legislation, please refer to those definitions. Terms that are not defined therein are clarified below.

- Belfius classification: socio-economic typology of municipalities, drawn up by Belfius Bank.
- Combustible waste: waste with a loss on ignition >10% and a TOC content of >6%.
- Final treatment: pre-treatment for landfill or incineration or the direct landfill or incineration of waste
- Small garden waste: green waste, excluding tree stumps and prunings.
- Frying fats and oils: animal and vegetable fats and oils produced for human consumption.
- Pet animal: any animal belonging to species normally nourished and kept but not consumed by humans for purposes other than farming (Regulation 1069/2009).
- Glass: transparent and coloured glass bottles and hollow glass jars, excluding crystal glass, terracotta, heat-resistant glass, mirrors and flat glass, lamps, lids and caps.
- Rigid plastics: all rigid plastics, except EPS, thermosetting plastics (including fibre-reinforced polyester), foamed and composite plastics (including cooling boxes and bicycle helmets), plastic packaging containing residues of or being contaminated with hazardous substances, and pmd plastics.
- Wood:
 - Untreated wood / 'A' grade wood: wood waste that has undergone mechanical treatment only.
 - Uncontaminated treated wood waste / 'B' grade wood: treated wood waste not covered by contaminated treated wood waste.
 - Contaminated treated wood waste / 'C' grade wood: wood waste which may contain organically bound halogens or heavy metals as a result of treatment with wood preservatives or coating, including in particular such wood waste originating from construction and demolition waste.
- Residual waste: waste generated by the normal functioning of a private household and the equivalent waste that can be disposed of in the prescribed recipients for residual waste collection, excluding the waste that is collected separately.
- Market waste: waste generated by traders at a market on public domain (e.g. packaging waste, fruit and vegetable scraps, etc.). The sweeping rubbish cleared after the market has ended belongs to household waste.
- Metals: ferrous and non-ferrous scrap excluding WEEE, end-of-life vehicles, gas cylinders, small hazardous waste or metal receptacles that have contained small hazardous waste (kga), hazardous waste or metal receptacles that have contained these hazardous substances.
- Avoidance behaviour: littering, clandestine dumping and illegal incineration.

- Paper and cardboard (for the purpose of household collection): books, newspapers, magazines and leaflets, paper bags and cardboard boxes, writing and printing paper arising from the normal functioning of a private household, excluding wallpaper, cellophane paper, paraffin paper or cardboard, soiled or greasy paper or cardboard.
- Refuse derived fuel (RDF): waste that was prepared into pellet or fluff for subsequent use as fuel in a waste incineration or waste co-incineration plant because of its calorific value.
- Separate collection: the separate collection of waste fractions to enable recycling or ensure safe disposal.
- Prunings: prunings with a diameter of up to 10 cm. Prunings fall within the VLAREMA definition of green waste.
- Beach litter: the waste that washes onto the beach from the sea. Litter on public beaches belongs to residual waste.
- Grant order: Government of Flanders Order of 15 July 2022 on the subsidisation of local authorities for waste and materials management and repealing the Government of Flanders Order of 23 January 2004 on the subsidisation of certain works, supplies and services carried out in the Flemish Region by or on the initiative of local authorities or equivalent legal entities.
- Textiles (for purposes of household collection): a generic term for the product group consisting of clothing and accessories (belts, bags, shoes in pairs), bedding (pillows, sleeping bags, sheets, blankets and duvets), kitchen and bathroom textiles, home textiles (tablecloths, curtains, seat covers), cuddly toys, clean rags and textiles with minor defects, excluding carpets, mattresses, seat cushions and wet or soiled textiles, footwear, linen and products made of natural or synthetic fibres. The textile fraction contains both reusable and non-reusable textiles.
- Flat glass: flat glass, such as glass from the construction industry, including window and door glass and glass of façade elements, mirror glass, conservatory glass, etc. This does not include laminated glass (e.g. of vehicles), lead glass, heat-resistant glass (e.g. Pyrex, glass of stoves), glass of solar panels.

ANNEX 2: LIST OF ABBREVIATIONS

ABB	Agentschap Binnenlands Bestuur (Agency for Home Affairs)
WEEE	Waste electrical and electronic equipment
AWV	Agentschap Wegen en Verkeer (Agency for Roads and Traffic)
Diftar	Pay-as-you-throw (PAYT)
EEE	Electrical and electronic equipment
ESF	European Social Fund
ETS (emissions)	Greenhouse gas emissions under the European Trading Scheme
EWSR	European Waste Shipment Regulation
GAS	Gemeenschappelijke Administratieve Sanctie (municipal administrative sanction)
Door-to-door collection	Door-to-door collection
IHM	Waste collector, dealer or broker
IMJV	Integraal Milieujaarverslag (Integrated Environmental Annual Report)
ISA	Interregionaal Samenwerkingsakkoord (Interregional Cooperation Agreement)
IRPC	Interregional Packaging Commission
kga	Klein gevaarlijk afval (small hazardous waste)
SME	Small and medium-sized enterprise
KWIT campaign	'Kappen met Wegwerp Is Top-campagne' (Ditching the Disposable Habit is Cool campaign)
MATIS	Materials information system of OVAM (from the collection of waste through to the input into recycling)
MHB	Milieuhandhavingsbesluit (Environmental Enforcement Order)
OVAM	Openbare Vlaamse Afvalstoffenmaatschappij (Public Waste Agency of Flanders)
OVAM-SV	OVAM-Samenwerkingsverband (OVAM Partnership)
SAP	Superabsorbent polymers
SUP(-richtlijn)	European Single Use Plastics (Directive)
RDF	Refuse derived fuel
EPR	Extended producer responsibility
VITO	Vlaamse Instelling voor Technologisch Onderzoek (Flemish Institute for Technological Research)
VLAIO	Agentschap Innoveren & Ondernemen (Flanders Innovation & Entrepreneurship)
VLAREM	Vlaams reglement betreffende de milieuvergunning (Flemish Regulations on Environmental Permits)
VLAREMA	Vlaams reglement betreffende het duurzaam beheer van materiaalcringen en afvalstoffen (Flemish Regulations on the Sustainable Management of Material Cycles and Waste)
VVSG	Vereniging van Vlaamse Steden en Gemeenten (Association of Flemish Cities and Municipalities)

ANNEX 3: MIXED HOUSEHOLD WASTE TARGET BY MUNICIPALITY

Cluster	Municipality	Target by cluster and municipality without Flanders' share (13 kg)		Target by cluster and municipality including Flanders' share (13 kg)	
		Cluster - target	Municipal target	Cluster - target	Municipal target
Cluster 15: Large and regional cities	Antwerp	148		135	
	Ghent	148		135	
	Bruges	148		135	
	Leuven		109		96
	Genk	124		111	
	Roeselare	124		111	
	Aalst	124		111	
	Hasselt		120		107
	Kortrijk	124		111	
	Mechelen	124		111	
	Sint-Niklaas		99		86
Turnhout		112		99	
Cluster 16: Coastal municipalities	Blankenberge	194		181	
	Bredene		190		177
	De Haan	194		181	
	De Panne	194		181	
	Knokke-Heist	194		181	
	Koksijde	194		181	
	Middelkerke	194		181	
	Nieuwpoort	194		181	
Ostend	194		181		
Main cluster: all other municipalities	Aalter	103		90	
	Aarschot	103		90	
	Aartselaar	103		90	
	Affligem	103		90	
	Alken		99		86
	Alveringem	103		90	
	Anzegem	103		90	
	Ardooie	103		90	
	Arendonk		91		78
	As	103		90	
	Asse	103		90	
	Assenede	103		90	

Avelgem	103		90	
Baarle-Hertog	103		90	
Balen		102		89
Beernem	103		90	
Beerse		98		85
Beersel	103		90	
Begijnendijk	103		90	
Bekkevoort		94		81
Beringen	103		90	
Berlaar	103		90	
Berlare	103		90	
Bertem		90		77
Bever	103		90	
Beveren	103		90	
Bierbeek		98		85
Bilzen	103		90	
Bocholt	103		90	
Boechout	103		90	
Bonheiden	103		90	
Boom	103		90	
Boortmeerbeek		91		78
Borgloon	103		90	
Bornem	103		90	
Borsbeek	103		90	
Boutersem		95		82
Brakel	103		90	
Brasschaat	103		90	
Brecht	103		90	
Bree	103		90	
Buggenhout	103		90	
Damme	103		90	
De Pinte	103		90	
Deerlijk	103		90	
Deinze	103		90	
Denderleeuw	103		90	
Dendermonde	103		90	
Dentergem	103		90	
Dessel	103		90	
Destelbergen	103		90	
Diepenbeek		102		89

Diest	103		90	
Diksmuide	103		90	
Dilbeek	103		90	
Dilsen-Stokkem	103		90	
Drogenbos	103		90	
Duffel	103		90	
Edegem		99		86
Eeklo	103		90	
Erpe-Mere	103		90	
Essen	103		90	
Evergem	103		90	
Galmaarden	103		90	
Gavere	103		90	
Geel		102		89
Geetbets		102		89
Geraardsbergen	103		90	
Gingelom	103		90	
Gistel	103		90	
Glabbeek		96		83
Gooik	103		90	
Grimbergen	103		90	
Grobbendonk		101		88
Haacht		85		72
Haaltert	103		90	
Halen	103		90	
Halle	103		90	
Ham	103		90	
Hamme	103		90	
Hamont-Achel	103		90	
Harelbeke	103		90	
Hechtel-Eksel	103		90	
Heers	103		90	
Heist-op-den-Berg		93		80
Hemiksem	103		90	
Herent		83		70
Herentals	103		90	
Herenthout		102		89
Herk-De-Stad	103		90	
Herne	103		90	

Herselt	103		90	
Herstappe	103		90	
Herzele	103		90	
Heusden-Zolder	103		90	
Heuvelland	103		90	
Hoegaarden		97		84
Hoeilaart	103		90	
Hoeselt	103		90	
Holsbeek		91		78
Hooglede	103		90	
Hoogstraten		101		88
Horebeke		88		75
Houthalen-Helchteren	103		90	
Houthulst	103		90	
Hove	103		90	
Huldenberg		78		65
Hulshout		92		79
Ichtegem	103		90	
Ypres	103		90	
Ingelmunster	103		90	
Izegem	103		90	
Jabbeke	103		90	
Kalmthout	103		90	
Kampenhout	103		90	
Kapellen	103		90	
Kapellen-op-den-Bos	103		90	
Kaprijke	103		90	
Kasterlee	103		90	
Keerbergen	103		90	
Kinrooi	103		90	
Kluisbergen	103		90	
Koekelare	103		90	
Kontich	103		90	
Kortemark	103		90	
Kortenaken		96		83
Kortenbergh		87		74
Kortesseme		100		87
Kraainem	103		90	

Kruikeke	103		90	
Kruisem	103		90	
Kuurne	103		90	
Laakdal	103		90	
Laarne	103		90	
Lanaken	103		90	
Landen		88		75
Langemark-Poelkapelle	103		90	
Lebbeke	103		90	
Lede	103		90	
Ledegem	103		90	
Lendeledede	103		90	
Lennik	103		90	
Leopoldsburg	103		90	
Lichtervelde	103		90	
Liedekerke	103		90	
Lier	103		90	
Lierde	103		90	
Lievegem	103		90	
Lille	103		90	
Linkebeek	103		90	
Lint	103		90	
Linter		94		81
Lochristi	103		90	
Lokeren	103		90	
Lommel	103		90	
Londerzeel	103		90	
Lo-Reninge	103		90	
Lubbeek		83		70
Lummen	103		90	
Maarkedal	103		90	
Maaseik	103		90	
Maasmechelen	103		90	
Machelen	103		90	
Maldegem	103		90	
Malle	103		90	
Meerhout	103		90	
Meise	103		90	
Melle	103		90	

Menen	103		90	
Merchtem	103		90	
Merelbeke	103		90	
Merksplas		102		89
Mesen	103		90	
Meulebeke	103		90	
Moerbeke	103		90	
Mol	103		90	
Moorslede	103		90	
Mortsel	103		90	
Nazareth	103		90	
Niel	103		90	
Nieuwerkerken	103		90	
Nijlen		100		87
Ninove	103		90	
Olen	103		90	
Oosterzele	103		90	
Oostkamp	103		90	
Oostrozebeke	103		90	
Opwijk	103		90	
Oudenaarde	103		90	
Oudenburg	103		90	
Oud-Heverlee		81		68
Oudsbergen	103		90	
Oud-Turnhout	103		90	
Overijse	103		90	
Peer	103		90	
Pelt	103		90	
Pepingen	103		90	
Pittem	103		90	
Poperinge	103		90	
Putte		100		87
Puurs-Sint-Amands	103		90	
Ranst	103		90	
Ravels		99		86
Retie		85		72
Riemst	103		90	
Rijkevorsel		87		74
Ronse	103		90	

Roosdaal	103		90	
Rotselaar		87		74
Ruiselede	103		90	
Rumst	103		90	
Schelle	103		90	
Scherpenheuvel- Zichem		87		74
Schilde	103		90	
Schoten	103		90	
Sint-Genesius- Rode	103		90	
Sint-Gillis-Waas		98		85
Sint-Katelijne- Waver	103		90	
Sint-Laureins	103		90	
Sint-Lievens- Houtem	103		90	
Sint-Martens- Latem	103		90	
Sint-Pieters- Leeuw	103		90	
Sint-Truiden	103		90	
Spiere-Helkijn	103		90	
Stabroek	103		90	
Staden	103		90	
Steenokkerzeel	103		90	
Stekene		102		89
Temse	103		90	
Ternat	103		90	
Tervuren	103		90	
Tessenderlo	103		90	
Tielt	103		90	
Tielt-Winge		84		71
Tienen	103		90	
Tongeren	103		90	
Torhout	103		90	
Tremelo		97		84
Veurne	103		90	
Vilvoorde	103		90	
Vleteren	103		90	

	Voeren	103		90	
	Vorselaar		90		77
	Vosselaar	103		90	
	Waasmunster	103		90	
	Wachtebeke	103		90	
	Waregem	103		90	
	Wellen	103		90	
	Wemmel	103		90	
	Wervik	103		90	
	Westerlo		97		84
	Wetteren	103		90	
	Wevelgem	103		90	
	Wezembeek- Oppem	103		90	
	Wichelen	103		90	
	Wielsbeke	103		90	
	Wijnegem	103		90	
	Willebroek	103		90	
	Wingene	103		90	
	Wommelgem	103		90	
	Wortegem- Petegem	103		90	
	Wuustwezel		101		88
	Zandhoven	103		90	
	Zaventem	103		90	
	Zedelgem	103		90	
	Zele	103		90	
	Zelzate	103		90	
	Zemst	103		90	
	Zoersel	103		90	
	Zonhoven	103		90	
	Zonnebeke	103		90	
	Zottegem	103		90	
	Zoutleeuw		96		83
	Zuikerkerke	103		90	
	Zulte	103		90	
	Zutendaal	103		90	
	Zwalm	103		90	
	Zwevegem	103		90	
	Zwijndrecht	103		90	

ANNEX 4: TARGETS FOR INSPECTIONS OF SORTING AT SOURCE TO BE CARRIED OUT IN COMPANIES BY MUNICIPALITY

The table below summarises by year the number of inspections of sorting at source that municipalities would like to carry out in companies. This table fleshes out Action 45 in Chapter 7 for each municipality. The number of companies per municipality refers to the number of companies subject to VAT in 2020 according to Statbel data and was consulted on the website provincies.incijfers.be.

Municipality	Number of companies	2024	2025	2026	2027	2028	2029	2030	Total number of inspections during plan period
Aalst	6814	68	68	68	68	136	136	136	681
Aalter	3665	37	37	37	37	73	73	73	367
Aarschot	2784	28	28	28	28	56	56	56	278
Aartselaar	1655	17	17	17	17	33	33	33	166
Affligem	1174	12	12	12	12	23	23	23	117
Alken	1257	13	13	13	13	25	25	25	126
Alveringem	776	8	8	8	8	16	16	16	78
Antwerp	46380	464	464	464	464	928	928	928	4638
Anzegem	1846	18	18	18	18	37	37	37	185
Ardoorie	1227	12	12	12	12	25	25	25	123
Arendonk	1269	13	13	13	13	25	25	25	127
As	597	6	6	6	6	12	12	12	60

Asse	3121	31	31	31	31	62	62	62	312
Assenede	1393	14	14	14	14	28	28	28	139
Avelgem	907	9	9	9	9	18	18	18	91
Baarle-Hertog	273	3	3	3	3	5	5	5	27
Balen	1899	19	19	19	19	38	38	38	190
Beernem	1732	17	17	17	17	35	35	35	173
Beerse	1564	16	16	16	16	31	31	31	156
Beersel	2144	21	21	21	21	43	43	43	214
Begijnendijk	837	8	8	8	8	17	17	17	84
Bekkevoort	712	7	7	7	7	14	14	14	71
Beringen	3753	38	38	38	38	75	75	75	375
Berlaar	1026	10	10	10	10	21	21	21	103
Berlare	1285	13	13	13	13	26	26	26	129
Bertem	918	9	9	9	9	18	18	18	92
Bever	247	2	2	2	2	5	5	5	25
Beveren	4122	41	41	41	41	82	82	82	412
Bierbeek	990	10	10	10	10	20	20	20	99
Bilzen	2771	28	28	28	28	55	55	55	277
Blankenberge	1458	15	15	15	15	29	29	29	146
Bocholt	1244	12	12	12	12	25	25	25	124
Boechout	1314	13	13	13	13	26	26	26	131
Bonheiden	1604	16	16	16	16	32	32	32	160
Boom	1136	11	11	11	11	23	23	23	114

Boortmeerbeek	1184	12	12	12	12	24	24	24	118
Borgloon	1147	11	11	11	11	23	23	23	115
Bornem	2003	20	20	20	20	40	40	40	200
Borsbeek	697	7	7	7	7	14	14	14	70
Boutersem	800	8	8	8	8	16	16	16	80
Brakel	1328	13	13	13	13	27	27	27	133
Brasschaat	4077	41	41	41	41	82	82	82	408
Brecht	3161	32	32	32	32	63	63	63	316
Bredene	1075	11	11	11	11	22	22	22	108
Bree	1740	17	17	17	17	35	35	35	174
Bruges	11821	118	118	118	118	236	236	236	1182
Buggenhout	1145	11	11	11	11	23	23	23	115
Damme	1579	16	16	16	16	32	32	32	158
De Haan	1279	13	13	13	13	26	26	26	128
De Panne	861	9	9	9	9	17	17	17	86
De Pinte	1086	11	11	11	11	22	22	22	109
Deerlijk	1420	14	14	14	14	28	28	28	142
Deinze	4917	49	49	49	49	98	98	98	492
Denderleeuw	1090	11	11	11	11	22	22	22	109
Dendermonde	3602	36	36	36	36	72	72	72	360
Dentergem	997	10	10	10	10	20	20	20	100

Dessel	840	8	8	8	8	17	17	17	84
Destelbergen	2023	20	20	20	20	40	40	40	202
Diepenbeek	1658	17	17	17	17	33	33	33	166
Diest	2205	22	22	22	22	44	44	44	221
Diksmuide	2051	21	21	21	21	41	41	41	205
Dilbeek	4168	42	42	42	42	83	83	83	417
Dilsen-Stokkem	1661	17	17	17	17	33	33	33	166
Drogenbos	438	4	4	4	4	9	9	9	44
Duffel	1347	13	13	13	13	27	27	27	135
Edegem	1939	19	19	19	19	39	39	39	194
Eeklo	1627	16	16	16	16	33	33	33	163
Erpe-Mere	1798	18	18	18	18	36	36	36	180
Essen	1746	17	17	17	17	35	35	35	175
Evergem	2929	29	29	29	29	59	59	59	293
Galmaarden	782	8	8	8	8	16	16	16	78
Gavere	1332	13	13	13	13	27	27	27	133
Geel	3763	38	38	38	38	75	75	75	376
Geetbets	651	7	7	7	7	13	13	13	65
Genk	4805	48	48	48	48	96	96	96	481
Ghent	26273	263	263	263	263	525	525	525	2627
Geraardsbergen	2680	27	27	27	27	54	54	54	268

Gingelom	733	7	7	7	7	15	15	15	73
Gistel	1217	12	12	12	12	24	24	24	122
Glabbeek	568	6	6	6	6	11	11	11	57
Gooik	1079	11	11	11	11	22	22	22	108
Grimbergen	3332	33	33	33	33	67	67	67	333
Grobbendonk	1170	12	12	12	12	23	23	23	117
Haacht	1304	13	13	13	13	26	26	26	130
Haaltert	1554	16	16	16	16	31	31	31	155
Halen	863	9	9	9	9	17	17	17	86
Halle	2705	27	27	27	27	54	54	54	271
Ham	851	9	9	9	9	17	17	17	85
Hamme	2015	20	20	20	20	40	40	40	202
Hamont-Achel	1203	12	12	12	12	24	24	24	120
Harelbeke	2544	25	25	25	25	51	51	51	254
Hasselt	8867	89	89	89	89	177	177	177	887
Hechtel-Eksel	1087	11	11	11	11	22	22	22	109
Heers	714	7	7	7	7	14	14	14	71
Heist-op-den-Berg	4013	40	40	40	40	80	80	80	401
Hemiksem	699	7	7	7	7	14	14	14	70
Herent	1963	20	20	20	20	39	39	39	196

Herentals	2594	26	26	26	26	52	52	52	259
Herenthout	789	8	8	8	8	16	16	16	79
Herk-de-Stad	1398	14	14	14	14	28	28	28	140
Herne	703	7	7	7	7	14	14	14	70
Herselt	1227	12	12	12	12	25	25	25	123
Herstappe	17	0	0	0	0	0	0	0	2
Herzele	1489	15	15	15	15	30	30	30	149
Heusden-Zolder	2992	30	30	30	30	60	60	60	299
Heuvelland	1032	10	10	10	10	21	21	21	103
Hoegaarden	697	7	7	7	7	14	14	14	70
Hoeilaart	1077	11	11	11	11	22	22	22	108
Hoeselt	1009	10	10	10	10	20	20	20	101
Holsbeek	1052	11	11	11	11	21	21	21	105
Hooglede	1218	12	12	12	12	24	24	24	122
Hoogstraten	2574	26	26	26	26	51	51	51	257
Horebeke	237	2	2	2	2	5	5	5	24
Houthalen- Helchteren	2414	24	24	24	24	48	48	48	241

Houthulst	1054	11	11	11	11	21	21	21	105
Hove	882	9	9	9	9	18	18	18	88
Huldenberg	994	10	10	10	10	20	20	20	99
Hulshout	938	9	9	9	9	19	19	19	94
Ichtegem	1394	14	14	14	14	28	28	28	139
Ypres	3696	37	37	37	37	74	74	74	370
Ingelmunster	1245	12	12	12	12	25	25	25	125
Izegem	2912	29	29	29	29	58	58	58	291
Jabbeke	1699	17	17	17	17	34	34	34	170
Kalmthout	2095	21	21	21	21	42	42	42	210
Kampenhout	1181	12	12	12	12	24	24	24	118
Kapelle-op-den-Bos	795	8	8	8	8	16	16	16	80
Kapellen	2838	28	28	28	28	57	57	57	284
Kaprijke	722	7	7	7	7	14	14	14	72
Kasterlee	1847	18	18	18	18	37	37	37	185
Keerbergen	1531	15	15	15	15	31	31	31	153
Kinrooi	1050	11	11	11	11	21	21	21	105
Kluisbergen	697	7	7	7	7	14	14	14	70
Knokke-Heist	4817	48	48	48	48	96	96	96	482

Koekelare	988	10	10	10	10	20	20	20	99
Koksijde	2270	23	23	23	23	45	45	45	227
Kontich	2732	27	27	27	27	55	55	55	273
Kortemark	1484	15	15	15	15	30	30	30	148
Kortenaken	823	8	8	8	8	16	16	16	82
Kortenbergh	1725	17	17	17	17	35	35	35	173
Kortesseme	779	8	8	8	8	16	16	16	78
Kortrijk	8350	84	84	84	84	167	167	167	835
Kraainem	1009	10	10	10	10	20	20	20	101
Kruibeke	1369	14	14	14	14	27	27	27	137
Kruisem	2089	21	21	21	21	42	42	42	209
Kuurne	1351	14	14	14	14	27	27	27	135
Laakdal	1199	12	12	12	12	24	24	24	120
Laarne	1258	13	13	13	13	25	25	25	126
Lanaken	1869	19	19	19	19	37	37	37	187
Landen	1113	11	11	11	11	22	22	22	111
Langemark-Poelkapelle	948	9	9	9	9	19	19	19	95
Lebbeke	1468	15	15	15	15	29	29	29	147
Lede	1423	14	14	14	14	28	28	28	142
Ledegeem	1118	11	11	11	11	22	22	22	112

Lendeledede	633	6	6	6	6	13	13	13	63
Lennik	952	10	10	10	10	19	19	19	95
Leopoldsburg	1055	11	11	11	11	21	21	21	106
Leuven	9024	90	90	90	90	180	180	180	902
Lichtervelde	983	10	10	10	10	20	20	20	98
Liedekerke	872	9	9	9	9	17	17	17	87
Lier	3231	32	32	32	32	65	65	65	323
Lierde	637	6	6	6	6	13	13	13	64
Lievegem	2630	26	26	26	26	53	53	53	263
Lille	1514	15	15	15	15	30	30	30	151
Linkebeek	478	5	5	5	5	10	10	10	48
Lint	781	8	8	8	8	16	16	16	78
Linter	695	7	7	7	7	14	14	14	70
Lo-Reninge	544	5	5	5	5	11	11	11	54
Lochristi	2517	25	25	25	25	50	50	50	252
Lokeren	3595	36	36	36	36	72	72	72	360
Lommel	2664	27	27	27	27	53	53	53	266
Londerzeel	1822	18	18	18	18	36	36	36	182
Lubbeek	1528	15	15	15	15	31	31	31	153
Lummen	1567	16	16	16	16	31	31	31	157
Maarkedal	812	8	8	8	8	16	16	16	81

Maaseik	2127	21	21	21	21	43	43	43	213
Maasmechelen	2568	26	26	26	26	51	51	51	257
Machelen	1567	16	16	16	16	31	31	31	157
Maldegem	2840	28	28	28	28	57	57	57	284
Malle	1651	17	17	17	17	33	33	33	165
Mechelen	7207	72	72	72	72	144	144	144	721
Meerhout	906	9	9	9	9	18	18	18	91
Meise	2079	21	21	21	21	42	42	42	208
Melle	1227	12	12	12	12	25	25	25	123
Menen	2658	27	27	27	27	53	53	53	266
Merchtem	1682	17	17	17	17	34	34	34	168
Merebeke	2380	24	24	24	24	48	48	48	238
Merkspas	859	9	9	9	9	17	17	17	86
Mesen	71	1	1	1	1	1	1	1	7
Meulebeke	1322	13	13	13	13	26	26	26	132
Middelkerke	1802	18	18	18	18	36	36	36	180
Moerbeke	601	6	6	6	6	12	12	12	60
Mol	2849	28	28	28	28	57	57	57	285
Moorslede	1294	13	13	13	13	26	26	26	129

Mortsel	2137	21	21	21	21	43	43	43	214
Nazareth	1627	16	16	16	16	33	33	33	163
Niel	637	6	6	6	6	13	13	13	64
Nieuwerkerken	709	7	7	7	7	14	14	14	71
Nieuwpoort	1305	13	13	13	13	26	26	26	131
Nijlen	2020	20	20	20	20	40	40	40	202
Ninove	3000	30	30	30	30	60	60	60	300
Olen	1091	11	11	11	11	22	22	22	109
Ostend	5334	53	53	53	53	107	107	107	533
Oosterzele	1517	15	15	15	15	30	30	30	152
Oostkamp	2959	30	30	30	30	59	59	59	296
Oostrozebeke	883	9	9	9	9	18	18	18	88
Opwijk	1257	13	13	13	13	25	25	25	126
Oud-Heverlee	1165	12	12	12	12	23	23	23	117
Oud-Turnhout	1247	12	12	12	12	25	25	25	125
Oudenaarde	3137	31	31	31	31	63	63	63	314
Oudenburg	902	9	9	9	9	18	18	18	90
Oudsbergen	2321	23	23	23	23	46	46	46	232
Overijse	2589	26	26	26	26	52	52	52	259

Peer	1609	16	16	16	16	32	32	32	161
Pelt	2799	28	28	28	28	56	56	56	280
Pepingen	530	5	5	5	5	11	11	11	53
Pittem	1084	11	11	11	11	22	22	22	108
Poperinge	2129	21	21	21	21	43	43	43	213
Putte	1742	17	17	17	17	35	35	35	174
Puurs-Sint-Amands	2351	24	24	24	24	47	47	47	235
Ranst	2100	21	21	21	21	42	42	42	210
Ravels	1464	15	15	15	15	29	29	29	146
Retie	1065	11	11	11	11	21	21	21	107
Riemst	1531	15	15	15	15	31	31	31	153
Rijkevorsel	1166	12	12	12	12	23	23	23	117
Roeselare	6549	65	65	65	65	131	131	131	655
Ronse	1812	18	18	18	18	36	36	36	181
Roosdaal	987	10	10	10	10	20	20	20	99
Rotselaar	1634	16	16	16	16	33	33	33	163
Ruiselede	818	8	8	8	8	16	16	16	82
Rumst	1355	14	14	14	14	27	27	27	136
Schelle	654	7	7	7	7	13	13	13	65
Scherpenheuvel-Zichem	1700	17	17	17	17	34	34	34	170

Schilde	3111	31	31	31	31	62	62	62	311
Schoten	3338	33	33	33	33	67	67	67	334
Sint-Genesius-Rode	1817	18	18	18	18	36	36	36	182
Sint-Gillis-Waas	1761	18	18	18	18	35	35	35	176
Sint-Katelijne-Waver	1962	20	20	20	20	39	39	39	196
Sint-Laureins	851	9	9	9	9	17	17	17	85
Sint-Lievens-Houtem	1040	10	10	10	10	21	21	21	104
Sint-Martens-Latem	1780	18	18	18	18	36	36	36	178
Sint-Niklaas	5958	60	60	60	60	119	119	119	596
Sint-Pieters-Leeuw	2307	23	23	23	23	46	46	46	231
Sint-Truiden	3855	39	39	39	39	77	77	77	386
Spiere-Helkijn	236	2	2	2	2	5	5	5	24
Stabroek	1319	13	13	13	13	26	26	26	132
Staden	1438	14	14	14	14	29	29	29	144

Steenokkerzeel	995	10	10	10	10	20	20	20	100
Stekene	1526	15	15	15	15	31	31	31	153
Temse	2741	27	27	27	27	55	55	55	274
Ternat	1576	16	16	16	16	32	32	32	158
Tervuren	1767	18	18	18	18	35	35	35	177
Tessenderlo	1620	16	16	16	16	32	32	32	162
Tielt	2441	24	24	24	24	49	49	49	244
Tielt-Winge	1122	11	11	11	11	22	22	22	112
Tienen	2672	27	27	27	27	53	53	53	267
Tongeren	2734	27	27	27	27	55	55	55	273
Torhout	2101	21	21	21	21	42	42	42	210
Tremelo	1337	13	13	13	13	27	27	27	134
Turnhout	3241	32	32	32	32	65	65	65	324
Veurne	1431	14	14	14	14	29	29	29	143
Vilvoorde	2694	27	27	27	27	54	54	54	269
Vleteren	465	5	5	5	5	9	9	9	47
Voeren	430	4	4	4	4	9	9	9	43
Vorselaar	613	6	6	6	6	12	12	12	61
Vosselaar	829	8	8	8	8	17	17	17	83
Waasmunster	1391	14	14	14	14	28	28	28	139
Wachtebeke	559	6	6	6	6	11	11	11	56

Waregem	4396	44	44	44	44	88	88	88	440
Wellen	737	7	7	7	7	15	15	15	74
Wemmel	1678	17	17	17	17	34	34	34	168
Wervik	1415	14	14	14	14	28	28	28	142
Westerlo	2076	21	21	21	21	42	42	42	208
Wetteren	2173	22	22	22	22	43	43	43	217
Wevelgem	3116	31	31	31	31	62	62	62	312
Wezembeek-Oppem	1052	11	11	11	11	21	21	21	105
Wichelen	977	10	10	10	10	20	20	20	98
Wielsbeke	1140	11	11	11	11	23	23	23	114
Wijnegem	1160	12	12	12	12	23	23	23	116
Willebroek	1863	19	19	19	19	37	37	37	186
Wingene	1961	20	20	20	20	39	39	39	196
Wommelgem	1682	17	17	17	17	34	34	34	168
Wortegem-Petegem	879	9	9	9	9	18	18	18	88
Wuustwezel	2151	22	22	22	22	43	43	43	215

Zandhoven	1566	16	16	16	16	31	31	31	157
Zaventem	3368	34	34	34	34	67	67	67	337
Zedelgem	2595	26	26	26	26	52	52	52	260
Zele	1799	18	18	18	18	36	36	36	180
Zelzate	662	7	7	7	7	13	13	13	66
Zemst	1904	19	19	19	19	38	38	38	190
Zoersel	2362	24	24	24	24	47	47	47	236
Zonhoven	2156	22	22	22	22	43	43	43	216
Zonnebeke	1511	15	15	15	15	30	30	30	151
Zottegem	2226	22	22	22	22	45	45	45	223
Zoutleeuw	855	9	9	9	9	17	17	17	86
Zuienkerke	429	4	4	4	4	9	9	9	43
Zulte	1770	18	18	18	18	35	35	35	177
Zutendaal	687	7	7	7	7	14	14	14	69
Zwalm	897	9	9	9	9	18	18	18	90
Zwevegem	2519	25	25	25	25	50	50	50	252
Zwijndrecht	1354	14	14	14	14	27	27	27	135
Total	617685	6177	6177	6177	6177	12354	12354	12354	61769

ANNEX 5: DETAILED CALCULATIONS OF VFG TREATMENT CAPACITY

Current and future treatment situation in Flanders

The table below shows the current and estimated future licensed treatment capacity in Flanders. The licensed capacity may differ from the technical capacity, both in a negative and a positive sense. Variability in the quantity of waste presented, for instance, should be taken into account with determination of the extent to which the capacity should be able to cover the peak quantity of waste presented.

Name	Location	Annual capacity (tonnes)	Estimated future annual capacity (tonnes)	Estimated additional capacity (tonnes)	Realisation
VERKO	Dendermonde	45,000	45,000	0	/
WIPS NV	Erembodegem	37,200	37,200	0	/
IVVO	Ypres	50,000	62,000	12,000	2024
IOK	Beerse	60,000	60,000	0	
IGEAN	Brecht	65,000	75,000	10,000	2024
BIONERGA	Maasmechelen	20,000	-	unknown	unknown
BIONERGA	Bilzen	40,000	20,000	-20,000	2022
ECOWERF	Leuven	50,000	50,000	0	
Bio Blue	Ypres	20,000	40,000	20,000	2023
	TOTAL	387,200	389,200	22,000	

Licensed annual capacity in 2021 and estimated future licensed capacity of VFG treatment plants in Flanders (OVAM)

Note: the capacities listed represent the total capacity for VFG waste, green waste and organic-biological waste (OBW). As a rule, a plant treats about 70% of VFG waste with 30% of green waste being added as structural material. This ratio varies between plants. OBW is negligible for the overall picture because only IVVO treats OBW to a relevant extent.

No free capacity is available in the other Regions or in the Netherlands.

Future quantity of VFG waste that will be presented

Total announced quantity of VFG waste that will be presented

Five municipalities of two intermunicipal partnerships in green regions have announced that they will start VFG collection in the period from September 2022 to January 2024 for an estimated quantity of between 5,572 and 13,234 tonnes a year that will be presented, assuming a minimum estimate (VFG collection in **bags**, 32 kg/resident/year) and a maximum estimate (collection in **bins with a volume-based PAYT system**, 76 kg/resident/year).

Intermunicipal partnership	Municipality	Residents	Estimated minimum quantity of VFG (bags, tonnes)	Estimated maximum quantity of VFG (bins, tonnes)	Start
MIROM-Menen	Menen	33,931	1,085.792	2,578.756	1/1/2023
MIROM-Menen	Wervik	19,001	608,032	1,444.076	1/1/2023
MIROM-Menen	Wevelgem	31,554	1,009.728	2,398.104	1/1/2023
IVOO	Ostend	71,489	2,287.648	5,433.164	1/1/2024
IVOO	Bredene	18,156	580,992	1,379.856	1/9/2022
	TOTAL		5,572.19	13,233.96	

Minimum and maximum estimates of the announced quantity of VFG waste that will be presented

Contacts with IVVO indicate that this plant has the capacity to treat the additional quantity presented by MIROM Menen. Bredene currently also transports its VFG waste to IVVO. Ostend will start to do so from 1 January 2024 onwards.

Total unannounced quantity of VFG waste that will be presented

In early August 2022, 65 municipalities from nine intermunicipal partnerships had not yet expressed any intentions to collect VFG. Assuming a minimum estimate (VFG collection in bags, or 32 kg/resident/year) and a maximum estimate (collection in bins with a volume-based PAYT system, or 76 kg/resident/year), a theoretical VFG collection would amount to an additional 40,000 to 96,000 tonnes/year.

Intermunicipal partnership	Municipalities	Residents	Estimated minimum quantity of VFG (bags, tonnes)	Estimated maximum quantity of VFG (bins, tonnes)
IVAREM	10	284,104	9,091.328	21,591.904
IMOG	11	250,316	8,010.112	19,024.016
MIROM-Roeselare	12	193,910	6,205.120	14,737.160
IVM	7	152,674	4,885.568	11,603.224
IVIO	11	125,164	4,005.248	9,512.464
IVLA	8	103,243	3,303.776	7,846.468

IVOO ¹²	4	55,662	1,781.184	4,230.312
Knokke-Heist	Knokke-Heist	32,863	1,051.616	2,497.588
IVBO	Blankenberge	20,399	652.768	1,550.324
Intradura	Bever	2,266	72.512	172.216
Intradura	Dilbeek	44,075	1,410.400	3,349.700
		TOTAL	40,469.63	96,115.38

The estimated unannounced quantity of waste presented as a theoretical consequence of the mandatory collection

Overview of the future quantity of waste that will be presented and the capacity

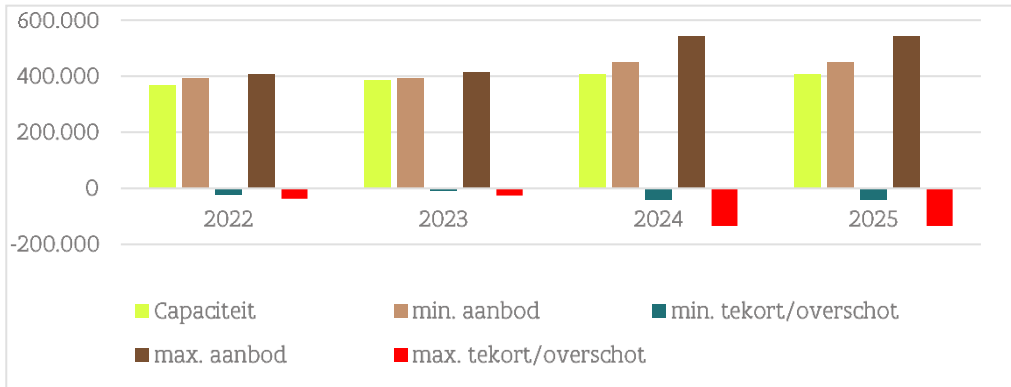
The table and figure below summarise the situation based on the above tables with 'From 2025 onwards' representing the 'unknown' years and with for:

- capacity: the current licensed and estimated additional capacity per year;
- the quantity of waste presented:
 - the peak year 2021 (315,000 tonnes of VFG with deduction of Genk and Diepenbeek (since 2022 Optimo), worst case scenario for the existing quantity of waste that is presented);
 - the estimated minimum and maximum tonnes of VFG per year, for both the announced and the theoretical unannounced quantity of waste that will be presented;
 - addition of 28% of green waste as structural material.

Year	Capacity	Minimum quantity presented (tonnes)	Minimum shortage (tonnes)	Maximum quantity presented (tonnes)	Maximum shortage (tonnes)
2022	367200	390,630	-23,430	404,965	-37,765
2023	387200	394,092	-6,892	413,183	-25,983
2024	409,200	448,820	-39,620	543,164	-133,964
From 2025 onwards	409,200	448,820	-39,620	543,164	-133,964

Summary table showing current and future estimated shortages of VFG treatment capacity in tonnes

¹² At IVOO, VFG will be collected in bags; the actual amount of separately collected VFG will therefore be about 40% lower (around 32 kg/resident).



Summary figure showing current and future estimated shortages or surpluses of VFG treatment capacity

Capaciteit: Capacity - min. aanbod: minimum quantity presented – min. tekort/overschot: minimum shortage/surplus – max. aanbod: Maximum quantity presented – max. tekort/overschot: maximum shortage/surplus

Please note that the technical capacity exceeds the licensed capacity as virtually all the separately collected VFG waste could be treated in the existing plants in 2020 and 2021.

Conclusion

When calculating the expected quantity that will be presented, both a minimum and a maximum scenario was estimated for the VFG waste presented, depending on the collection scenarios chosen by the local authorities (bins with a volume-based PAYT system versus bags). We can count with relative certainty on 22,000 tonnes of additional VFG treatment capacity during the 2023-2024 period. Still, we expect a treatment capacity shortage of minimum 7,000 tonnes to maximum 25,000 tonnes in 2023, which could potentially be absorbed through technical and organisational flexibility. Meteorological conditions present an additional uncertain factor, which can greatly affect the quantity of waste presented. We expect an additional treatment capacity need of 40,000 to 134,000 tonnes from 2024 onwards. Based on the average capacity of a treatment plant, this corresponds to one to three additional plants to be constructed from 2024 onwards. This does not yet take into account the possible affiliation of small producers of commercial kitchen waste and food leftovers to public VFG collection.

ANNEX 6: LEGAL FRAMEWORK FOR THE IMPORT AND EXPORT OF COMBUSTIBLE WASTE

Article 16 of the European Waste Framework Directive (2008/98/EC) reads that “Member States shall take appropriate measures [...] to establish an integrated and adequate network of waste disposal installations and of installations for the recovery of mixed municipal waste collected from private households, including where such collection also covers such waste from other producers, taking into account best available techniques.”. According to the same article “The network shall enable waste [...] to be recovered in one of the nearest appropriate installations, by means of the most appropriate methods and technologies, in order to ensure a high level of protection for the environment and public health.”.

According to Article 3(5) of the European Waste Shipment Regulation (EC) No 1013/2006, “Shipments of mixed municipal waste (EURAL-code 20 03 01) collected from private households, including where such collection also covers such waste from other producers, to recovery or disposal facilities shall [...] be subject to the same provisions as shipments of waste destined for disposal.”.

Recital 33 of the European Waste Framework Directive (2008/98/EC) adds that “[...] mixed municipal waste as referred to in Article 3(5) of that Regulation remains mixed municipal waste even when it has been subject to a waste treatment operation that has not substantially altered its properties.”.

According to a recent judgment of 11 November 2021 by the Court of Justice of the European Union in case C-315/20 (points 29, 30 and 32):

- “Article 3(5) and Article 11(1)(i) of Regulation No 1013/2006, interpreted in the light of recital 33 of Directive 2008/98, mean that mixed municipal waste that has been classified under EURAL-code 19 12 12 of the EWC following mechanical treatment for the purpose of energy recovery which has, however, not substantially altered the original properties of that waste must be regarded as falling within the mixed municipal waste collected from private households covered by those provisions [...];
- the legal rules applicable to shipments of waste depend on the substantial nature of those wastes, and not on their formal classification in accordance with the EURAL-code;
- it is common ground that the mechanical treatment of the waste at issue did not substantially alter its original properties and, consequently, its nature.”

Article 12(1)(k) of the European Waste Shipment Regulation (EC) No 1013/2006 stipulates that, in the case of shipments of waste destined for recovery, the competent authority(ies) of transit may raise reasoned objections to the planned shipment, if the waste concerned will not be treated in accordance with waste management plans drawn up pursuant to Article 7 of Directive 2006/12/EC (now Article 28 of the Waste Framework Directive 2008/98/EC

with the purpose of ensuring the implementation of legally binding recovery or recycling obligations established in Community legislation.

In line with this last provision and in order to guarantee a high level of protection for the environment and public health, Flanders chooses to maximise the treatment of MMW of purely commercial origin in one of the closest appropriate installations, in addition to the MMW falling under the principle of self-sufficiency. The pursuit of a high level of protection for the environment implies that MMW that has not undergone substantial changes should be treated in one of the closest appropriate installations.

ANNEX 7: OVERVIEW AND TIME FRAME OF ALL THE POLICY ACTIONS

The table below provides an overview of all the policy actions in this plan by chapter. It gives a brief description of each action. The exact wordings can be found in the text. The table also indicates for each action on which targets the action has an impact. Actions earlier on in the chain often have an impact on many different targets in this plan. Prevention actions, for instance, not only affect the prevention targets themselves, but often also reduce residual waste and subsequently help facilitate a decrease in final treatment capacity. Prevention actions often even have a positive impact on litter targets. Actions that focus more on the end of the chain, such as final treatment, often only have an impact on directly linked targets.

In addition, the table below indicates which organisation will promote the action and which stakeholders are involved as a minimum. The last column also gives an idea of the time frame. We give an approximate time frame for the implementation of each action (duration). This time frame is indicative and can be changed depending on changing priorities. In the end, each action must be realised by the end of the plan period. If the time frame simply states 'plan period', it means that this action will be worked on throughout the plan period.

No	Description	Prevention and reuse	Recycling	Mixed household waste	Commercial residual waste	Final treatment	Avoidance behaviour	Promoter	Organisations involved	Time frame (duration of action)
	Chapter 4: targets and indicators									
1	Optimisation of measurement and registration methods for reuse shops	X						OVAM	Reuse shops, Herw!n	2023-2026
2	Taking account of post-sorted mixed company waste in residual waste target				X			OVAM	Denuo	2023-2025
3	Examining the feasibility of registering and reporting cleared						x	OVAM and local	VVSG and Interafval	2027-2028

	quantities of fly-tipped waste							authorities		
	Chapter 5: prevention									
4	Structural inclusion of prevention in multi-year communication plan of OVAM	X		X	X	X	X	OVAM	Depending on theme	Plan period
5	Expanding and promoting education knowledge guide	X		X	X	X		OVAM	Education sector	Plan period
6	Promoting washable diapers among parents and in nurseries	X		X	X	X		OVAM Circular Flanders	Kind en Gezin, Gezinsbond, VVSG-Interafval, BBL	2023-2026
7	Adapting the Interregional Cooperation Agreement on Packaging Waste to integrate prevention targets.	X		X	X	X	X	IRPC	OVAM, other Regions, Fost Plus, Valipac	2024-2025
8	Increasingly embedding prevention strategies in both new and existing EPR schemes.	X		X	X	X		OVAM	Management bodies	Plan period
9	Examining how reuse potential and the elimination of ambiguities at household goods services and reuse shops can take further shape.	X		X	X	X		OVAM	Denuo, VVSG- Interafval, recycling sector, Herw!n	2024
10	New bans on use of some single-use products.	X		X	X	X	X	OVAM	Sector federations	2024-2030
11	Public locations with access to drinking water.	X		X	X	X	X	OVAM	VVSG-Interafval	2023-2027
12	Reversing the sticker principle in the VLAREMA legislation	X					X	Printed advertising sector	OVAM	2025
13	Ban on the destruction of certain reusable goods	X		X	X	X		OVAM	Sector federations, Denuo, BW2E	2026-2028
14	Reuse shops: optimising existing collection channels and methods and developing new ones	X		X	X	X		Reuse shops, Herw!n	OVAM	Plan period
15	Supporting reuse shops through	X		X	X	X		OVAM	Reuse shops,	Plan period

	visitations								HerwIn	
16	Promoting the submission of projects around prevention and reuse for half a euro project grants.	X		X	X	X	X	OVAM & Fost Plus	VVSG-Interafval	Plan period
17	Taking circular strategies into account in the reform of VLAIO grants.	X			X	X		VLAIO	OVAM, Circular Flanders	2023
18	Programme activities of Circular Flanders towards local authorities	X		X	X	X		Circular Flanders	VVSG-Interafval, OVAM	2023-2026
19	Local authorities are committed to sharing and repair initiatives in their cities. Inventory and support from OVAM and Circular Flanders	X		X	X	X		Local authorities	OVAM, Circular Flanders VVSG-Interafval	Plan period
20	Building on the 'Circular Work(s)' project to promote cooperation around circular economy between mainstream companies and adapted work companies/companies from the social economy	X		X	X	X		Circular Flanders	HerwIn, VVSG-Interafval, OVAM	2023-2025
21	Supporting events organisers in making their events more sustainable.	X		X	X	X	X	OVAM	VVSG-Interafval, private organisers	Plan period
	Chapter 6: Separate household waste collection									
22	Separate collection of biowaste in every Flemish municipality		X	X		X		Local authorities	OVAM, VVSG-Interafval	2023-2024 introduction, then follow-up
23	Potential introduction of acceptance obligation for diapers		X	X		X		OVAM	Diapers sector, VVSG-Interafval, other Regions, IPUP	Plan period
24	Adapting the incineration ban for mixed household waste		X	X		X		OVAM	VVSG-Interafval, BW2E	2025
25	Consulting with relevant sectors on the collection of medicines and			X				OVAM	Febupro, Essenscia,	2024

	gas cylinders.								pharmacists, IRPC	
26	Working together to reduce fire risks and other safety risks at civic amenity sites and at private processors.							OVAM, VVSG-Interafval Denuo and BW2E	Police, fire brigade and other security services	2023-2024
27	Improving bulky waste collection at civic amenity sites		X	X		X		Local authorities & OVAM	VVSG-Interafval	2023-2026
28	Further reducing contaminants in biowaste through various initiatives		X					Local authorities & OVAM	VVSG-Interafval, Denuo	2025-2027
29	Better defining the total variable part of tariffs for bulky waste		X	X		X		OVAM	VVSG-Interafval	2023
30	Including preconditions for waste bill allowances in the VLAREMA legislation	X	X	X		X		OVAM	VVSG-Interafval	2024-2025
31	Updating and increasingly publicising the benchmark tool for local authorities		X	X		X		OVAM	VVSG-Interafval	Plan period
32	Continuing the visitations, while prioritising municipalities and intermunicipal partnerships with a great potential impact on Flanders' residual waste rate	X	X	X		X		OVAM	VVSG-Interafval	Plan period
33	Continuing and further optimising the learning networks	X	X	X		X		VVSG-Interafval	OVAM	Plan period
34	Continuing existing partnerships between OVAM and local authorities and initiating annual consultations with other central cities	X	X	X		X		OVAM	Local authorities	Plan period

35	New composition analysis of household and bulky waste		X	X		X		OVAM	VVSG-Interafval, management bodies	Residual waste: 2025-2026 Bulky waste: 2027
36	OVAM is working together with the ABB to		X	X		X		OVAM	ABB	Plan period

	ensure that non-compliant taxes and fees are adjusted									
37	Evaluating the EPR scheme for mattresses	X	X	X	X	X		OVAM	Valumat, VVSG-Interafval, Denuo	No later than 2027
38	New EPR schemes promoting the separate collection and recycling of certain household waste streams, with textiles as a priority		X	X		X		OVAM	Management bodies, sector federations, other Regions	From 2023
Chapter 7: separate collection of company waste										
39	Communicating to companies about the sorting obligation and raising their awareness of it		X		X	X		OVAM	Sector federations, Denuo, Voka, Unizo, management bodies	Plan period
40	OVAM is further developing its sector-specific approach. Healthcare, education and hospitality are priority sectors.	X	X		X	X		OVAM	Sector federations, Horeca Vlaanderen, education umbrella organisations, Denuo, Voka, Unizo	Plan period
41	Expanding the user base of Cirkeltips and fine-tuning the benchmark function	X	X		X	X		OVAM	Sector federations, Denuo, Voka, Unizo, management bodies	2024-2025
42	New composition analysis of commercial residual waste		X		X	X		OVAM	Management bodies, Denuo	2025-2026

43	Specific targets by collection in companies in the next accreditation for household packaging.		X		X	X		IRPC, OVAM	Fost Plus	2023-2024
44	Adapting the VLAREMA legislation to ensure more correct tariff formulas for mixed company waste based on weight		X		X	X		OVAM	Denuo	2023

45	Targets for the number of inspections by local authorities of sorting at source in companies		X		X	X		Local enforcers	OVAM, Enforcement Division	Plan period
46	Single point of contact at OVAM and the Enforcement Division to assist local authorities in conducting local inspections of the sorting obligation in companies.		X		X	X		Enforcement Division & OVAM	Local authorities	Plan period
47	Additional enforcement of sorting at source through the half a euro work plan		X		X	X		Fost Plus, OVAM, Enforcement Division		Plan period
48	OVAM and the Enforcement Division strengthen their cooperation to enforce compliance with the rules on residual waste collection in companies		X		X	X		OVAM, Enforcement Division		Plan period
Chapter 8: Recycling										
49	Evaluating the impact of the support through the 'recycling hub'		X	X	X	X		OVAM	Denuo, Essenscia	2023 and 2026
50	Further developing the symbiosis platform	X	X		X	X		OVAM	The relevant sectors	Plan period
Chapter 9: final treatment										
51	Preparing an updated projection of the quantity of combustible waste that will be presented and the available capacity					X		OVAM	BW2E, VVSG-Interafval, Denuo	2026
52	Revising the 'Levies' section in the Materials Decree					X		OVAM	BW2E, VVSG-Interafval, Denuo	2024
53	Set of criteria as the basis for evaluating waste incineration plants in light of the climate targets					X		OVAM	BW2E, VVSG-Interafval, Denuo	2023-2024

54	Enabling tool for the voluntary phase-out of incineration capacity					X		OVAM	BW2E, VVSG- Interafval, Denuo	2027-2028
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55	Work method for a more permanent monitoring of the relevant and structurally available incineration capacity outside of Flanders.					X		OVAM	BW2E, VVSG-Interafval, Denuo	2026
56	Phasing out the landfilling of combustible residues					X		OVAM	BW2E, VVSG-Interafval, Denuo, textile sector	2030
Chapter 10: litter and avoidance behaviour										
57	Continuing platforms such as Mooimakers						X	OVAM	VVSG-Interafval, Fost Plus, tobacco sector, Fevia	Plan period
58	Introduction of a deposit return scheme						X	Producers of beverage packaging	3 regional authorities, IRPC	2025
59	Awareness campaign(s) to change attitudes and behaviour towards litter and fly-tipping.						X	Mooimakers		Plan period
60	Mooimakers informs and supports partners and stakeholders through structural communication and communication products						X	Mooimakers		Plan period
61	Local and supra-local authorities work with an up-to-date litter bin plan, with support from Mooimakers.						X	Local and supra-local authorities	Mooimakers	Plan period
62	Local and supra-local authorities make sure public areas are cleaned, with support from Mooimakers.						X	Local and supra-local authorities	Mooimakers	Plan period
63	Mooimakers keeps knowledge on the approach to type environments up-to-date and						X	Mooimakers		Plan period

	shares it on a continuous basis										
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64	Local authorities tackle litter and fly-tipping hotspots, with support from Mooimakers						X	Local authorities	Mooimakers	Plan period
65	Mooimakers continues to support and facilitate clean-up actions (including with clean-up equipment)						X	Mooimakers		Plan period
66	Mooimakers also supports schools, youth associations and local authorities to activate volunteers.						X	Mooimakers		Plan period
67	Local and supra-local authorities implement efficient and effective enforcement on litter and fly-tipping.						X	Local and supra-local authorities	Mooimakers	Plan period
68	Offer of support from Mooimakers to local authorities and Flemish agencies with enforcement authority						X	Mooimakers	Local authorities, Flemish agencies	Plan period
69	From 2023 onwards, local authorities, provinces and relevant Flemish public sector bodies will report annually to OVAM on the quantities of litter cleared from the ground.						X	Local authorities, provinces, Flemish bodies	OVAM	Plan period
70	The local authorities, the five Flemish provinces and the relevant Flemish public sector bodies report on the financial and human resources used and on the costs incurred in the context of the litter policy.						X	Local authorities, provinces, Flemish bodies	OVAM	Plan period
71	Expected minimum policy actions for local authorities in terms of litter and fly-tipping						X	Local authorities	Mooimakers	Plan period
72	Formalising cooperation between Mooimakers and relevant Flemish agencies through a cooperation protocol						X	Mooimakers & Flemish agencies	Mooimakers	2023-2024

	Chapter 11: monitoring and implementation of the Local Materials Plan									
73	Mid-term review of the Local Materials Plan	X	X	X	X	X	X	OVAM	Stakeholders of the consultation platform and the working groups	2026

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This overview does not include the tables and figures in the annexes.

ANNEX 9: FULFILMENT OF EUROPEAN REQUIREMENTS

The present implementation plan is submitted to the European Commission as a waste management plan and waste prevention programme as provided for in Articles 28 and 29 of the European Waste Framework Directive. When drawing up this plan, attention was paid to meeting all the European requirements around waste management plans and waste prevention programmes as well as possible. However, certain requirements are fulfilled through other policy documents that are inextricably linked to the present plan. The Local Materials Plan should be read in a policy context in which the following legislation and policy documents already exist:

- the Decree containing general provisions on environmental policy (DABM)
- the Decree on the sustainable management of material cycles and waste (the Materials Decree)
- the Government of Flanders Order establishing the Flemish Regulations on the Sustainable Management of Material Cycles and Waste (VLAREMA)
- the Government of Flanders Order of 1 June 1995 containing general and sectoral provisions on environmental hygiene (VLAREM II)
- other Government of Flanders decrees or orders
- the Implementation Plan for Household Waste and Similar Company waste 2016-2022
- Het plan gewikt en gewogen – Evaluatie van het uitvoeringsplan huishoudelijk afval en gelijkaardig bedrijfsafval 2016-2022 (Review of the Implementation Plan for Household Waste and Similar Company waste 2016-2022)
- the socio-economic analysis and plan-EIR associated with the Local Materials Plan
- the Plastics Implementation Plan 2020-2025
- the Action Plan ‘Food Loss and Biomass Waste streams and Residual Waste streams Circular 2021-2025’
- the policy programme ‘Towards Circular Construction 2022-2030’ (Op weg naar circulair bouwen 2022-2030)
- the Long-Term Vision on Final Treatment, adopted by the Government of Flanders on 18 December 2020
- annual publications on household waste and similar company waste data
- annual publications on tariffs and capacities for landfill and incineration
- various other publications, databases and applications used to monitor targets and indicators in terms of data
- lists of notifications for the import and export of waste, published on [OVAM’s website](#);
- lists of licensed processors for various wastes, published on [OVAM’s website](#);
- the register of raw material declarations, published on [OVAM’s website](#);
- various other public lists and registers published on [OVAM’s website](#)
- the Federal Circular Economy Action Plan, adopted by the Federal Government on 17 December 2021
- the federal product policy
- various legislation and policy plans of the Brussels-Capital and Walloon Regions, whether or not officially submitted as waste management plans and/or waste prevention programmes.

ANNEX 10: PLAN-EIR AND SOCIO-ECONOMIC ANALYSIS

The present Local Materials Plan was accompanied by the preparation of an environmental impact report (plan-EIR) and a socio-economic analysis. The plan-EIR calculates the environmental impact for a selection of actions and estimates the extent to which the residual waste targets in particular can be achieved through the actions in the plan. The socio-economic analysis considers the costs and benefits associated with the actions for different actors, paying explicit attention to the costs and benefits for local authorities.

The plan-EIR and the socio-economic analysis should be considered in their entirety as annexes to the Local Materials Plan. However, as these are very sizeable documents, they are not inserted here textually. The plan-EIR and the socio-economic analysis are always available for consultation on OVAM's website and/or upon request.

ANNEX 11: BIBLIOGRAPHY

Theme	Scientific publications and policy documents
Context, targets and indicators	<ul style="list-style-type: none"> – Christis & Vercalsteren (2020), macro-economic material flow indicators for Flanders 2002-2018 – Demir (2019), Beleidsnota 2019-2024 Omgeving – IVC (2022), Activiteitenverslag 2021 – OVAM (2020), Het plan gewikt en gewogen – Evaluatie van het uitvoeringsplan huishoudelijk afval en gelijkaardig bedrijfsafval 2016-2022 – Uytterhoeven (2020), Van Belfius-clusters naar CART – Vlaamse Regering (2019a), Vlaams Energie- en Klimaatplan 2021-2030 – Vlaamse Regering (2019b), Vlaamse regering 2019-2024 Regeerakkoord – VITO (2021a), Het aandeel van materiaal- en niet-materiaalgerelateerde emissies in Vlaanderen
Circulaire steden en gemeenten	<ul style="list-style-type: none"> – Doughnut Economics Action Lab (2020), creating city portraits – IRP (2018), The weight of cities – Morisse et al (2020), Vier stedelijke cases over mogelijke transitierichtingen naar circulaire economie in functie van Segmentatie V, in opdracht van het Vlaams Planbureau voor Omgeving – OECD(2020), The circular economy in cities and regions – Willeghems & Bachus (2019), Modelling job creation in the circular economy in Flanders
Preventie en hergebruik	<ul style="list-style-type: none"> – Delanoëje & Bachus (2020), Reuse – The understudied circular economy strategy – Ernst & Young (2020), onderzoek weeg- en turfmethode bij kringloopcentra – Federaal planbureau, bisa.brussels, Statistiek Vlaanderen & IWEPS, Regionale economische vooruitzichten 2021-2026 – Kenta & Suma Consulting (2019), mogelijkheden voor een hergebruiksvergoeding – Komosie (2018), lokale verschillen in hergebruik in de kringwinkelsector – Ökopol (2021), Policy Brief on Prohibiting the Destruction of Unsold Goods – Statistiek Vlaanderen (2021), Website, pagina ‘Bevolking: omvang en groei’, gepubliceerd op 7 juli 2021 – Van Aggelpoel et al (2018), Parent’s views on toilet training: a cross-sectional study in Flanders
Inzameling Huishoudelijk afval	<ul style="list-style-type: none"> – OVAM (2021), Preventie- en sorteergedrag van de Vlaamse Bevolking – Kwantitatieve en kwalitatieve bevraging

	<ul style="list-style-type: none"> – OWS (2022a), Sorteeraanlyse Huisvuil 2020-2021 – OWS (2022b), Sorteeraanlyse Grofvuil 2020-2021 – RDC & Thingit (2021), Maatschappelijke impactanalyse inzamelscenario's luierafval bij burger en bedrijven in Vlaanderen – Sita (2014), Sorteeraanlyse-onderzoek huisvuil 2013-2014
Inzameling Bedrijfsafval	<ul style="list-style-type: none"> – Arcadis (2019), Onderzoek naar collectieve afvaloplossingen op bedrijventerreinen – Ernst & Young (2020), Onderzoek naar recycleerbaarheid van nagesorteerde materialen – OVAM (2020), Onderzoek naar de inzet van financiële instrumenten – OWS (2018), Sorteeraanlyse bedrijfsrestafval 2017-2018 – Valipac (2020), Rapportage aan de IVC over de gegevens ingezameld i.k.v. artikel 18 van de erkenning
Recyclage	<ul style="list-style-type: none"> – Gaasbeek (2018), Potentieel in circulariteit voor luiers en incontinentiemateriaal – VITO (2021b), Einde-afval criteria voor luierrecyclage – VITO (2022), Medicijnen en hormoonresten in luiermateriaal – RDC (2021), Milieu-economische analyse van inzamel- en verwerkingsscenario's voor huishoudelijk bioafval en vergelijkbaar bioafval van bedrijven in Vlaanderen
Eindverwerking	<ul style="list-style-type: none"> – CE Delft (2019), Verwerkingsscenario's Vlaams huishoudelijk afval en gelijkaardig bedrijfsafval 2020-2030 – OVAM (2012), De rol van stortplaatsen binnen het materialenbeleid – OVAM (2022), Tarieven en Capaciteiten voor Storten en Verbranden – Actualisatie tot 2020 – Vlaamse Regering (2020), Langetermijnvisie eindverwerking – VITO (2021c), impactanalyse over de verhoging van de verbrandingsheffing
Zwerfvuil & sluikestorten	<ul style="list-style-type: none"> – Idea Consult (2015, 2017) en Statter (2019), bevraging zwerfvuil en sluikestort – hoeveelheden en beleidskosten – Idea Consult (2019), Vooronderzoek en steekproeftrekking voor fractietelling zwerfvuil (uitgevoerd met onderaannemers Organic Waste Systems en VITO) – Ordina (2021), Haalbaarheidsstudie artificiële intelligentie (AI) voor zwerfvuilmonitoring – Organic Waste Systems (2021), studie fractietelling van het zwerfvuil (onderaanneming door Idea Consult)
Andere	<ul style="list-style-type: none"> – Antea & RDC (2022), Plan-MER en socio-economische analyse van het uitvoeringsplan huishoudelijk afval en gelijkaardig bedrijfsafval

ANNEX 12: GOVERNMENT OF FLANDERS DECISION

The Government of Flanders adopted the Local Materials Plan on 26 May 2023. The Government of Flanders decisions can be found [here](#). The decision sheet is also published on OVAM's website.