DELIVERABLE REPORT

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Dissemination Level		
PU	Public	√
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

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Table 1-1: abbreviations used in the report

Abbreviation	Signification	Definition
C&D	Construction and Demolition	Waste that arises from construction and demolition activities. It mostly consists of inert waste
CAS	Civic Amenity Site	A guarded, fenced-off area where residents can dispose of and sort out their household waste into receptacles in order to be recycled or otherwise treated, under the control of an on-site supervisor.
EEE	Electrical and Electronic Equipment	Electrical or electronic devices
LA	Local authority	Municipality or group of municipalities responsible for waste management (collection and/or treatment)
MCAS	Mobile Civic Amenity Site	A temporary installation in a public area where residents can dispose of and sort out their household waste in order to be recycled or otherwise treated. Unlike a regular CAS, the mobile CAS is only open or limited periods and is generally smaller.
PAYT	Pay as you throw	The system of waste collection in which waste producers pay for the waste collection depending on the quantity of waste produced.
WEEE	Waste Electrical and Electronic Equipment	Discarded electrical or electronic devices as defined in the WEEE Directive 2012/19/EU

1. Summary and Objectives

URBANREC aims to develop and implement an eco-innovative and integral bulky waste management system, enhancing prevention, improving logistics and allowing new waste treatments to obtain high added value recycled products and demonstrate its effectiveness in different regions. In the URBANREC project, Northern, Mediterranean, Eastern and South-eastern areas in Europe are represented by Belgium, Spain, Poland and Turkey, which have very different urban waste recycling rates.

The URBANREC project aims to improve the separation and disassembling of bulky waste - implementing advanced fragmentation techniques to obtain high quality raw materials, promoting innovative valorisation routes for those considered more problematic (PUR foam, mixed hard plastics and mixed textiles), until now not recycled due to lack of eco-innovative cost-effective solutions. Innovative waste treatments will be investigated to increase the recovery of these fractions, and later will be optimized and implemented at industrial level thanks to the collaboration of the URBANREC partners.

This report consists in URBANREC's deliverable 1.1: "definition of the starting situation in URBANREC regions", achieved within the framework of task 1.1 whose aim is to define an evaluation of bulky waste management in the 4 regions involved in the project.

It aims at describing the current situation of bulky waste management in the 4 regions, especially:

- The regulation;
- The existing communication activities;
- The current collection and treatment schemes;
- An overview of existing quantitative information allowing to establish a status quo that will then be used to monitor the progress achieved along the course of the project.

This report presents these starting situations as a collection and analysis of information filled in in factsheets focusing on the territories covered by the project: Flanders Region and IMOG area in Belgium, Province of Valencia and CVI territory in Spain, the City of Warsaw in Poland and the district of Bornova along with other Districts in Izmir in Turkey. It will also analyse them and compare them in a second part.

2. Work Progress

2.1 Methodology

Data collection was organised as follows:

- By the end of September 2016, a 1st version of the template was drafted by ACR+ and provided to the members of the consortium;
- By the end of October 2016, a 2nd version was sent to the consortium taking into account the feedback provided by the members of the consortium;
- On the 15 November 2016, the template was discussed and finalised during the 2nd project meeting in Karlsruhe. A final version of the template was made available to the territories;
- By the end of December 2016, a first version of the filled-in factsheets was sent to ACR+, who provided feedback and further questions to ensure relevant and comparable information was provided;
- By the end of January 2017, the final versions of the factsheets were sent to AIMPLAS in order to finalise the report.

The factsheets were drafted to cover all the topics addressed in the description of task 1.1 and to allow the definition of clear and comprehensive situations, in order to assess the room for improvement and be able to monitor further improvements.

ACR+ ensured that the information provided is consistent, in line with the project's scope and comprehensive.

The final version of the template is presented in ANNEX 1.

2.2. Detailed description

2.2.1 Scope and definition

As mentioned above, one important aspect of the data collection is to ensure the consistency of the data collected. This is challenging as a compromise has to be found between the necessity of having data sharing the same scope and the fact each territory uses its own definitions and handles waste in a specific way, meaning that scopes and definitions are likely to be heterogeneous.

To reduce the possible biases, several precautions were taken:

- For the various elements asked in the questionnaire, definitions were provided to ensure each territory understands well the scope of the question;
- As much as possible, the scope of the data provided is asked (e.g. the inclusion or not of non-household waste and illegal dumping, which can significantly impact the overall quantities);
- Territories were asked to provide as much as possible qualitative information and description to explain the context and background behind quantitative data;
- The factsheets were reviewed by ACR+ and all partners were asked to provide additional information when uncertainties occurred.

It is also important to highlight the general definitions and specially to stress the difference between "bulky waste" and "mixed bulky waste". In this report, the following definitions apply:

- "**Bulky waste**" refers to "*solid waste originating from the normal functioning of a private household and similar waste from companies that may require special collection and management because it cannot be accepted by the regular*

household waste collection systems due to its shape, volume and/or weight.", as defined by the URBANREC project. This means that it encompasses both sorted fractions and mixed fractions. However, it is important to note that the scope of the data presented by the different territories is likely to change depending on the general organisation of the waste service.

- "**Mixed bulky waste**" refers to the streams of bulky waste composed of the mixed fractions, i.e. either mixed bulky waste collected on the kerbside or on demand from citizens or mixed waste containers in civic amenity sites that are then sent to sorting centres, incineration or landfilling. The collected quantities of mixed bulky waste greatly depend on the sorting performances and its composition will vary from one territory to another (as with residual waste).

Therefore, bulky waste is composed of both sorted bulky waste (i.e. a homogeneous fraction that is sorted either at the source or in sorting centres such as wood, cardboard…) and mixed bulky waste that is composed of several material fractions. Any deviation from these general definitions will be clarified when presenting the data. Other definitions are presented in the following table:

Table 2-1: Definition used in the report.

Collection schemes	
Civic amenity sites (CAS)	A guarded, fenced-off area where residents can dispose of and sort out their household waste into receptacles in order to be recycled or otherwise treated, under the control of an on-site supervisor.
Mobile civic amenity sites (MCAS)	A temporary installation in a public area where residents can dispose of and sort out their household waste in order to be recycled or otherwise treated. Unlike a regular CAS, the mobile CAS is only open during limited periods and is generally smaller
Re-use centres	A centre operated by or on behalf of a local authority or by an association (charity, social economy organisation) where people can donate products/waste that are then prepared for re-use (checking, cleaning, and possibly repairing) and made available for redistribution or sales.
Kerbside collection	The collection of household bulky waste takes place from door to door or from one house to the next. Waste materials are collected from resident's doorsteps at regular frequency
Collection on demand	The collection of household bulky waste in front of a house after appointment (taken by phone, via a website…).
Economic instruments	
Waste tax	Charge levied by the local authority for the handling of waste and which are generally calculated as a percentage of a local tax (% of the tax on property value, % of the water or electricity bill…)
Waste fee	Charge paid to the local authority specifically applied to the use of the waste service, whose total amount is tied to the cost of the service and which is calculated according to the service provided (e.g. according to the size of the household, the size of the bins provided…)
Pay-as-you-throw	A waste fee whose amount is calculated according to the quantities of waste produced (e.g. based on the weight of waste collected, on the frequency of collection, the number of bags used…)
Landfill/incineration tax	A tax applied by public authority (generally national or regional authorities) to the quantities of waste sent to landfill/incineration. It can be levied based on the weight or the volume.
Other	
Sorting facility for non-reusable bulky waste	A facility intended to segregate recyclables such as paper and cardboard, glass, wood and metals from the collected bulky waste through manual sorting, manual sorting belts and/or automatic processes such as air flow or optical separators.

Composition analysis	A composition analysis consists in various measurements aiming at assessing the average composition (i.e. the distribution of the various waste fractions) within a mixed waste stream (e.g. residual waste or mixed bulky waste)

3. Results

3.1 Turkey

General framework

At which level is the waste regulation voted? ☒ National ☐ Regional	
Main regulation on waste	**Law on Environment No. 2872:** it is the central existing law in Turkey where all activities, actions and services with regard to the environment are legally defined. In that sense, according to Article 8: "...It is forbidden to release all sorts of waste and residues directly or indirectly into receiving environment, storing them or being engaged in a similar activity…" **Municipality Law No. 5393:** articles 14 and 15 of the Municipality Law No. 5393 state that "...municipalities are responsible for the provision of all services concerning the collection, transport, separation, recycling, disposal and storage of solid waste...as well as for the removal of waste water and rain water, establishment of necessary waste water treatment facilities or having them established, and for their operation or having them operated..." **Metropolitan Municipality Law No. 5216:** article 7 of the Metropolitan Municipality Law No. 5216 states that "...Metropolitan municipalities are responsible for designing of the Metropolitan solid waste management plan, ensuring its design; except for the collection at source and the transportation of solid waste to the transfer facility, providing services for the recycling, storage and disposal of solid waste and excavation residues, establishing or having established facilities for these purposes, operating or having them operated..." **Regulations On Waste Management:** - The **Solid Waste Control Regulation dated from 1991** establishes the general framework of waste management system. This regulation requires the reduction of waste production as far as possible, separation of recoverable waste at its source and recycling the valuable wastes for the economy, disposal of non-recyclable wastes by means of environment-friendly methods. - The **Regulation on the Control of Hazardous Wastes** prepared based on the Environmental Law and the Basel Agreement with a view to establishing a hazardous waste management system, came into effect in 1995 and this Regulation was rearranged and harmonized with the EU Acquis in 2005. Separate control regulations were established for packaging and packaging wastes, waste oils, medical wastes, construction and excavation wastes and used batteries and accumulators - With the amendment made to **the Environmental Law in 2006**, concrete arrangements with regard to financing of waste services were introduced.

	Currently, most of the EU waste management directives concerning MSW have been transposed into Turkey's national legislation in (**Bakas and Milios, 2013**): - By- Law on General Principles of Waste Management (05.07.2008); - By- Law on Landfilling of Waste (26.03.2010). - By- Law on Control of Packaging Waste (24.08.2011); In addition, newly, Civic Amenity Sites (31.12.2014) communique has been declared. Policy-making, strategy development, planning, specifying the standards, issuing license, auditing, monitoring, taking measure, coordination and training at national level in the field of waste management are under the mandate of the Ministry of Environment and Urbanization. The Ministry also performs the activities of directing the implementations, project development, and monitoring, auditing, reporting, applying sanctions at local level through its Provincial Directorates. In addition to the Ministry of Environment and Urbanization and municipalities, a large number of ministries and public institutions in Turkey are involved in the management of waste sector. The Ministry of Health, which is rather responsible for monitoring the effects on the public health, is also authorized to issue license for waste disposal areas. The Ministry of Finance has the power to make arrangements related to the environmental clear up tax. The Ministry of Interior is responsible of directing, monitoring and controlling the local administrations. Ministry of Development (formerly was the State Planning Organization) which prepares the sectorial plans and approves the projects in need of public financing and foreign credits is in charge of planning and programming waste management investments and strategic solid waste projects. İller Bank has a role in the implementation of the projects on solid waste management and providing financing for the regional and local municipalities.
Regional waste strategy	Bornova Municipality puts emphasis on Cleaning Affairs and Waste Management as primary services at the "Strategic Plan" of Municipality covering the years 2015-2019. As it is defined at the Municipal Law 5393, "Municipality is responsible organization from the all services made on solid waste Collection, transportation, sorting, reuse, landfill…"
Specific regulation on bulky waste	In 2014, the Ministry of Environment and Urbanization published a regulation to establish CA sites all over the country.
Existing reuse / recycling targets on bulky waste	*No specific target so far*
Existing EPR schemes for bulky waste: NONE	

Current Situation and Future Outlook for the Waste Management Market

According to Legislative structure, the current status of Turkey's waste industry shows that Primary and Secondary Legislation with regard to waste management has been clearly set and the underlying regulations have been mainly adopted from the existing EU environmental directives.

However, the current implementation of waste management and waste water treatment services by municipalities and Metropolitan municipalities has by far not reached its optimal status. While collection and transportation of waste is done at great extent, the great majority of solid waste in the country is still not being disposed in accordance with

the laws and regulations. Also, the industrial pollution is still not satisfactorily well managed and in line with the regulatory requirements.

While on the way, there are still some important governmental actions to do in order to guarantee the full adaption and implementation of the waste regulations to EU standards. That is, in order to ensure effective implementation, monitoring and auditing of the current legislation, there is a need for strengthening the institutional structure and capacity building. Especially, due to the repeated implementation of the audit, permission and sanction processes by different institutions in the country a healthy environment management plan cannot be applied to the environment.

In Turkey, aspects such as permission, monitoring, auditing, sanctioning and reporting are still unsatisfactory and have a non-integrated structure. Optimizing the administrative process and adaption process of the existing regulations to EU directives in the near future, together with Turkey's clearly defined strategies, targets and action plans with regard to waste management and waste water treatment will further stimulate Turkey's waste management industry in future.

Turkey's municipal waste per capita is around 407 kg / per year and municipal waste water per capita 182 litres / day, which have been more or less constant for the last few years. Due to Turkey's various population growth scenarios of, both the amount of waste and waste water in total is expected to further increase, implying a future growth of the waste industry in Turkey.

3.1.1 Province of IZMIR

GENERAL INFORMATION		
Name	IZMIR	
Population	4,168,415 (2015)	
Density	2,023 inh/km²	
Urbanisation class	A (50 – 100% of population living in multi-family houses)	**Figure 1: location of the Province of Izmir, Turkey**

The Province of Izmir is located in western Anatolia on the Aegean coast. Its climate is Mediterranean. It encompasses 30 districts (11 of them are in the metropolitan area, 19 of them are the town municipalities) and 1 metropolitan municipalities. Its total population is about 4 million inhabitants.

Regional waste framework

Each district/municipality is in charge of waste collection on its territory, while Metropolitan municipalities are in charge of waste treatment. All waste is generally sent to landfills, with some exceptions for bulky waste:

- In some municipalities, social markets organise a bulky waste collection (either door-to-door or on demand) and sell them after repairing and cleaning them;

- Some municipalities collect wooden waste (broken pieces of wooden furniture…) and make it available to disadvantaged population for residential heating. Some NGOs also collect textiles with dedicated bring banks.

However, no quantitative data is available.
In 2014, a new regulation made the implementation of civic amenity sites mandatory for municipalities, which are expected to comply within this year. Most municipalities are in the design phase (identification of the location of the CAS, design…).

Definition of bulky waste

The definition of bulky waste encompasses larger solid waste mostly voluminous waste consisting of household goods such as refrigerators, washing machines, seats, and not to be re-used.

3.1.2 District of Bornova

GENERAL INFORMATION		
Name	Bornova Municipality	**Figure 2: location of the district of Bornova in the district of Izmir, Turkey**
Population	435,000 (2015)	
Density	2,023 inh/km²	
Urbanisation class	A (50 – 100% of population living in multi-family houses)	

Bornova is one of the oldest local authorities of Turkey established in 1881 in the Province of Izmir. It is located in the western part of Turkey. Bornova is highly urbanized and modern city that covers an area of 215 Km² (third largest district in Izmir) and is home of about 435,000 inhabitants in the Greater Metropolitan Area, with corresponding high levels of development in terms of industry (5 big Industrial Zones locates in Bornova) and services. The urban area is divided into 45 officially constituted and delimited neighbourhoods including 12 small villages. All these factors are the causes of rapid and uncontrolled urbanization and population increase, heat island effect, heavy traffic congestion resulting in air and noise pollution, forecast water deprivation; risks of sudden and heavy rainfall thus flood risks, loss of natural and cultural endowments, derelict brown areas.

Local waste framework

There is no local waste plan or strategy as such. Bulky waste is collected by the Social Affairs Department through 2 collections modes: on demand and with a regular kerbside collection. Civic amenity sites are being considered; when they are implemented, the district will consider implementing specific targets for recycling of bulky waste.

Definition of bulky waste

The definition of bulky waste is homogeneous at national level: it is defined in the National Law of Environment as "***discarded home furniture and electrical equipment such as refrigerators, washing machines and sofas***"

Bulky waste includes the following fractions:
- Household bulky waste.
- Cleaning up of illegal dumping.

Bulky waste collection schemes

In Bornova, bulky waste is collected through:
- **A daily collection on the kerbside**, covering all the population;
- **A collection on demand**, available to all inhabitants;
- **A re-use centre** is also available, allowing donors to bring the goods.

One re-use centre is available, operated by the local authority. The information that could be retrieved is presented in the table below:

RE-USE CENTRE		
Type of collection	Brought by donors and collection on demand	
Type of operations	Waste collection Preparation for re-use Awareness raising	
Operated by	Local authority	
Number of employees	6	
Accepted products	Books and multimedia Clothes	Furniture Toys
Collected quantities (2015 data)	Furniture: 5,000 items Clothes: 10 tonnes	
COLLECTION ON KERBSIDE		
% of the population covered	100 %	
Frequency	Daily collection	
Operated by	Local authority	
Collection lorry	Platform lorry	
Accepted fractions	Cardboard Furniture Hard plastics Other plastics	Metal Green waste C&D waste Textiles
Collected quantities	No data	
Treatment	Almost all collected fractions go to landfilling	

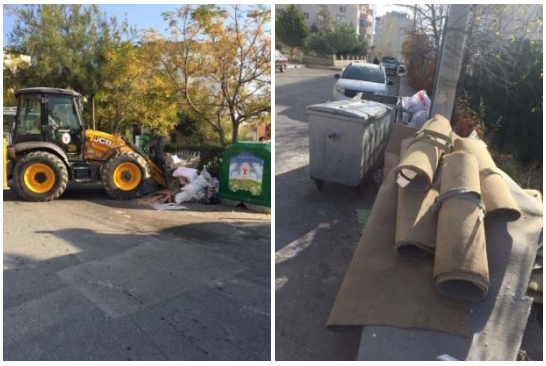


Figure 3: kerbside collection in Bornova

COLLECTION ON DEMAND		
% of the population covered	100 %	
Conditions for collection	Limited calls per year Specific fee	
Operated by	Local authority	
Collection lorry	Platform lorry	
Accepted fractions	Cardboard Wood Furniture Mattresses Hard plastics Other plastics Metal Green waste C&D waste Textiles	
Collected quantities	No data	Figure 4: collection on demand in Bornova
Treatment	Almost all collected fractions go to landfilling	

In Bornova, no bulky waste sorting centre is used. No data on the composition of mixed bulky waste is available.

Instruments promoting bulky waste management

The instruments set in Bornova to organise and promote bulky waste management are presented in the following table:

ECONOMIC INSTRUMENTS	
Financing system	Fees are applied for C&D waste: 1 bag for C&D waste collection costs 1.5 Turkish Lira (0.4 €) (A limit of 100 bags/yr is set for collection on demand)
Specific instruments	**Fine for illegal dumping:** according to their size, type… - For household bulky waste: > 10 € - For C&D waste: from 60 up to 1,750 €
LEGAL INSTRUMENTS	
Mandatory waste collection?	For packaging waste only
Landfill ban	Only for hazardous waste
Incineration ban	None
COMMUNICATIVE INSTRUMENTS	
No communication strategy addressing bulky waste is available	
Instruments in use	Awareness raising campaigns Website: www.bornova.bel.tr Municipal call centre providing information and organising collection on demand

Information on the waste fractions targeted by URBANREC

Information on the current waste fractions targeted by URBANREC could be retrieved, and is presented in the following table. No quantitative data could be collected.

Table 3-1: current management of URBANREC waste fractions in Bornova.

Waste fraction	Separation at the source?	Destinations
Mattresses	No	Landfilling
Fixtures and fittings	No	Landfilling
Upholstery	Yes	Re-use Landfilling
Wooden furniture	Yes	Re-use Landfilling
Plastic furniture	Yes	Re-use Landfilling
Textiles	Yes	Re-use Landfilling
Hard plastics	No	Landfilling
Tyres	Yes (mobile collection system)	Recycling
Wood	Yes	Compost facility

Main difficulties faced with bulky waste collection

The district of Bornova faces the following problems with bulky waste collection:

- Occupational diseases faced by the employees because of heavy bulky wastes;
- Logistical difficulties in terms of transportation;
- Inability to quickly identify the location of the bulky waste randomly disposed of in the city.

Next steps

Following the national law on the implementation of civic amenity sites, Bornova plans to implement one in 2017. The district will then set new priorities and targets for bulky waste management.

3.1.3 Other districts in Izmir

Further information could be collected in other districts and municipalities in Izmir. However, the information collected was generally less exhaustive than the ones collected for Bornova. It was decided to summarize the collected information in tables giving an overview of bulky waste management in these territories.

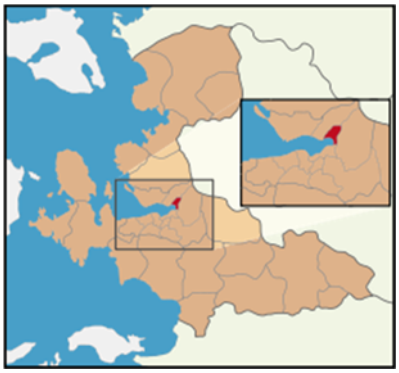
ALİAĞA

GENERAL INFORMATION		
Name	ALİAĞA	
Population	87,376	
Density	335 inh/km²	
Urbanisation class	B (30 – 49% of population living in multi-family houses) Heavy industrial area	Figure 5: location of Aliaga in Izmir Province

COLLECTION SCHEMES		
Collection modes in use	Collection on demand	
Description	7 containers are used for the collection Collection once in a week (on Thursday or Friday)	
Operated by	The local authority / 4 workers	
Collection material	Platform lorry	
Collected fractions	Furniture Office furniture Household items	Hobby items Clothes Gas appliances
Collected quantities	No data available, an average of 1,086 persons contributors (This for the furniture and rest of the items except clothes)	

SORTING AND TREATMENT	
Treatment of bulky waste	Collection and preparation (cleaning, repair etc.) for the reuse Landfilling

BAYRAKLI

GENERAL INFORMATION		
Name	BAYRAKLI	 Figure 6: location of Bayrakli in Izmir Province
Population	309,147	
Density	0.3 inh./m^2	
Urbanisation class	A (50 – 100% of population living in multi-family houses)	

COLLECTION SCHEMES		
Collection modes in use	Kerbside collection	Collection on demand
	26 days/month 100% population covered	100% population covered
Operated by	The local authority	
Collection material	Platform lorry (3.5 ton and 7.5 ton platform lorry)	
Conditions for accepting waste	If C&D waste>1 tonne there is charge	
Collected fractions	Cardboards, wood, glass furniture, mattresses, hard plastics, plastics, green wastes, C&D waste, textile and metals	

SORTING AND TREATMENT	
Bulky waste sorting centre?	No
Treatment of bulky waste	Landfill

LOCAL INSTRUMENTS FOR BULKY WASTE	
Mandatory separate collection?	No mixing with other residual waste
Landfill ban	None for bulky waste
Incineration ban	None for bulky waste

FINANCIAL	
Cost	464,651.75 TL/1000 ton, by collection from kerbside
Payment by habitants	Tax or fee (for ex. C&D waste charges)

DİKİLİ

GENERAL INFORMATION		
Name	DİKİLİ	Figure 7: location of Dikili in Izmir Province
Population	44,990	
Density		
Urbanisation class	A (50 – 100% of population living in multi-family houses)	

COLLECTION SCHEMES		
Collection modes in use	Kerbside collection	Collection on demand
	everyday 100% population covered	100% population covered
Operated by	The local authority and some licenced companies	
Collection material	compactor	Platform lorry
Conditions for accepting waste	No charge or fee	
Collected fractions	Cardboards, wood, furniture, mattresses, hard plastics, plastics, green wastes, textile and metals	

SORTING AND TREATMENT	
Bulky waste sorting centre?	No
Treatment of bulky waste	Landfill

LOCAL INSTRUMENTS FOR BULKY WASTE	
Mandatory separate collection?	No mixing with other residual waste
Landfill ban	None for bulky waste
Incineration ban	None for bulky waste

COMPOSITION ANALYIS	
Have you ever had composition analysis	YES (Year of 2016)
Composition %	Cardboards (40%), wood (2%), hard plastics (15%), other plastics (15%), textile (1%) and metals (10%)
Source of Waste	Kerbside, on demand collection and their market

GAZİEMİR

GENERAL INFORMATION		
Name	GAZİEMİR	Figure 8: location of Gaziemir in Izmir Province
Population	132,365 / 2015	
Density		
Urbanisation class	A (50 – 100% of population living in multi-family houses)	

COLLECTION SCHEMES		
Collection modes in use	Kerbside collection	On demand
	Daily 100% population covered	25%
Operated by	The local authority	
Collection material	Platform lorry	

SORTING AND TREATMENT	
Bulky waste sorting centre?	Only packaging material with contractor
Treatment of bulky waste	Landfill

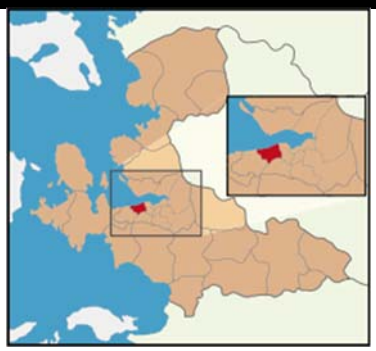
KIRAZ

GENERAL INFORMATION		
Name	KIRAZ	Figure 9: location of Kiraz in Izmir Province
Population	43,600	
Density	74 inh/km²	
Urbanisation class	C (20 – 29% of population living in multi-family houses)	

COLLECTION SCHEMES		
Collection modes in use	Kerbside collection	Collection on demand
	Daily collection 100% population covered	40% population covered

Operated by	The local authority	
Collection material	Platform lorry	
Collected fractions	Green waste Cardboard	Furniture Mattresses
SORTING AND TREATMENT		
Bulky waste sorting centre?	None available	
Treatment of bulky waste	Landfilling	
LOCAL INSTRUMENTS FOR BULKY WASTE		
Mandatory separate collection?	No mixing with other residual waste	
Landfill ban	None for bulky waste	
Incineration ban	None for bulky waste	

NARLIDERE

GENERAL INFORMATION		
Name	NARLIDERE	
Population	69,700 (2015)	
Density	72 inh/km²	
Urbanisation class	A (50 – 100% of population living in multi-family houses)	**Figure 10: location of Narlidere in Izmir Province**
COLLECTION SCHEMES		
Collection modes in use	Door-to-door	
Operated by	The local authority	
SORTING AND TREATMENT		
Bulky waste sorting centre?	None available	
Treatment of bulky waste	Landfilled by metropolitan municipality	
LOCAL INSTRUMENTS FOR BULKY WASTE		
Mandatory separate collection?	No mixing with other residual waste	

Landfill ban	None for bulky waste
Incineration ban	None for bulky waste

ÖDEMİŞ

GENERAL INFORMATION		
Name	ÖDEMİŞ	
Population	139,000	
Density	135 inh/km2	
Urbanisation class	B (30 – 49% of population living in multi-family houses)	Figure 11: location of Ödemiş in Izmir Province

COLLECTION SCHEMES		
Collection modes in use	House to house	Collection on demand
	8 days/month 40%	60%
Operated by	The local authority	
Collection material	Platform lorry	
Collected fractions	Furniture, mattress, green waste	

SORTING AND TREATMENT	
Bulky waste sorting centre?	None available
Treatment of bulky waste	Landfilled by metropolitan municipality

LOCAL INSTRUMENTS FOR BULKY WASTE	
Mandatory separate collection?	No mixing with other residual waste
Landfill ban	None for bulky waste
Incineration ban	None for bulky waste

OTHER INFORMATION
Areas for improvement for the collection of the bulky waste: The cost of collection and recycling should be paid by the recycle companies similar to packaging recycling.

SEFERİHİSAR

GENERAL INFORMATION		
Name	SEFERİHİSAR	Figure 12: location of Seferihisar in Izmir Province
Population	36 335	
Density		
Urbanisation class	C (20 – 29% of population living in multi-family houses)	

COLLECTION SCHEMES	
Operated by	The local authority
Collection material	Only packaging waste collected by contractor for recycling.
Collected fractions	Rest of the fractions collected by municipality and transfer to metropolitan landfill.

TİRE

GENERAL INFORMATION		
Name	TİRE	Figure 13: location of Tire in Izmir Province
Population	82.102	
Density	115 inh/km²	
Urbanisation class	A (50 – 100% of population living in multi-family houses)	

COLLECTION SCHEMES		
Collection modes in use	Kerbside collection	
	Daily for waste	
Operated by	The local authority	

SORTING AND TREATMENT	
Bulky waste sorting centre?	None available

Treatment of bulky waste	Landfilled by metropolitan municipality
LOCAL INSTRUMENTS FOR BULKY WASTE	
Mandatory separate collection?	No mixing with other residual waste
Landfill ban	None for bulky waste
Incineration ban	None for bulky waste

TORBALI

GENERAL INFORMATION		
Name	TORBALI	
Population	156,983	
Density	260 inh/ km^2	
Urbanisation class	A (50 – 100% of population living in multi-family houses)	Figure 14: location of Torbali in Izmir Province
COLLECTION SCHEMES		
Collection modes in use	Collection on demand 70% population covered	
Operated by	The local authority	
Collection material		
Conditions for accepting waste	Fee	
Collected fractions	C&D waste	
SORTING AND TREATMENT		
Bulky waste sorting centre?	No	
Treatment of bulky waste	Landfill	
LOCAL INSTRUMENTS FOR BULKY WASTE		
Mandatory separate collection?	No mixing with other residual waste	
Landfill ban	None for bulky waste	
Incineration ban	None for bulky waste	

3.2 Spain

General framework

At which level is the waste regulation voted?	☒ National ☒ Regional
Main regulation on waste	In Spain the basic legislation is approved at **national level**. Regions can then establish more restrictive regulations and adapt them to the regional characteristics as long as it is in line with the National law. In July 2011 the new law (22/2011) on waste and contaminated soils came into force, transposing the European Waste Framework Directive (2008/98/EC) into the Spanish legislation and adopting all related targets and objectives (Ministry of Agriculture, Food and Environment, 2012). At **regional level,** the autonomous regions are responsible for issuing strategic waste management plans. They also attend to the authorization, inspection and sanction of waste management activities and the shipment of waste to/from EU countries. At **local level** municipalities are responsible for the management of municipal waste (from household, commerce, offices and services), including collection and treatment. Groups of municipalities can form waste consortium to organise waste management. The consortium must following the Integrated Regional Waste Plan, designed by the regional governments (called PIRCV in Valencia Region)
Regional waste strategy	In the Valencia Region, the Law 10/2000 de Residuos de la Comunidad Valenciana. This is the law that establishes the way to carry out waste management in Valencia region.
Specific regulation on bulky waste	The Spanish legislation (Law 22/2011) says that local authorities are competent in the management of waste generated in homes, businesses and service. There is no specific legislation for bulky waste, it is included household waste. To carry out this competence in bulky waste management, the local authorities rely on Civic Amenity Sites. The use of these facilities is regulated by local ordinances. To coordinate the operation of CAS, in Valencia Region there is a model of ordinance with a list of admissible waste, where all types of bulky waste are included. (20 03 07 bulky waste) The illegal dumping of waste (including bulky waste) is forbidden in the national law, with fines from 901 euros to 45,000 euros.
Existing reuse / recycling targets on bulky waste	The Spanish legislation does not set quantitative targets for bulky waste management. The legislation establishes the following targets: “By 2020, the amount of household and commercial waste sent to preparation for reuse and recycling shall be increased to a minimum of overall 50 % by weight for the following fractions: paper, metals, glass, plastics, bio-waste or other recyclable fractions.” The legislation is focused on common household waste, without specific focus on bulky waste. The lack of definition of bulky waste in the legislation and the fact that this type of waste does not represent the most important fraction in terms of quantities could be the reasons of not having specific obligations for recycling bulky waste.
Existing EPR schemes for bulky waste: WEEE, batteries and medical waste	

3.2.1 Valencia Region

GENERAL INFORMATION		
Name	Valencia Region	
Population	4,953,482	
Density	215.2 inh/km²	
Urbanisation class	A	**Figure 15: location of Valencia Region in Spain**

The Valencia Region is located in the South-eastern part of Spain. It is divided into three separate provinces, from North to South: Castellón, Valencia and Alicante with a total area of 23,255 km². It is the fourth most populated in Spain after Andalusia, Catalonia and Madrid with 4,953,482 inhabitants. It is also the fourth Spanish region in terms of Gross Domestic Product (GDP) representing 10% of Spain GDP. Valencia Region is of key importance to the Spanish economy due to several sectors of great importance, such as tourism, the motor industry, plastics, chemicals and food and agriculture. The Valencian Region is among the top 4 regions in Spain in terms of exports.

Regional waste framework

The **Waste Management Plan (PIRCV-2013)** is the legal document planning and coordination municipal waste management in the Valencia Region. This document includes an analysis of the initial state, the establishment of general objectives, the setting of measures to fulfil them as well as the description of tasks to adapt any changes in the waste legislation.

This strategy has been designed based on the objectives of the European Directive 2008/98/EC and the Waste Hierarchy. In terms of requirements for the recycling of waste, this strategy only focuses on the most common household waste collected in street containers. The regional strategy sets general targets on the treatment of municipal waste but there is no obligation regarding the recovery or recycling of bulky waste.

The population of the region of Valencia is distributed in 542 municipalities, among which 70% of has less than 5,000 inhabitants. The small municipalities have a common problem with the lack of technical and economic resources, which makes waste management one of the most important challenges for them. In the region of Valencia, 13 waste consortiums were created in the three provinces (Castellón, Valencia, Alicante), four of them in the province of Valencia. These public organisations created by groups of municipalities to manage their waste are represented by local authorities, regional government and provincial government (Valencia Provincial Council). In the bulky waste management, the Valencia provincial council financed the construction of 92 civic amenities sites in order to help small municipalities. Support is also provided for small municipalities in the process of collecting taxes to support the management costs and also with a new program for the computerization of C.A.S throughout the province.

Definition and scope of bulky waste

There is not legal definition for bulky waste. This waste stream is included in the definition of municipal wastes (household waste and similar commercial, industrial and institutional wastes) In the European list waste it is defined by code 20 03 07. The Regional Authority considers the following waste fractions as bulky waste: mattresses, furniture (wood and plastic) and mixed bulky waste.

Bulky waste only includes **household bulky waste.** However, according to the information provided on the conditions for acceptance of waste in CAS, it is likely that a share of non-household waste is collected with household bulky waste.

Bulky waste collection scheme

In the Region of Valencia, bulky waste is essentially collected in civic amenity sites, mobile civic amenity sites and with a kerbside/collection on demand system. These units were opened mainly to ensure a proper collection of hazardous waste (diverting it from street containers) and to limit illegal dumping. In 2014, among the 1,919,200 tonnes of municipal waste collected:

- 115,155 tonnes were collected in CAS (6% of the total), among which 25,000 of mixed bulky waste;
- 33,500 tonnes of mixed bulky waste were collected through the kerbside system (1.7%).

The main information available at regional level is presented in the table below:

CIVIC AMENITY SITES	
Number of units (2015)	222 units 22,500 inhabitants per CAS
Accessibility	Open 6 days per week (incl. Saturday) Opening hours: from 8.00 to 20.00
Control of the access	Each CAS has defined its own mode of control, the most common being ID card.
Employee providing support/assistance	Yes
Limitations	No limitations regarding the volumes brought Payment asked if the person brings significant quantities of waste not regarded as common household waste. However, in case of doubts, waste is accepted to limit illegal dumping.
Acceptance of non-household waste	No
Excluded fractions	Medical waste, radioactive waste, mining waste, end-of-life vehicles, explosive materials, and residual waste collected in street containers.
Collected fractions	Average number of fractions sorted in CAS: 27 Cardboard, Wood, WEEE, Furniture, Mattresses, Textiles, Tires, Paint, Textiles, Hard plastics, Mixed bulky waste, Different containers for burnable/non-burnable, Glass containers, X-ray films, Carpets, Other plastics, Metal, Green waste, Batteries, Light packaging, Toxic packaging (plastic, metallic), Earth and stones, Energy saving Light bulbs, Fluorescent tubes, Engine oil filters, Edible oils, Automotive oils, Print cartridges, Flat glass

Figure 16: list of accepted waste

Figure 17: picture of a CAS in Valencia Region

MOBILE CIVIC AMENITY SITES

Type of MCAS	Trucks and automatic containers		
Accessibility	Open on Saturday		
Control of access	Yes, all types of systems can be used (ID card…) No limitations		
Waste accepted	Mostly small waste such as batteries, small WEEE, oil Mixed bulky waste not collected		
Collected fractions	Cardboard Wood WEEE	Textiles Big toys	Chemical waste Batteries

Figure 18: Mobile CAS with automatic container

Figure 19: Mobile CAS with operator

Figure 20: Mobile CAS with operator

RE-USE CENTRES

In the region of Valencia there is no regulation for re-use centres. These activities used to be organised by the charity foundations, for this reason no information is available. The local authorities are in charge of transporting bulky waste from the street to the Civic Amenities Site, but not in re-use it.

KERBSIDE / ON DEMAND COLLECTION

General information	No specific data is available at regional level. Some inhabitants have access to either a bulky waste collection on the kerbside at regular frequency or a collection on demand service.		
Operated by	Local authorities		
Type of lorry	Platform lorry		
Accepted fractions	Cardboard Wood WEEE Furniture	Mattresses Hard plastics Metal	Green waste C&D waste Textiles

Collected quantities and treatment

Table 3-2: collected quantities in Valencia Region

Collection scheme	Quantities	Destination
Fractions separated at the source		
Civic amenity sites	20,068 t 69,749 t	Recycling Sorting centre
Mixed fractions (mixed bulky waste)		
Civic amenity sites	500 t 24,500 t	Recycling (wood furniture) Landfilling
Collection on kerbside	33,500 tonnes	Landfilling

No bulky waste sorting centre is used.

The composition of bulky waste collected in CAS is available and presented in the table below:

Table 3-3: Composition analysis of bulky waste collected in CAS in Valencia Region

Material fractions	*Waste collected at CAS (%)*
Cardboard	4,07
Wood	6,16
WEEE	7,00
Furniture (mixed bulky waste)	22,00
Metal	2,00
Green waste	7,00
C&D waste	49,00
Textiles	0,50
Packaging	2,26
Total	**100,00**

More details on bulky waste quantities are presented in the ANNEX of the factsheet completed.

Instruments promoting bulky waste management

The instruments set in Valencia Region to organise and promote bulky waste management are presented in the following table:

ECONOMIC INSTRUMENTS						
Financing system			**CAS**	**Mobile CAS**	**Kerbside**	**On demand**
		…. €/t	249	1,305	152	243
		…. €/visitor	7.02 €	2.91 €		

LEGAL INSTRUMENTS	
Mandatory waste collection?	Not for bulky waste
Landfill ban	None
Incineration ban	None

COMMUNICATIVE INSTRUMENTS

Valencia Provincial Council coordinates a commutation campaign to promote the use of Civic Amenities Sites in 2014.

OBJECTIVES: to promote the use of C.A.S through open-days to educate people on how the waste deposited there can be transformed into new products, helping to avoid the use of landfills, and reducing the consumption of natural resources.

This camping reached more than 7,500 students in the Province of Valencia in 2014.

Leaflet designed to promote the use of C.A.S to recycle household waste.

Figure 21: communication material for CAS in Valencia Region

Figure 22: school activities in Valencia Region

Instruments in use	Awareness raising campaigns Sorting leaflets Actions in schools (http://en.ecovitrum.es/ver/177/Environmental-awareness-in-schools.html) :to sensitize the student population (7,500) : students, parents and teachers, to the importance of individual action on the care of the global environment, focusing on the limited natural resources and the importance of recycling the waste generated in our municipalities using C.A.S.

Information on the waste fractions targeted by URBANREC

Beside for wooden furniture, (of which 500 tonnes were directed to recycling in 2014), no data is available for the fractions tackled by the project at regional scale.

Main difficulties faced with bulky waste collection

As mentioned above, the small municipalities face difficulties in allocating significant resources, e.g. by setting important CAS allowing separation at the source. Many CAS are between 300 and 500 m² with 4 to 6 containers and only one is dedicated to bulky waste, mixing all kind of bulky waste (plastic, wood and metal). When bulky waste is collected as a mixed fraction, the final destination is generally shredding and landfilling. Material fractions like mattresses cannot be recycled because of the high cost of treatment and has been used as an internal barrier for the protection of landfills structure (as a system of barriers in the landfill).

In Spain the average cost of disposal in landfills is very low (between 40 and 50 €/t) compared to Member States with more advanced waste management systems which are around (90-120 €/t). This low cost discourages the changes needed to advance toward recycling-oriented policies.

Another reason could that bulky waste (without taking into account WEEE) represents less than 2 % of the total urban waste produced. Local authorities might prefer to focus on more important fractions.

Another difficulty with bulky waste is the lack of legal obligation and the absence of recycling targets. The lack of specific definition of bulky waste has also effect to define regional or national objectives for recycle and recovery this waste stream in Valencia Region and Spain. It is important to know that at the regional level little data on bulky waste treatment is available. The Official data are focused on household waste without details of bulky waste.

These data can be obtained from municipalities and some consortiums such as CVI. However only the most important municipalities have specific information on bulky waste collected separately at the source. We include a general data of household waste collected in Region of Valencia and Spain in order to understand the main problems in bulky waste management and the past and present situation of waste management.

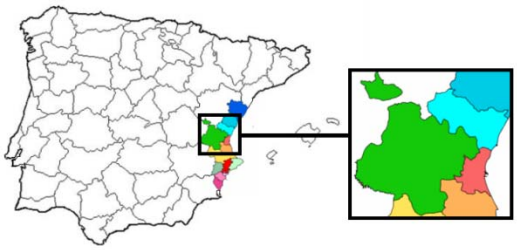
Next steps

At national level a significant part of the fractions collected in CAS or through specific collection may be available for preparation for reuse, such as furniture, clothing, and waste electrical and electronic equipment. This management option is beginning to be developed under the new waste law and information on the scope of this activity should be improved. On the other hand, this activity is being developed by authorized entities, among which are social economy entities, which contribute to the creation of employment and the social integration of people at risk of exclusion. It is necessary that this management activity is reinforced given its environmental and social aspect.

In the region of Valencia, there is not official model to re-use bulky waste, to solve this problem and give solutions. CAS can be used to improve the reuse models of bulky waste in order to develop re-use and recycling objectives established in the directive a national law.

It is necessary to improve the way to communicate with citizen in order to avoid illegal disposal of bulky waste as matters and to improve the ways to inform them about the importance of bulky waste disposal.

3.2.2 Consorcio Valencia Interior V3

GENERAL INFORMATION		
Name	Consorcio Valencia Interior V3	
Population	249,370 (2016)	
Density	46 inh/km²	
Urbanisation class	A	**Figure 23: location of CVI in Spain**

The Consorcio Valencia Interior V3 (CVI, Inland Valencia Consortium) is the Local Authority responsible for waste management in the V3 management area of the Integral Waste Plan of the Valencian Region. This V3 area includes the territory of 61 municipalities with two clearly differentiated subzones: the regions closest to the metropolitan area of Valencia, which concentrate 75% of the population, with a density of 155 inh/km², and the inland regions, with a lower density (16 inh/km²).

The population of inland regions is distributed among 43 municipalities, among which 95% of has less than 2,000 inhabitants. By contrast, only 3 of the 18 municipalities of the second metropolitan crown of Valencia dependent on the CVI have less than 2,000 inhabitants.

The CVI is one of the four waste consortia created in the province of Valencia. At its General Assembly are represented its 61 municipalities, the regional government and the provincial government (Valencia Provincial Council).

The CVI was the first consortium in the Valencian Region to set a specific tax to finance waste management (2008), the only one that manages in common the separate collection of household packaging (2011), and the first to establish a complete network of CAS with computerized registration of contributions and users (2014).

Local waste framework

The management strategy for large waste in the V3 management area is briefly included in the Zonal Plan 4. The collection will be carried out mainly through a CAS network, and a sorting facility will be available to crush and recover the different components of furniture and household items collected.

There is no specific target for bulky waste.

Definition and scope of bulky waste

The definition and scope of bulky waste are similar to the one presented for Valencia Region.

It seems advisable to exclude from the descriptive information in this sheet the data corresponding to the management of the inner part of the CVI. These inland

municipalities account for scarcely 10% of the population of CVI, but half of the CVI's CAS and MCAS serve this part, although with very different schedules and service levels.

The information refers therefore to the part of CVI with relatively higher density of population. With the addition of the municipalities of Utiel and Requena, this area includes 89% of the CVI population, served by four MCAS routes and twelve CASs of similar size and operation.

Bulky waste collection scheme

In small municipalities the collection of bulky waste is carried out by the CVI through the CAS network. In some larger municipalities there is also a specific municipal collection service, with a voluminous collection schedule in the kerbside or a pick-up service on demand. Some bulky waste also arrives at the CVI from municipal collection of uncontrolled discharges (illegal dumping). In any case, the waste collected by the municipal services is delivered to the CVI.

Collected quantities and treatment

In 2014, 137,857 tonnes of household waste were collected, representing 7% of the total regional production. About 2,150 t were bulky waste, 1.56% of the total household waste.

In 2016 the amount of bulk waste collected separately in the CAS network has increased to 3,381 tonnes (2.2% of household waste). The increase in the amounts of separately collected waste, including bulky waste, is associated with the incentives campaign to use CAS initiated after the computerization of the CAS network in 2014.The main information available at regional level is presented in the table below:

CIVIC AMENITY SITES	
Number of units (2016)	12 units 20,800 inhabitants per CAS
Number of visitors per year (2016)	138,614
Accessibility	Open 6 days per week (incl. Saturday) Opening hours: from 8.00 to 20.00
Control of the access	Contactless RFID smart cards linked to tax units.
Employee providing support/assistance	Yes
Limitations	The system of registration of contributions and users is linked to an incentive program whereby each user accumulates environmental points with each contribution. These points are exchanged for discounts on the waste treatment tax for the following year. Beyond not admitting residues that are clearly different from those generated in households, there is **no more limitation on the amounts of access than the capacity of the facilities**. There are, however, limitations on the quantities that are likely to obtain environmental points for each type of material contributed in a given period of time. From certain thresholds established by material and day / month, a higher contribution does not generate more points.
Acceptance of non-household waste	Yes, for non-hazardous waste. The CVI has an ordinance of public prices to be able to admit in its CAS (paying a fee) the professional waste that usually enters as household waste (C&D, bulky waste and remnants of paints), but it is not yet operative.
Excluded fractions	Medical waste, radioactive waste, mining waste, end-of-life vehicles, explosive materials, residual waste collected in street containers.

Collected fractions	% of municipal waste collected in CAS : 11.71 % (2016) Average number of fractions sorted in CAS: 27 Cardboard, Wood, WEEE, Furniture, Mattresses, Textiles, Tires, Paint Textiles, Hard plastics, Mixed bulky waste, Different containers for burnable/non-burnable, Glass containers, X-ray films Carpets, Other plastics, Metal, Green waste, Batteries, Light packaging, Toxic packaging (plastic, metallic), Earth and stones Energy saving Light bulbs, Fluorescent tubes, Engine oil filters, Edible oils, Automotive oils, Print cartridges, Flat glass

Figure 24: list of accepted waste

Figure 25: picture of a CAS in CVI

MOBILE CIVIC AMENITY SITES	
Number of MCAS	5
Type of MCAS	Containers
Number of visitors	21,239
Accessibility	6 collection areas located in squares in commercial centres, markets, town hall square… Opening time: 4 days/month for each collection area (3 days every 3 weeks). Open on Saturday Opening hours: 9 - 15
Control of access	Contactless RFID smart cards linked to tax units. No limitations
Waste accepted	The limitations of MCAS are determined by limited storage space. Consequently C&D waste, mixed bulky waste and similar waste cannot be allowed. However, there is a six-cubic-meter compartment for storing certain bulky waste.
Collected fractions	% of municipal waste collected in MCAS: 0.19% 16 fractions accepted WEEE (small appliances, large appliances, monitor & TV), Energy saving light bulbs, Fluorescent tubes, Print cartridges Furniture (wooden, mixed material), Mattresses, Textiles (clothing and footwear), Engine oil filters, Toxic packaging (plastic, metal) Other plastics, Batteries, Tires, X-ray films, Remnants of paint

Figure 26: Mobile CAS with automatic container

Figure 27: Mobile CAS with operator

Figure 28: Mobile CAS with operator

RE-USE CENTRES
In the region of Valencia there is no regulation for re-use centres. These activities used to be organised by the charity foundations, for this reason no information is available. The local authorities are in charge of transporting bulky waste from the street to the Civic Amenities Site, but not in re-use it.

KERBSIDE COLLECTION / COLLECTION ON DEMAND		
Mode of collection	Kerbside collection	Collection on demand
% of the population covered	22 %	60%
Frequency	1 to 4 times per month	
Operated by	Local authorities	
Type of lorry	Platform lorry > 16 t	
Accepted fractions	Furniture Mattresses	

Collected quantities and treatment

Table 3-4: collected quantities in CVI

Collection scheme	Quantities	Destination
Fractions separated at the source		
Civic amenity sites	3,113 t	Recycling
Mobile CAS	152 t	Recycling
Mixed fractions (mixed bulky waste)		
Civic amenity sites	8,547 t 2,102 t	Sorting centre Landfilling
Mobile CAS	63 t	Landfilling
Kerbside collection	178.2 t	Landfilling
Collection on demand	1,071 t	Landfilling

No bulky waste sorting centre is used.
No data on the composition of mixed bulky waste is available.

Instruments promoting bulky waste management

The instruments set in Valencia Region to organise and promote bulky waste management are presented in the following table:

ECONOMIC INSTRUMENTS	
Financing system	**Fee:** CVI Citizens pay the services provided by the entity through an annual fee linked to the ownership of living places likely to be inhabited. This fee finances the consortium's waste management services (treatment of mixed household waste, maintenance of the CAS and MCAS network and treatment of all wastes collected in that network, including bulky waste collection at CAS and MCAS and treatment of bulky waste from municipal collection services. The amount of the fee for a common housing in each municipality is proportional to the quantity of mixed waste contributed by the collection services of such municipality. Taking advantage of the system of identification and registration of users and contributions of the CAS network, citizens accumulate environmental points with each contribution to the CAS. These points are exchanged at the end of the year for discounts on the waste treatment fee for the following year. In short, CVI citizens pay a global fee for all waste management services provided by the entity, which is reduced according to their personal collaboration with the separate collection system in CAS.
Costs	

	CAS	Mobile CAS	Kerbside	On demand
…. €/t	249	1,305	152	243
…. €/visitor	7.02 €	2.91 €		

Specific instruments	Fees for companies (prepared but not in operation) EPR for tyres and WEEE Incentives for the use of CAS (discounts on the waste treatment annual fee).

LEGAL INSTRUMENTS	
Mandatory waste collection?	Not for bulky waste
Landfill ban	None
Incineration ban	None

COMMUNICATIVE INSTRUMENTS	
Communication strategy	The communication strategy on bulk waste is included in the overall strategy of incentives for separate collection in the CAS network, with the following main objectives: - Raise awareness of the importance of good separate collection for more efficient and sustainable waste management - Rewarding those who do it well. Recognizing the collaboration of the neighbour in a direct, personalized and palpable way. - Improving the environmental results: reducing illegal dumping, improving the operation of mixed waste treatment plants.

	The target audiences are the recipients of the consortium fee receipts, as possible users of our CAS network.
Communication instruments in use	Agents at CAS/MCAS Discount for the use of CAS

At the beginning of 2014, ID smartcards were distributed to users of the CAS and MCAS network. The agents of the CASs offered them explaining the advantages of their use. It was accompanied by a campaign in local press and radio, and distribution of informative leaflets.

The response of the citizens has been very positive. Between 2014 and 2016, the number of users who have visited the CAS network more than once in the same year has increased by 19%. The number of visits to the CAS network in 2016 was 35% higher than in 2014.

The amount of waste collected in the CAS network has increased in these two exercises in a significant way. In 2016, 18,200 of tonnes* were managed in the CAS network, 41% more than in 2014. If we focus on the bulky waste fractions (mattresses, furniture, mixed bulky waste...), the increase is higher. In 2016, 3,400 tonnes* of bulky waste were managed in the CAS network, 62% more than in 2014.

(*) Unlike the rest of the report, these figures take into account waste managed throughout the CVI territory, not excluding the inland zone.

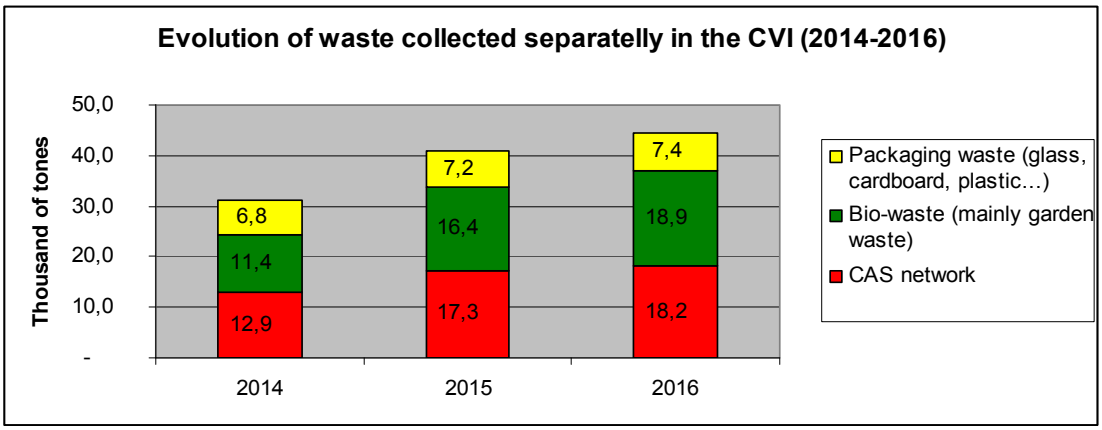


Figure 29: evolution of waste collected in CVI

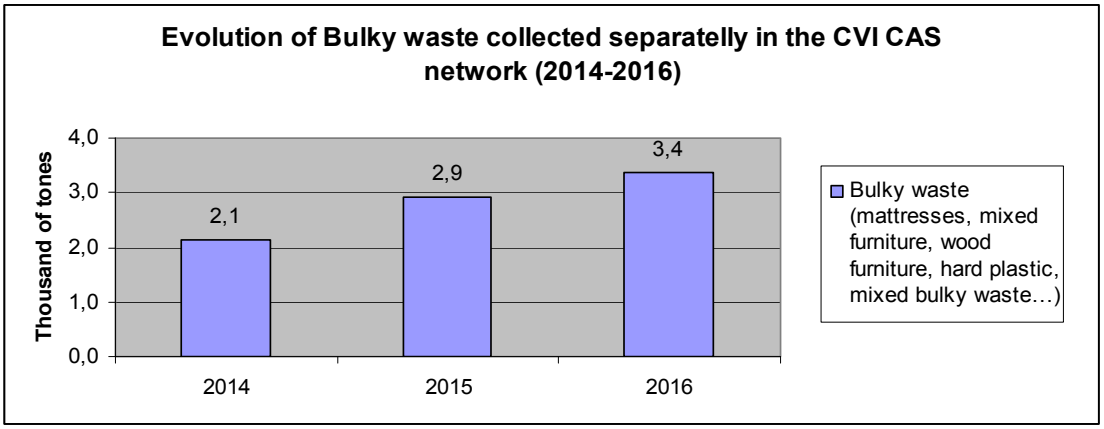


Figure 30: evolution of bulky waste collected in CAS in CVI

Equivalencias de puntos y tipo de residuo
Aceites de cocina usados
3 puntos / kg
Neumáticos fuera de uso, fluorescentes, radiografías
3 puntos / kg
Electrodomésticos
1 puntos / kg
Cartuchos de Tinta e Impresion, Pilas y Baterías
3 puntos / kg
Restos de pintura y barnices
2 puntos / kg
Escombros, volumino colchones, restos de
0,5 puntos / kg
Envases vacíos de tóxicos del hogar
3 puntos / kg
Papel-cartón y vidrio
1 punto / kg
Madera y muebles
0,5 puntos / kg
consorcio valencia interior
mi
Cuenta Ambiental
RECICLANDO GANAS
mi
Cuenta Ambiental
¿Qué es?
Es una iniciativa pionera del Consorcio Valencia Interior que perr premiar el buen comportamiento ambiental individual de cada uno de vecinos del Consorcio en materia de gestión de residuos y reciclaje.
Mediante una tarjeta de identificación personal, utilizable cada vez que miembro de la familia va a reciclar al ecoparque o ecomóvil, se acumu puntos ambientales que se convertirán en beneficios económicos direc que pueden suponer hasta un 50% de la tasa por tratamiento de residu
mi
Cuenta Ambiental
¿Quién puede solicitar la tarjeta?
¿Quién puede usarla?
La tarjeta la pueden solicitar todos los ciudadanos o empresas que pagan la tasa por tratamiento de residuos domésticos del Consorcio Valencia Interior. La tarjeta, aunque va a nombre de la persona titular del recibo de la tasa, puede ser usada por cualquier miembro de la familia o de la empresa al ir a la red de ecoparques y ecomóviles a reciclar.
mi Cuenta Ambiental
AHÓRRATE HASTA UN 50% DE TU TAS
POR TRATAMIENTO DE RESIDUOS, RECICLAND
¿A QUÉ ESPERAS?
consorciovalenciainterior
www.consorciovalenciainterior.es

mi
Cuenta Ambiental

¿Cómo puedo hacerlo?

La manera más sencilla de solicitar la emisión, totalmente gratuita, de la tarjeta, es acudiendo al ecoparque o ecomóvil más cercano a nuestro municipio con una notificación del Consorcio o una copia del recibo. Allí se encargarán de realizarnos nuestra tarjeta que estará lista para usar.

En la web del Consorcio, www.consorciovalenciainterior.es encontrarás la dirección y los horarios de los ecoparques y los lugares de parada de los ecomóviles.

mi
Cuenta Ambiental

¿Qué debo llevar al ecoparque?

Todo lo que no debe ir a la basura: Aceites comestibles, cartuchos de ti de impresión, baterías, pilas, pequeños aparatos eléctricos, bombillas bajo consumo, fluorescentes, televisores, frigoríficos, grandes electro mésticos, muebles y enseres, residuos voluminosos, ropa y calza aceites de motor, filtros de aceite, restos de pintura, esmaltes y barnic envases vacíos de tóxicos del hogar, radiografías, neumáticos fuera de u escombro, vidrio plano, envases ligeros, envases de vidrio, papel y cart

Un operario te atenderá y pesará los materiales que deposites, acumula do puntos directamente en tu Cuenta Ambiental según el tipo de residu el peso del mismo. Podrás combrobar a través de la web o en los prop ecoparques cuántos puntos has acumulado y a qué beneficios económi puedes optar, así como la manera de conseguirlos.

mi
Cuenta Ambiental

¿Qué beneficios tengo?

Desde el Consorcio, en las plantas de Llíria y Caudete de las Fuentes, descontaminamos y gestionamos adecuadamente los residuos de nuestros hogares, obteniendo compost y recuperando materiales para un segundo uso, de modo seguro para la salud y el medio ambiente. Los desechos que contienen sustancias tóxicas, los residuos voluminosos, los aparatos eléctricos en desuso, etc. hacen mucho más difícil esta labor si se mezclan con la basura común.

Al colaborar con nuestra red de recogida selectiva en ecoparque se mejora el entorno de nuestros pueblos (se evitan contaminación y vertidos inadecuados), se reduce la factura global de gestión de residuos (al reducirse la

cantidad de residuos que van a la basura común) y mejoran los porcent de reciclaje de nuestras plantas de tratamiento.

Además, la iniciativa de mi Cuenta Ambiental nos permite agradec personalmente el esfuerzo que haces al ayudarnos a separar corre mente desde casa. Por eso queremos reconocer tu esfuerzo, recom sándote directamente por reciclar en nuestra red de ecoparques y ec viles.

Con los puntos que acumules obtendrás **vales de hasta 50€** pa comprar en el comercio local (y en el futuro también podrás canje los puntos por **descuentos de hasta el 50% en la tasa** del Consorc

Figure 31: communication materials used in CVI

Information on the waste fractions targeted by URBANREC

Information on the current waste fractions targeted by URBANREC are presented below:

Table 3-5: information on URBANREC waste fractions in CVI

Waste fraction	Separation at the source?		Quantities (t)	Destinations
Mattresses	Yes	CAS	201	Landfilling
Fixtures and fittings	No			Landfilling
Upholstery	Yes	CAS	234	Landfilling
Wooden furniture	Yes	CAS	71	Recycling – production of pellets
Plastic furniture	No			
Textiles	No			
Hard plastics	No			Landfilling
Tyres	Yes	CAS	32	Recycling – sent to EPR system
Wood	Yes		465	Recycling – production of pellets

Main difficulties faced with bulky waste collection

Proper waste management has not been a priority until very few years ago. The system of comprehensive management of all fractions of household waste, and the financing system that accompanies it, is very recent. Efforts have focused on the majority fractions. Planning does not even have marked recovery targets for bulky waste. Social awareness about responsibility for proper waste management is limited, and legal instruments against illegal dumping are not operational. In this scenario, the implementation of PAYT systems is very difficult.

Next steps

It is essential to introduce systems of preparation for reuse using the experience of other managers. Treatment should also be improved according to the hierarchy set out in the waste directive. We must adapt the separation at source and implement a correct separation later to take advantage of the new routes of recovery under study.

3.3 Poland

General framework

At which level is the waste regulation voted? ☐ National ☒ Regional	
Main regulation on waste	**The Act of 13 September 1996**, on maintaining cleanliness and order in municipalities (as amended by the Act of July 1, 2011 on amending the Act on maintaining cleanliness and order in municipalities and some other acts). This Act introduced revolutionary changes in the system for management of communal waste, changing the model for communal waste management and establishing new rules for financing, collection and administration of communal waste from property owners **The Act of 14 December 2012** on waste By means of this Act the Polish law on waste is being amended to the requirements resulting from the Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives. Each municipality is responsible for waste management in their territory.
Specific regulation on bulky waste	None
Existing reuse / recycling targets on bulky waste	None
Existing EPR schemes for bulky waste: none	

3.3.1 City of Warsaw

GENERAL INFORMATION		
Name	Capital City of Warsaw	
Population	1,735,000	
Density	3,355 inh/km²	
Urbanisation class	See description below	Figure 32: location of Warsaw in Poland

Several elements on the data presented in the table above:

- Served population: unknown - 1.735 million in 2012, but these are only the people registered as inhabitants of Warsaw, in reality much more – estimates show numbers even as high as 2,5 million
- Area of intervention (km²): 517.24
- Population density (inh/km2): 3,355 (based on 1.735 million inhabitants)

Local waste framework

The municipal waste management system in Warsaw is regulated by 6 resolutions adopted by the Council of Capital City of Warsaw, pursuant to the Act on maintaining cleanliness and order in municipalities. The City of Warsaw is responsible for both waste collection and waste treatment of municipal waste.

One of the most significant acts of the local law among those 6 resolutions is the Terms of maintaining cleanliness and order in the Capital City Warsaw adopted by the Council of the Capital City Warsaw Resolution No. XLIX/1366/2013 on 17 of January, 2013.

The local waste framework is detailed in the Voivodeship Waste Management Plan: it set objectives to be achieved in perspective 2016–2021 including years 2022–2027

The system established the collection of in Warsaw:
- „segregated dry waste" (paper and cardboard, plastics, metals and multi-material packaging) – red container
- „glass packaging" – selectively collected glass packaging – green container
- „mixed waste" – unsorted mixed municipal waste, designated; AND
- bulky waste and green waste (grass, branches, leaves);
- "bio-waste" - kitchen waste from HoReCa sector and bio-waste from markets.

Collection of WEEE in cooperation with WEEE recovery organisation:
WEEE collection – collection points in every district of Warsaw, on Saturdays from 10:00 - 14:00.
Directly from homes - the service is for large WEEE (e.g. washing machines, refrigerators, dishwashers), but on this occasion, also small equipment is taken.

Collection of drugs, drug packaging and mercury thermometers is carried out at selected pharmacies and pharmacy outlets in the Capital City of Warsaw.

Points of selective collection of municipal waste:
In Warsaw, residents can take advantage of two points of selective collection of municipal waste. The task of the points is free of charge reception of waste from residents – primarily of troublesome hazardous waste, such as paints, varnishes, adhesives, detergents and other chemicals and its packaging, but also such as fluorescent lamps and batteries.
The stationary points are complemented by Mobile points of selective collection of municipal waste.

Bulky waste is collected from all kinds of properties once a month. There is a waste collection schedule that indicates when the bulky waste should be displayed in collection points. It is acceptable for a company that collects waste to agree with the property owner a date of collection, but it should reflects the schedule. Inhabitants can also deliver bulky waste to CAS.

Definition and scope of bulky waste

Bulky waste is one of the municipal solid waste (MSW) that may require special collection and management due to its shape, volume and/or weight, excluding f.ex. WEEE, C&D waste.

In general, MSW are waste coming from households, excluding *vehicles* that have been *decommissioned, and waste not consisting hazardous waste coming from other waste generators, that are similar with its character or nature to MSW; mixed* solid waste remain municipal even if they have been processed but without crucial change of its features.

The scope of bulky waste includes:
- Household waste.
- Non-household waste from trade, services, handicraft, schools, industry.
- Cleaning up illegal dumping.

Bulky waste collection scheme

CIVIC AMENITY SITES	
Number of units	2 units 867,500 inhabitants per CAS
Number of visitors per year (2016)	4,600
Accessibility	Open 6 days per week (Monday - Saturday) Opening hours: From 13.00 to 21.00 (weekdays) From 8.00 to 20.00 (Saturday)
Control of the access	None. Only available to Warsaw inhabitants
Employee providing support/assistance	Yes
Limitations	None
Acceptance of non-household waste	No
Excluded fractions	None specified
Collected fractions	Average number of fractions sorted in CAS: 39 Hazardous wood (4.84%) — Plastics (1.14%) Non-hazardous wood (2.28%) — Metal (1.20%) WEEE (2.6%) — Green waste (11%) Furniture (7.74%) — C&D waste (56.73%) Textiles and clothes (0.88%) — Batteries (0.18%)
MOBILE CIVIC AMENITY SITES	
Number of MCAS	5 trucks in the 18 districts
Type of MCAS	Trucks (van < 3.5 t)
Number of visitors	Data to be available soon
Accessibility	18 collection areas located in public spaces, parking lots, market places Opening time: open on Wednesday and Saturday Opening hours: 11 – 20. Available during 1.5 hour for each district.
Control of access	No control of access No limitation
Waste accepted	Only household waste is accepted
Collected fractions	15 fractions accepted

	Chemical waste Batteries		
KERBSIDE COLLECTION			
Mode of collection	Kerbside collection		
% of the population covered	100 %		
Frequency	1 to 4 times per month		
Operated by	Subcontracted to a private company		
Type of lorry	Lorry with compactor: van<3.5 t and lorry > 16 t		
Accepted fractions	Cardboard Wood Metal	Furniture Mattresses Green waste	Hard plastics Other plastics

Bulky waste is transported to **the sorting plant** (dismantling line for bulky waste) where it is sorted and materials that are suitable for recycling is separated (wood, metal, glass and plastic) manually and mechanically. Wood is sent to recyclers for a production of chipboard. Metal is sent to recyclers/ironworks. The rest is processed for dismantlement and conversion into energy. Only minimal quantities are proceed to landfilling.

No data on the composition of mixed bulky waste streams is available.

Instruments promoting bulky waste management

The instruments set in Warsaw to organise and promote bulky waste management are presented in the following table:

ECONOMIC INSTRUMENTS	
Financing system	**Fee:** householders pay a fee according to the number of people living in the household. Commercial activities' fee depends on the size of their bin.
Costs	Cost for CAS + mobile CAS management: 1,898,558 zl (434,240 €) Cost for total waste management: 290,205,907 zł (66,368,100 €) Total cost per inhabitant: 38 €/inh
Specific instruments	Tax on landfilling: 28 e/t
LEGAL INSTRUMENTS	
Mandatory waste collection?	Not for bulky waste
Landfill ban	Yes, on waste with a calorific value above 6 MJ/kg (European waste codes: 19 08 05, 19 08 12, 19 08 14 and 19 12 12 and all the waste from group 20)
Incineration ban	Yes: on green waste
COMMUNICATIVE INSTRUMENTS	
Communication strategy	An information campaign about the rules for sorting waste is organised in Warsaw, as well as education action, such as **Warsaw Recycling Days** (inhabitants receive plants in exchange for waste)
Communication instruments in use	Sorting leaflet (see below) Awareness raising campaigns and education actions Website (http://czysta.um.warszawa.pl/)

Figure 33: communication materials and picture of the CAS in Warsaw.

Information on the waste fractions targeted by URBANREC

The data collected are mainly on total quantities of bulky waste, and no data is available on specific fractions such as mattresses or upholstery. In general disassembly is the first stage in the recycling process, then wood (10%) and metal (2%) are recovered, and residues are used to produce alternative fuels (fragmentation).

Next steps

Main issues with bulky waste are:

- Textiles are usually too dirty to be recycled
- Mattresses has got chlorine that is unwished in the process of incineration with energy recovery.

Efforts will be put on data collection, especially on waste collected in civic amenity sites.

3.4 Belgium

General framework

At which level is the waste regulation voted?	☐ National ☒ Regional
Main regulation on waste	The waste regulation in Belgium is a regional matter. The OVAM is responsible to establish and control the implementation of the waste-, soil- and materials policy. The municipalities are legally responsible for the implementation of the policy regarding municipal waste and to ensure that the citizens can easily carry out the outlined municipal (solid) waste policy. They can provide power to the intermunicipal organizations (such as IMOG). The citizens are responsible to comply with the established regulations.
Specific regulation on bulky waste	The Implementation Plan for Household Waste and Comparable Industrial Waste defines among others the main policy measures, the targets and the actions to be taken for the bulky waste: - Municipalities with large amounts of bulky waste (and therefore high residual waste figures) will get guidance from OVAM to conceive an action plan. Through visitations and/or roundtables the policy and the situation of each municipality will be analysed. Also, the local re-use will be mapped. - From 2017 on, the OVAM will examine which instrument can promote re-use, refurbishment, selective collection and recycling of furniture (both households and industrial). Based on the research results, the most appropriate mix of instruments will be introduced. This could lead to a new extended producer responsibility (EPR), but other instruments are also possible. - Introduction of an extended producer responsibility of mattresses from January 1, 2018.
Existing reuse / recycling targets on bulky waste	Instead of setting one single quantitative target number for household waste for all municipalities with a correction factor to be able to compare the different municipalities, the new implementation plan sets up clusters of comparable municipalities based on an existing social-economical typology of municipalities. Each municipality can produce in 2022 up to the amount of residual waste (including mixed bulky waste) that has been assigned to the cluster to which it belongs:

Cluster	Denomination	Target
Cluster V1	In the suburbs	116kg/inh
Cluster V2	In rural zones	139kg/inh
Cluster V4	Rural and agricultural municipalities with industrial activity	
Cluster V5	Medium sized cities	
Cluster V3	Very rural municipalities with strong ageing	144kg/inh
Cluster V6	little urbanized municipalities with demographic decline	129kg/inh
Cluster V9	Small agricultural municipalities	
Cluster V7	Strongly urbanized municipalities with low income	147kg/inh
Cluster V8	Cities and agglomerations with an industrial character	
Cluster V10	Agglomerative municipalities with tertiary activity	
Cluster V11	Residential suburbia with high income	158kg/inh
Cluster V12	Rural or urbanized countryside with strong economic growth	122kg/inh
Cluster V13	Rurban (Rural urban) municipalities with industrial activity and demographic	125kg/inh
Cluster V14	Regional cities	151kg/inh

Cluster V15	Big and regional cities	197kg/inh
Cluster V16	Coastal municipalities	258kg/inh

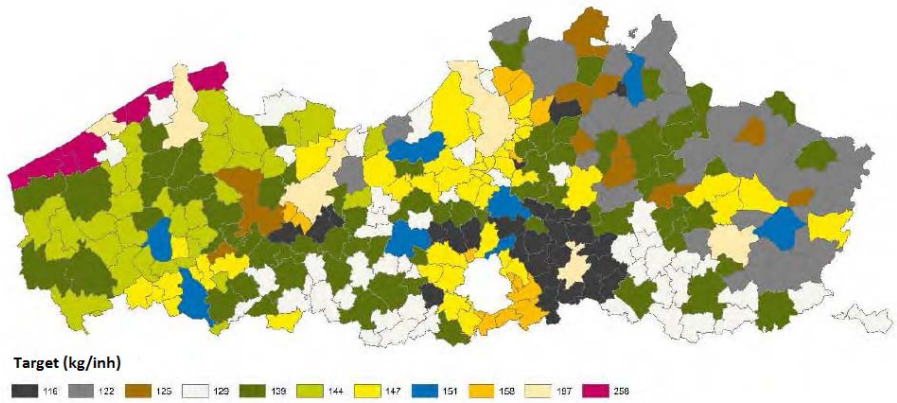


Figure 34. Targets of each municipality.

If all local authorities achieve the fixed targets, an average of 141 kg of residual waste per inhabitant will be produced in 2022 (compared to 157 kg/inh in 2014).

The figure consists of household solid waste, as well as waste produced by shops and small amounts of industrial waste.
It is also important to note that the total amount of household solid waste (residual waste and source-separated waste) may not increase even if the population growth increases.

Each intermunicipal organization also has a target number of maximum residual waste to produce (for example 144 kg/inh for IMOG), but the main target is the target defined on municipal level.

Several targets have been set with an impact on bulky waste management:

- Effective **re-use** achieved through the re-use centres: 7 kg per capita by 2022 with a re-use rate (sold / collected ratio) of at least 50%.
- The amount of **plastics** in the residual waste will be reduced with 50% compared to 2014.

Recently policy measures were taken in order to obtain that bulky waste must be paid for. Moreover, several targets have been set for residual waste (including mixed bulky waste) with impact on bulky waste management.

Existing EPR schemes for bulky waste: WEEE, batteries

3.4.1 Flanders

GENERAL INFORMATION		
Name	Flanders	**Figure 35: location of Flanders in Belgium**
Population	6,444,127 (1/1/2015) 6,477,804 (1/1/2016)	
Density	477 inhabitants/km^2 (1/1/2015) 479 inhabitants/km^2 (1/1/2016)	
Urbanisation class	C: 20 – 29% of population living in multi-family houses	

Situated in west of Europe, Belgium shares a land border with the Netherlands in the north, Germany and Luxembourg in the east, France in the south and a sea border with the United Kingdom to the west. Belgium is a federal state with two types of entities: the communities (the Flemish, French and German-speaking Communities) and the regions (the Flemish and Walloon Regions and the Brussels-Capital Region), which each have their own government and parliament. In Flanders, the region and community authorities are merged into one government and one parliament.

The regions are territorial entities. The Flemish Region territory coincides with the Dutch language area. The Walloon Region territory covers the French and German language areas. The Brussels-Capital Region is authorised in the bilingual Brussels-Capital area. The regions manage everything that concerns the interests of Flemish people, people from Brussels and Walloons. They exercise their authorities with regard to international affairs, the economy, employment, housing, public works, energy, transport, the environment and environmental planning in their territory. Also, the waste management is regional determined.

Belgium has a varied climate (temperate maritime climate). Rainfall is mild and stable throughout the year. Summer days are sunny. Winters are mostly overcast. The average daytime temperature is between 1° C (January) and 21° C (August).

The Flemish region, a low-lying territory with a coastline along the North Sea, occupies the northern part of Belgium and covers an area of 13,522 km2 (44.29% of Belgium). It is one of the most densely populated regions of Europe with 477 inhabitants per km².

The Flemish Region comprises five provinces, each consisting of administrative arrondissements that, in turn, contain municipalities (in total 308 municipalities in Flanders).

The Belgian federated entities (including Flanders) can act internationally for their own competences. They are active at international and at European level and can conclude treaties. This sub-statal right to conclude treaties is unique in the world. Flanders thus also has its own foreign policy and plays an important part in the Belgian EU Presidency.

Typology of the houses

A vast majority of the Flemish dwellings are single family houses (80%). This percentage has not changed significantly over time. Of these singlefamily houses, almost half are detached houses, the most common building type in Flanders. Semi-detached and terraced housing makes up for 21% and 25% of the total amount of houses. The remaining 20% of residences are part of a multifamily housing stock. The vast majority (95%) of these multi-family houses are apartments, and only a marginal fraction is studios, lofts, etc. (5%). [1]

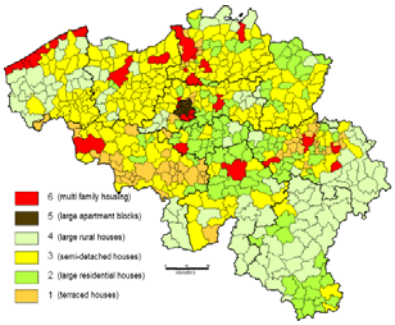


Figure 36: typology of the various communes in Flanders

The demographic projections of the Federal Planning Bureau and the Directorate-General Statistics and Economic Information indicate that the Belgian population should grow from 11.1 million in 2013 to 11.9 million in 2030 (+7%) and 12.5 million in 2060 (+13%). The number of private households in Belgium should rise from 4.8 million in 2013 to 5.3 million in 2030 (+11%) and 5.8 million in 2060 (+21%). The results are based on a set of hypotheses regarding the future evolution of birth and death rates, international and domestic migration and, as far as households are concerned, the evolution of the different ways of living together. The figures show that on the long-term, the number of households is increasing faster than the population growth, this due to ageing (which entails a significant increase in the number of single households) and the emergence of new ways of living together.[2]

Some demographic trends will have a negative impact on the waste management in Flanders, as published in study on March 2015, such as:

- The middle-aged population class (30-50 year-olds) is characterized by a proper waste separation and collection. Within the population, ageing leads to a decreasing importance of families with children and middle-aged (30-50year olds) two-income couples. Elderly also encounter physical constraints which results in a less good source-separated collection. Ageing occurs everywhere in Flanders, but even more in more peripheral areas
- Rejuvenation (a decrease in the number of young people), which will occur even more in the suburbs of the big cities than in the big cities themselves, creates an additional risk for waste collection, given the lower environmental awareness and thus a less responsibility-oriented attitude in waste collection of young couples and single people (often with low incomes)
- Middle-income families will decrease relativity in importance due to a higher income inequality. Since both the lower and highest socio-economic classes run behind in attitude and collection behaviour, this creates a supplementary risk.

[1] 2001-2005; http://www.lehr.be/Reports/PHP_Potential_of_LEHR.pdf
[2] http://www.plan.be/publications/publication-1322-nl-demografische+vooruitzichten+2013+2060+bevolking+huishoudens+en+prospectieve+sterftequotienten

Regional waste framework

Regulation

The waste legislation and policy in Flanders implements the **European Framework Directive (EC) 2008/98** which sets the basic concepts and definitions related to waste management.

In Flanders, on 14 December 2011 the **Materials Decree** was approved and replaced the Waste Decree that was implemented since 1981. The Material Decree is a legal framework that assumes a complete view on the material chain which is essential to find a lasting solution to the waste problem. It anchors the sustainable materials management in Flanders.

Parallel to the decree, the VLAREA was replaced on the same date by a new implementation order: the **VLAREMA** (the Flemish regulations for the sustainable management of material cycles and waste). The VLAREMA contains more detailed implementation rules on (special) waste, materials, selective source-separated collection, transport, the obligation to register and the extended producer responsibility.

The **VLAREMA** defines the waste streams that require a source-separated collection (and who are therefore not considered as bulky waste). It also defines the minimum and the maximum tariffs to be paid for the collection.

Regional strategy

The Flemish government defines the working methods of the waste management and the municipalities are responsible for the daily operation and management within the legal framework of an implementation plan that aims at setting priorities, targets and general strategies to organise the waste management in the region for the coming years.

A lot of streams are collected source-separated in order to promote a useful application (re-use, recycling, composting, …): e.g. glass, textile, re-usable articles, plastic bottles and flacks, metal packaging and drink cartons, paper and cardboard, wood,…In addition the source-separated collection of hard plastics will be obliged during the actual implementation plan. Certain material streams such as asbestos-containing construction and demolition waste are collected source-separated in order to carry out landfilling or incineration in a controlled and environmentally responsible way. Small Hazardous Household Waste is collected separately in order to be treated on an environmental sound way. The remaining household solid waste that is not source-separated (the residual waste), consists of household residual waste, mixed bulky waste and municipal waste (waste from swiping and cleaning roads and waste from public garbage cans along the road).

On 16 September 2016 the Flemish Government approved a new Implementation Plan for Household Waste and Comparable Industrial Waste. This implementation plan replaces the previous implementation plan. The new plan will run until 2022 and contains the concrete targets that must be met by 2022. It has been worked out in close cooperation with the umbrella federations (e.g. VVSG (association of Flemish cities and municipalities), Interafval (cooperation of the association of Flemish cities and municipalities, all Flemish waste intermunicipal organizations and other local authorities responsible for local waste policy), Go4Circle (waste collectors and treatment centres), KOMOSIE (re-use centres)) and other actors in the waste and materials sector. The European directives, the evaluations of previous plans and scientific research were also taken into account. The plan translates the Flemish waste and materials policy in the

coming years into specific implementation actions, both for households and for companies, with a focus on the local level. It gives ideas and tools for the municipalities to make work of waste prevention and re-use, an improved source-separated selection and recycling and less street litter, in collaboration with the citizens, associations and companies.

Also at municipal level, the police regulations points out more specifically the responsibilities of the citizens within the waste regulation: what (not) to bring to the civic amenity sites, what are the opening hours of the civic amenity site, how does the payment at the civic amenity site takes place, how to use the civic amenity site, when does the selective collection takes place, what (not) to present during the selective collection, how to use the containers, what to do with bulky waste, what in case of infringements, fines, …

In all municipalities a **waste collection calendar** is distributed to all citizens and gives more information on the local waste policy: when does the door-to-door collection takes place, location and opening hours of the civic amenity site … Recently, the waste collection calendar is supplemented by the 'Recycle'-app that is freely available.

EPR schemes

The OVAM has taken the initiative to investigate whether a take back obligation for **mattresses** would be a feasible option in Flanders. The OVAM negotiated a starting document for an environmental policy agreement implementing a take back obligation of discarded mattresses. This *starting note* (start memorandum) is the official start for the discussions on an environmental policy agreement as described in the procedures of the Flemish Decree of 5 April 1995 concerning general provisions related to environmental policy. Following the procedure, this starting note was submitted to the Flemish Government for approval. The starting note constitutes the basis for negotiations and outlines the main objectives of the Flemish Region. In a following step the stakeholders were invited to submit their views and comments on this starting note. After this public participation procedure, a concluding note has made up summarizing all comments and strategic policy choices to be made. In 2017 interregional discussions will be started in order to investigate whether a take back obligation for mattresses is a feasible policy option at the Belgian level.
In 2017, the OVAM will investigate if an EPR scheme for **furniture** in Flanders is feasible and if it can produce an added value.

Definition and scope of bulky waste

The regional definition of bulky waste in Flanders is "waste generated by the normal functioning of a private household and the similar waste, that doesn't fit in the collection container/bag due to their size, nature and/or weight, both collected door-to-door, as well as the residual fraction collected in de civic amenity sites that remains for incineration and landfilling" (VLAREMA). This definition applies at local level in a homogeneous way.

The scope of bulky waste is the following:
- Household bulky waste;
- Industrial waste similar in nature, composition and quantity to household waste
- Cleaning up of illegal dumping: a small piece of bulky waste will be disposed of in the mixed bulky waste container in the CAS by community workers; large illegal dumps are cleared ex officio by the government and are not regarded as municipal waste

Residual fraction in de civic amenity sites that remains for incineration and landfilling

Illegal dumping in Flanders is defined as followed: the abandonment or dumping of waste at unregulated places and times and in the wrong containers. It involves consciously avoiding the household or industrial waste collection. Illegal dumping is banned by the material decree and the police regulation.

At this moment, a study is ongoing to have more details about the amount, the cost, the composition, the locations and the perpetrators of illegal dumping in Flanders. These figures provide the baseline to develop policies against illegal dumping and formulate targets. The policy (with emphasis on prevention, enforcement and an example function) aims a significant reduction in the amount of illegal dumping in Flanders.

Bulky waste collection scheme

In Flanders, bulky waste can be **collected** on three different ways:

By the municipality

- by a fixed door-to-door collection,
- by a door-to-door collection on demand (via the purchase in advance of a sticker, via an advanced payment, …)

By the citizen

- by bringing the bulky waste to the civic amenity site.

In general, the door-to-door collection on demand and the bringing method to the civic amenity site are preferred, because it is proven that in those cases less goods that cannot be considered as bulky waste (recyclable goods, re-usable goods, source-separated waste …) are present. It is also economically less efficient to collect the bulky waste door-to-door on a fixed time since at the collection time a lot of households do not have bulky waste that has to be collected (already brought to the CAS because of a lack of space, more expensive than bringing by themselves to the CAS, no bulky waste produced, …).

In Flanders, 10 kg/inhabitant of goods are collected as reusable goods from which 5 kg/inhabitant is resold in the re-use shop. The collection of reusable goods can happen in different ways by:

- door-to-door collection on demand (operated by the re-use centres);
- bringing the bulky waste to the CAS equipped with a specific container for re-usable goods;
- bringing the bulky waste to the re-use centre ;
- bringing the bulky waste to the civic amenity site;
- Other collection methods (e.g. bring banks, private initiatives such as TROC, internet second hand sites … for which data do not exist and is by consequence not included in the abovementioned 10 kg).

The collection of bulky waste should be as much source-separated as possible. Re-usable goods can be disposed in a re-use centre and recyclable goods can be separated for recycling. In that case, the door-to-door collection on demand and the civic amenity site are regarded as the best collection methods, because it is proven that these collection schemes allow a better separation and less damage of the collected goods. At the end more goods are re-used and recycled and only a less fraction ends up for final disposal.

According to the legislation

- a CAS is mandatory for every municipality of more than 10.000 inhabitants. A municipality of more than 30.000 inhabitants needs to add a CAS per started disc of 30.000 inhabitants.

or

- 90% of the inhabitants live up to max. 5 km away (in a nutshell) of a civic amenity site to which he can access.

At the moment, 95.8% of the Flemish population lives at about 5 km from an existing CAS. A total of 286 municipalities dispose of a CAS. Seven municipalities of more than 10,000 inhabitants do not have a CAS and 26 municipalities with more than 30,000 inhabitants have only one CAS. Inhabitants of those municipalities can leave their waste in CAS of municipalities that belong to the same intermunicipal organization.

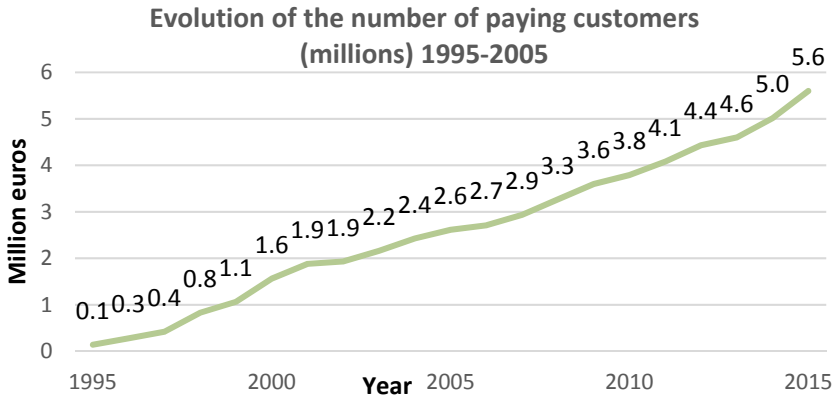
The main information on collections schemes is presented in the table below:

CIVIC AMENITY SITES	
Number of units	335 units 19,300 inhabitants per CAS
Accessibility	Open at least 5 days per week (incl. Saturday) + min. 1 evening per week Opening hours: Since the municipalities or the intermunicipal organizations are responsible for the daily operation and management, the opening hours vary a lot. In general, given their importance for the municipality, the CAS are often open (five days a week with a minimum of 3-4 hours a day). The opening hours change also in function of the need of the population (opening hours depending on the season).
Control of the access	ID-ard, ID, type of vehicle (depending on the CAS) The legal framework (implementation plan and VLAREMA) defines the working methods of the civic amenity sites (e.g. min opening hours, min type of waste fractions,...). Nevertheless, the municipalities are responsible for the daily operation and management within the rules of the implementation plan.
Employee providing support/ assistance	Yes
Limitations	Yes: either on the number of visits and the volume brought (depending on the CAS or both applicable for one CAS)
Acceptance of non-household waste	Yes, the local authorities are asked to encourage SMEs on their territory to selectively deposit small amounts of waste in their CAS. In this way, the Flemish government strives for a more selective collection, also among companies. Only if the industrial waste is similar to household waste in nature, composition and quantity: - arising from activities of the same nature as the activities of the normal operation of a private household - amounts are similar to the amount of household waste of an average family (+/- three residual waste bags of 60 kg each two weeks or one container of 22.5 kg) - for the paper and cardboard and for the plastic bottles and flasks, metal packaging and drink cartons the limitations are established in the accreditation of FostPlus - for the other fractions, the municipality can define quantity restrictions

Re-use containers	While not mandatory, they are quite common in Flemish CAS
Excluded fractions	Some fractions are not accepted in the CAS: old and expired medicines and gas bottles that are not mentioned on the list of small hazardous waste. Nevertheless, to make sure that those goods do not end up in the residual waste, most CAS accept them by exception.
Collected fractions	% of municipal waste collected in CAS : 39% Minimum number of fractions sorted in CAS: 16 Municipalities can choose to separate in more fractions if desired (e.g. mattresses, other plastics,…). Cardboard Wood WEEE Textiles Hard plastics Mixed bulky waste Flat glass Rubble Metal Green waste (fine garden waste, pruning wood, tree trunks; kitchen waste is not obligatory, but if accepted, it's under strict conditions) C&D waste Small hazardous waste (Batteries, chemical waste, …) Edible oils Bonded asbestos Tree trunks

Figure 37: CAS in Flanders

MOBILE CIVIC AMENITY SITES	
Number of MCAS	1 – and some pilot projects: In Flanders, MCAS means temporary CAS as well as permanent mini-CAS with limited storage space. Both are included in the new implementation plan but it's up to the municipalities whether they will implement them or not.
Type of MCAS	Containers
Accessibility	Collection areas: public space, parking lots, market places Opening time: Depending whether it is a temporary CAS or a mini-CAS + since the municipalities or the intermunicipal organizations are responsible for the daily operation and management, the opening hours vary a lot.
Control of access	ID-Card, type of vehicle if vehicle is accepted, … (depending on the MCAS) The municipalities are responsible for the daily operation and management within the rules of the implementation plan.

Waste accepted	The limitations of MCAS are determined by limited storage space. Only small amounts of waste are collected, most of the time limited to an amount that can be brought by foot or by bicycle. In fact, in Flanders, MCAS means temporary CAS as well as permanent mini-CAS. Both are included in the new implementation plan but it's up to the municipalities whether they will implement them or not.
Employee providing support/ assistance	Yes
Collected fractions	The local authority decides which fractions are being collected.
RE-USE CENTRES	
Number of re-use centres	31 (2015)
Operated by	Individual and autonomous enterprises (non-profit, social economy).
Number of employees	Number of employees: 5,353 (4.115 fulltime equivalents) (2015) Number of social economy employees: 80% = 4,282 (3.292 fulltime equivalents) (2015).
Number of visitors per year	Given the broad variety of methods to bring re-usable goods to the re-use centres, it is not feasible to collect data on the number of donors per year. Only the disposed kilos are counted. The number of clients per year are estimated in function of the pay desk transactions. In 2015, 5.6 million paying customers where counted.  Figure 38: evolution of customers in re-use centres
Type of collection	The collection method concerns a minimum obligatory service to the citizens and is determined in the VLAREMA. The municipality has to encourage re-use by concluding at least an agreement with a re-use centre accredited by the OVAM. The agreement contains minimum provisions on awareness raising, mutual referral function, collection methods, the residual waste and the fee for re-usable goods. Re-usable goods need to be collected door-to-door for free (because of the 6% VAT ruling) or may be disposed of at the re-use centre. Another possibility is the delivery of re-usable goods to the civic amenity site. A good collaboration with the local authorities is crucial for successful collections. The share of the various collection methods is presented below:

	Type of collection	**Share**
	Brought by inhabitants	42%
	Inhabitants on demand	23%
	Inclusive collection WEEE CAS	11%
	Re-use container CAS	5%
	Inclusive collection WEEE electro business	3%
	Textile container on the street	4%
	Textile container CAS	3%
	Door-to-door textile	2%
	Clearing houses	2%
	Other: remaining containers CAS, companies…	4%
Product accepted	Household furniture Business furniture EEE Household goods Leisure time items Books & Multimedia Do-it-yourself Transportation Gas appliances and others Clothes (textiles)	
Non-reusable products accepted	Re-use centres do not accept non-re-usable goods as such. The traditional re-use centres only collect goods by visual pre-selection and thus only accept goods of a good quality (potentially sellable goods). Centers that collect on the broader scope, collect goods with a visual pre-selection too, but they also include collecting methods for which a visual pre-selection is more difficult or not possible. In that case, non-reusable goods are collected because they are disposed of by the citizens. (The visual pre-selection is mainly dependent on the collection method. Some examples: - when people bring a t-shirt to the center, you can see directly whether or not the t-shirt can be re-used - when you place a bring bank container to put in clothes near the road, you cannot verify the quality of the t-shirt before somebody puts it in. Or sometimes other stuff is put into the container - when somebody calls to pick up a sofa at home and the employee of the re-use center arrives, he can see directly whether or not the sofa could be resold (he will not take it when it's a bad quality – or in the case the re-use center also has a repair service, whenever the sofa cannot be repaired) The products (fractions) that could not be sold are sorted for recycling and re-use of materials of the products or as last solution as waste. Recyclable materials: • Stored and registered by type after checking the collected goods for repair and preparation for re-use/sale : glass, wood, metals, iron, lamps, multi stream, paper, Styrofoam, hard plastics, plastics Separately collected for recycling: cork and candle remnants • Waste: residual waste, mixed bulky waste, wrapping film, packaging, industrial waste	
Excluded products	Large quantities of a particular product, non-reparable goods, food/drinks, objects with advertising of tobacco, chemicals and dangerous products, packaging material, heating and gas, some transport material, …	

	In general, good quality is important.
Activities of the re-use centres	Preparation for re-use and repairing Awareness raising (communication campaigns…) Sales of products Sales of recycled materials Collection of re-usable goods.
Relationship with local authorities	The collection method concerns a minimum obligatory service to the citizens and is determined in the VLAREMA. The municipality has to encourage re-use by concluding at least an agreement with a re-use centre accredited by the OVAM. The agreement contains minimum provisions on awareness raising, mutual referral function, collection methods, the residual waste and the fee for re-usable goods. Re-usable goods need to be collected door-to-door for free (because of the 6% VAT ruling) or may be disposed of at the re-use centre. Another possibility is the delivery of re-usable goods to the civic amenity site. A good collaboration with the local authorities is crucial for successful collections.

By reusing products, waste is reduced. The re-use centres take care of the collection, the sorting and the selling of re-usable goods.

Since the start, OVAM actively supports the development of the re-use sector. OVAM's support focuses on four areas:

- Policy: The OVAM recognizes the re-use sector as a unique partner for environmentally responsible product re-use and waste prevention. OVAM accredited the re-use centres and determines their operating area. The conditions are described in the resolution of 2005 of the Flemish Government.
- Financial support: The re-use centres receive annual subsidies for their achievements. These are determined on the basis of the number of inhabitants and the amount of sold products in their working area.
- Consultation: The re-use centres are united in the non-profit organization Komosie asbl. OVAM and Komosie regularly consult and collaborate on initiatives on waste and materials policy.
- Follow-up: A follow-up report annually compiles the achievements, goals and developments.
- Communication and support of the sector: the OVAM together with KOMOSIE developed a brochure on how to set up a re-use centre and distributed this document for free (see annexe 13).

Key-success factors of the re-use centres:

- Linking re-use, social employment, social protection and protection of the environment
    - Waste prevention through re-use and extending life span of household goods
    - Job creation for low-skilled and long-term unemployed people
    - Tackling poverty by offering low priced goods to people with limited means
- Inclusion of re-use in the local waste management policy
- Establishment of a strong umbrella organization (Komosie asbl)
- Professionalization of the re-use sector (defined targets, …)
- Measurement is the key to knowledge
- Re-usable goods are donated and disposed of in a re-use shop, a CAS or are collected for free by the collection service
- Re-use centres sort-out the goods. Some goods are repaired. No re-usable goods are recycled or removed on an environmental friendly way
- The goods are available at an affordable price
- Electronics and electronic devises are revised and are sold with a warranty of one year

In 2015, the re-use sector consisted of 31 individual and autonomous enterprises, each one with its own well-assigned operating/collection area: a conglomeration of cities and municipalities where the re-use centre is allowed to collect and sell goods. These unique operating areas have been established and are defined by a decision of the Flemish Government (2005). An operating/collection area covers an average of 200,000 inhabitants.
Within most municipalities, only one accredited re-use centre is responsible for the collection of re-usable goods, on behalf of, and in cooperation with, the local authorities. This system ensures less competition amongst the centres themselves and stimulates collaboration through, for instance, an exchange of their practical experiences. A wide diversity exists amongst these different centres, both amongst the centres themselves (activities, number of shops, personnel ...) and their operating area (size, rural versus urban...). The assignment of these area has developed historically out of the successive formations and agreements. Each re-use centre has received an accreditation from OVAM.
OVAM divides the re-use centres in 2 groups, namely centres that operate on a broader scope (22) and the traditional ones (9).

A traditional re-use centre concentrates on the systematic collection, sorting and sale of goods with a view to their re-use (= selective collection). These centres have been accredited for product re-use, as stated in VLAREMA; in other words, the basis condition for this process is that the goods be collected after visual pre-selection for re-use (before acceptation). The sorting, inspection, and the repair work also are part of the basic activity.

A broader scope centre likewise carries out overall collection of, for instance, WEEE via door-to-door collection and by using containers, but without visual pre-selection of the goods. OVAM considers this method as a waste activity, which makes these centres subject to the provisions imposed by VLAREMA. A broader scope centre thus collects on visual inspection as well as by overall collection.

Some re-use centres have developed extra activities with regard to product re-use, such as, for instance, a repair workplace for WEEE or a sorting centre for textile products. Mostly it concerns agreements and contracts for logistics and social jobs for collections and transport of recyclable materials.

KERBSIDE COLLECTION	
% of the population covered	Not available in many local authorities. If the municipality makes this solution available, then the whole population is covered. The municipalities still collect bulky waste by this method, but it is not the intention.
Frequency	Depends on the municipality
Operated by	Local authorities
Type of lorry	With compactors > 3,5t- < 16 t Platform lorry > 3,5t- < 16 t
Conditions	Payment of the waste fee. Generally high tariffs to promote the use of CAS Compliance with sorting guidelines
% of total municipal waste	Only 0.4% of the quantities collected door-to-door is mixed bulky waste Only 4.5% of mixed bulky waste is collected on kerbside
Accepted fractions	Bulky waste as defined in the legal definition. The exact list is set by the municipality: Every municipality or intermunicipal organization have a detailed list of what is accepted and what is refused. Furniture / Wood / Hard plastics Mattresses / WEEE / Metal C&D waste

COLLECTION ON DEMAND	
% of the population covered	100%
Frequency	min. twice a year / continuous for re-usable products

Operated by	Local authorities Re-use centres
Type of lorry	With compactors Platform lorry
Conditions	Payment of the waste fee (btw. 0.05 to 0.6 €/kg) Limited number of calls (min twice a year for mixed bulky waste) Good quality (for re-use collection)
% of total municipal waste	61% of the waste collected on demand is mixed bulky waste 1.7% of mixed bulky waste is collected on demand
Accepted fractions	Bulky waste as defined in the legal definition Detailed list defined by each municipality Furniture / WEEE / Mixed bulky waste Mattresses / Metal / Re-usable products
OTHER TYPES OF COLLECTION	
A minimal fraction of waste (12%, of which 1.2% is mixed bulky waste) is collected via other collection scheme, such as the municipal depot, traders, schools, district collection (bring banks for glass or textile containers for example). For example, for mattresses, some distributors organise collection through a take back system.	

Collected quantities and treatment

Data on the quantities collected by the various collection schemes presented above are detailed in the following table:

Table 3-6: collected quantities of all municipal household waste in Flanders.

Collection scheme	Quantities	Destination
Fractions separated at the source		
Civic amenity sites	31,762.2 t 572,433.5 t 324,907.3 t 54,974.9 t 105,431.5 t 54.1 t 9,318.6 t + 130.4t (temporary storage)	Re-use of materials Recycling Composting Incineration with energy recovery (R1) Landfilling Drying/separating Other
Re-use centres	32,412.1t 34,448.6t	Re-use Recycling
Kerbside collection	976.5 t 462,201.4 t 527.5 t 297,365.3 t 8.3 t 420.1 t	Re-use (of materials) Recycling Incineration with energy recovery (R1) Composting Drying/separation Landfilling
Collection on demand	955.0 t 354.9 t 10.0 t 315.4 t	Re-use (of materials) Recycling Incineration with energy recovery (R1) Composting

Mixed fractions (mixed bulky waste)		
Civic amenity sites	127,680.0 t 10,024 t	Incineration with energy recovery Landfilling
Re-use centres	4,651.8 t	Incineration with energy recovery
Kerbside collection	712,939.3 t 64,350.4 t 5.9 t	Incineration with energy recovery Drying/separation Landfilling
Collection on demand	2,625.1 t 40.7 t	Incineration with energy recovery Landfilling

In the collected quantities the destination of re-use centres the concept in this case refers to goods that are not send to a waste processor, but that are collected and disposed elsewhere without changing the composition.
More details are presented in annex 3.

In total, 11.1% of the waste collection in CAS concerns mixed bulky waste and 90.7% of the mixed bulky waste collected is collected via the CAS.

For the **treatment of mixed bulky waste**, the main part is incinerated with energy recovery (93%), the other small remaining part is landfilled (7%). One mixed bulky waste sorting centre is available in Flanders. Since it is operated by IMOG, the associated data will be presented in part 3.4.2.

Data on re-use

In 2017, KOMOSIE asbl (the network of non-profit organisations involved in recovery and energy-cutting activities in Flanders) will analyse the different methods of calculation of re-use products to link the supply and sale of products to re-use. Based on this analysis, the monitoring of the re-use sector will be further refined and made more transparent. A methodology will be developed and implemented so that the re-use target and also the re-use of each municipality can be more transparent and better monitored.

Nevertheless, at this moment, the re-use centres gather already a lot of information: KOMOSIE and other partners set up a registration system (ECLIPS) for the management of the collected goods, from collection to the sorting and selling process. This registration system, financed by an European Interreg IV project ("Zicht op hergebruik", 01/05/2009-31/12/2013), was created by the Flemish and Dutch federation of re-use centres and members of re-use centres and is the official registration and reporting system for the OVAM and is used by 30 centres who all employ the same criteria for registration of the collected goods, recyclable and waste materials up to sold articles.

Data on weight are collected in three different ways:
Goods taken to the re-use centre

- if the re-use centre does not have an appliance to weigh, the re-use centre counts the incoming/outgoing pieces and allocates the amounts to the correct fraction based on a standardized list of average weight per product agreed by the OVAM and the re-use centres.
- if the re-use centre has a weighing system, the incoming/collected goods are weighted.

Goods taken to containers (in or outside the CAS) or collected door-to-door

- the goods are weighted (e.g. textile from textile container)

After sorting out,

- the remaining waste fractions are registered by weight;
- the remaining waste and materials for recycling are registered by type and weight.

In 2017, a study will be done in order to examine the possibilities and cost to install a weigh system in all re-use centres at some levels of the process of the goods in order to obtain more accurate figures.

For the data collection, the commercial and other non-profit re-use initiatives (internet, private second hand shops …) are not taken into account.

Composition analysis

A composition analysis was conducted in 2011 for both mixed bulky waste collected in CAS and mixed bulky waste collected on the kerbside. The values are presented below:

Table 3-7: composition analysis of mixed bulky waste in Flanders

Composition of the bulky waste in CAS		Composition of the bulky waste collected door-to-door	
Combustible	52,49%	Combustible	49,83%
Inert material	17,86%	Wood	28,21%
Wood	12,33%	Mattresses	7,74%
Mattresses	7,42%	Plastics (HDPE)	4,29%
Carpets	3,64%	Carpets	3,78%
Plastics (HDPE)	3,38%	Ferro metals	3,31%
Plastics (PVC)	1,44%	Inert material	1,67%
Ferro metals	0,89%	Small hazardous waste	0,73%
Styrofoam	0,32%	Plastics (PVC)	0,21%
Glass	0,09%	Non-ferrous metals	0,13%
Small hazardous waste	0,06%	Organic-green	0,06%
Non-ferrous metals	0,05%	Glass	0,03%
Other	0,03%	Other	0,02%
Organic-green	0,00%	Styrofoam	0,00%

Instruments promoting bulky waste management

ECONOMIC INSTRUMENTS	
Costs borne by the local authorities	**Door-to-door collection of household solid waste (residual waste, biodegradable waste, PMD, paper&cardboard, textile, bulky waste and green waste)** The amount of the collection costs depends on several variables, including the overhead costs of equipment (e.g. collection car), staff costs, but also the number of collection points per collection tour. The collection costs consist largely of overhead costs, such as equipment and staff. Regardless of the quantity of waste offered at every house, the collection truck must drive his round. This means that the waste collection costs do not vary linearly with the increase/reduction in the volume of the fraction. The average collection cost of all waste fractions collected door-to-door in Flanders is about € 30 per capita per year.

	Re-use sector The total operating income of the re-use sector amounts to 113 million euros (2015) and consists mainly of own revenues and grants. The companies in the re-use sector deploy in many cases activities outside the re-use shop activity, such as social restaurants and ironing workshops. It is not possible to separate exactly the financial results of these activities on a global level. The own revenues are earned from: - The retailing of reusable goods: 50.5 million euros (2015; 44% of the global revenues); - Service fees (collection of goods) and non-re-use activities (6 million euros) - Sale of recycling fractions (2.3 million euros). In addition, the re-use sector receives grants: - Social economy subsidies (43 million euros, 39% of global sales); - Operating grants (3 million, 3% of global sales); - 4.7 million comes from tonnage fees.
Financing system	Citizens pay for waste management with: - A flat-rate tax - A PAYT fee (based on kg or volume) For bulky waste, the PAYT part is calculated according to the volume or the weight collected.
Fees	The minimum and maximum tariffs of bulky waste of variable interpretation are described in the VLAREMA: - Civic amenity site : min €0,02/kg; max €0,3/kg - Door-to-door: min €0,05/kg; max €0,6/kg 200kg = 1m³
Specific instruments	PAYT system Fines for illegal dumping EPR system for WEEE, batteries, tires… Tax on landfilling and incineration
LEGAL INSTRUMENTS	
Mandatory waste collection? Source-separated collection	For the following fractions: paper&cardboard, plastic bottles and flasks, metal packaging and drink cartons, glass, pruning wood, biodegradable waste, mixed bulky waste, textile, WEEE, metals, wood (type A and B), reusable goods, flat glass, hard plastics, small hazardous waste, frying fats and oil, pure rubble, other C&D waste, asbestos-containing C&D waste, trunks, fine garden waste, medicines
Landfill ban	Waste that can be recycled and can be incinerated, such as mixed municipal waste, source-separated waste in view of their useful application, waste that by nature, quantity or homogeneity according to the best available techniques is appropriate for re-use or material recycling, combustible fractions or fractions that are appropriate for material recycling resulting from the sorting or treatment of household waste or industrial waste similar to household waste, old and expired medicines and all waste streams subjected to an incineration ban.
Incineration ban	Waste that by nature, quantity or homogeneity according to the best available techniques is appropriate for re-use or material recycling (the ban does not apply for following waste used for producing energy, if the caloric value is higher than 11.500 kJ/kg: vegetable waste from agriculture and forestry, vegetable waste from the food industry, fibrous vegetable waste that comes from sorting, screening and washing the raw pulp and paper production, wood and cork), untreated bulky waste and source-separated industrial waste

COMMUNICATIVE INSTRUMENTS	
Communication strategy	The OVAM communicates to intermediates (intermunicipal organizations, local administrations, re-use centres …), who further disseminate the message to the citizens. The main objectives of the communication is to inform the citizens on their obligations regarding the waste management (such as the sorting rules, the costs …) and on how to prevent waste production.
Communication instruments in use	Sorting leaflet (waste calendar, waste newspaper) Awareness raising campaigns Website (www.ovam.be) Agents at CAS + "sorting ambassadors"

Recycle app
Recycle! is a joint initiative of Bebat, Fost Plus and Recupel, with the collaboration of the intermunicipal organizations. The application gives an overview of all waste collections in each street via a collection calendar and for which reminders can be set, all collection points nearby with additional information on opening hours and closing days (including CAS, re-use centres, collection points for batteries and electronics) and a sorting guide that helps to sort the waste correctly.

Waste collection calendar
The waste calendar gives information about the collection days and collection hours, the method of collection, the sorting specifications, the CAS … Sometimes additional information is given regarding the actions taken by the concerned municipality.

Since the collection scheme varies per district/street/… the calendar is adapted to each address. A new resident gets the waste calendar on the moment of registration.

Waste newspaper
The purpose of the waste newspaper, mostly edited by the intermunicipal organizations, is to inform people about everything related to environmental policy and waste prevention. Municipalities can also publish their own articles, what gives them the opportunity to present local actions, achievements, changes in the waste policy … and to clarify the relationship between the intermunicipal organizations and the municipality in question.

Websites
The websites of the municipalities and intermunicipal organizations give clear information about the different waste issues (waste calendar, what's allowed/what's not allowed, what changes, …).

Information on the waste fractions targeted by URBANREC

Information on the current waste fractions targeted by URBANREC are presented below:

Table 3-8: information on URBANREC waste fractions in Flanders

Waste fraction	Separation at the source?		If not separated, collected with…	Quantities (t)	Destinations
Mattresses	Not obligatory, but separated in some CAS and possibility to bring back to some shops when buying a new one	CAS Shops	mixed BW	8.67% of mixed BW	Incineration with energy recovery + recycling
Fixtures and fittings	No (in Flanders, we separate the waste fraction by material, not by product)				
Upholstery	Yes, when brought to re-use centres, otherwise not	Re-use	mixed BW	42.7% of mixed BW on kerbside	Incineration with energy recovery
Wooden furniture	Yes, when taken to re-use centres, otherwise not; if only wood, collected in the wood-container	CAS (wood-container) Re-use	mixed BW/wood	N.A.	re-use, recycling, incineration with energy recovery
Plastic furniture	Yes, when taken to re-use centres, otherwise not; if only plastic, collected in the plastic-container	CAS (plastic-container) Re-use	Mixed BW until September 2017, then it will have to be collected source-separated	N.A.	re-use, recycling

Waste fraction	Separation at the source?		If not separated, collected with…	Quantities (t)		Destinations
Textiles	Only for all loose textile pieces Also carpets in some CAS	Bring banks, CAS, re-use, …	mixed BW/household waste	5.97% of mixed BW		re-use, recycling
Hard plastics	Not obligatory, but separated in most CAS; From September 2017, source-separated collection of hard plastics will be obliged in the CAS and hard plastics will not be allowed anymore in the mixed BW	CAS Other	Mixed BW until September 2017, then it will have to be collected source-separated	12,736.87 t 13 t		Recycling
Tyres	YES Not obligatory, but separated in most of the CAS + possibility to bring back to the garage or the tire centre + possibility to call a collector Tires are not allowed in the bulky waste	CAS + …	Has to be collected source-separated	1,500 t (2015) 0.04% of mixed BW (2011)		Recycling + cement plant
Wood	Yes	CAS Re-use Other	Has to be collected source-separated	Hazardous 48,750 20 85	Non hazardous 109,330 0.08 3,371	Re-use + Recycling + incineration with energy recovery

Main difficulties faced with bulky waste collection

- Still too much recyclable material in the mixed bulky waste that is incinerated (wood, metal, other recyclable materials; wood and metal are mandatory to be taken out of the bulky waste – before or after collection).
- Often the products consist of different materials, which complicates recycling.
- According to the regulation the mixed bulky waste may not contain reusable goods. This rather subjective criterion, however, is difficult to interpret both for inhabitants and collectors: e.g. civic amenity sites are reluctant to install a container for re-usable goods, to avoid discussions between the supervisors and the citizens (free deposit of re-usable goods versus bulky waste that has to be paid).
- Not all the CAS have the space and means for placing extra containers.
- Less interest of the collectors if the good (well-earned) fractions are taken out of the bulky waste before they arrive (e.g. bulky waste collected on the kerbside, cooking oil in the CAS …).
- Companies and organizations do not know well enough the possibilities for re-use, so a big potential to enhance the re-use sector is not used. Also the option for purchasing re-usable goods is not enough explored.

Next steps

The total amount of (mixed) bulky waste in the municipalities has already declined over the years. This is the result of:

- the sustained efforts of the municipalities, the intermunicipal organizations and other actors involved in the waste policy since the early 90s to sensitize the Flemish population to selectively sort out as much as possible for re-use and recycling;
- the obligation of the municipalities to charge the population for the collection of mixed bulky waste (the pay-as-you-throw principle);
- a tight supervision during the disposing of the bulky waste in the civic amenity site in order to refuse recyclable/re-usable waste and in order to guide the residents to the right container to use.

Further reducing the amount of mixed bulky waste is not an end in itself if this would result in an increase in the amount of municipal solid waste, but some recommendations could be taken into account for a higher reusability or recycling:

Door-to-door collection

- It is advised to enhance the awareness raising of the citizens to bring the re-usable goods to the re-use centre or call the re-use centre to pick the goods up. This will not only reduce the amount of mixed bulky waste, but it will also permit a better quality control.
- The municipalities who pick up door-to-door bulky waste, wood and metal on the same day, should increasingly sensitize the population to better sort out the three fractions in advance. This because they are still often offered mixed with as a result that they all end up in the mixed bulky waste stream.

CAS

- Increasing the fee of mixed bulky waste in municipalities where it is currently low and differentiation in price with source-separated materials, will reduce the supplied amount of mixed bulky waste in the CAS. A payment system in which the amount of mixed bulky waste is measured or weighed and where the payment occurs per volume or per weight seems to be most efficient system.
- Placing separate containers in the CAS to sort out more materials, can contribute to a better recycling and less mixed bulky waste.
- Informing municipalities and CAS by exemplary municipalities.
- A good supervision at the CAS.
- A good sensitizing of the population.
- A separation of mixed bulky waste in a 'to incinerate' fraction and an 'inert' fraction (landfilling).

Collaboration with re-use centres

- An intensified collaboration between the intermunicipal organizations and the re-use centres.
- When a door-to-door collection on demand, the resident should be informed better regarding the re-usability of materials.
- A continuous awareness raising of the population through advertising and local newspapers
  regarding reuse of goods.
- Installation of a container specifically for re-usable goods in each CAS and an increased sensitization and an increased supervision of the staff of the CAS to prevent that re-usable material end up in the mixed bulky waste fraction (training of supervisors).

Awareness raising

- Because it is proven that an increased awareness raising of the population has a positive effect on the efforts that people make in terms of sorting and recycling, a continuous awareness raising for a waste management focused on re-use and recycling, is necessary.
- If additional measures are introduced, it is important always to accompany it with additional awareness raising and information.

Other specific actions that will be taken to improve the collection of bulky waste:

- Municipalities with large amounts of (mixed) bulky waste (and therefore high residual waste figures) will get guidance from the OVAM to draw up an action plan. Through visitations and / or roundtables the policy and the situation on the ground will be analysed. Also, the local reuse will be mapped.
- From 2017 on, the OVAM will investigate which instrument can promote the re-use, the refurbishment, the separated-source collection and the recycling of furniture. According to the research results, the most appropriate instrument mix will be implemented.
- Implementation of an extended producer responsibility for mattresses by January 2018.
- Stimulate re-use at companies and organizations: re-use initiatives will collaborate more closely to make re-use generally more accepted, by:

- a more active communication with companies and organizations (among other regarding the best practices) to raise awareness of the benefits of re-use and of the services of re-use initiatives;
- actions to collect re-usable goods (collective collection on company sites, projects in spacious office buildings, ...);
- office furniture and 'business clothing' will be taken into account while implementing the actions of the Implementation Plan established for furniture and textiles.

3.4.2 IMOG

GENERAL INFORMATION		
Name	IMOG-region	Figure 39: location of IMOG in Flanders
Population	233,126 (2015)	
Density	603.3 inh/km²	Figure 40: map of IMOG territory
Urbanisation class	C (20 – 29% of population living in multi-family houses)	

Flanders comprises 308 municipalities (6.5 million inhabitants). For waste treatment the municipalities are organized in 26 intermunicipal organizations (cooperation services): separate corporations containing an average of 250,000 inhabitants each, owned and controlled by the municipalities.

Imog is the intermunicipal organization for waste management in the region of South-West-Flanders and takes care of the waste management of 11 municipalities (Anzegem, Avelgem, Deerlijk, Harelbeke, Kortrijk, Kuurne, Kruishoutem, Waregem, Wielsbeke, Spiere-Helkijn, Zwevegem), representing about 230,000 inhabitants. Imog is responsible for the waste collection and waste treatment. Therefore, Imog has two sites with their specific activities (such as a household waste incinerator, landfilling site, biomass centre and two sorting centres) and an extensive network of source-separated waste collection with 16 civic amenity sites, 300 glass containers and door-to-door collection. Imog also gives a wide range of services to the municipalities such as extensive communication services about waste prevention, resource efficiency and recycling as head topics. The

last years, Imog puts a lot of efforts in stimulating and developing public cleanliness. This integrated approach results in very high sorting and recycling rates, up to 72%.

Local waste framework

The general framework has been presented in the previous part about the Flanders Region.

The Flemish government defines the working methods of the waste management. Nevertheless, the municipalities are responsible for the daily operation and management within the legal framework of an implementation plan that aims at setting priorities, targets and general strategies to organise the waste management in the region for the coming years. Therefore, the eleven municipalities in the IMOG-region have outsourced the following responsibilities to IMOG: waste collection and waste treatment.

A lot of streams are collected source-separated in order to promote a useful application (re-use, recycling, composting …): e.g. glass, textile, re-usable articles, plastic bottles and flacks, metal packaging and drink cartons, paper and cardboard … Certain material streams such as asbestos-containing construction and demolition waste are collected source-separated in order to carry out landfilling or incineration in a controlled and environmentally responsible way. Small Hazardous Household Waste is collected separately in order to be treated on an environmental sound way. The remaining household solid waste that is not source-separated (the residual waste), consists of household residual waste, mixed bulky waste and municipal waste (waste from swiping and cleaning roads and waste from public garbage cans along the road).

On September 16, 2016 the Flemish Government approved a new **Implementation Plan for Household Waste and Comparable Industrial Waste**. This implementation plan replaces the previous implementation plan and contains the main policy measures, targets and actions in order to further decrease the quantity of residual waste from households and similar waste from companies. The Plan will run until 2022 and contains the concrete targets that must be met by 2022.
The new plan has been worked out in close cooperation with the umbrella federations (e.g. VVSG (municipalities), Interafval (waste incinerators), Go4Circle (waste collectors and treatment centres), KOMOSIE (re-use centres)) and other actors in the waste and materials sector. The European directives, the evaluations of previous plans and scientific research were also taken into account.
The plan translates the Flemish waste and materials policy in the coming years into specific implementation actions, both for households and for companies, with a focus on the local level. It gives ideas and tools for the municipalities to make work of waste prevention and re-use, an improved source-separated selection and recycling and less street litter, in collaboration with the citizens, associations and companies.

IMOG has developed his own action plan in which the objectives of the Implementation Plan are translated into 12 challenges with 52 concrete actions on local level.

Also at municipal level, the **police regulation** points out more specifically the responsibilities of the citizens within the waste regulation: what (not) to bring to the civic amenity sites, what are the opening hours of the civic amenity site, how does the payment at the civic amenity site takes place, how to use the civic amenity site, when does the selective collection takes place, what (not) to present during the selective collection, how to use the containers, what to do with bulky waste, what in case of infringements, fines, …

Also, a **waste collection calendar** (downloads of the waste collection calendar of each municipality available on http://www.imog.be/afval-inzamelen/ophaalkalender/) is distributed by every municipality to his residents and gives more information on the local waste policy: when does the door-to-door collection takes place, location and opening hours of the civic amenity site … Citizens can also freely install the 'Recycle'-app to be informed on the waste collection.

Definition and scope of bulky waste

The definition used in IMOG territories is similar to the one presented in the previous part.

Bulky waste collection scheme

The details on the collection schemes are presented in the table below (with 2015 data). Further data are presented in ANNEX 4

In the IMOG-region, the mixed bulky waste is **collected** in two different ways:

- by a door-to-door collection on demand: every first Tuesday of the month, the bulky waste can be collected door-to-door on demand, after registration. A transport cost (€12) has to be paid in advance. After collection, an additional fee of €0,20 per collected kilo has to be paid.
- by bringing the bulky waste by yourself to the civic amenity site (CAS) and paying a fee according the weight.

The collection of reusable goods happens as follows:

- door-to-door collection (on demand) operated by the re-use centre South-West Flanders: for example, textile is collected twice a year (a bag in which the textile pieces are collected, is distributed a week before the actual collection);
- bringing the bulky waste to the CAS equipped (with a specific container for re-usable goods);
- bringing the bulky waste to one of the shops coordinated by the re-use centre South-West Flanders or to the re-use centre by itself;
- other collection methods (e.g. bring banks, private initiatives such as TROC, internet second hand sites, … for which data do not exist.

The collection of bulky waste should be as much source-separated as possible. Re-usable goods can be disposed in a re-use centre and recyclable goods can be separated for recycling.

CIVIC AMENITY SITES	
Number of units	17 units 13,700 inhabitants per CAS
General description	The 'Witboek containerparken' ('Whitebook civic amenity sites') gives an overview of the different characteristics of the CAS in the IMOG region, such as general information, an short explanation of the legislation, the location plan of the CAS in the region, an overview of the different fractions, equipment and costs of a CAS, the tasks, competences, … of the CAS stewards, specific information on some recipients, additional concerns, durability in the CAS, exceptions per CAS, detailed information per CAS, …

	The ownership and operation of the CAS in the IMOG-region is not the same for every CAS: - some CAS are owned by the municipality and ran by the municipality itself - some CAS are owned by the municipality and ran by IMOG - some CAS are completely directed by IMOG Three different types of CAS exist in the IMOG-region: - **DIFTAR-CAS IMOG**: fully equipped diftar ("the polluter pays" principle) CAS with extensive opening hours accessible to both SME's and residents. In addition to a paying part, each CAS also has a free section for individuals. The infrastructure of the CAS is highly expanded. The entrance and exit of the charged part are provided with barriers with an identification pole. One or more weighbridges are present for the registration of the weight measurement. - **Municipal DIFTAR-CAS:** diftar CAS with limited opening hours (26 to 36 hours a week). Only residents with cars, trailers and vans are allowed. Each park is provided with a paying part and a free section. For cars, the paying part is sometimes equipped with a separate entrance with currency system and bracket. For vans and cars with trailers, the paying part is equipped with a weighbridge. IMOG recommends to phase out the use of a bracket and to switch to weighbridges everywhere. - **Small CAS**: These CAS offer a free and a paying part. In the paying part, an amount (2 to 5 euros) has to be paid per visit, regardless of the nature of the waste being disposed. These CAS are only accessible to residents with a car. Opening hours are rather limited. **Figure 41: location of the CAS on IMOG territory**
Accessibility	Open at least 5 days per week (incl. Saturday) + min. 1 evening per week Opening hours: in general, given their importance for the municipality, the CAS are often open (five days a week with a minimum of 3-4 hours a day). The opening hours change also in function of the need of the population (opening hours depending on the season)
Control of the access	Card, ID, type of vehicle (depending on the CAS) The legal framework (implementation plan and VLAREMA) defines the working methods of the civic amenity sites (e.g. min opening hours, min type of waste fractions,...). Nevertheless, the municipalities are

	responsible for the daily operation and management within the rules of the implementation plan.
Employee providing support/assistance	Yes
Limitations	Yes: either on the number of visits and the volume brought.
Acceptance of non-household waste	idem Flanders region
Re-use containers	Yes
Collected fractions	% of municipal waste collected in CAS: 34.9% In total, 15.6% of the waste collection in CAS concerns mixed bulky waste and 98.4% of the mixed bulky waste is collected via the CAS. Average number of sorted fractions: 39 Cardboard, Wood, WEEE, Textiles, Mattresses, Rubble, Hard plastics, Other plastics, Mixed bulky waste, Different containers for burnable/non-burnable, Flat glass, Metal, Green waste, C&D waste, Batteries, Glass (bottles and jars), little hazardous waste, polystyrene, Car tires, Bicycles

Figure 42: picture of a CAS in IMOG

MCAS	
No MCAS in the IMOG-region	
RE-USE CENTRES	
Number of re-use centres	6 (2015)
Operated by	The re-use centres are clustered in one organisation: the non-profit organization Kringloopcentrum South-West Flanders (de Kringloopwinkel vzw).
Type of collection	Brought by donors, re-use centres in CAS, collection on demand, kerbside collection (textiles)
Product accepted	Household furniture, Business furniture, EEE, Household goods, Leisure time items, Books & Multimedia, Do-it-yourself, Transportation, Gas appliances and others, Clothes (textiles)

Excluded products	Large quantities of a particular product, non-reparable goods, food/drinks, objects with advertising of tobacco, chemicals and dangerous products, packaging material, heating and gas, transport material
Activities of the re-use centres	Preparation for re-use and repairing Awareness raising (communication campaigns…) Sales of products Sales of recycled materials Collection of re-usable goods.
Relationship with local authorities	Collection of reusable bulky waste (in partnership with the associations of municipalities). A good collaboration with the local authorities is crucial for successful collections.
KERBSIDE COLLECTION	
No bulky waste collected door-to-door	
COLLECTION ON DEMAND	
% of the population covered	100%
Operated by	Local authorities
Type of lorry	Platform lorry with crane
Conditions	Payment of the **waste fee**: - C&D waste : €111/m³ (max. 1,500kg) - green waste : €55/m³ - mixed bulky waste: transport cost of €12 (paying in advance) + €0,.20/kg - asbestos-containing C&D waste: €41 + price of a bag 1m³-2m³ (between €16 and €44, depending on the size of the bag) + €151,.3/t Limited to **certain conditions**: (asbestos-containing) C&D waste, green waste, mixed bulky waste: placing waste bag as close as possible to the street, it's not allowed to fill the bag with other waste than authorized
Accepted fractions	47.7% of the door-to-door collection on demand concerns mixed bulky waste and 1.6% of the mixed bulky waste collected, is a door-to-door collection on demand. Wood WEEE Furniture Mattresses Metal Green waste C&D waste Asbestos C&D waste Mixed bulky waste Figure 43: collection on demand in IMOG

Collected quantities and treatment

Table 3-9: collected quantities in IMOG

Collection scheme	Quantities	Destination
Fractions separated at the source		
Civic amenity sites	239.4 t; 21,307.6 t 9,335.2 t 998.8 t	Re-use (of materials) Recycling Composting Landfilling
Re-use centres	1,176.7 t 1,797.5 t	Re-use Recycling
Collection on demand	30.6 t 140.2 t 68.4 t	Re-use (of materials) Recycling Composting
Mixed fractions (mixed bulky waste)		
Civic amenity sites	3,681.1 t 2,281.6 t	Incineration with energy recovery (R1) Landfilling
Re-use centres	538.0 t	Incineration with energy recovery (R1)
Collection on demand	87.7 t 11.6 t	Incineration with energy recovery (R1) Landfilling

The figure of the table 3-9 contain a mix of bulky waste and other waste.

Details on the nature of re-used products are presented in the table below:

Table 3-10: Re-used quantities in IMOG

Re-used products	Quantities (t/yr)
Furniture	437.3
Among which: mattresses	No data available, but almost none, because of hygienic reasons
EEE	103.0 (large household appliance: 32.9t; cool/freeze: 6.9t; television/monitors: 9.4t; other: 53.8t)
Household goods	77.8
Leisure time items	105.6
Books & Multimedia	116.4
Clothes	311.6
Do-it-yourself	12.0
Transport	10.4
Gas appliance and remaining	2.5
TOTAL RE-USE	1,176.7t sold of 3,536.3t collected

Sorting centre

In the CAS there's an extensive sorting process in different containers (based on type of fraction). Most of these waste fractions go to recycling, after being clustered. Nevertheless, the CAS still have a container for objects who exist out of different materials (e.g. wood, plastic,…). This 'mixed stream containers' go to the sorting facility

for bulky waste as this mixed bulky waste still contains a lot of valuable materials. Also, the source-separated wood fraction, collected in the CAS, goes into a sorting facility.

1. **Sorting facility for mixed bulky waste:**

First, before going into the shredder, big objects with a homogenous composition (e.g. carpets) are pre-sorted. Afterwards the mixed bulky waste goes into a shredder to reduce the size, then passes a magnet to sort out the iron and at last goes to a sorting hall where it is possible to sort out valuable materials.
The inert materials are taken out by a shaking sieve. Also a dust extraction takes place.

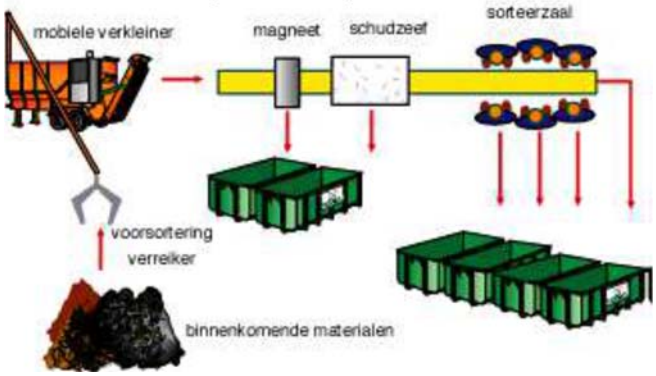


Figure 44. Sorting mechanism in different containers.

The end product is a mixture of small and larger parts that are not larger than 35 cm. The total volume reduction is at least 75%. This end product goes to the incineration with energy recuperation. The inert materials and the extracted dust are landfilled.

Due to the current economic market of recyclable goods it is not achievable to do a manual sorting after shredding (in a sorting cabine) to sort out valuable materials of the mixed bulky waste.

2. **Sorting facility for wood waste:**

In the sorting center the wood is shredded to reduce the size. A magnet takes out the iron and non-ferro materials and different shaking sieves split up the wood plaques in different sizes.

The end product of the non-treated wood waste fraction is sold as new raw material for e.g. the chipboard industry; the end product of the treated wood waste is sold as raw material for the energy industry. The residue of both fractions goes to the incineration installation.

Financial data

	From CAS (Total)	Mobile CAS	Reuse	Kerbside collection	Collection on demand	Illegal dumping	Total

Bulky waste that goes to incineration (€/t)	240,07	NA	/	NA	/	No exact data available per municipality. In Flanders 60 million euros is spent every year to clean up litter and illegal dumping. 90% of this amount is borne by local authorities.	
Bulky waste → landfilling (€/t)	135,46	NA	/	NA	/		
Mixed bulky waste → sorting centre (€/t)	586,01	NA	/	NA	Not calculated, because a lot of input is needed. This is possible in a further stage of the project.		
Wood (€/t)	258,32	NA	/	NA	/		
Hard plastics HDPE (€/t)	252,34	NA	/	NA	/		
Hard plastics PVC (€/t)	215,65	NA	/	NA	/		
Matrasses (€/t)	538,72	NA	/	NA	/		
Carpets (€/t)	323,65	NA	/	NA	/		
…. €/visitor	No exact number about visitors, so not possible to calculate	NA					

<u>Important remark about the financial data:</u>
Included in the calculation: exploitation cost and maintenance on CAS, transport, treatment, treatment of residual fraction after sorting process, overhead and incomes (positive or negative).
Not included: the fee / tax / payment per kg of the citizens

The citizens pay for waste management in three ways:
☒ Tax (no link with waste production, e.g. based on property value)
☒ Fee (with no link with waste production, e.g. based on the number of inhabitant)

☒ PAYT system (in relation with the waste production. Please specify how it is calculated :……)

Instruments promoting bulky waste management

ECONOMIC INSTRUMENTS	
Financing system	The general financing system is similar to the one described for the Flanders Region
LEGAL INSTRUMENTS	
Mandatory waste collection?	Idem Flanders
Landfill ban	Idem Flanders
Incineration ban	Idem Flanders
COMMUNICATIVE INSTRUMENTS	
Communication strategy	In Flanders there is a big tradition in communication and sensitization on waste in order to prevent waste and higher the amount of waste that is collected source-separated (and become a higher sorting percentage). We've started more than 20 years ago with the main messages on sorting and waste prevention. Over the years the communication expanded with re-use, home-composting, illegal dumping and litter and further sorting at the source on the CAS. The target audience is especially the citizens in our region, including SME's.
Communication instruments in use	Sorting leaflets Awareness raising campaigns Website (www.imog.be) Agents at CAS Volunteers cleaning up litter and illegal dumping Online guide for sorting waste (Waste Alphabet)
- 4 times a year we publish a 'Waste paper' and it is spread to 15.000 mailboxes (on paper). Digital version of the waste papers on http://www.imog.be/publicaties/afvalkranten/ - IMOG makes different leaflets on waste prevention and different waste fractions. All leaflets are published on the website of IMOG: http://www.imog.be/publicaties/folders/ - Every waste fraction has a 'waste passport'. These are published on our website http://www.imog.be/afval-inzamelen/afvalpaspoorten/houtafval/ and are also available on paper. - Every year we guide around more than 5000 visitors in our installations. Leaflet on bulky waste: http://www.imog.be/uploads/media/grof_vuil.pdf Waste alphabet (online on http://www.imog.be/index.php?id=265)	

Information on the waste fractions targeted by URBANREC

Information on the current waste fractions targeted by URBANREC are presented below:

Table 3-11: information on URBANREC waste fractions in Imog.

Waste fraction	Separation at the source?		If not separated, collected with…	Quantities (t)	Destinations
Mattresses	Not obligatory, but separated in the CAS	CAS Shops	N/A	150.7 t	Incineration with energy recovery (R1)
Fixtures and fittings	N/A		If no re-usable anymore, fixtures and fittings are collected in the waste stream of mixed bulky waste, hard plastics, wood or WEEE, depending on the material.		
Upholstery	Partly (Yes, when brought to reuse centres)	Re-use	If no re-usable anymore, upholstery is collected in the waste stream of mixed bulky waste.		
Wooden furniture	Yes, brought to reuse centres or wood container)	Re-use CAS	mixed BW		
Plastic furniture	Yes, when brought to reuse centres, or plastic-container)	Re-use CAS	mixed BW		
Textiles	yes	Bring banks, CAS, re-use centres	Mixed BW, household waste	568.5t 1,147.9t	Re-use + recycling
Hard plastics	Yes	CAS		232.3 t	Recycling
Tyres	Yes	CAS + garage	Mixed BW	52.7 t	Recycling + cement plant
Wood	Yes	CAS D-t-D	Mixed BW	4,701.79 t 131.22 t	Recycling

Main difficulties faced with bulky waste collection

The challenge is to have less materials in the bulky waste that can be used as a secondary raw material or for re-use. A better sorting could take out those materials, at the source (re-use or source-separated collection) or during the sorting process. Due to financial and economic reasons (profitability) too few materials are removed out of the bulky waste.

Next steps

The current objectives regarding bulky waste management are:

- Increase re-use.
- Increase the source-separated collection.
- The use of more materials as a secondary raw material (market (price) plays a key role).

4. Analysis of the collected data

4.1. General framework in bulky waste.

The table below shows the general framework of bulky waste management of each country.

	Province of Izmir, Turkey	Region of Valencia and Consorcio Valencia Interior, Spain	Warsaw, Poland	Region of Flanders and Imog area, Belgium
At which level is waste regulation voted?	☒ **National** ☐ **Regional** ☐ **Both**	☐ **National** ☐ **Regional** ☒ **Both**	☐ **National** ☒ **Regional** ☐ **Both**	☐ **National** ☒ **Regional** ☐ **Both**
	At **local level**, municipalities or districts are responsible for the management of municipal waste (from household, commerce, offices and services).			
Specific regulation on bulky waste	☒ **Yes** ☐ **No** Regulation published in 2014 to establish CAS across the country.	☐ **Yes** ☒ **No** There is no a specific concept, but it is included ii the household waste.	☐ **Yes** ☒ **No**	☒ **Yes** ☐ **No**
Existing re-use/ recycling targets on bulky waste	None	No specifically in bulky waste, but it is included in the household waste.	None	Yes
Extended producer responsibility (EPR)	None	WEEE, batteries and medical waste.	None	WEEE and batteries.

While the waste regulation is decided either at national level (in Turkey), at regional level (in Belgium and Spain) or at both level (in Spain), the practical implementation of waste management is at municipal level in all 4 territories. In Spain and Belgium, municipalities can form consortium as shown by the examples of CVI or IMOG.

A regulation addressing specifically bulky waste is only available in the Province of Izmir (obligation to implement CAS within 2017) and in Flanders where the **VLAREMA** (the Flemish regulations for the sustainable management of material cycles and waste) sets specific requirements for bulky waste (minimum and the maximum tariffs to be paid for the collection of bulky waste, definition of the fractions that must be selectively collected…). There is no specific regulation on bulky waste in the Province of Valencia or in Warsaw. In Valencia, bulky waste is indirectly targeted by the legislation on municipal waste promoting selective collection: there is a model of ordinance with a list of admissible waste, where all types of bulky waste are included. The legislation targets establishes that: “By 2020, the amount of household and commercial waste sent to preparation for re-use and recycling shall be increased to a minimum of overall 50 % by weight for the following fractions: paper, metals, glass, plastics, bio-waste or other recyclable fractions.”

When it comes to regulation, the Flemish **Implementation Plan for Household Waste and Similar Industrial Waste** defines the main policy measures, targets and actions in order to further decrease the quantity of residual waste (of which mixed bulky waste is part of it) from households and similar waste from companies. Actions directly related to bulky waste, are:

- Municipalities with large amounts of bulky waste (and therefore high residual waste figures) will get guidance from OVAM to conceive an action plan. Through visitations and/or roundtables the policy and the situation of each municipality will be analysed. Also, the local re-use will be mapped.
- From 2017 on, the OVAM will examine which instrument can promote re-use, refurbishment, selective collection and recycling of furniture (both households and industrial). Based on the research results, the most appropriate mix of instruments will be introduced. This could lead to a new extended producer responsibility (EPR), but other instruments are also possible.
- Introduction of an extended producer responsibility of mattresses from January 1, 2018.

Specific reuse/recycling targets on bulky waste can only be found in the Flemish regulation, notably:

- Effective re-use achieved through the re-use centres: 7 kg per capita by 2022 with a re-use rate (sold / collected ratio) of at least 50%.
- The amount of plastics in the residual waste will be reduced with 50% compared to 2014.

4.2. Scope of bulky waste.

		Province of Izmir, Turkey	Region of Valencia, Spain	Warsaw, Poland	Region of Flanders, Belgium
Definition of Bulky waste		The National law define as: "discarded home furniture and electrical equipment such as refrigerators, washing machines and sofas". Province of Izmir: encompasses larger solid waste mostly voluminous waste consisting of household goods such as refrigerators, washing machines, seats, and not to be re-used.	There is no legal concept of bulky waste, but it is integrated into the concept of household waste, its integration into legislation would open up more possibilities in this field.	Bulky waste is one of the municipal solid waste (MSW) that may require special collection and management due to its shape, volume and/or weight, excluding f.ex. WEEE, C&D waste.	VLAREMA defines as: Bulky waste is the waste generated by the normal functioning of a private household and the similar waste, that does not fit in the collection container/bag due to their size, nature and/or weight, both collected door-to-door, as well as the residual fraction collected in the civic amenity sites that remains for incineration and landfilling.
Scope of Bulky waste	**Household waste**	YES	YES	YES	YES
	Non-household waste	NO	It depends on the CAS	From trade, services, handicraft, schools, industry. Excluding vehicles (decommissioned), and non-hazardous waste. The mixed solid waste remain municipal even if they have been processed but without crucial change of its features.	Similar bulky waste produced by businesses. Some civic amenity sites also collect residual fractions to be disposed in incineration or landfills.
	Cleaning up of illegal dumping	YES	YES	YES	YES

All countries have integrated the concept of bulky waste but in Spain is not declared as a concept, it is included in the household waste. Its integration into legislation would open up more possibilities in this field.

As it is shown in the table, the scopes of bulky waste consider the bulky waste as household waste, and the fraction belongs to non-household waste are not accepted in all of the areas, it depends on the CAS or in the different analysed areas, due to the municipalities or districts are responsible for the management of municipal waste. This point could hinder the comparison of the quantities collected in the locations of URBANREC Project due to non-quantifying the same fractions.

One of the scopes of the bulky waste is the cleaning up of illegal dumping. The different areas collect this waste, even in countries such as Belgium and Spain which is punishable by law. In Flanders, it exists a concept of illegal dumping.

4.3. Collections and treatments

The collection methods of bulky waste in the different areas are shown in the following table.

Table 12. Types of collection methods in each area analysed.

Turkey						
	CAS	**MCAS**	**Collection on demand**	**Kerbside collection**	**Reuse centres**	**TREATMENT**
Bornova			X	X	X	Preparation for reuse/ Landfilling
Aliağa			X			Preparation for reuse/ Landfilling
Bayrakli			X	X		Landfilling
Dikili			X	X		Landfilling
Gaziemir			X	X		Landfilling
Kiraz			X	X		Landfilling
Narlidere			X			Landfilling
Ödemis			X	X		Landfilling
Tire				X		Landfilling
Torbali			X			Landfilling
Spain						
	CAS	**MCAS**	**Collection on demand**	**Kerbside collection**	**Reuse centres**	**TREATMENT**
Region of Valencia	X	X	X	X	X	Preparation for reuse/landfilling /recycling
Consorcio Valencia interior	X	X	X	X	X	Preparation for reuse/landfilling/ recycling
Poland						
	CAS	**MCAS**	**Collection on demand**	**Kerbside collection**	**Reuse centres**	**TREATMENTS**
Warsaw	X	X		X		Recycling/landfilling/ incineration
Belgium						
	CAS	**MCAS**	**Collection on demand**	**Kerbside collection**	**Reuse centres**	**TREATMENTS**
Region of Flanders	X	X	X		X	Reuse/Preparation for reuse/recycling/ incineration with energy recovery (R1)/landfilling
Imog	X		X		X	Reuse/Preparation for reuse/recycling/ incineration with energy recovery (R1)/landfilling

Collection methods

Turkey, Province of Izmir

The most used collection methods are the following:

- Kerbside collection: in the most of districts cover the 100% of the population
- Collection on demand vary between 100 % and 25 % of population covered.

One of the negative points is the lack of data in terms of volumes collected in both methods.

Specifically, in Bornova, there is no local plan or strategy but bulky waste is collected by Social Affairs Department through 2 collections modes. Civic amenity sites are being considered; when they are implemented, the district will consider implementing specific targets for recycling of bulky waste.

Spain, Region of Valencia and Consorcio Valencia Interior

In Region of Valencia, the most used methods of collection are CAS, MCAS and kerbside collection/collection on demand system.

The following table show the description of the different methods to collect. In the case of the civic amenity site, there is one CAS per 22,500 inhabitants The MCAS accept mostly small waste and it does not allow mixed bulky waste, due to storage space. There is more specific information in the next table.

Table 13 Description of collection methods used in Region of Valencia.

	CAS	MCAS	Kerbside collection	Collection on demand
Number and population covered	222 (22,500 inhab./per CAS)	No data available	No data available.	No data available.
Access	ID card	ID card, without limitations.	No data available.	No data available.
Limitations	Payment asked if bring non-common household. However, waste is accepted to limit illegal dumping.	Storage space.	No data available.	No data available.
Acceptance of non-household	No.	Mostly small waste collected. Not collected mixed bulky waste.	No data available.	No data available.
Percentage of total municipal waste	6%	No data available.	1.70%	No data available.
Fractions sorted and aceppted	Average: 27 types of sorted fractions.	7 types of accepted fractions.	10 types of accepted fractions.	10 types of accepted fractions.

The highest percentages collected by CASs are from construction and demolition (C&D) waste and furniture (mixed bulky waste), see Table 3-3.

In Consorcio Valencia Interior the different methods are similar than in Region of Valencia and are shown in the following table. There is one CAS per 20,800 inhabitants and population can bring non-household goods (being non-hazardous waste).The MCAS accept mostly small waste and it does not allow mixed bulky waste and C&D waste, the limitations are from storage space. There is more specific information in the next table.

Table 14. Description of collection methods used in Consorcio Valencia Interior.

	CAS	MCAS	Kerbside collection	Collection on demand
Number and population covered	12 (20,800 inhab./per CAS)	5 containers.	22% of population covered.	60% of population covered.
Access	ID card.	ID card, no limitations.	No data available.	No data available.
Limitations	Limitations capacity of the facilities.	Limitations in storage space and C&D waste, mixed bulky waste and similar waste cannot be allowed. There is a 6m^3 compartment for sorting centre.	No data available.	No data available.
Acceptance of non-household	Yes, for non-hazardous waste, CVI has an ordinance of public prices to be able to admit in CASs (paying a fee), not yet operative.	No.	No data available.	No data available.
Percentage of total municipal waste	11.71%	0.19%	No data available.	No data available.
Fractions sorted and accepted	Average: 27 types of sorted fractions.	16 types of accepted fractions.	2 types of accepted fractions.	2 types of accepted fractions.

In 2014, ID cards were distributed to be able to use the services of the CASs and MCASs, in addition there was a campaign of sensitization in the press. Between 2014 and 2016, this was reversed in that the number of visits increased by 19% and therefore the amount collected by more than one ton see Figure 30.

In Consorcio de Valencia Interior, there is an irregular distribution of CAS (regarding inhabitant per CAS) due to the different geographic concentration of the population. For ejample, Utiel and Requena represents the 89% of the population . In the Region of Valencia does not accept the non-household bulky waste but in CVI does it, with the condition non-hazardous waste.

In CVI, the MCAS accept more types of fractions than in Region of Valencia but in other methods as kerbside collection or collection on demand have more types accepted at Regional level.

Poland, Warsaw

There is a waste collection schedule which indicates when the bulky waste should be displayed in collection points. It is acceptable for a company that collects waste to agree with the property owner a date of collection, but it should respect the schedule.

Inhabitants can also deliver bulky waste to the two available CAS, meaning there is one for 867.500 inhabitants. The CAS allow to sort 39 different fractions. In the MCAS accept only household waste (15 types of fractions accepted). The kerbside collection has a frequency of 1-4 times per month and it is subcontracted to a private company.

Table 15. Description of collection methods used in Warsaw.

	CAS	MCAS	Kerbside collection
Number and population covered	2 (867,500 inhab./CAS)	5 trucks.	100% of the population covered.
Access	Only available to Warsaw habitants.	No control Access.	No data available.
Limitations	None.	Only household waste is accepted.	No data available.
Acceptance of non-household	No (no specifications of excluded fractions).	No.	No data available.
% of total municipal waste	No data.	No data available.	No data available.
Fractions sorted and accepted	Average: 39 types of sorted fractions.	15 types of accepted fractions.	8 types of accepted fractions.

*Collection on demand: not used.

The highest percentage of quantities collected in CAS corresponds to the C&D waste and in a smaller amount to a green waste.

Belgium, Region of Flanders and Imog

In Flanders, a lot of streams are collected source-separated such as for example non-treated wood in order to promote re-use, recycling, ... The remaining household solid waste that is not source-separated (the residual waste), consists of household residual waste, mixed bulky waste and municipal waste (waste from swiping and cleaning roads and waste from public garbage cans along the road). There is a list of the streams that are obliged to collect source-separated with the obliged collection method (door-to-door, bring method, CAS) and the minimum frequency.

(Mixed) bulky waste can be collected by the municipality through a fixed door-to-door collection, or through a collection on demand (via the purchase in advance of a sticker, via an advanced payment…). However the most common collection method is CAS.

Re-usable goods are collected by the re-use centres through collection on demand or by the citizens by bringing the products to a re-use centre, to a CAS equipped with a specific container for re-usable goods or to a bring bank (for textiles).

In general, collection *on demand* and the bring method to the civic amenity site or the re-use centre are preferred, because this collections methods are favoured since they allow source separation and preserve the quality of the products or of their components, favouring re-use and recycling. It is also economically less efficient to collect the bulky waste by kerbside collection since at the collection time a lot of households have not bulky waste that has to be collected (already brought to the CAS because of a lack of space, more expensive than bringing by themselves to the CAS, no bulky waste produced, …).

According to the legislation the minimum obligation is:

- a CAS is mandatory for every municipality of more than 10,000 inhabitants. A municipality of more than 30,000 inhabitants needs to add a CAS per started disc of 30,000 inhabitants.

or

- 90% of the inhabitants live up to max. 5 km away (in a nutshell) of a civic amenity site to which he can access.

At the moment, 95.8% of the Flemish population lives at about 5 km from an existing CAS.

The existence of reuse containers in a CAS is quiet common but it is not mandatory. The mobile CAS includes two types: permanent mini-CAS and temporary mobile CAS. The MCAS are included in the new implementation plan but it's up to the municipalities whether they will implement them or not.

Table 16. Description of collection methods used in Region of Flanders.

	CAS	MCAS	Kerbside collection	Collection on demand
Number and population covered	335 (19,300 inhab./CAS).	1 temporary (in 2015) contains a container per collected stream.	Not allowed anymore for BW collection.	100% of the population covered (min. twice a year/ continuously for reusable products).
Access	Variable: ID card, type of vehicle… (depending on the CAS).	Depending on the MCAS.	No.	Living in the concerned municipality or in the working area of the concerned reuse centre.
Limitations	Variable: Volume brought and/or number of visits (depending on the CAS).	Vriable: f.ex, Volume brought (depending on the MCAS).		- Limited calls per year. -Payment of a fee, amounts depends on the municipality or the intermunicipal organization. - in case of re-use centres a good quality is necessary or the product will not be taken.

Acceptance of non-household	Yes	No.	No	No
Reuse containers	While not mandatory, quite common in Flemish CAS.	Not mandatory, but possibility.	N/A	N/A
Percentage of total municipal waste	39% of the municipal waste is collected via a CAS.	No data.	0.4% of the municipal waste collected door-to-door is mixed bulky waste and 4.5 % of the mixed bulky waste collected is a door-to-door collection	61% of the waste collected is mixed bulky waste and 1.7% of the mixed bulky waste collected, is collected on demand
Fractions sorted	Average of 20 (not only bulky waste).	Depending on the municipality or intermunicipal organization.	In general, at least household solid waste streams list need to be collected door-to-door source-separated.	In general, a list of household solid waste streams are collected on demand.

A minimal fraction of waste (12%, of which 1.2% is mixed bulky waste) is collected via other collection scheme, such as the municipal depot, traders, schools, district collection (bring banks for glass or textile containers for example) and others. In the IMOG-region, the (mixed) bulky waste is collected on demand or by bringing the bulky waste by yourself to the civic amenity site (CAS).

Re-usable goods are collected on demand, operated by the re-use centre South-West Flanders, or by bringing the re-usable goods to one of the shops coordinated by the re-use centre South-West Flanders, to the re-use centre by itself, to a bring bank or to a CAS equipped with a specific container for re-usable goods. In the following table there is more specific information about the collection methods.

Table 17. Description of collection methods used in Imog.

	CAS	Collection on demand
Number and population covered	17 (13,700 inhab./CAS)	100% of the population covered.
Access	ID card, type of vehicle…depending on the CAS.	Operated by IMOG.
Limitations	Volume brought and number of visits.	Conditions payment of the waste fee(C&D, Green waste, mixed bulky waste).
Acceptance of non-household	Yes, the local authorities are asked to encourage SMEs on their territory to selectively deposit small amounts of waste in their CAS. Only if the industrial waste is similar to household waste in nature composition and quantity.	
Reuse containers	Yes	N/A

Percentage of total municipal waste	34.9 % in comparison of other collection methods. 15.6% of the waste collection in CAS concerns mixed bulky waste and 98.4% of the mixed bulky waste collected, is collected via the CAS.	47.7% concerns mixed bulky waste and 1.6% of the total amount of mixed bulky waste collected.
Fractions sorted	39 (not only bulky waste).	6 types of accepted fractions.

*MCAS and kerbside collection: not used.

In comparison with other collection methods the CAS in Region of Flanders collect more municipal waste than Imog due to a high number of inhabitants per CAS in Region of Flanders.

The collection on demand covers the 100% of population in both. In Region of Flanders, the highest amount is destined to reuse due to the collection on demand is operated by reuse centres.

As it is shown in the table 3-6, there are more ways to collect the bulky waste in the Region of Flanders. In both cases the major part of the waste is destined to recycling and followed of composting.

Treatments

Turkey, Province of Izmir

All of the collection methods are carried out by local authorities. In general, all waste is sent to landfill and one part of this bulky waste could be suitable to destiny to other better methods environmentally talking as reuse or recycling. There is no available sorting centre to identify different parts to recycle or to reuse.

They have some exceptions at regional level (Province of Izmir) as:

- Social markets organize a bulky waste collection and sell them.
- Municipalities collect wooden waste for residential heating.
- NGOs collect textiles with dedicated bring banks.

Spain, Region of Valencia and Consorcio Valencia interior

In this case, there are data quantities of different types of methods according to separation at the source or mixed fractions. In Region of Valencia the highest amount in civic amenity sites is destined to sorting centre where the materials suitable for recycling is easy to identify it, but in the mixed fractions the highest amount are destined to landfill, because there is no a previous part to separate in each material to enable other methods available as recycling or reusing, see Table 3-2. In CAS the mixed bulky waste part belonging to wood furniture is destined to recycling.
In Consorcio Valencia Interior, the quantities of bulky waste from fractions separated at the source are destined to recycling, but in mixed fractions the highest part is destined to sorting centre where the materials suitable to recycle is separated, however the part destined to the landfill is still high, see Table 3-4.

Poland, Warsaw

All of the collected waste is going to sorting plants where materials suitable for recycling are separated manually and mechanically. Wood is sent to recyclers for a production of chipboard and metal is sent to recyclers/ironworks. The rest is dismantling and converted in energy, minimal quantities are destined to landfill.

Belgium, Region of Flanders and Imog

In Flanders, an extensive source-separated collection carried out by the citizen which reduces the amount of mixed bulky waste and facilitates re-use and recycling. The remaining mixed bulky waste is incinerated with energy recovery (R1) (93%) or landfilled (7%).

Imog operates a sorting centre for bulky waste to take out valuable materials of the mixed bulky waste as well as of the source-separated wood fraction. The sorting centre allows separating materials of mixed bulky waste (containers in CAS of different materials) with high potential value of recycling. The major part sorted is destined to recycling.

Reuse centres and preparation for reuse

Turkey, Province of Izmir

In the districts of Bornova and Aliağa have the possibility to prepare the bulky waste for reuse, and in Bornova there is a reuse centre, as in the last paragraph was commented. In addition, there is a reuse center; where they work through the collection on demand and through brought by donors in the center itself. The center of reutilization is carried out by local authorities that could mean a greater control of the incoming quantities. The data of 2015 is the following:

- 5000 ítems of furniture.
- 10 tonnes of clothes.

Spain, Region of Valencia and Consorcio Valencia interior

The data of the separate fractions at the reuse centres in the Region of Valencia and Consorcio Valencia Interior are not available. There is no regulation of reuse centres in Region of Valencia.

The data of reuse of Spain are collected from various non-profit organizations as AERESS (Spanish Association of Recovery Companies of Social and Solidarity Economy). The next table shows that highest percentage collected by AERESS is from bulky waste.[3]

Table 18. Amounts of waste collected by AERESS in Spain (2016).

Collected types	Amount (tons)	Percentage (%)
Bulky waste	**28,430.5**	**33.87**
Textiles	26,043.05	31.03
Paper/cardboard	10,241.11	12.2
WEEE	9,654.59	11.5
Toxic wastes	2,314.84	2.76
Vegetable oil	1,659.29	1.98
Light packaging	58.39	0.07
Glass	1,258.42	1.5

[3] www.aeress.org

Collected types	Amount (tons)	Percentage (%)
Organic material	0	0
Debris	2,764.33	3.29
Pruning	1,496.03	1.78
Tyre	17.66	0.02
Total	83,938.21	100

In the next figure we can see the percentages destined to reuse, recycling and reject fraction and others. The percentage belonging to reuse is low yet.

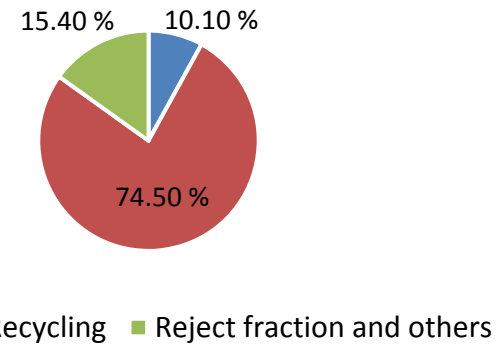


Figure 45. Graph with the different percentages destined to reuse, recycling or to reject fractions and others.

In the Region of Valencia there are four associations (belonging to AERESS) that collect bulky waste:

- Fundació tots units (Reciplana Recuperacions 2010 S.L.E.I.) (with the possibility to repair household appliances and electronics). The association is dedicated to the management of waste whose purpose is the labor insertion of people in situations of social exclusion through a work itinerary that aims to improve the employability of these people in the current labor market.
- Asociación Proyecto Lázaro. They have been working in the area of socio-labor insertion, giving priority, when it comes to being a beneficiary of our services, to those people who are excluded from the labor market and who also have, due to various factors, problems of social integration.
- Asociación El Rastrell: They collect in homes and in the containers of the street, is carefully selected to destine it to the necessary end. Either it is put back on sale in our network of stores or it is taken to waste plants where it is recycled as raw materials. Work on the environment and social economy.
- El Cuc Centre de Recuperació Coop. (with the possibility to repair furniture). In this association collects paper and paperboard, electrical and electronic equipment and bulky waste (furniture, household goods ...). They offer a free collection in home. They sell the second-hand products in a shop.

Warsaw, Poland

There is no information available.

Belgium, Region of Flanders and Imog

The reusable goods should be separated at the source as much as possible. For that, collection on demand (by the municipality or re-use centre) and bringing the goods to a CAS or to the re-use centre are preferred, because they allow a better separation and less damage of the goods. In total 50% of reusable goods collected by the reuse centres, are sold.

In 2015, the re-use sector consisted of 31 individual and autonomous enterprises (non-profit organizations, social economy), each one with its own well-assigned operating/collection area.
The number of clients per year are estimated in function of the pay desk transactions. In 2015, 5.6 million paying customers where counted.

OVAM supports the reuse centres by different ways:

- Policy: recognition of the re-use sector, accreditation of the re-use centres, determination of their operating area.
- Financial support: annual subsidies determined on the basis of the number of inhabitants and the amount of sold products.
- Monitoring.
- Communication and support of the sector.

There are six reuse centres in Imog clustered in one organization (de Kringloopwinkel vzw). The table 3-10 shows the quantities collected to reuse which the highest amount is belonging to furniture (437.3 t/vr) and followed of clothes (311.6 t/vr).

5. Conclusions

In this section the main difficulties that are presented in the bulky waste management in each analysed area are evaluated. In the next table is shown some critical points of the analysis.

Table 19. Critical points of the situation in the four areas analysed.

	Province of Izmir	Region of Valencia	Warsaw	Region of Flanders
Existing reuse/recycling targets on bulky waste	No	Yes	No	Yes
Collection methods	↑↑	↑↑↑↑	↑↑↑	↑↑↑↑
CAS availability	↑	↑↑↑↑	↑↑	↑↑↑↑
Reuse centre	↑↑	↑↑↑	↑	↑↑↑↑
Overall reuse performance	↑	↑↑↑	↑	↑↑↑↑
Recycling quantitites	↑	↑↑↑	↑↑	↑↑↑↑
Landfill quantitites	↑↑↑↑	↑↑	↑↑	↑↑
	↑↑↑↑	↑↑↑	↑↑	↑
Explanation	Well advanced	Advanced	With projection	Non - advanced

Spain and Belgium/Flanders have an extensive network for (mixed) bulky waste /re-usable goods collection, thus increasing the amount which they can collect and avoiding illegal dumping.

In Warsaw compared to Spain or Belgium has less availability of CASs, but it compensates this low number of civic amenity sites with a good door-to-door collection system, but there are no reuse.

In Province of Izmir (Turkey), only two methods are available (collect on demand and kerbside collection), in which the civic amenity site is excluded, and they have only one reuse centre, insufficient to treat or to sell all of the bulky waste reusable in all over territory. The government of Turkey has targets about specific bulky waste to establish CAS all over the country.

One of the problems with reference to the civic amenity sites in Spain is the low availability of them in remote areas, that is to say, small towns far from large urban centres.

In Flanders, strict rules exist on the establishment of civic amenity sites, covering 95.8% of the population living within 5 km of a CAS.

Concerning on the different types of methods in Province of Izmir most of the bulky waste is destined to landfill, because of the inhabitants do not have the possibility to bring their bulky waste, to allow good separation at source and to distinguish different products suitable for reuse or recycling, and to increase the number of reuse centres. In addition, the lack of monitoring of the waste management by local authorities.

The bulky waste treatment in Warsaw is only available through sorting centres but no other systems such as reuse, leaving many of the products dismantled and recycled without the possibility of giving it a second use. In addition, there are no specific targets on bulky waste to be able to advance in the management system.

Twenty years of experience and several key-success factors such as the inclusion of reuse in the local household waste management policy in Flanders (Belgium) result in a high presence for the re-use sector.

In Spain, through associations like AERESS that are non-profit organizations establish good management, but there is no control from the government on the amounts collected, because there is no regulation about this type of collection. In the District of Bornova (Turkey) has only one reuse centre reducing the amount of bulky waste destined to worse treatment methods but not enough to cover the entire population.

After dealing with the different blocks on collection, treatment and reuse goods could be said that one of the critical points in the management of bulky waste is the lack of monitoring of quantifying the amount of products, the percentages of utilization of the different collections and treatments in order to be able to visualize the possible problems that may exist around the management of voluminous waste and to act on them. In Flanders, they have a good management in reference with the monitoring of the quantifying the products.

There are still too much products/material in the mixed bulky waste that is incinerated, even though for example in Belgium/Flanders the source-separated collection is far advanced, wood and metal are mandatory to be taken out of the bulky waste (before or after collection) and the mixed bulky waste may not contain reusable goods. One of the challenges is to find an economic value of the secondary materials for which a market is still difficult to find.

Finally, one of critical points is derived from the high amount of non-separated bulky waste (counted in Spain and Belgium). At the moment there is still much that is destined to landfill or incineration that have a high potential of another type of recovery or reuse. It is also true that the cost of increasing CAS sizes, with the possibility of owning more containers or dismantling or separation plants to have a greater facility of identifying which materials are susceptible to be recycled or reused.

Belgium/Flanders has an advanced bulky waste management system with a very well-equipped infrastructure for collection and treatment of bulky waste. One of the reasons is that waste management is conducted by one public body, namely the OVAM, who's exclusively dedicated to waste and contaminated soils.

Also, because of its special characteristics, bulky waste is considered as a specific waste stream within the household waste and with proper legal and political policy measures for bulky waste management.

Furthermore, Belgium/Flanders has a long history of re-use and recycling of waste, resulting in a high environmental awareness of society. It should be noted that participation of society is critical to achieve high yields of collection of bulky waste.

The main difficulties observed in the other analyzed areas are aligned on the lack of monitoring, effectiveness separation, types of collection methods, among others.

The waste fractions targeted by URBANREC Project are shown in the tables 3-1, 3-5, 3-8 and 3-11, where are distributed in different waste fractions and if there is separation at the source or not, the quantities and the destination of the different types of waste.

In Bornova, the different types of waste if there is no separation at the source is destined to landfill. If it exists the possibility of the separation at the source the destination could be reused, landfilled, recycled or brought to compost facility. In the current situation Bornova collect mattresses, furniture, textiles, hard plastics and wood by collection on demand and kerbside collection. The project introduces the collection of tyres with a recycling destination.

In Poland, there is no data available on specific fractions. The data collected are mainly on total quantities of bulky waste. In general, disassembly is the first stage in the recycling process, then wood (10%) and metal (2%) are recovered, and residues are used to produce alternative fuels (fragmentation).

In CVI, it is quantified only the waste separated at the source in the CAS. At this moment in CAS are available to collect mattresses, wooden furniture, textiles, hard plastics and tyres. Only in tyres and in wooden furniture have the possibility of recycling.

The different fractions collected In Region of Flanders are usually collected in different materials, not in different products (e.g. the wood furniture is collected in wood containers). The mattresses and tyres are not obliged to separate in the source but separated in the most of CAS. The upholstery is separated at the source in the reuse centre, but if there is no the possibility of the reuse It will be considered as mixed bulky waste (42.7 % of mixed bulky waste on kerbside collection, in 2011). The most quantity of mixed bulky waste is destined to reuse, recycling and incineration, improving the current situation of the mixed bulky waste which is destined mostly to incineration.

In Imog, it is encouraging to reuse the bulky waste, as it shows in the table 3-11. The most of fractions are collected by CAS, bring banks or reuse. If the fractions do not separate in the source it is been considered as mixed bulky waste. The CAS of Imog separate mattresses, textiles, hard plastics, tyres and wood, the upholstery, wooden furniture and plastic furniture if there is separation at the source the waste is destined to reuse.

6. References

The various elements presented in the factsheets were provided by the different municipalities, local and regional authorities involved in the project.

7. Annexes

In the next annexes are included the template of the factsheet to complete in each region and the completed factsheets.

ANNEX 1: final version of the template

URBANREC – Bulky waste Factsheet

This factsheet aims at presenting your local situation regarding bulky waste management, including the framework, the collection and sorting schemes in place, overall quantities and specific instruments implemented to promote bulky waste re-use, recycling and proper treatment. It will be used to assess the starting situation and identify room for improvement.

Please fill in this factsheet with your local/regional information. If you think any further information is important to detail your situation, do not hesitate to add some comments. Moreover, if some data are not available, please specify the reason. If discrepancies within your territory make it difficult to give an average situation, make sure to explain it in a short text. Any picture can be added if you think it clarifies the descriptions. Do not hesitate to add relevant information (other waste fractions, regional instruments…) if it is missing in the tables. Make sure to discuss with the other partners gathering data on the same territory as yours so that the information you provide are complementary, consistent and possibly not overlapping.

For any question regarding the factsheet, please contact ACR+ (Jbb@acrplus.org - bs@acrplus.org)

Timeline for this assignment:

Date	Activity
15/11/2016	Definitive version of the factsheet uploaded
15/12/2016	**Factsheets completed by territories – feedback from ACR+**
15/01/2017	**Final version of the factsheets sent to AIMPLAS - feedback**
31/01/2017	Final factsheets sent to AIMPLAS
End of Feb 2017	Submission of the report D1.1

List of the abbreviations used:

Abbreviation	Signification	Definition
C&D	Construction and Demolition	Waste that arises from construction and demolition activities. It mostly consists of inert waste
CAS	Civic Amenity Site	A guarded, fenced-off area where residents can dispose of and sort out their household waste into receptacles in order to be recycled or otherwise treated, under the control of an on-site supervisor.
EEE	Electrical and Electronic Equipment	Electrical or electronic devices
LA	Local authority	Municipality or group of municipalities responsible for waste management (collection and/or treatment)
MCAS	Mobile Civic Amenity Site	A temporary installation in a public area where residents can dispose of and sort out their household waste in order to be recycled or otherwise treated. Unlike a regular CAS, the mobile CAS is only open or limited periods and is generally smaller.
PAYT	Pay as you throw	The system of waste collection in which waste producers pay for the waste collection depending on the quantity of waste produced.
WEEE	Waste Electrical and Electronic Equipment	Discarded electrical or electronic devices as defined in the WEEE Directive 2012/19/EU

TERRITORY

Name		*MAP OF THE TERRITORY IN THE COUNTRY*
Population		
Density		*MAP OF THE TERRITORY IN THE REGION OR MAP OF THE LA IF COMPOSED OF SEVERAL MUNICIPALITIES*
Urbanisation class		
Short presentation (please detail the specificities of your territories: typology of the housing, socio-demographic elements, weather… If your organisation is a group of municipalities, please explain its composition and its organisation. Please specify the roles and responsibilities of your territory regarding waste management: waste collection/treatment…		

Urbanisation class:
A: 50 – 100% of population living in multi-family houses
B: 30 – 49% of population living in multi-family houses
C: 20 – 29% of population living in multi-family houses
D: 8 – 19% of population living in multi-family houses
E: 0 – 7% of population living in multi-family houses

GENERAL FRAMEWORK (IF A REGIONAL FACTSHEET IS FILLED FOR YOUR TERRITORY, DO NOT FILL IN THE GREY PART)

At which level is the waste regulation voted?	☐ National ☐ Regional
Main regulation on waste	*Please present the main regulation and the main content (responsibilities for municipal waste management – planning, operational level, priorities, specific obligations….).*
Regional waste strategy (Name and general content)	*If there is a regional waste strategy, please give the main outlines: main objectives, activities foreseen (implementation of civic amenity sites, promotion of re-use…).*
Specific regulation on bulky waste (who is responsible, precisions?)	*Please explain the regulation and framework related to bulky waste, if any: responsibilities, possibilities for collection and treatment, regulation on illegal dumping…*
Existing reuse / recycling targets on bulky waste (general, by material fraction…)	*Please indicate the **quantitative** targets applicable to bulky waste*
Existing EPR schemes for bulky waste: ☐ WEEEs ☐ Furniture ☐ Batteries ☐ Other? (Specify):……	
Local waste strategy (Name and general content, if any)	
General organisation of bulky waste collection	
Existing recycling targets on bulky waste (if different than national/regional)	

DEFINITION AND SCOPE OF BULKY WASTE

National definition of bulky waste	
Is the local definition the same definition as the national/regional one?	☐ Yes ☐ No
If different from the legal definition, specify it	

Specify the categories included in your scope for bulky waste:
☐ Household bulky waste
☐ Non-household bulky waste (if yes, please specify: ……)
☐ Cleaning up illegal dumping
☐ Other (specify: ……..)

COLLECTION SCHEME

CIVIC AMENITY SITES (CAS)

A guarded, fenced-off area where residents can dispose of and sort out their household waste into receptacles in order to be recycled or otherwise treated, under the control of an on-site supervisor.

Are CAS in use in the territory? ☐ Yes ☐ No Number of CAS in the territory: ……

Number of visitors per year: ……..

Accessibility *(if data are heterogeneous among CAS, please present the most common situation)*

Opening time (days in a week): ……. Opening hours: from …… to …….

Open on Saturday ☐ Yes ☐ No

Control of the access? ☐ Yes ☐ No Mode of control (cards, ID, type of vehicle…): ……

Limitations? ☐ Yes ☐ No Type of limitation (number of visits? / Volume?): …….

Conditions for accepting waste (fee, limits, proof of payment the waste fee…): ……..

Is there an employee providing support/assistance: ☐ Yes ☐ No

Non-household waste accepted? ☐ Yes ☐ Only certain types of waste ☐ No

Types of non-household waste accepted: …….

Conditions for accepting non-household waste (fee, limits…): ……..

Waste collected

Average number of fractions sorted: …….. Re-use container/section? ☐ Yes ☐ No

% of municipal waste collected in CAS :

Collected fractions:

- ☐ Cardboard
- ☐ Wood
- ☐ WEEE
- ☐ Furniture
- ☐ Mattresses
- ☐ Textiles
- ☐ Hard plastics
- ☐ Mixed bulky waste
- ☐ Different containers for burnable/non-burnable
- ☐ Other (specify): ……..
- ☐ Big toys
- ☐ Carpets
- ☐ Other plastics
- ☐ Metal
- ☐ Green waste
- ☐ C&D waste
- ☐ Chemical waste
- ☐ Batteries

INSERT A PICTURE HERE

Collected quantities in CAS

Type of fraction	***Destination***	***Quantities (t/yr)***
Sorted fractions (homogeneous fractions collected in a specific container)	Re-use	
	Recycling	
	Dismantlement	
	Sorting centre	
	Incineration with energy recovery	
	Incineration without energy recovery	
	Landfilling	
Mixed fractions (residual fractions mixing different types of waste)	Sorting centre	
	Incineration with energy recovery	
	Incineration without energy recovery	
	Landfilling	

MOBILE CIVIC AMENITY SITES (MCAS)

A temporary installation in a public area where residents can dispose of and sort out their household waste in order to be recycled or otherwise treated. Unlike a regular CAS, the mobile CAS is only open or limited periods and is generally smaller.

Are MCAS in use in the territory? ☐ Yes ☐ No

Number of MCAS system (set of containers used in different locations) in the territory: ……

Type of MCAS in use:

- ☐ Truck (specify – van<3,5t; lorry>16t; lorry>32t):….
- ☐ Containers
- ☐ Other (specify): …….

Number of visitors per year: ……..

Accessibility

Number of different collection areas where MCAS are proposed: …….

Types of areas in use (public space, parking lots, market places…):……

Opening time (days in a **month**): …….

Opening hours: from …… to …….

Open on Saturday ☐ Yes ☐ No

Control of the access? ☐ Yes ☐ No Mode of control (cards, ID, type of vehicle…): ……

Limitations? ☐ Yes ☐ No Type of limitation (number of visits ? / volume?): …….

Conditions for accepting waste (fee, limits, proof of payment the waste fee,…): ……..

Is there an employee providing support/assistance: ☐ Yes ☐ No

Non-household waste accepted? ☐ Yes ☐ Only certain types of waste ☐ No

Types of non-household waste accepted: …….

Conditions for accepting non-household waste (fee, limits…): ……..

Waste collected

Average number of fractions collected: ……..

Re-use container? ☐ Yes ☐ No

% of municipal waste collected in MCAS :

Collected fractions:

☐ Cardboard
☐ Wood
☐ WEEE
☐ Furniture
☐ Textiles
☐ Mattresses
☐ Hard plastics
☐ Mixed bulky waste
☐ Different containers for burnable/non-burnable
☐ Big toys
☐ Carpets
☐ Other plastics
☐ Metal
☐ Green waste
☐ C&D waste
☐ Chemical waste
☐ Batteries

INSERT A PICTURE HERE

Collected quantities in MCAS

Type of fraction	***Destination***	***Quantities (t/yr)***
Sorted fractions (homogeneous fractions collected in a specific container)	Re-use	
	Recycling	
	Dismantlement	
	Sorting centre	
	Incineration with energy recovery	
	Incineration without energy recovery	
	Landfilling	
	Sorting centre	

Mixed fractions (residual fractions mixing different types of waste)	Incineration with energy recovery	
	Incineration without energy recovery	
	Landfilling	

RE-USE CENTRES

A centre operated by or on behalf of a local authority or by an association (charity, social economy organisation) where people can donate products/waste that are then prepared for re-use (checking, cleaning, and possibly repairing) and made available for redistribution or sales.

Are reuse centres available in the territory? ☐ Yes ☐ No

Number of re-use centres in the territory: ……

Operated by: ☐ Local authorities ☐ Charity organisation ☐ Other (specify): …….

Data on re-use centres might be challenging to collect (e.g. from the charity sector). Please specify the scope for which you could retrieve the data which are presented below:

Number of visitors (donors) per year: ……..

Type of collection

☐ Brought by donors
☐ Link with a CAS
☐ On demand
☐ On kerbside
☐ Other (specify):……

Products/waste accepted

☐ Household furniture
☐ Business furniture
☐ EEE
☐ Household goods
☐ Leisure time items
☐ Books & Multimedia
☐ Do-it-yourself
☐ Transportation
☐ Gas appliances and others
☐ Clothes
☐ Other (specify):……

Operations

☐ Waste collection
☐ Preparation for re-use
☐ Repairing
☐ Awareness raising
☐ Sales of products
☐ Sales of recycled materials
☐ Other (specify):……..

Number of employees: …… Number of social economy employees:……

Relations with the local authority (if operated by charities)

☐ Subsidies
☐ Collection of waste
☐ Treatment of disposable fractions
☐ Other (specify):……..

Re-used products	**Quantities (t/yr)**
Furniture	
Among which : mattresses	
EEE	
Household goods	
Leisure time items	
Books & Multimedia	
Clothes	
Other	
TOTAL RE-USE	

Other fractions	**Destinations**	**Quantities (t/yr)**
Sorted fractions (homogeneous fractions collected in a specific container)	Recycling	
	Dismantlement	
	Sorting centre	
	Incineration with energy recovery	
	Incineration without energy recovery	
	Landfilling	
Mixed fractions (residual fractions mixing different types of waste)	Sorting centre	
	Incineration with energy recovery	
	Incineration without energy recovery	
	Landfilling	

KERBSIDE COLLECTION

*The collection of household **bulky waste** takes place from door to door or from one house to the next. Waste materials are collected from resident's doorsteps at regular frequency*

Is kerbside collection in use in your territory? ☐ Yes ☐ No

Frequency of collection (per month):……. % of the population covered:……..

Operated by: ☐ Local authorities ☐ Charity organisation ☐ Other (specify): …….

Type of lorry: ☐ with compactor ☐ platform lorry ☐ Others (specify) …….

Type of transport (e.g. van<3,5t, lorry>16t, lorry>32t):

Conditions for accepting waste (fee, limits, proof of payment the waste fee…): ……..

Accepted waste

☐ Cardboard	☐ Hard plastics
☐ Wood	☐ Other plastics
☐ WEEE	☐ Metal
☐ Furniture	☐ Green waste
☐ Mattresses	☐ C&D waste
☐ Other (specify): ……..	☐ Textiles

INSERT A PICTURE HERE

Collected quantities by kerbside collection

Type of fraction	***Destination***	***Quantities (t/yr)***
Sorted fractions (homogeneous fractions collected in a specific container)	Re-use	
	Recycling	
	Dismantlement	
	Sorting centre	
	Incineration with energy recovery	
	Incineration without energy recovery	
	Landfilling	
Mixed fractions (residual fractions mixing different types of waste)	Sorting centre	
	Incineration with energy recovery	
	Incineration without energy recovery	
	Landfilling	

COLLECTION ON DEMAND

The collection of household bulky waste in front of a house after appointment (taken by phone, via a website,…).

Is the collection on demand in use in your territory? ☐ Yes ☐ No

% of the population covered:……..

Operated by: ☐ Local authorities ☐ Charity organisation ☐ Other (specify): …….

Type of lorry: ☐ with compactor ☐ platform lorry

Type of transport (e.g. van<3,5t, lorry>16t, lorry>32t):

Conditions: ☐ limited calls per year
☐ fee (specify amount): …….
☐ limited to certain conditions (specify):……..

Accepted waste

- ☐ Cardboard
- ☐ Wood
- ☐ WEEE
- ☐ Furniture
- ☐ Mattresses
- ☐ Textiles
- ☐ Other (specify): ……..
- ☐ Hard plastics
- ☐ Other plastics
- ☐ Metal
- ☐ Green waste
- ☐ C&D waste
- ☐ Hazardous waste

INSERT A PICTURE HERE

Collected quantities

Type of fraction	***Destination***	***Quantities (t/yr)***
Sorted fractions (homogeneous fractions collected in a specific container)	Re-use	
	Recycling	
	Dismantlement	
	Sorting centre	
	Incineration with energy recovery	
	Incineration without energy recovery	
	Landfilling	
Mixed fractions (residual fractions mixing different types of waste)	Sorting centre	
	Incineration with energy recovery	
	Incineration without energy recovery	
	Landfilling	

OTHER SPECIFIC COLLECTION SCHEME

Any collection scheme not belonging to the previous categories (collection in shops, take back systems….

Description:

Where is the collection taking place?

Which waste streams are collected?

Who does organise the system?

Please present the general principles and associated quantities:

SORTING FACILITY FOR NON-REUSABLE BULKY WASTE

A facility intended to segregate recyclables such as paper and cardboard, glass, wood and metals from the collected bulky waste through manual sorting, manual sorting belts and/or automatic processes such as air flow or optical separators.

Is there bulky waste sorting centre in use in your territory? ☐ Yes ☐ No

Number of bulky waste sorting centres: …… Total capacity: …… t/yr

General description of the process (*type of sorting lines, manual sorting…). Any diagram or figure presenting the process is welcome.*

Sorted fractions:

- ☐ Cardboard
- ☐ Wood
- ☐ Furniture
- ☐ Textiles
- ☐ Mattresses
- ☐ Other (specify): ……..
- ☐ Hard plastics
- ☐ Other plastics
- ☐ WEEE
- ☐ Metal
- ☐ C&D waste

Average sorting residues rate (%): ……

INSERT A PICTURE HERE

Collected quantities

Type of fraction	***Destination***	***Quantities (t/yr)***
Sorted fractions (homogeneous fractions collected in a specific container)	Re-use	
	Recycling	
	Dismantlement	
	Incineration with energy recovery	
	Incineration without energy recovery	
	Landfilling	
Sorting residues	Incineration with energy recovery	
	Incineration without energy recovery	
	Landfilling	

COMPOSITION ANALYSIS

A composition analysis consists in various measurements aiming at assessing the average composition (i.e. the distribution of the various waste fractions) within a mixed waste stream (e.g. residual waste or mixed bulky waste).

Have you already performed a composition analysis for mixed bulky waste? ☐ Yes ☐ No

For which bulky waste stream:
☐ Mixed bulky waste collected in CAS
☐ Mixed bulky waste collected on the kerbside/on demand
☐ Mixed bulky waste entering the sorting facilities
☐ Other (specify):……..

Year of the latest composition analysis:……..

Are you planning to do one over the course of the project? ☐ Yes ☐ No
If yes, please specify when:…….

If a composition analysis on bulky waste has been performed on your territory, please specify the proportion (in %) of the various material fractions. Please specify the waste stream concerned by the composition analysis (e.g. mixed fraction in CAS, mixed bulky waste collected on the kerbside, mixed fractions entering bulky waste sorting centre…). Do not hesitate to add lines to the tables for missing.

Material fractions	***SPECIFY THE WASTE STREAM***	***SPECIFY THE WASTE STREAM***	***SPECIFY THE WASTE STREAM***
Annual quantities (t/yr)			
Cardboard			
Wood			
WEEE			
Furniture			
Mattresses			
Fixtures and fittings			
Upholstery			
Wooden furniture			
Plastic furniture			
Hard plastics			
Other plastics			
Metal			
Green waste			
C&D waste			
Hazardous waste			
Textiles			
Residual fraction			
Please specify the size of fine elements, if any (in mm)			

FINANCIAL DATA

Average costs for **bulky waste management**: *please indicate* ***the cost borne by local authorities*** *for collection and treatment, i.e. the total technical costs minus the incomes from material sales and possible subsidies:*

	CAS	Mobile CAS	Reuse	Kerbside	On demand	Illegal dumping	Total
…. €/t							
…. €/visitor							

How do citizens pay for waste management:

☐ Tax (no link with waste production, e.g. based on property value)

☐ Fee (with no link with waste production, e.g. based on the number of inhabitant)

☐ PAYT system (in relation with the waste production. Please specify how it is calculated:……)

Please provide any further information explaining how citizens pay for bulky waste management

Economic instruments in place :

Type of instrument	Yes	No	Describe the instrument
PAYT system	☐	☐	
Fees for companies	☐	☐	
Fines for illegal dumping	☐	☐	
EPR system	☐	☐	(please detail the products concerned)
Other (specify):…….	☐	☐	

LEGAL INSTRUMENTS

Mandatory separately collection scheme in force: ☐ Yes ☐ No

Which waste streams: ……

Landfill bans: ☐ Yes ☐ No

Which waste streams: ……

Incineration bans: ☐ Yes ☐ No

Which waste streams: ……

Others (specify) : ……..

COMMUNICATION AND INFORMATION ON BULKY WASTE

Local communication strategy for bulky waste: ☐ Yes ☐ No	
Description of the communication strategy *(Main objectives, target audience, main messages: re-use, illegal dumping, CAS…)*	
Communication instruments in use: ☐ Sorting leaflet? (present them below) ☐ Awareness raising campaigns ☐ Website (link) ☐ Other (specify):……..	☐ Sorting ambassadors ☐ Agents at CAS ☐ Re-use maps/guides
Please describe the communication instruments in use (target audience, concrete organisation, resources involved, responses from the inhabitants, results…)	
Please put some pictures of your communication materials/activities	

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Information on collection and sorting		Collection		Treatment			
		Method of collection	**Collected quantities**	**Destination**	**Quantities**	**Please specify the destination** *(e.g. paper mill, …)*	**Please, specify the type of transport** *(e.g. van<3,5t, lorry>16t, lorry>32t)*
MATTRESSES							
Separation at the source?	☐ Yes ☐ No	**CAS**		Re-use			
If no, within which fraction is it collected?		**MCAS**		Recycling			
% of mattresses within the fraction		**Re-use**		Dismantlement			
Are mattresses then sorted at a later stage?	☐ Yes ☐ No	**Other (specify)**		Incineration with energy recovery			
Specify the sorting stage:				Incineration without energy recovery			
				Landfilling			
FIXTURES AND FITTINGS							
Separation at the source?	☐ Yes ☐ No	**CAS**		Re-use			
If no, within which fraction is it collected?		**MCAS**		Recycling			
% of fixtures and fittings within the fraction		**Re-use**		Dismantlement			

Are fixtures and fittings then sorted at a later stage?	☐ Yes ☐ No	**Other (specify)**		Incineration with energy recovery			
Specify the sorting stage:				Incineration without energy recovery			
				Landfilling			

UPHOLSTERY (SOFAS, ARMCHAIRS, ETC.) – PLEASE SPECIFY:

Separation at the source?	☐ Yes ☐ No	**CAS**		Re-use			
If no, within which fraction is it collected?		**MCAS**		Recycling			
% of upholstery within the fraction		**Re-use**		Dismantlement			
Are upholstery then sorted at a later stage?	☐ Yes ☐ No	**Other (specify)**		Incineration with energy recovery			
Specify the sorting stage:				Incineration without energy recovery			
				Landfilling			

WOODEN FURNITURE (E.G. BOOKCASES, CUPBOARDS, WARDROBES, WOODEN CHAIRS, WOODEN GARDEN FURNITURE, ETC.) -PLEASE SPECIFY

Separation at the source?	☐ Yes ☐ No	**CAS**		Re-use			
If no, within which fraction is it collected?		**MCAS**		Recycling			
% of wooden		**Re-use**		Dismantlement			

furniture within the fraction							
Are wooden furniture then sorted at a later stage?	☐ Yes ☐ No	**Other (specify)**		Incineration with energy recovery			
Specify the sorting stage:				Incineration without energy recovery			
				Landfilling			
PLASTIC FURNITURE (E.G. PLASTIC CHAIRS, PLASTIC GARDEN FURNITURE) - PLEASE SPECIFY							
Separation at the source?	☐ Yes ☐ No	**CAS**		Re-use			
If no, within which fraction is it collected?		**MCAS**		Recycling			
% of plastic furniture within the fraction		**Re-use**		Dismantlement			
Are plastic furniture then sorted at a later stage?	☐ Yes ☐ No	**Other (specify)**		Incineration with energy recovery			
Specify the sorting stage:				Incineration without energy recovery			
				Landfilling			
TEXTILES							
Separation at the source?	☐ Yes ☐ No	**CAS**		Re-use			
If no, within which fraction is it collected?		**MCAS**		Recycling			

% of textiles within the fraction		**Re-use**		Dismantlement			
Are textiles then sorted at a later stage?	☐ Yes ☐ No	**Other (specify)**		Sorting centre			
Specify the sorting stage:				Incineration with energy recovery			
				Incineration without energy recovery			
				Landfilling			
HARD PLASTICS							
Separation at the source?	☐ Yes ☐ No	**CAS**		Re-use			
If no, within which fraction is it collected?		**MCAS**		Recycling			
% of hard plastics within the fraction		**Re-use**		Dismantlement			
Are hard plastics then sorted at a later stage?	☐ Yes ☐ No	**Other (specify)**		Incineration with energy recovery			
Specify the sorting stage:				Incineration without energy recovery			
				Landfilling			
TYRES							
Separation at the source?	☐ Yes ☐ No	**CAS**		Re-use			
If no, within which fraction is it collected?		**MCAS**		Recycling			

% of tyres within the fraction		**Re-use**		Dismantlement			
Is tyres then sorted at a later stage?	☐ Yes ☐ No	**Other (specify)**		Incineration with energy recovery			
Specify the sorting stage:				Incineration without energy recovery			
				Landfilling			
WOOD							
Separation at the source?	☐ Yes ☐ No	**CAS**		Re-use			
If no, within which fraction is it collected?		**MCAS**		Recycling			
% of wood within the fraction		**Re-use**		Dismantlement			
Is wood then sorted at a later stage?	☐ Yes ☐ No	**Other (specify)**		Incineration with energy recovery			
Specify the sorting stage:				Incineration without energy recovery			
				Landfilling			

DATA ON SPECIFIC FRACTIONS

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OTHER INFORMATION

General problems encountered with the collection of the bulky waste:
Areas for improvement for the collection of the bulky waste:

CONTACT DETAILS

Name of the organisation	
Name of the contact person	
Email	

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MATERIALS DECREE

23 DECEMBER 2011 - Decree on the sustainable management of material cycles and waste

Articles relevant for the URBANREC-project

Flanders
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Article 1. This Decree governs a regional matter.

Article 3. The following definitions shall apply for the purposes of this Decree:

6° industrial waste: waste originating as a result of an industrial, artisanal or scientific activity, and waste considered equivalent to this by order of the Government of Flanders;

11° mixed municipal waste: household waste, as well as company, industrial and institutional waste which is by its nature and composition comparable to household waste, except the waste types mentioned in the Appendix to Decision 2000/532/EC under 20 01 which are collected separately at the source, and the other waste mentioned under 20 02 of the said Appendix;

12° separate collection: collection where a waste stream is separated by type and nature so as to facilitate a specific treatment;

17° household waste: waste originating from the normal activities of a private household and waste considered equivalent to this by order of the Government of Flanders;

Chapter 2. General provisions on the management of material cycles and waste

Article 18. §1. OVAM shall design implementation plans for the management of material cycles and waste, design their possible review and follow up their implementation. These plans shall, alone or in combination, cover the entire geographical territory of the Flemish Region.

With a view to the design and implementation of the implementation plans, consultation platforms shall be set up in accordance with Article 19.

§2. The implementation plans shall contain measures aimed at establishing an adequate integrated 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 the best available techniques. These measures shall be taken with a view to self-sufficiency when it comes to waste disposal and the recovery of the abovementioned waste streams and they must enable disposal or recovery of the respective waste streams in one of the nearest suitable installations using the most suitable methods and technologies to guarantee a high level of protection of the environment and public health. Insofar as this is necessary or advisable, these measures shall be established in cooperation with surrounding countries or regions.

Except in cases of force majeure, mixed municipal waste which is collected completely separately from waste from private households may only be exported if it has been collected in Flanders in accordance with the rules established by the Government of Flanders.

§3. The implementation plans may contain an analysis of one or more material cycles and their impacts on the environment and health, as well as an overview of measures that need to be taken at different stages of the life cycle to reduce the environmental and health impacts of the use and consumption of the materials in question, in accordance with the objectives mentioned in Article 4.

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§4.The implementation plans shall contain at least an analysis of the current waste management situation, in general or for one or more categories of waste in particular, as well as the measures to be taken in order to make preparing for re-use, recycling and other forms of recovery and disposal of waste more environmentally sound, as well as an evaluation of how the plan will support the implementation of the objectives and provisions of this Decree.

§5. The purpose of the implementation plans is to improve coordination between measures taken by different actors involved in the management of material cycles and waste.

§6. In particular, the implementation plans shall comprise at least the following elements:

1° the type, quantity and source of the waste generated within the Flemish Region and of the waste likely to be shipped from or to the Flemish Region, and an evaluation of the development of the waste streams in the future;

2° existing waste collection schemes and major disposal and recovery installations, including any special arrangements for waste oils, hazardous waste or waste streams addressed by specific Community legislation;

3° an assessment of the need for new collection schemes, the closure of existing waste installations, additional waste treatment installations in accordance with §2, and, if necessary, the investments related thereto;

4° sufficient information on the location criteria for site identification and on the capacity of future disposal or major recovery installations, if necessary;

5° general waste management policies, including planned waste management technologies and methods, or policies for waste posing specific management problems;

6° adequate qualitative and quantitative indicators, target figures and objectives shall be linked to the measures mentioned in §2, which will serve to assess the progress and the effect of the measures and their contribution to the objective mentioned in Article 4.

§11. The implementation plans shall apply to the administrative authorities of the Flemish Region, the provinces, the municipalities and the organizations governed by public or private law charged with tasks in the public interest relating to environmental policy. The duration of the implementation plans shall be defined separately in each plan. The implementation plans shall be evaluated at least once every six years, and revised if necessary.

Chapter 3. Provisions on the management of specific material cycles and waste

Section 3. Household waste

Article 26. Each municipality, whether or not in cooperation with other municipalities, shall ensure that household waste is prevented or re-used as much as possible, collected at regular intervals or gathered in another way and recovered or disposed of in accordance with Articles 11, 12 and 13(§2).

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The municipalities shall recover the costs of the management of household waste from the waste producers in accordance with Article 10. The municipality may authorise its independent bodies or intermunicipal cooperation partnerships to collect these costs, also if these are translated into taxes and fees. The Government of Flanders may establish further rules concerning the way in which municipalities are to calculate the costs of the management of household waste.

Without prejudice to the application of the provisions of this Decree, the collection and gathering of household waste shall be regulated by municipal regulations.

The activities of each person necessary for the normal working of the services charged with the collection of household waste, as well as the material required for this, may be required by the Mayor, the Assistant Governor and the Governor.

Article 27. Municipalities and associations of municipalities may conclude agreements with OVAM to promote or supervise the organisation of the separate collection or gathering of household waste.

The provinces may, within the framework of the Flemish waste policy, offer supporting initiatives and actions aimed at concrete achievements in the field.

Article 28. If a municipality or province or their cooperation partnerships do not within the term established by the Government of Flanders fulfil their obligations imposed by or by virtue of the first paragraph of Article 26 or by the programs and plans mentioned in Articles 17 and 18 and, as a result, harm the public interest, the Government of Flanders may, after giving notice of default by means of a reasoned decision, replace the municipality or province or their cooperation partnerships in question for the implementation of all measures necessary to comply with the aforementioned obligations. The Flemish Region may recover the costs of the aforementioned measures from the municipality or the province or their cooperation partnerships.

Both with respect to the coordination and with respect to the organisation, municipalities, provinces and their cooperation partnerships have the possibility to lodge an appeal with the Flemish Minister with responsibility for the Environment. The Government of Flanders shall establish the more specific rules for this appeal procedure.

Chapter 5. Environmental contributions, taxes and fees

Section 2. Environmental taxes

Article 44. The definitions as referred to in the Decree of 28 June 1985 on environmental permits shall apply mutatis mutandis to the present section.

Article 45. Operators of facilities with a license obligation as mentioned in Article 46(§1), paragraph 1, (1°) through (18°) and (§2), paragraph 1, as well as enterprises and facilities that are professionally engaged in the collection or transport of waste, waste dealers and brokers with a view to its treatment outside the Flemish Region, as mentioned in Article 46(§1), paragraph 1, (19°), shall be subject to an environmental tax.

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Municipalities or associations of municipalities acting in their place may be directly liable for environmental taxes for the household and municipal waste collected by them if they have received authorization for this from OVAM. The authorisation shall mention the waste stream, the concrete destination and the applicable tax rate. A copy of this authorisation shall be provided to the operator of the facility to which the waste stream in question is being removed. The operator shall state the quantities concerned in an appendix to his declaration with reference to the respective authorisation. The operator shall report these quantities in good time to the municipalities or the associations of municipalities acting in their place that themselves act as the party responsible for paying the tax for the quantities concerned and shall submit a declaration in accordance with the provisions of this Decree.

Without prejudice to the exception specified in the second paragraph of Article 47, the tax mentioned in Article 46(§1), paragraph 1, (1°) through (18°) and §2, paragraph 1, shall apply for the quantities of waste as they are landfilled, incinerated or co-incinerated, including admixtures which were added for the purposes of landfilling, incineration or co-incineration.

Article 47. The environmental tax mentioned in Article 45 shall be owed:

1° at the moment the waste is processed in the facilities mentioned in Article 46(§1), paragraph 1, (1°) through (18°) and §2, paragraph 1, where the amounts mentioned in Article 46(§1), paragraph 1, (1°) through (18°) and §2, paragraph 1 are concerned;

2° at the moment the waste produced in the Flemish Region is transferred for the purposes of its processing outside the Flemish Region, where the amounts mentioned in Article 46(§1), paragraph 1, (19°) are concerned.

When a waste material undergoes different treatment methods, the tax shall only be payable for the first treatment method applied that is subject to the tax. The exemption from the tax shall also apply for the admixtures added in the first treatment method.

Article 50. §1. The party responsible for paying the tax shall submit a declaration in the course of the months of April, July, October and January concerning the tax owed for the prior quarter.

§2. The party responsible for paying the tax shall pay the tax for the prior quarter before 10 May, 10 August, 10 November and 10 February. The party responsible for paying the tax shall also, before 10 December of each year, make an advance payment of the tax for the fourth quarter of that year. This advance payment shall be set at sixty-six per cent of the amount obtained by dividing the amount payable by the party responsible for paying the tax for the first three quarters by three. The resulting fixed sum shall be rounded down to the nearest ten. If based on the declaration relating to the fourth quarter it appears that the tax that is actually due is lower than the due advance payment, this advance payment is decreased by the tax that is actually due, but increased by legal late payment interest on the calculated difference, shall be repaid to the party responsible for paying the tax within ninety calendar days of receipt of the appropriately completed declaration relating to the fourth quarter. The advance payment shall not be payable if the party responsible for paying the tax provides proof before 10 December that they have ceased their taxed activity before the commencement of the fourth quarter.

§3. If the party responsible for paying the tax does not proceed with payment of the indicated amount, or if after control by the official charged with the collection and recovery of the tax it appears that the indicated amounts are incorrect, the official charged with the collection and recovery of the tax may claim a further amount from the party responsible for paying the tax.

§4. If the party responsible for paying the tax has to make payments for a number of quarters, the oldest debts shall be paid first and, in order, payment shall be made of administrative penalties, late payment interests and the principal.

Article 51. The Government of Flanders shall establish the more specific regulations for the declaration and payment of the tax.

Article 52. The party responsible for paying the tax shall record the quantities of waste materials, in tonnes, for each day and in the order of treatment, in a register.

The party responsible for paying the tax shall present all documents required to check the settlement of the tax or the correctness of the indicated amounts on each request from the officials responsible for the control of compliance with the obligations relating to the tax.

On each request from the officials responsible for the control of compliance with the obligations relating to the tax, the party responsible for paying the tax shall, orally or in writing, provide all information requested from him to check the settlement of the tax or the correctness of the indicated amounts.

Section 3. Fees

Article 66. §1. The Government of Flanders may subject the evaluation of an application for recognition as a laboratory for the performance of waste and soil sample analyses, as mentioned in the second paragraph of Article 7, to the payment of a fee.

The Government of Flanders may subject the application for inclusion in a register, as mentioned in Article 13(§1), to the payment of a fee.

The Government of Flanders may subject the evaluation of an application for recognition or registration with a view to the management of animal by-products, as mentioned in Article 33(§3), to the payment of a fee.

The Government of Flanders may subject the evaluation of an application for the issuing of a declaration of raw material, as mentioned in Article 40, for the producer of the raw material in question or the natural or legal person acting on his behalf, to the payment of a fee.

§2. If the Government of Flanders, in the cases mentioned in §1, establishes a fee, the proof of payment of this fee shall be included with the application, under penalty of inadmissibility.

§3. The Government of Flanders shall determine the amount and the method of collection of the fees referred to in §1.

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The Government of Flanders shall designate the OVAM officials who will be responsible for collecting and claiming the fees mentioned in §1, and it shall determine the specific rules regarding their competence.

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17 FEBRUARY 2012 - Order of the Flemish Government on the sustainable management of material cycles and waste materials

Articles relevant for the URBANREC-project

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Section 1.2. Definitions

Article 1.2.1. § 1. The concepts and definitions, set out in the Decree of 23 December 2011 on the sustainable management of material cycles and waste materials shall apply to this order.

§ 2. The following definitions shall apply for the purposes of this order:

5° tyre: each full or pneumatic tyre, including trusses, with the exception of bicycle tyres;

18° recycling yard: a licensed facility as per Title I of the VLAREM, where residents and in some cases also business enterprises are permitted to dispose of on certain days and at certain times, under supervision, sorted household waste and possibly also industrial waste materials similar to household waste;

34° bulky waste: waste materials originating from the normal activities of a private household, and similar waste that cannot be kept in the residual waste recipient due to its size, nature, or its weight, collected door-to-door, as well as disposed of at the recycling yard in order to be incinerated or landfilled;

46° re-use centre : a legal entity accredited by the OVAM that operates a collection service, a sorting and sales area, and that, within its own operating area, collects, stores, sorts, repairs, and sells potentially re-usable goods in order to be re-used;

54° with household wastes comparable industrial waste: industrial waste that is similar in nature, composition, and quantity to household waste, which is generated as a consequence of activities that are of the same nature as the activities of the normal operation of a private household;

CHAPTER 4 General provisions about the management of material cycles and waste materials

Section 4.1. Classification of waste materials

Article 4.1.1. Litter and sweeping waste are treated as household waste.

Section 4.3. Separate collection of waste materials

Article 4.3.1. At least the following types of household waste must be selectively collected and stored at the time of collection:

1° small hazardous household waste;

2° glass bottles and jars;

3° paper and cardboard waste;

4° bulky waste:

5° green waste;

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6° textile waste;

7° waste electrical and electronic equipment (WEEE);

8° waste tyres;

9° debris;

10° asbestos-containing waste;

11° plastic bottles, metal packaging, and drinking cartons (PMD) waste.

At least the following types of household waste must be selectively collected and stored at the time of collection, or, if this is demonstrably impossible, they must subsequently be sorted out afterwards:

1° wood waste;

2° metal waste.

Article 4.3.2. At least the following types of industrial waste must be selectively collected and stored by the waste producer:

1° small hazardous household waste of comparable industrial origin;

2° glass waste;

3° paper and cardboard waste;

4° used animal and vegetable oils and fats;

5° green waste;

6° textile waste;

7° waste electrical and electronic equipment;

8° waste tyres;

9° debris;

10° used mineral oils;

11° hazardous waste;

12° asbestos-containing waste;

13° discarded equipment and containers that contain ozone-depleting substances or fluorinated greenhouse gases;

14° waste agricultural films;

15° waste batteries and accumulators;

16° plastic bottles, metal packaging, and drinking cartons (PMD) waste;

17° wood waste;

18° metal waste.

The waste producers which have industrial waste is obliged to conclude a contract with the waste collector, dealer, and brokers of industrial waste, in which the waste fractions mentioned in the first paragraph, and their proposed collection method, shall be clearly mentioned.

In deviation from the first paragraph, the waste producer may mix various waste fractions that are eligible for high-quality material recycling, as well as wood waste, together in the same container, under the following cumulative terms and conditions:

1° the waste fractions are dry and non-hazardous so that the combination of the fractions does not hinder the sorting and the high-quality processing of the individual waste fractions;

2° the container is transported to an accredited sorting facility in which the fractions will be fully sorted out;

3° the waste producer has concluded a contract concerning the same with a waste collector, dealer, or broker, in which the mixed fractions are listed.

In deviation from the second paragraph, it shall not be mandatory to conclude a contract for industrial waste if the following cumulative terms and conditions are fulfilled:

1° the industrial waste from the waste producer is of a nature, composition, and quantity similar to the household waste;

2° the industrial waste of the waste producer is collected at the same time as the household waste;

3° for the collection of the industrial waste, the full and actual cost shall be charged to the waste producer.

Section 4.5. Landfill and incineration bans

Article 4.5.1. The processing operation “D1 - deposit into or onto land”, as well as removal with a view to implementing the disposal operation “D1 - deposit into or onto land”, is prohibited for the following types of waste:

1° waste for which an incineration prohibition applies as per article 4.5.2;

2° mixed municipal waste;

3° waste that has been separately collected in order to be used in a useful manner;

4° waste, which due to its nature, quantity, or homogeneity is eligible for re-use or for material recycling in accordance with the best available techniques;

5° the combustible fractions or fractions eligible for material recycling that arise during the sorting or pre-treatment of household waste or industrial waste similar to household waste;

6° old and expired medicines.

Article 4.5.2. The processing operations “R1 - use principally as a fuel or other means to generate energy” and “D10 - incineration on land”, as well as the removal with a view to implementing the processing operations “R1 - use principally as a fuel or other means to generate energy” and “D10 - incineration on land”, are prohibited for the following wastes:

1° waste that due to its nature, quantity, or its homogeneity is eligible for re-use or for recycling using the best available techniques. The prohibition doesn’t apply to operation R1 for the incineration of the following waste materials, if the calorific value of the same is more than 11,500 kJ/kg:

a) vegetable waste from agriculture and forestry;

b) vegetable waste from the food industry;

c) fibrous vegetable waste originating from sorting, sieving, and washing for raw pulp and paper production;

d) wood waste;

e) cork waste;

2° industrial wastes, other than as mentioned in 1, that is not collected in accordance with Article 4.3.2;

3° untreated bulky waste.

Household waste, as mentioned in the Implementation Plan for household waste, and industrial waste similar to household waste that is jointly collected along with household waste is not covered under the incineration ban.

Article 4.5.3. § 1. The Minister can, by means of reasoned decision, allow individual derogations to the prohibitions referred to in articles 4.5.1 and 4.5.2.

§ 2. An application for the derogation must be submitted in writing by the operator of the landfill site or incineration plant, or if the waste is exported, by the waste producer, dealer, or trader.

The application for the derogation must contain the following elements:

1° the specification of the prohibitory provisions of this order for which the derogation is requested;

2° the reasons that justify the derogation, particularly in the light of the nature and the quantities of the waste, on the one hand, and the available treatment capacity on the other.

The Minister announces his/her decision concerning the derogation application within a period of three months after its submission. Prior to the decision, the Minister seeks the opinion of the OVAM. The derogation may be granted for a maximum of two years.

The derogation granted will be published in the Belgian Official Gazette and on the OVAM website.

CHAPTER 5 Provisions concerning the management of specific material cycles and waste

Section 5.1. Provisions concerning the management of household waste

Article 5.1.1. The municipalities apply the principle of “the polluter pays” when calculating the contribution to the costs made by the citizen for the household waste that is collected via municipal channels, taking into account the actual costs in accordance with the provisions of this order.

Article 5.1.2. The contribution to the cost be made by the citizen for managing household waste is calculated based on the cost price of the specific service, and is charged according to the type and quantity of the waste, or per unit weight, per waste container, or in any other manner.

Article 5.1.3. When determining the amount and terms and conditions for the contribution to the cost of household waste management, the municipality shall take into account the following costs:

1° the purchase and the distribution of the bags or vignettes or other containers for the collection of waste;

2° maintenance and repair of containers for the collection of waste;

3° the depreciation or rental of waste containers;

4° the door-to-door collection of the various waste streams;

5° the treatment costs of the waste collected;

6° the management and maintenance of the recycling yards or the other waste collection points;

7° the efforts for the waste prevention;

8° awareness-raising campaigns;

9° indirect costs such as IT support, information provision, and complaint handling.

Among other things, the municipality shall deduct the contributions resulting from the extended producer responsibility, the revenue from waste streams, and the subsidies from the regional government.

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Article 5.1.4. The municipality calculates the amount and the terms and conditions for the contribution to the costs of household waste management in good faith, and takes into account the minimum and the maximum stipulated in Annex 5.1.4.

The minimum and maximum stipulated in Annex 5.1.4 are revised on the 1th of January of each year, based on the evolution of the health index, as follows: each amount will be multiplied by a factor with the numerator being the health index that was applicable on 1 November of the year preceding the year in which the amount was revised, with the denominator being the health index that was applicable on 1 November of the year preceding the year in which the applicable amount was determined. The resulting number is rounded off to the whole number.

Article 5.1.5. The OVAM may always contact the municipality to request the details of the method used for calculating the contributions to the waste management costs. The municipality has thirty days to submit the calculation note to the OVAM.

Article 5.1.6. If the municipality demonstrates that, in view of the specific local situation, it makes a structural deviation from a conversion factor as mentioned in Annex 5.1.4, the OVAM may grant a derogation from the conversion factor in case of a reasoned request.

Article5.1.7. The municipality encourages re-use by at least concluding an agreement with a re-use centre accredited by the OVAM. The agreement shall at least contain the provisions concerning awareness-raising, the mutual referral, the collection methods, the residual waste, and the compensation for re-usable goods.

CHAPTER 7 Recording and reporting of waste and material data

Section 7.1. General provisions

Article 7.1.1. Identification numbers of actors as mentioned in this Chapter are provided by the OVAM.

Article 7.1.2. The databank for waste materials contains the information that is collected and statistically processed in the context of this chapter.

The databank contains basic information that, while maintaining compliance with the provisions concerning transparency of government and transparency of public access to environmental information, are only accessible to the officials responsible for the implementation of the provisions of this chapter, and validated information that is suitable for active and passive disclosure, among other things, in the context of the environmental databank, established by order of the Flemish Government of 31 July 1992, providing for the regulation of the collaboration between the Ministry of the Flemish Community and the environmental autonomous semi-governmental institutions for the establishment and organisation of an environmental databank.

Article 7.1.3. Unless stipulated otherwise in this chapter, the following actors are required to provide waste and material information on a simple request from the OVAM:

1° waste collectors, dealer, and brokers;

2° waste treatment facilities;

3° industrial waste producers;

4° the municipalities and the intermunicipal organizations responsible for waste management;

5° the raw material producer;

6° the raw material consumer.

Reporting may be done according to Article 2 and 3 of the Flemish Government decree of 2 April 2004 until the introduction of the integral annual environmental report, prior to the date specified therein.

Section 7.2. Waste and materials registers

Sub-section 7.2.1. Waste registers

Article 7.2.1.3. The Minister defines the form and content of the waste code list that is used for the coding of waste collected by or on behalf of the municipality.

The municipalities or the intermunicipal organizations responsible for waste management keep up a register of the waste collected by or on behalf of the municipality.

Per municipality, this register contains the following information about waste:

1° the quantity of waste in litres or kilograms;

2° the nature and the composition of the waste, mentioning the waste code, mentioned in the first paragraph;

3° if applicable, the name, address, and identification number of the waste collector, dealer, or brokers, and the company number for Belgian waste collectors, traders, or dealer, and the VAT number operators abroad;

4° the manner in which the waste is treated or utilised: re-use, incineration with energy recovery (R1), other waste incineration (D10), drying and sorting, recycling, composting, temporary storage, landfilling, or other treatment;

5° the name, address, and identification number of the waste processor, the company number for Belgian processors, and the VAT number of operators abroad;

6° information on the waste the collector, the origin of the waste, and the collection and pick-up methods.

The register, mentioned in the second paragraph, is updated with the latest information at least once every month. The waste register may be a collection of identification forms as mentioned in Article 6.1.1.2.

Article 7.2.1.4. The waste processor maintains a register of the waste processed by it, and such register shall contain the following information:

1° date and time of the delivery of the waste to be treated;

2° the quantity of waste supplied in tonnes, cubic metres, litres, or kilograms;

3° the nature and composition of the waste, stating the European Waste Catalogue code mentioned in Annex 2.1;

4° the name, address, including the country, and, if known, the identification number of the waste producer, the enterprise number for Belgian waste producers, and the VAT number of operators abroad;

5° if applicable, the name, address, and identification number of the waste collector, dealer, or brokers;

6° the manner in which the waste is treated or utilised, mentioning the relevant R or D code as mentioned in section 4.2.2, with at least the following categories: landfilling, incineration with energy recovery (R1), other waste incineration (D10), re-use, composting, recycling, sorting, other pre-treatment;

7° if applicable, the mention that the incoming waste has been refused, together with reasons for such refuse;

8° in case of landfilling, the number of the landfill, and in case of hazardous waste, the precise location thereof on the landfill site;

9° in case of storage, the localisation of the storage in the facility;

10° comments concerning the waste and its delivery, the difficulties and faults experienced, observations, measurements, and other information about the operation of the facility.

The register mentioned in the first paragraph is updated with the latest information at least every workday or after each input.

The environmental permit issued according to the provisions of the Decree concerning Environmental Licences may derogating from the stipulated content of the register as mentioned in paragraph 1.

Sub-section 7.2.3. Storage and exchange of waste and materials registers

Article 7.2.3.1. The registers prepared according to Articles 7.2.1.1, 7.2.1.2, 7.2.1.3, 7.2.1.4, 7.2.2.2 and 7.2.2.3 are kept for a period of five years by the person/entity responsible for keeping the register. The register shall be available for inspection at the head office, and on the vessel itself for inland navigation operators.

Article 7.2.3.2. The registers prepared in accordance with Articles 7.2.1.2, 7.2.1.4, 7.2.2.2 and 7.2.2.3 are kept on an electronic carrier to facilitate the easy exchange of registration data between the OVAM and

the person/entity keeping the register. The technical specifications that the registers must satisfy and the technical specifications relating to the exchange of information on the request by the OVAM are included in a standard procedure stipulated by the Minister on the proposal of the OVAM. In the absence of such a standard procedure, the register is kept and the data in the register are exchanged according to a code of good practice.

Section 7.3. Information about the production of waste and materials

Sub-section 7.3.2. Household wastes

Article 7.3.2.1. The municipal authorities submit before 1 April of each year an annual report to the OVAM concerning the waste collected by it or on its behalf during the previous calendar year.

The aforesaid annual report relates to household waste and household waste similar to industrial waste that is collected by or on behalf of the municipality.

Article 7.3.2.2. The annual report mentioned in Article 7.3.2.1 shall be preserved in hardcopy format or electronically, and shall contain annual totals from the register of the waste collected by or on behalf of the municipality, as mentioned in Article 7.2.1.3. The OVAM defines the content of the annual report and the form in which it shall be prepared and submitted, including the technical specifications for the electronic submission of the report.

CHAPTER 9 Environmental taxes and environmental contributions

Section 9.1. Environmental taxes

Article 9.1.1. § 1. The officials and personnel appointed by the chief official of the OVAM is responsible for collecting the environmental taxes on behalf of the Flemish Region.

The officials and personnel mentioned in the first paragraph are also authorised to make settlements, exemption, or reduction of the administrative fines, and to grant an extension of payment, in accordance with Section 60 of the Materials Decree.

§ 2. The chief official of the OVAM has the power to do the following:

1° to sign, declare enforceable, and authenticate the final demand as mentioned in Section 63 of the Materials Decree;

2° to request a mortgage act as mentioned in Section 64 of the Materials Decree.

In his/her absence, he/she is replaced by an official appointed by him/her, for carrying out the tasks mentioned in the first paragraph.

Article 9.1.2. § 1. The declaration referred to in Section 50 et seq. of the Materials Decree has to be made through a declaration form no later than by the twentieth of the first month after each calendar quarter, of which the model is determined by the Minister, and of which the necessary copies are provided by the OVAM.

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The advance on the tax for the fourth quarter of each year is declared no later than on 20 November through a special declaration form, of which the model is determined by the Minister and of which the necessary copies are provided by the OVAM.

§ 2. The environmental tax for the first three quarters are paid before the tenth day of the second month after each calendar quarter by deposit or transfer of the amount payable into the financial account mentioned in the declaration form.

The advance on the environmental tax for the fourth quarter is paid before 10 December, by deposit or transfer of the amount payable into the financial account mentioned in the declaration form.

The balance if any of the environmental tax for the fourth quarter is paid before 10 February of the next year by deposit or transfer of the amount payable into the financial account mentioned in the declaration form.

Article 9.1.3. The appeals as mentioned in Section 55 of the Materials Decree have to be submitted to the Minister. The advisory committee, as mentioned in Section 55 of the Materials Decree, consists of:

1° a Chairman, appointed through mutual consent between the Flemish Minister for Finance and Budgets, and the Minister;

2° two officials as effective members, and two officials of the Flemish authorities as substitute members, appointed by the Minister;

3° two officials of the Flemish authorities as effective members, and two officials as substitute members, appointed by the Flemish Minister for Finance and Budgets.

The advisory committee hears the OVAM or the party liable to pay the tax on its own request or on the request of the OVAM and the party liable to pay the tax. The Minister may stipulate specific rules for the functioning of the advisory committee.

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Vlaanderen
is materiaalbewust

Uitvoeringsplan huishoudelijk afval en gelijkaardig bedrijfsafval - samenvatting

SAMEN MAKEN WE
MORGEN MOOIER

OVAM

WWW.OVAM.BE

UITVOERINGSPLAN HUISHOUDELIJK AFVAL EN GELIJKAARDIG BEDRIJFSAFVAL

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1 WAT HEEFT U VOOR ZICH?

Innovatieve inzamelsystemen uittesten, zwerfvuil efficiënt aanpakken, goede praktijken over de aanpak van afval en materialen uitwisselen met andere lokale besturen? Het nieuwe uitvoeringsplan voor huishoudelijk afval en gelijkaardig bedrijfsafval, biedt u inspiratie om ook in uw gemeente aan de slag te gaan met afval en materialen. Voor u ligt een beknopte samenvatting van dat uitvoeringsplan.

Het uitvoeringsplan is de opvolger van het 'Uitvoeringsplan Milieuverantwoord Beheer van Huishoudelijke Afvalstoffen' (UMBHA) en van het plan "Gescheiden inzameling bedrijfsafval van kleine ondernemingen". Het UMBHA zette van 2008 tot 2015 de krijtlijnen uit voor preventie, selectieve inzameling en verwerking van huishoudelijk afval. Intussen is de maatschappelijke context gewijzigd: zo verandert de samenstelling van de Vlaamse bevolking in snel tempo, wonen steeds meer Vlamingen in steden en zit compact wonen in de lift.

Vanuit deze veranderende context wil het nieuwe uitvoeringsplan voor huishoudelijk afval en gelijkaardig bedrijfsafval inzetten op maatwerk. Het vertaalt het Vlaamse afval- en materialenbeleid voor de komende jaren naar concrete acties op het terrein, met focus op het lokale niveau. Met het uitvoeringsplan kunt u als lokaal bestuur meer op maat werken en via proefprojecten nieuwe inzamelvormen uit testen.

Als lokaal bestuur speelt u een sleutelrol in het afval- en materialenbeleid. U bent immers het eerste aanspreekpunt voor uw inwoners. Het uitvoeringsplan voor huishoudelijk afval en gelijkaardig bedrijfsafval verschaft u ideeën en instrumenten om met de inwoners, verenigingen en bedrijven uit uw gemeente werk te maken van meer afvalpreventie en hergebruik, een betere selectieve inzameling en recyclage, en minder zwerfvuil. Op die manier maken we samen werk van een mooi en materiaalbewust Vlaanderen dat Europees aan de top staat inzake afvalbeleid.

Het uitvoeringsplan richt zich op deze soorten afval:

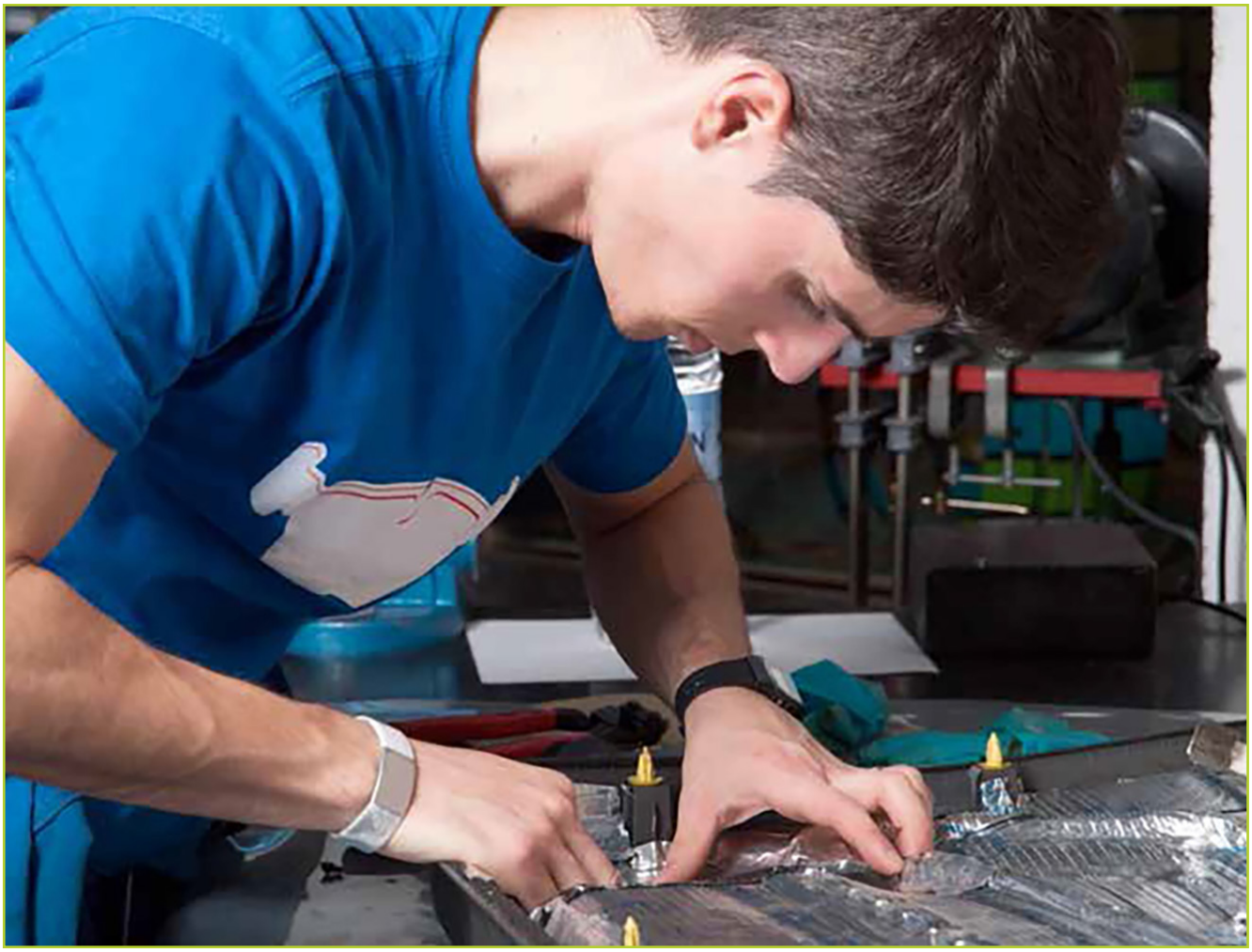
Huishoudelijk afval:

- selectief ingezameld afval;
- het huisvuil;
- grofvuil;
- straat- en veegvuil, zwerfvuil en afval uit straatvuilnisbakken.

Bedrijfsafval:

- vergelijkbaar bedrijfsafval: dit is afval van bedrijven dat inzake aard, samenstelling en hoeveelheid vergelijkbaar is met huishoudelijk afval. Het wordt hoofdzakelijk ingezameld door gemeenten.
- gelijkaardig bedrijfsafval: dit is afval van bedrijven dat inzake aard en samenstelling vergelijkbaar is met huishoudelijk afval. Het gaat om grotere hoeveelheden dan bij huishoudelijk afval en wordt vooral ingezameld door privaatrechtelijke afvalinzamelaars.

Papier



2 DE SAMENLEVING VERANDERT

Sinds de lancering van het vorige uitvoeringsplan in 2008 is de maatschappelijke context in Vlaanderen veranderd. Dat heeft ook gevolgen voor het afval- en materialenbeleid. Het nieuwe uitvoeringsplan voor huishoudelijk afval en gelijkaardig bedrijfsafval speelt in op dat gewijzigde kader.

2.1 Drie maatschappelijke trends

Het uitvoeringsplan houdt rekening met **drie maatschappelijke trends.** Ook uw gemeente heeft daar in meer of mindere mate mee te maken:

1. **Compact wonen wint aan belang.** De jongste jaren nemen hoogbouw en het aantal kleinere woningen weer toe. Bewoners hebben daar minder plaats om hun afval voor lange tijd te stockeren.
2. **Mobiliteit** vormt steeds meer een knelpunt. Afvalophaling belast het lokale verkeer en de leefbaarheid. Bovendien is het voor stadsbewoners niet evident om een recyclagepark te bezoeken, want vaak hebben ze geen auto.
3. **De samenstelling van de Vlaamse bevolking** verandert. "De burger" bestaat niet. De Vlaming sorteert op verschillende manieren en produceert uiteenlopende hoeveelheden en soorten afval, afhankelijk van inkomen, leeftijd, gezinssamenstelling, socioculturele achtergrond, opleiding ... En hij reageert verschillend op initiatieven om afval te voorkomen en te sorteren.

2.2 Meer maatwerk

Met het nieuwe uitvoeringsplan wil de OVAM inspelen op die maatschappelijke trends en lokale besturen meer maatwerk bieden. We houden rekening met de gewijzigde lokale context en de verschillen tussen gemeenten. Het plan trekt dus de krijtlijnen, maar voor de uitvoering krijgen de gemeenten **meer autonomie.** Zo bepaalt het uitvoeringsplan de afvalfracties die elk lokaal bestuur moet inzamelen, maar houdt u de regie van het afvalbeheer in handen: gezinnen sensibiliseren, erover waken dat ze hun afval correct selectief inzamelen, zorgen voor de netheid in uw gemeente ...

2.3 Innovatieve inzamelsystemen

De komende zeven jaar kunt u als lokaal bestuur nieuwe inzamelsystemen gebruiken. Concreet gaat het om:

- **de brengmethode op korte afstand:** inwoners brengen hun afval naar een nabijgelegen inzamelpunt;
- **minirecyclageparken**: u kunt tijdelijke of permanente miniparken inrichten. Inwoners kunnen hun afval er te voet of per fiets naar toe brengen;
- **zelf nieuwe inzamelmethodes uittesten in een proefproject.**

3 WAT WILLEN WE BEREIKEN TEGEN 2022?

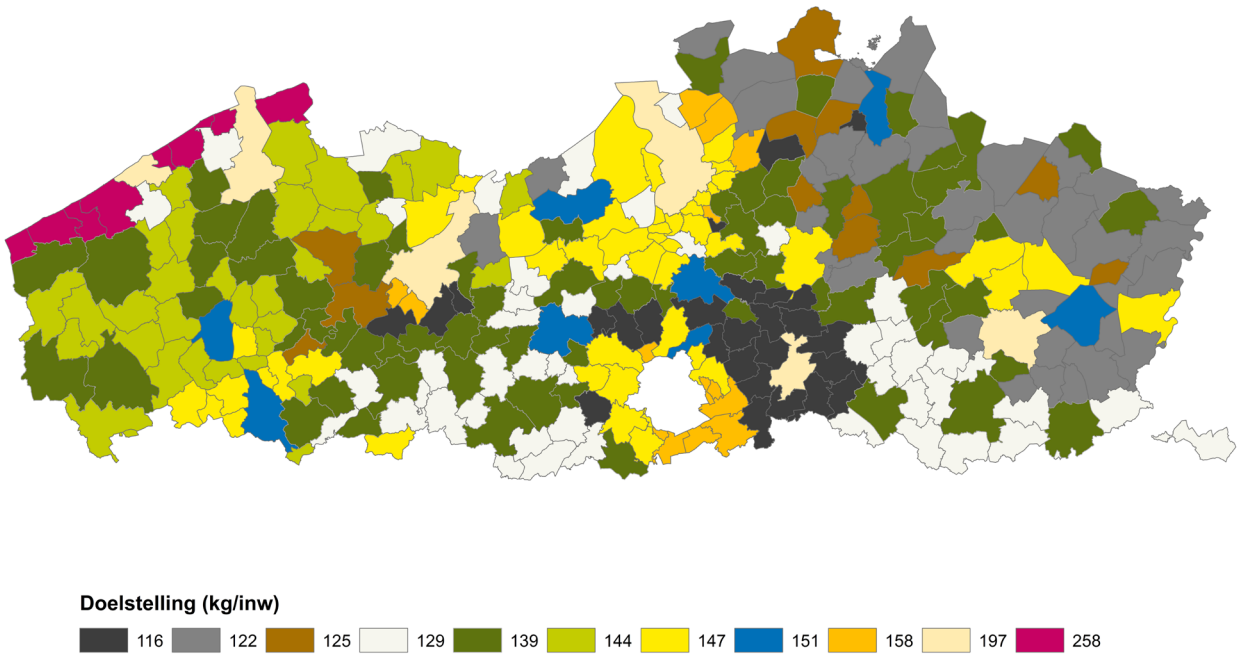
Met het uitvoeringsplan voor huishoudelijk afval en gelijkaardig bedrijfsafval wil Vlaanderen de totale hoeveelheid restafval van gezinnen, bedrijven en organisaties in de periode 2016-2022 sterk verminderen. Dat doet het door verschillende doelstellingen voor restafval op te leggen per cluster van gemeenten. Voor afvalpreventie, hergebruik, zwerfvuil, sluikstorten en bedrijfsafval legt het uitvoeringsplan nieuwe Vlaamse doelen op.

3.1 Doelstellingen op maat

Het uitvoeringsplan stapt af van één restafvaldoelstelling voor heel Vlaanderen maar werkt op maat van de lokale besturen. Het plan richt zich op elf doelstellingen, verdeeld over zestien clusters van gemeenten die op sociaaleconomisch vlak vergelijkbaar zijn. Zo krijgen kustgemeenten een minder strenge doelstelling omdat ze door het toerisme meer restafval produceren dan bijvoorbeeld landelijke gemeenten.

Afhankelijk van de cluster waartoe uw gemeente behoort, krijgt u andere doelstelling voor de hoeveelheid restafval die u maximaal mag produceren. Tegen 2022 moet elke gemeente naar die doelstelling toe werken. Heeft uw gemeente haar doelstelling bereikt? Dan moet u dat resultaat de komende jaren behouden of waar mogelijk verbeteren. Tot aan de evaluatie van indeling in clusters zijn de doelstellingen richtinggevend. Pas bij een positieve evaluatie van de nieuwe indeling worden ze bindend.

Dit zijn de doelstellingen per cluster van gemeenten voor het huishoudelijk restafval en vergelijkbaar bedrijfsrestafval in 2022:



Cluster	Doelstelling tegen 2022
In de stadsrand	116 kg/inw
Landelijke of verstedelijkte plattelandsgemeenten met sterke demografische groei	122 kg/inw
Verstedelijkte plattelandsgemeenten met industriële activiteit en demografische groei	125 kg/inw
Weinig verstedelijkte gemeenten met demografische achteruitgang Kleine landbouwgemeenten	129 kg/inw
In landelijke zones Landelijke en landbouwgemeenten met industriële activiteit Middelgrote steden	139 kg/inw
Erg landelijke gemeenten met sterke vergrijzing	144 kg/inw
Sterk verstedelijkte gemeenten met lage inkomens Steden en agglomeratiegemeenten met industriële activiteit Agglomeratiegemeenten met tertiaire activiteit	147 kg/inw
Residentiële randgemeenten met hoge inkomens	158 kg/inw
Regionale steden	151 kg/inw
Grote en regionale steden	197 kg/inw
Kustgemeenten	258 kg/inw

Om de gemeenten te ondersteunen hun doelstellingen tegen 2022 te bereiken zijn als hulpmiddel ook een doelstelling op intercommunaal niveau geformuleerd. Deze intercommunale doelstellingen zijn richtinggevend.

INTERCOMMUNALE/ GEMEENTE	doelstelling per IC (kg/inw) tegen 2022
AARSCHOT	102
LIMBURG.NET	126
ECOWERF	110
HAVILAND	141
I.VL.A.	133
IBOGEM	143
IDM	127
IGEAN M&V	125
ILVA	121
IMOG	144
INCOVO	136
INTERRAND	158
INTERZA	124
IOK-AFVALBEHEER	96

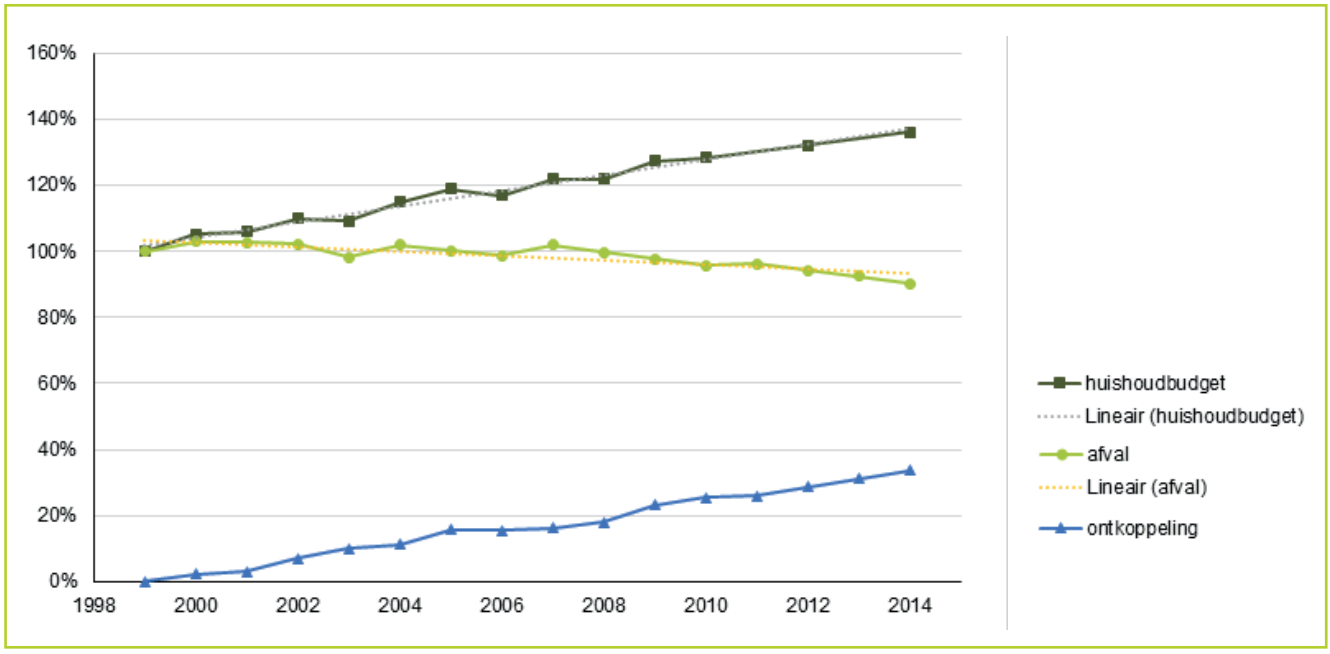
INTERCOMMUNALE/ GEMEENTE	doelstelling per IC (kg/inw) tegen 2022
ISVAG	197
IVAGO	193
IVAREM	136
IVBO	184
IVIO	142
IVM	136
IVOO	190
IVVO	164
KNOKKE-HEIST	258
MIROM MENEN	147
MIROM ROESELARE	144
MIWA	143
VERKO	134

3.2 Meer preventie

Afval selectief inzamelen, recycleren en verwerken is belangrijk. Maar het is nog beter om afval te voorkomen én goederen te hergebruiken. Met het uitvoeringsplan wil Vlaanderen de consumptie loskoppelen van de afvalproductie. Met andere woorden: meer consumptie mag niet noodzakelijk tot meer afval leiden.

Bovendien moet de totale hoeveelheid afval gelijk blijven, ook als de bevolking aangroeit. **Waar Vlaanderen in 2012, 2013 en 2014 nog gemiddeld 522 kg huishoudelijk afval per inwoner produceerde, mag dat in 2022 nog slechts 502 kg zijn.**

Evolutie ontkoppeling afvalproductie en de consumptie van huishoudens



3.3 Meer hergebruik

De komende jaren willen we meer meubels en spullen een tweede leven gunnen. Het vorige uitvoeringsplan stelde minimaal 5 kg hergebruik per inwoner voorop. Dat doel werd intussen bereikt. Tegen 2022 moeten de erkende kringloopcentra ervoor zorgen dat elke Vlaming 7 kilogram aan goederen hergebruikt.

3.4 Minder zwerfvuil

Mensen produceren ook afval buitenshuis. Dat afval moet zoveel mogelijk (selectief) worden ingezameld. Wat toch nog op de grond terechtkomt, wordt zo snel mogelijk opgeruimd.

Er slingert nog te veel zwerfvuil rond. Dat is niet goed voor het milieu én voor de netheid van uw gemeente. De hoeveelheid zwerfvuil moet daarom tegen 2022 naar beneden. Met de volgende graadmeters zullen we die afname in kaart brengen:

- Zwerfvuil komt vooral voor op autosnelwegparkings, haltes van openbaar vervoer en afvalinzamelpunten. Tegen 2022 moet de Netheidsindex op die plekken met 10% verbeteren in vergelijking met 2014. Op de andere plaatsen mag de netheid ook niet verslechteren. De Netheidsindex of netheidsbarometer is een praktische tool die u kunt gebruiken om de netheid in uw gemeente te meten.
- Tegen 2022 daalt het zwerfvuil met 20% (in gewicht) ten opzichte van 2013. Dit betekent dat in 2022 er maximaal 14.000 ton zwerfvuil is (in vergelijking met 17 500 ton in 2013).

3.5 Minder sluikstorten

In 2016 brengt de OVAM met een studie de hoeveelheid, kostprijs, samenstelling, locaties en daders van sluikstorten in Vlaanderen in 2015 in kaart. Die cijfers vormen de basis voor een plan van aanpak om sluikstorten in Vlaanderen te verminderen.

3.6 Minder gelijkaardig bedrijfsafval

Ook het bedrijfsrestafval bevat nog veel materiaal dat selectief ingezameld kan worden. In 2013 bestond het bedrijfsrestafval nog voor minstens 20% uit materialen die gerecycleerd kunnen worden. De doelstelling: tegen 2022 is er **15% minder bedrijfsrestafval** dan in 2013, rekening houdend met de tewerkstellingsgraad.

Aankoper: spil in de kringloopeconomie

Een spilfiguur in het duurzame materialenbeleid is de aankoper van een gemeente of een bedrijf. Zijn aankoopbeleid kan producten na gebruik terug in de kringloop doen terechtkomen. Door te kiezen voor hergebruik en gerecycleerde materialen brengen aankopers de kringloopeconomie in de praktijk.

Kies voor gerecycleerde materialen
De OVAM wil de markt voor producten uit gerecycleerd materiaal extra impulsen geven. Daartoe ontwikkelt ze materiaalcriteria voor bestekken van Vlaamse en lokale overheden om zoveel mogelijk te kiezen voor gerecycleerde materialen en deelt ze haar expertise over de materiaalaspecten van producten of diensten voor overheidsopdrachten.

Stromen	Huis aan huis of brengmethode*	Grote recyclageparken
huisvuil	om de twee weken of brengmethode	
papier en karton	maandelijks of brengmethode	verplicht
pmd	om de drie weken of brengmethode	
glas	maandelijks of set glasbollen wit/gekleurd (2 monobollen of 1 duobol bovengronds of ondergronds) (min. één per 1000 inwoners)	
snoeihout	op afroep, min. viermaal per jaar (in groenregio)	verplicht
gft - keukenafval	om de twee weken of brengmethode (in gft-regio)	
grofvuil	op afroep, min. tweemaal per jaar	verplicht
textiel	viermaal per jaar of containers (min. één per 1000 inwoners)	verplicht
AEEA		verplicht
metalen		verplicht
hout (type A en B)		verplicht
kringloopgoederen	op afroep	
vlakglas		verplicht
harde kunststoffen		verplicht
kga		verplicht
frituurvet en -olie		verplicht
zuiver steenpuin		verplicht
ander bouw- en sloopafval		verplicht
hechtgebonden asbestcement		verplicht
boomstronken		verplicht
fijn tuinafval		verplicht

* brengmethode: selectieve inzameling op korte afstand via ondergrondse of bovengrondse inzamelsystemen

4 INZAMELING VAN HUISHOUDELIJK AFVAL: U KIEST HOE

Als lokaal bestuur staat u in voor de inzameling van huishoudelijk afval. Dat maakt u tot een belangrijke schakel in het Vlaamse afval- en materialenbeleid. Het uitvoeringsplan voor huishoudelijk afval en gelijkaardig bedrijfsafval legt vast welke soorten afval u moet inzamelen, maar geeft u voortaan meer vrijheid om te kiezen hoe u dat aanpakt.

4.1 Wat zamelt u in?

De tabel hiernaast geeft aan welke afvalstromen u als gemeente minimaal verplicht selectief moet inzamelen, op welke manier en hoe vaak dat minimaal moet gebeuren. U mag altijd meer afvalstromen inzamelen dan de opgesomde stromen. Immers, hoe meer afval gescheiden wordt ingezameld, hoe minder er verbrand hoeft te worden. Zo blijven er meer materialen in de kringloop en levert u een belangrijke bijdrage aan de circulaire economie. Daardoor zijn er minder nieuwe grondstoffen nodig. De winning van nieuwe grondstoffen kost aanzienlijk meer energie dan het hergebruik of de inzet van gerecycleerde grondstoffen.

4.2 Hoe zamelt u in?

Het uitvoeringsplan stapt af van de verplichte huis-aan-huisinzameling voor restafval, papier en karton, pmd en gft. Voor die stromen heeft u de keuze tussen een huis-aan-huisinzameling, een brengsysteem op korte afstand of een combinatie van beide systemen.

Brengsysteem op korte afstand: voor- en nadelen

Bij een brengsysteem brengen inwoners hun afval naar een afvalcontainer in hun buurt. De openingsuren zijn erg ruim: inwoners kunnen hun selectief ingezameld afval wegbrengen wanneer het hen past. Vooral voor mensen die klein wonen en weinig opslagruimte hebben is dat voordelig.

Soms leidt een brengsysteem tot kwaliteitsverlies van de ingezamelde stromen en een hogere vervuiling. Daarnaast trekken inzamelpunten meer sluikstorters aan. Bovengrondse systemen scoren slechter dan ondergrondse systemen.

Recyclageparken

Naast de inwonersnorm geldt nu ook een afstandsnorm.

90% van de bevolking woont in vogelvlucht **maximaal 5 kilometer van een voor hem toegankelijk recyclagepark.**
De afvalfracties die u in een recyclagepark moet inzamelen, vindt u terug in bovenstaande tabel.

of

Eén recyclagepark in een gemeente vanaf **meer dan 10.000 inwoners.**

4.3 Lerende netwerken

Om u als gemeente te helpen bij de selectieve inzameling van afvalstromen, biedt de OVAM begeleiding op maat. Het uitgangspunt is dat gemeenten binnen eenzelfde cluster van elkaar kunnen leren. Daarom start de OVAM met de Vlaamse Vereniging voor Steden en Gemeenten (VVSG) en Interafval 'lerende netwerken' op. Binnen zo'n netwerk kunt u praktijkvoorbeelden uitwisselen met andere gemeenten uit uw cluster.

Gemeenten met het meeste restafval krijgen extra ondersteuning. Hoge restafvalcijfers kunnen diverse oorzaken hebben. Zo heeft een gemeente met grote hoeveelheden grofvuil al snel hoge restafvalcijfers. Ook de invoering van een gft-inzameling kan het restafval doen dalen.

5 GELIJKAARDIG BEDRIJFSAFVAL

Gelijkaardig bedrijfsafval is het afval van bedrijven dat inzake aard en samenstelling vergelijkbaar is met huishoudelijk afval: papier- en karton, pmd, organisch-biologisch afval … Het gaat om grotere hoeveelheden dan bij huishoudelijk afval en wordt vooral ingezameld door privaatrechtelijke afvalinzamelaars.

De OVAM ondersteunt bedrijven om hun materiaalstromen beter te beheren, zodat ze minder materialen verbruiken en meer recycleren. Dat doet de OVAM op verschillende manieren:

5.1 Handige OVAM-tools

Bedrijven kunnen een beroep doen op enkele tools om hun grondstoffen en materialen efficiënt te beheren:

- De **e-grondstoffentool** helpt om het onderscheid te maken tussen afvalstoffen en grondstoffen.
- Via de **feedbacktool** krijgen bedrijven feedback en tips over hun materialenbeheer in relatie tot andere vergelijkbare bedrijven in Vlaanderen.

5.2 Gerichte communicatie over sorteerverplichting

De OVAM organiseerde de voorbije jaren geregeld sensibiliseringscampagnes over de sorteerverplichtingen voor bedrijven. Die communicatieacties zet ze de komende jaren voort. De OVAM kiest voor twee sporen: een algemene aanpak en een benadering per sector voor de selectieve inzameling bij kmo's.

5.3 Kwaliteitsborging voor inzamelaars?

De inzameling van bedrijfsafval moet verder geprofessionaliseerd worden. Daarom onderzoekt de OVAM of een kwaliteitsborgingssysteem (KBS) voor inzamelaars van bedrijfsrestafval zinvol is. De invoering van zo'n KBS moet bedrijven ertoe aanzetten om afval gescheiden aan te bieden, zodat de kwaliteit van de ingezamelde stromen wordt gegarandeerd.

5.4 Collectieve inzameling op bedrijventerreinen

Lokale besturen en bedrijven kunnen proefprojecten opzetten rond de collectieve inzameling van selectieve fracties op een bedrijventerrein. Dat is beter voor het milieu en goedkoper door de efficiëntere logistiek. Door een vlotte service wordt vermeden dat individuele bedrijven kleine hoeveelheden van selectieve stromen bij het restafval gooien.

6 ACTIES VOOR ZES AFVALSTROMEN

Organisch-biologisch afval, verpakkingen, harde kunststoffen, papier en karton, textiel en grofvuil: voor die zes afvalstromen beschrijft het uitvoeringsplan specifieke acties. Met deze acties wil Vlaanderen de totale hoeveelheid restafval gevoelig verminderen en recyclage opdrijven.

6.1 Organisch-biologisch afval

Er komt nog te veel voedsel in ons afval terecht. De Vlaamse overheid en de spelers uit de hele voedselketen engageren zich om het voedselverlies tegen 2020 te verminderen met 15%. In het uitvoeringsplan focussen we op hoe lokale besturen voedselverlies kunnen voorkomen. De OVAM blijft thuiskringlopen (waaronder thuiscomposteren) stimuleren.

In gft-gemeenten wordt de inzameling van gft verder geoptimaliseerd en versterkt. Bovendien bekijkt de OVAM of het haalbaar is om gft uit te breiden met keukenafval dat dierlijke bijproducten bevat. Dit geeft een duidelijkere sorteerboodschap voor de burgers.

In de groenregio's wordt ingezet op een combinatie van thuiskringlopen en een intensievere selectieve inzameling van groenafval.

Bedrijven die veel organisch-biologische afval produceren, zullen dit vanaf 2021 selectief moeten inzamelen. Voor de kleinere producenten komt er eerst een proefproject.

6.2 Meer inzamelen en recycleren van verpakkingen

De komende jaren moeten VAL-I-PAC en Fost Plus meer verpakkingsafval inzamelen en recycleren. VAL-I-PAC stimuleert de recyclage van bedrijfsverpakkingen; Fost Plus staat in voor de promotie en financiering van de selectieve inzameling, sortering en recyclage van huishoudelijk verpakkingsafval in België.

Om meer verpakkingsafval in te zamelen zal het Interregionaal Samenwerkingsakkoord (ISA) aangescherpt worden. Dat samenwerkingsakkoord legt bedrijven die verpakkingen op de markt brengen een aantal verplichtingen op, bijvoorbeeld voor het recyclagecijfer.

Door het ISA aan te scherpen moeten VAL-I-PAC en Fost Plus meer focussen op de kleinere stromen verpakkingsafval die voorlopig nog niet selectief worden ingezameld. De wijziging van het ISA gaat over:

- hogere doelstellingen, zodat verpakkingsbedrijven nog meer recycleren;
- extra doelstellingen voor deelstromen, zodat ook stromen als EPS (piepschuim), folies en harde kunststoffen selectief ingezameld worden.

Nieuwe erkenning VAL-I-PAC en Fost Plus

De huidige erkenning van VAL-I-PAC loopt tot 31 december 2016, die van Fost Plus loopt tot eind 2018. Beide zijn de komende jaren dus aan herziening toe. De Vlaamse overheid schuift een aantal krachtlijnen voor beide erkenningen naar voor. Zo wil ze een verplichte selectieve inzameling van alle restplastics die nu nog in ons restafval terechtkomen.

6.3 Harde kunststoffen apart inzamelen

Particulieren moeten niet herbruikbare harde kunststoffen zoals emmers, speelgoed, buizen voortaan apart inzamelen en ze naar het recyclagepark brengen. Zo worden ze gerecycleerd en niet langer verbrand. Ook bedrijven zullen worden verplicht om hun gebruikte kunststoffen zoveel mogelijk apart in te zamelen. Het gaat dan om harde kunststoffen, folies en EPS.

6.4 Communicatie over papieren en kartonnen verpakkingen

De OVAM start samen met Fost Plus en Paper Chain Forum een nieuwe communicatiecampagne. Die moet de burger duidelijk maken dat papieren en kartonnen verpakkingsafval ook thuishoort bij het papier en karton.

6.5 Versleten textiel is ook textiel

Tot vandaag worden bij textielinzameling vooral herbruikbare kledij en schoenen ingezameld, terwijl ook versleten kledij, schoenen, handdoeken en lakens selectief ingezameld moeten worden. Een duidelijke en correcte sorteerboodschap is dus belangrijk. Daarom onderzoekt de OVAM de sorteerboodschappen die op textielcontainers staan en past die indien nodig aan. Ook brengt ze in 2017 actoren uit de textielsector samen om te bekijken hoe ze de uitdagingen voor het sluiten van de textielketen samen kunnen aanpakken.

6.6 Grofvuil: geen meubels en matrassen meer

Gemeenten die veel grofvuil produceren, krijgen begeleiding van de OVAM. Daarnaast komt er een specifiek beleid voor meubels en matrassen, met impulsen voor ecodesign, meer (lokaal) hergebruik en selectieve inzameling. Ook zal tegen 1 januari 2018 een uitgebreide producentenverantwoordelijkheid (UPV) voor matrassen ingevoerd worden. Voor meubels wil de OVAM uitzoeken wat het meest geschikte instrument is om deze stroom selectief in te zamelen.

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7 MINDER ZWERFVUIL

Zwerfvuil ontsiert onze publieke ruimte en is alle mensen een doorn in het oog. Bovendien kost de opruiming Vlaanderen miljoenen euro's. Om komaf te maken met zwerfvuil moet iedereen een inspanning doen. Het nieuwe plan omschrijft de grote strategische lijnen. Met een jaarlijks actieplan wordt hier concrete invulling aan gegeven.

In 2018 wordt de voortuitgang van het zwerfvuilbeleid een eerste maal geëvalueerd. Wanneer blijkt dat de hoeveelheid zwerfvuil niet voldoende daalt, zal het beleid bijgestuurd worden.

7.1 Wat doet Vlaanderen?

Een eerste stap is preventie: voorkomen dat er afval ontstaat dat zwerfvuil kan worden. De meest voorkomende zwerfvuilfracties zijn peuken, kauwgom en verpakkingen van voeding (bv. koffiebekers, drankverpakkingen, wikkels ...). Die specifieke fracties wil Vlaanderen aan de bron aanpakken. Hoe? Door producenten en verdelers aan te moedigen om oplossingen te ontwikkelen die consumenten helpen om geen zwerfvuil te veroorzaken.

Daarnaast gaat extra aandacht naar die plekken met het meeste zwerfvuil. Er komt een aanpak op maat van deze doelplaatsen. Daarmee kunt u als gemeente aan de slag.

7.2 Wat kunt u doen?

Om de openbare ruimte, ook in uw gemeente, net te houden is een duurzame gedragsverandering nodig. Elke schakel wordt aangesproken op zijn verantwoordelijkheid: producenten, distributie, consumenten en burgers, bedrijven, lokale besturen, domeinbeheerders en handhavers.

Een goed zwerfvuilbeleid steunt op vijf fundamenten:

Infrastructuur: een doordachte inrichting van de publieke ruimte moedigt burgers aan om afval in de vuilnisbak te gooien en sluikstorten te vermijden. Dat gebeurt door goed geplaatste en efficiënt beheerde vuilnisbakken, en door een performant veegbeleid.

Participatie: ondersteun het netwerk van vrijwilligers en partners en breid het uit. Maak hun inspanningen zichtbaar en zorg zo voor erkenning. Op die manier versterkt u de betrokkenheid bij de openbare netheid en creëert u een effectieve sociale controle.

Communicatie: maak via sensibiliserende communicatie duidelijk dat afval achterlaten maatschappelijk onaanvaardbaar is. Communicatie op het moment dat zwerfvuil ontstaat is het meest effectief (doelplaatsgerichte communicatie). U kunt daarbij uitgaan van de jaarlijkse campagne over zwerfvuil van Indevuilbak, een samenwerkingsverband tussen VVSG, Fost Plus en de OVAM. Door de boodschap van deze campagne te vertalen naar de situatie in uw gemeente, bent u zeker dat ze ook bij uw inwoners effect heeft.

Omgeving: een verlaten of verloederde wijk kan zwerfvuilgedrag uitlokken, door anonimiteit en verwaarlozing. De OVAM onderzoekt welke goede praktijken die situatie kunnen keren.

Handhaving: dit is het sluitstuk van elk beleid. Op het terrein moet zichtbaar zijn dat geen enkele vorm van zwerfvuil en sluikstorten nog geaccepteerd wordt. Handhaving krijgt een brede invulling: niet enkel boetes zijn mogelijk, u kunt overtreders ook aanspreken op hun gedrag en sociale controle stimuleren.

8 LIEFST ZO MIN MOGELIJK: VERBRANDEN EN STORTEN

Verbrandingsovens of stortplaatsen zijn de laatste toevlucht voor de verwerking van afval. Bij die manier van verwerken gaan waardevolle grondstoffen verloren.
Vlaanderen houdt vast aan het principe van 'zelfvoorziening': afval dat hier ontstaat, wordt enkel hier verbrand of gestort.

8.1 Verbranden: capaciteit afstemmen op aanbod

De afvalverbrandingscapaciteit in Vlaanderen wordt afgestemd op de hoeveelheid afval die verbrand moet worden. De OVAM brengt zowel het aanbod aan brandbaar afval als de verbrandingsinstallaties op een transparante manier in kaart. Wanneer de hoeveelheid afval gelijk blijft, kan er enkel verbrandingscapaciteit bijkomen als er elders capaciteit wordt afgebouwd. Van de afvalverwerkingsinstallaties worden bovendien inspanningen verwacht om performanter en energie-efficiënter te worden.

De komende jaren wil Vlaanderen de hoeveelheid restafval verder doen afnemen. Daarom ontwikkelt de OVAM de komende jaren een instrument om de afbouw van afvalverwerkingsinstallaties te stimuleren.

8.2 Storten: laatste optie

Afval storten is en blijft de laatste optie voor verwerking. Om het storten te beperken maakt de Vlaamse overheid gebruik van stortheffingen, stortverboden en een verbod op nieuwe stortsites voor niet-gevaarlijk afval.

Storten moet duurder blijven dan verbranden. Van dat principe gaan de milieuheffingen ook in de toekomst uit. Omdat er momenteel voldoende stortcapaciteit is, wordt er geen bijkomende stortcapaciteit op nieuwe locaties toegelaten.

9 BESLUIT

Van innovatieve inzamelvormen over doelstellingen voor recyclage en de inzameling van kunststoffen, deze beknopte samenvatting van het nieuwe uitvoeringsplan heeft u hopelijk heel wat frisse ideeën gegeven over hoe u afval en zwerfvuil ook in uw gemeente kunt aanpakken.

Meer inspiratie en alle details vindt u in de volledige versie van het uitvoeringsplan, op www.ovam.be/uitvoeringsplan.

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START MEMORANDUM FOR EPA RELATED TO DISCARDED MATTRESSES

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1 SITUATION

1.1 LEGISLATIVE FRAMEWORK

On December, 18th 2015, the Decree to amend the VLAREMA (Decree of the Flemish Government of February, 17th 2012 on the sustainable management of material cycles and waste materials) was approved in principle by the Flemish Government. The final approval is expected before the summer. This decree establishes an acceptance obligation for discarded mattresses with effect from 1 January 2018. A sub-section 3.4.8. will be introduced that will lay down the future Flemish legislation related to discarded mattresses:

- all discarded mattresses that are offered must be collected;
- the collected discarded mattresses must be utilised in a useful manner;
- retailers, brokers, and mattress manufacturers are obliged to report annually to the OVAM concerning the fulfilment of the acceptance obligation.

1.2 INNOMAT RESEARCH PROJECT

At present, a consortium of seven companies from the mattress value chain are collaborating with three research institutions for conducting a MIP research project called Innomat: innovation of mattresses in the developmental and the end-of-life phase.

The results of this project, in which the OVAM is involved in the steering committee, shall be used in further developing the details of the acceptance obligation for mattresses. The following three issues will be investigated within Innomat:

- eco-design of mattresses:
- what are the possibilities for design for disassembly and design for recycling?
- what are the possibilities to enhance recyclability of mattresses through material selection?
- what are the application options of the residual flows of polyurethane, latex, mattress covers, metal?
- drawing up an environmental cost/benefit analysis of separate collection and recycling versus incineration of discarded mattresses; investigation into the economic and ecological feasibility of separate collection and recycling.

The Innomat project started up in early December 2014 and will end at the end of November 2016. The results within each of the three subjects will be used in developing the further details of the acceptance obligation and the related EPA.

1.3 START MEMORANDUM FOR EPA RELATING TO DISCARDED MATTRESSES

Although the implementation of the acceptance obligation for discarded mattresses in the VLAREMA has not been definitively approved, and the results of Innomat are still not known, it is yet necessary to submit the start memorandum for discarded mattresses at this moment. After all, it is stipulated that the acceptance obligation for discarded mattresses shall come into force on 1 January 2018. According to experience, the entire procedure for drawing up an Environmental Policy Agreement (EPA) for the implementation of the acceptance obligations is likely to take as long as two years.

2 JUSTIFICATION FOR THE CHOICE OF INSTRUMENT

There is presently no separate collection of discarded mattresses. The mattresses are mostly collected via the bulky waste fraction, and as such, end up in an incinerator. In the context of sustainable materials management, it is important that the various material fractions can be re-used as a raw material in the production of new products through the recycling of discarded mattresses. Therefore, a policy objective for the OVAM is to ensure that discarded mattresses are collected and recycled to the extent possible.

In the Regulatory Impact Analysis (RIA) concerning the implementation of an acceptance obligation for discarded mattresses, a comparison is made between the following three policy options in order to achieve the aforesaid objective:

- no imposition of additional regulatory obligations;
- implementation of an acceptance obligation for discarded mattresses;
- introduction of a charge for discarded mattresses.

The three scenarios are compared in the RIA based on effectiveness, cost price, feasibility, and support. The option selected, being the acceptance obligation, scored the highest on these criteria.

The acceptance obligation imposes separate collection and recycling of discarded mattresses and makes a strong contribution to the policy objective in this way. The instrument implies a substantial cost for the manufacturers, which will be charged to consumers via an environmental contribution. The collection and processing costs for mattresses shall thus be passed on from the municipalities to the polluters (in accordance with “the polluter pays” principle). Experience shows that good to excellent results have been achieved in other streams for which an acceptance obligation was imposed. A significant part of the sector also has a strong preference for this policy instrument.

At present, some manufacturers and/or retailers voluntarily take back discarded mattresses from consumers who purchase a new mattress. Insofar as is known, most of the mattresses collected in this way are incinerated. Through the implementation of an acceptance obligation, the taking back of mattresses

will be generalised within the sector, thereby giving rise to economies of scale, and more high-quality processing can be aimed for.

3 KEY OBJECTIVES AND GUIDELINES

3.1 THE PARTIES WHO WILL BE NEGOTIATING AND SIGNING THE EPA

The Environmental Policy Agreement will be negotiated and signed by the following federations representing the manufacturers and importers of mattresses:

- Fedustria nfp, the Belgian federation of the textile, wood, and furniture industry;
- Comeos nfp, Belgian federation for trade and services;
- Navem nfp, National trade association for furniture dealers.

Fedustria, Comeos and Navem refer to the relevant federations of producers and importers of mattresses for private individuals. They estimate that they jointly represent around 90% of the mattresses brought into the household market. Presumably the remaining part is mainly brought into the market by producers/importers who are not affiliated with the federation.

If it is found that, for example, hotels, retirement homes, prisons, etc. also import mattresses, and the umbrella federations wish to sign the EPA as well, these parties may also be involved during the negotiations.

For Fedustria, Comeos and Navem, it is essential that an EPA is concluded with each of the three Regions. They emphasise that if this is not done, they will not sign any EPA in the Flemish Region (also see section 3.2).

3.2 THE SITUATION IN THE OTHER REGIONS AND THE NEIGHBOURING COUNTRIES

3.2.1 Interregional context

The Brussels-Capital Region and the Walloon Region have not as yet introduced any acceptance obligation for discarded mattresses. Both Regions have expressed an interest in doing something about discarded mattresses. For example, in its draft Wallonia Waste Plan Horizon 2020 the Walloon Region proposes, as a priority action for bulky waste, the introduction of a take back obligation for mattresses, in collaboration with the other Regions. The Brussels-Capital Region's Regional Programme for Circular Economy mentions the initiative in which the Government shall approve an extended producer responsibility (EPR) for mattresses in consultation with the two other Regions. However, no legislative initiatives have been launched either in the Walloon Region or in the Brussels-Capital Region to introduce an acceptance obligation. Legislative initiatives are currently ongoing in both Wallonia and Brussels, in which modifications will be made in the acceptance

obligation. Mattresses are, however, not included in this as a new stream. If this is not included in the processes that are currently in progress, it will probably take some time before an acceptance obligation for mattresses will apply to other Regions. The Walloon Region has also stated that they do not as yet know which instrument (environmental policy agreement, accreditation, specifications, participation obligation) they wish to use in order to promote the recycling of mattresses.

The sector has applied for a uniform system for the whole of Belgium. The OVAM is also a proponent of this and therefore constantly strives to have joint negotiations with the other regions about EPAs. The differences in vision on extended producer responsibility and the timing of the (potential) legislative initiatives in the three Regions will probably make it difficult to arrive at a uniform EPA for mattresses in the three Regions through joint negotiations.

As mentioned above, the sector has already made it clear that in no case will it conclude an EPA only in Flanders; the basic precondition laid down by them is an acceptance obligation that applies to the whole of Belgium. The timing proposed by the Flemish Region will consequently be greatly influenced by the legislative initiatives of the other Regions.

3.2.2 Neighbouring countries

Few countries have a specific law relating to discarded mattresses.

France introduced an acceptance obligation for furniture, including mattresses, on 1 May 2013. The statutory objectives in the French law are formulated for all product groups together without specific objectives for separate waste collection or processing of mattresses. This means that, in France, all furniture and mattresses are collected together in one container. The recycling targets can then be easily achieved merely by recycling the heaviest materials (such as wood and metal). Since the system is still in the start-up phase, it is difficult to draw any clear policy conclusions.

The Netherlands have no specific law concerning mattresses, but voluntary initiatives have arisen where discarded mattresses are separately collected and thereafter dismantled in order to recycle the various materials. In this connection, it is stated that the sale of the recycled materials is a problem right now.

An extended producer responsibility applies to mattresses also in certain US states (for example, Connecticut, Rhode Island, and California).

3.3 THE VALIDITY PERIOD

Since this is a new acceptance obligation, and therefore an initial EPA, it is appropriate to have a revision after a period of five years. We therefore propose that the EPA must be concluded for a period of five years.

3.4 THE OBJECTIVES

3.4.1 Scope

The draft decree for amending the VLAREMA establishes an acceptance obligation for all discarded mattresses, in which mattresses are defined as follows: "products that are intended to sleep and rest, suitable for use by humans for a long period, consisting of a strong loose cover, filled with materials, which can be placed on an existing supporting bed structure". This therefore relates to both the mattresses intended for private people as well as mattresses intended for the professional sector (for example, hotels, hospitals, prisons, etc.). Waterbed mattresses are not included in the scope: these are plastic covers that are filled with water at the consumer's location. At disposal, the water is also emptied on the spot.

The sector advocates that provisionally, the acceptance obligation must be restricted to mattresses that come from the household market. The OVAM does not, however, consider this appropriate. The OVAM will, in collaboration with the sector, soon collect further information concerning the mattresses in the professional market (the number of mattresses in use, their composition, the collection method used at present, etc.). Based on this information, it shall be further examined whether an alternative implementation of the acceptance obligation for mattresses from the professional sector can be found (for example, specific collection method, specific processing objectives, etc.).

3.4.2 Environmental objectives

3.4.2.1 Collection

The draft decree for amending the VLAREMA stipulates that all discarded mattresses that are offered must be collected. This is analogous to the collection targets for certain other waste streams to which an acceptance obligation applies (for example, waste tyres, and waste automotive batteries and accumulators). The OVAM wants to retain this general wording for the collection target. Since mattresses have a significantly negative value in the waste phase, a specific, quantitative collection target does not appear necessary. A free-of-charge collection system will in principle automatically attract almost all the discarded mattresses.

3.4.2.2 Processing

The draft decree for amending the VLAREMA stipulates that all the collected waste mattresses must be utilized in a useful manner. Further specific processing targets are not yet included in the draft legislation. However, the objective underlying the introduction of an acceptance obligation is to replace incineration as a processing method for discarded mattresses to the extent possible, through more advanced recycling applications.

The OVAM wishes to impose a minimum percentage of material recycling. The gradual increase of this percentage over time may be considered. However, the processing targets cannot be further concretized at the present time, since the results of the above Innomat research project are not yet known. Among other things, this study shall map the environmental impact of the various processing options for discarded mattresses. Keeping this in mind, well-thought-out processing targets will be laid down during the EPA negotiations, which will also be legally incorporated into the VLAREMA at

that time. On the other hand, it is important that the targets contained in the VLAREMA shall only apply if they are imposed prior to the EPA.

It must be noted that there is a difference between the composition of mattresses intended for private individuals and mattresses intended for the professional sector. Mattresses intended for the professional sector contain flame-retardant materials, which is not the case for mattresses intended for private individuals. This difference in chemical composition may result in different recycling options. It is therefore not inconceivable that different processing objectives would be necessary for, on the one hand, mattresses from the private individual market and, on the other hand, mattresses from the professional market. The Innomat research project will provide further information concerning this aspect.

The sector can agree to this approach, but it does state that the Innomat study must clearly show that the recycling as a processing method will result in greater environmental benefits in comparison to incineration. They state that, at the present moment, it is a major challenge to market materials (due to low oil prices). Techniques and equipment for the disassembly of mattresses and their separation into the various materials are available. According to the sector, various foreign disassembly projects are struggling with marketing problems for materials. The greater the number of mattresses offered for recycling, for example through the introduction of an acceptance obligation in Flanders, the more difficult it will be to find adequate applications for the recycled materials.

3.5 CONCRETE ACTIONS

3.5.1 Creation of Producer Responsibility Organization (PRO)

The sector federations and the producers that will sign the EPA shall set up a Producer Responsibility Organization in accordance with the provisions of the VLAREMA. This PRO shall execute, on behalf of the producers, the tasks that arise out of the acceptance obligation. This includes, among other things:

- recovery of an environmental contribution from producers/importers of mattresses;
- the conclusion of contracts with collection points, collectors, and processors;
- the organisation of the removal of discarded mattresses collected at civic amenity sites;
- the annual reporting to the OVAM.

The sector is currently making all the necessary preparations for setting up the PRO, which shall bear the name Valumat nfp. The actual establishment is planned for mid-2016.

3.5.2 Eco-design, prevention, and re-use

A section of the mattress sector is currently already working on an investigation into the eco-design of mattresses in connection with the Innomat research project (see above). The PRO shall be responsible for incentivizing the inclusion and execution of the policy recommendations from the Innomat study. Persistent research into eco-design of mattresses including recyclability,

remanufacturing, and dismantlability is necessary, as well as research on the re-use of mattresses. The management body must also play a role in stimulating the sales market for the recycled materials from mattress. This can be done through research and/or by setting up a specific fund.

Furthermore, the OVAM sees a role for the management body in providing information about the various mattress types and materials, and their impact on the environment, and on appropriate product use. This way, users will be encouraged to include environmental considerations in their purchase choice and product usage. It can also be examined to what extent differentiation of the environmental contribution is possible depending on the type of mattress and the related environmental impact.

3.5.3 Collection and Treatment

In accordance with the general provisions concerning the acceptance obligation in the VLAREMA, the retailers, brokers, and producers will, in principle, be required to receive discarded mattresses free of charge, both at the time of purchase at a point of sale as well as in case of home delivery (1-for-1). Discarded mattresses from citizens shall also be collected via civic amenity sites (1-for-0). The PRO will be required to draw up a model agreement with the public-law legal entities, which will comprise the practical modalities for collection, as well as a compensation arrangement for civic amenity sites.

The sector has already made it clear that it is very strongly opposed to mandatory collection via the distribution network, in view of the hygiene aspect and storage space required. The sector therefore advocates a voluntary instead of a mandatory collection from retailers.

A deviation can be made in the VLAREMA as regards the obligation to provide free-of-charge collection via the distribution network. This is currently included for the acceptance obligation for waste oils. The draft decree for discarded mattresses contains no provision for such an exemption. No deviation can be made in the EPA from the 1-for-1 principle because an EPA may not be less stringent than the statutory legislation. A possible exemption can therefore only be provided under the VLAREMA. The sector is of the opinion that voluntary collection via the (mostly specialized) retailers offers an adequate alternative, and is prepared to map and evaluate the same. For this reason, the sector requests that the VLAREMA should include an exemption from the obligation to provide free-of-charge collection via the distribution network.

For the OVAM, this is only possible if the disposer can dispose of their discarded mattress in a similar manner. Only the recycling centre as a collection point is clearly insufficient. Obviously, it is not feasible for all citizens to transport the discarded mattress to a civic amenity site or other collection point themselves. For example, double mattresses cannot be transported easily in a family car. In addition, not all families have a car. For this reason, for the OVAM, there can only be a deviation subject to the mandatory collection via the distribution network if the sector proposes an equivalent alternative.

Apart from households, discarded mattresses are also generated by professional actors such as hotels, prisons, hospitals, nursing homes, etc., which often do not have any access to civic amenity sites. Provisions for collection must be made here as well. Presumably, the logistics are less problematic since the mattresses are discarded in large numbers.

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The PRO shall organize the further disposal from the collection points and civic amenity sites, and the processing of the mattresses. For this, the PRO will be required to conclude contracts with collectors and/or processors.

3.6 FINANCIAL ASPECTS

As is the case with other products covered under the acceptance obligation, an environmental contribution shall be charged for each new mattress that is brought into the market. This shall also apply to online sales. This environmental contribution must reflect the cost of collection and processing of the discarded mattress. The amount of the environmental contribution has been estimated in the regulatory impact analysis (RIA) for the introduction of an acceptance obligation for discarded mattresses at 13.50 euros per mattress. The annual cost for the acceptance obligation in the Flemish Region is estimated in the RIA at 5.4 million euros. The largest cost item for the PRO shall be the financing of the collection and processing of the mattresses. This is because no extensive communication is required with consumers to encourage collection, as is the case with Recupel and Bebat, for example.

The sector continues to appeal for a gradual introduction of the acceptance obligation, in which a recycling fee shall be collected for a specific period before starting with the effective operational aspects. The OVAM does not agree to this, since this would mean that a contribution must be paid when purchasing a new mattress, but that the free-of-charge delivery of discarded mattresses is not possible at that moment. This is a wrong signal to the disposer. There are alternative solutions to approach the issue of costs during the start-up phase (for example, pre-financing by the producers or a loan from the bank).

Since it can be assumed that the quantity of collected mattresses shall be fairly stable throughout the years, a financing model can be drawn up in which the incomes for the year are used to cover the costs of the same year. There does not appear to be any discussion on stipulating extensive provisions for future processing. Due account must be taken of the increase in collection due to the clearing up of the historical liabilities during the first years of operation.

When the PRO determines the amount of the environmental contribution, it may also be examined to what extent differentiation is possible, for example, according to the type of mattress and the related environmental impact.

The sector calls for special attention to online sales because this is a growing phenomenon. This includes online sales to Belgian customers through (foreign or other) purely online players, as well as omni-channel sales (retailers who sell both in their physical stores as well as online to Belgian and foreign customers). An environmental contribution is payable at the time of the sale to Belgian customers, but not at the time of sale to foreign customers.

3.7 SANCTIONS FOR FAILURE TO MEET TARGETS

No specific sanctions will be stipulated in the EPA. Since the targets will also be included in the VLAREMA, the OVAM may avail of the option of imposing sanctions that are stipulated in this regard in the decree containing general provisions regarding environmental policy (DABM) and in the decree on the

implementation of Title XVI of the DABM. Specific sanction options have been provided for non-compliance with an EPA in the legislation on environmental agreements (Title VI of the DABM).

3.8 REPORTING OBLIGATIONS

The PRO will have to work out a transparent system for recording the collection and treatment of discarded mattresses. The draft decree for amending the VLAREMA specifies the aspects on which the PRO must report specifically. More specifically, these aspects are:

- the total quantity of the mattresses brought onto the market;
- the total quantity of collected mattresses;
- the establishments in which, and the manner in which the collected mattresses have been processed;
- the total quantity of the materials generated from the treatment of the discarded mattresses, which are:
- re-used;
- recycled;
- utilized in a useful manner;
- discarded.

The provisions in VLAREMA concerning validation of the reported figures by an independent inspection body will have to be complied with. The VLAREMA does provide for the option of deviating from these provisions in the EPA. If the sector demands this, it will be further examined during the EPA negotiations.

The PRO shall try to place the minimum administrative burden on its affiliated members and the operators (for example, procedure for exporting mattresses for which no environmental contribution is payable). The PRO shall jointly consider every suggestion for administrative simplification with the relevant actors.

3.9 THE MEASURES SET OUT BY THE FLEMISH REGION

The Flemish Region is committed to the following measures:

- the free provision of tools by the OVAM (Ecolizer 2.0, SIS Toolkit) and knowledge on sustainable materials management;
- the appeal to the other regional authorities for harmonization of the regulations relating to the acceptance obligation for mattresses;
- the monitoring of the strict application by all the actors of the acceptance obligation and for the verbalization of violations.

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3.10 DURATION OF THE NEGOTIATIONS

The aim is to complete the negotiations concerning the EPA draft within a period of six months.

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REPORT CONSULTATION REGARDING THE START MEMORANDUM ON THE EPA FOR DISCARDED MATTRESSES

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1 FRAMEWORK

An acceptance obligation to discarded mattresses will enter into force from 1 January 2018. This means that the producer will be responsible for the management of the discarded mattresses. The Flemish Government has taken the initiative to negotiate an Environmental Policy Agreement (EPA) with the sector.

In accordance with Title VI "Environmental Agreements" of the Decree of 5 April 1995 containing general provisions regarding environmental policy (DABM), the competent Minister has therefore made a start memorandum that justifies the policy choice and describes the main objectives and baselines. The Decree stipulates that a consultation must be organised concerning the start memorandum. In this regard, the start memorandum was submitted to the Environmental and Nature Council of Flanders (Minaraad) and to the President of the Flemish Parliament. In addition, the website on which the start memorandum is available was communicated to the stakeholders. For this, the Public Waste Agency of Flanders (OVAM) sent a mail to about 70 contact persons (all the OVAM contacts relating to extended producer responsibility [EPR]). During the consultation that continued from 1 October to 4 November 2016, everyone was given an opportunity to make remarks to and raise objections with the OVAM.

The regulations relating to environmental policy agreements further implies that the OVAM shall investigate all the responses and will draw up a report concerning the consultation. This report provides justification as to why the start memorandum will or will not be modified, and states the grounds for the decision as to whether or not negotiations concerning the agreement will be held. The Flemish Government will have to approve the start memorandum. The report is public and is sent together with the approved start memorandum to the interested parties who had expressed objections or made remarks.

2 COMMENT AND OBJECTIONS RECEIVED

The following actors submitted remarks and objections:

- Minaraad, 15 December 2016
- Horeca Vlaanderen, 4 October 2016
- Navem, 7 October 2016
- Fedustria, 10 October 2016
- Comeos, 11 October 2016
- Go4Circle, 25 October 2016

- Interafval, 26 October 2016

Also following individual companies submitted comments and objections:

- Forme&Style, 7 October 2016
- Gero Meubelen, 7 October 2016
- Woonark, Colifac, Krea, 7 October 2016
- Heim-Pollé, 10 October 2016
- Meubelen De Keizer, 10 October 2016
- Meubelen Ponsaerts, 10 October 2016
- Time2Sleep, 10 October 2016
- Zitidee, 10 October 2016
- Verberckmoes, 14 October 2016
- Limpa Meubelen, Auping Plaza Geel, Auping Plaza Brasschaat, 28 October 2016
- Meubelen Gaverzicht, 2 November 2016
- Fito Leuven, 21 November 2016

3 EXAMINATION OF THE COMMENTS AND OBJECTIONS

3.1 ENVIRONMENTAL AND NATURE COUNCIL OF FLANDERS

3.1.1 Sub-section [6] Relationship with Vision 2050

3.1.1.1 Comment

The Council requests that the negotiations and the implementation of the new EPA will be done while pursuing the long-term ambition of the Flemish Government for Flanders in 2050, “through a new economy, for an inclusive society, and within the ecosystem boundaries of our planet”. The new economy was characterised in Vision 2050 as a low-carbon and circular economy in which resources, materials, energy, water, space and food are handled intelligently, and material cycles are closed to the extent possible.

3.1.1.2 Explanation

The policy provided for discarded mattresses fits fully within the Vision 2050 of the Flemish Government: in point 2, the start memorandum states that, in the context of sustainable materials management, it is important that the various material fractions can be re-used as a raw material in the manufacture of new products through the recycling of discarded mattresses. A policy objective for the OVAM is also to ensure that discarded mattresses are collected and recycled to the extent possible. The acceptance obligation for mattresses will be introduced with the objective of achieving a circular economy for the mattress materials. The request of the Environmental and Nature Council of Flanders therefore appears to be sufficiently represented in the start memorandum.

3.1.1.3 Proposed decision

It is not necessary to change the start memorandum.

3.1.2 Sub-section [7] Information and reporting obligations

3.1.2.1 Comment

On the basis of the present EPAs, the environmental and nature organisations, OECD (Organisation for Economic Cooperation and Development) and the employee organisations, that are not members, and consequently are also not represented in the management bodies of the coordinating, representative organisations of companies (DABM, Section 6.1.1), state that a lack of transparency concerning the information that is collected and treated, is experienced in some situations implementing the extended producer responsibility. As a result, it becomes difficult to assess the effectiveness of the system and to evaluate the working of a producer responsibility organisation (PRO). There is often a lack of access to background documents that would have enabled this. These organisations requested the different PRO's and the Flemish Government to state whether they wish to satisfy this need, as perceived by the specified organisations, for greater transparency in the working of the PRO, and the significance of the processing results.

3.1.2.2 Explanation

It is not entirely clear to us which additional information the aforesaid actors deem to be necessary. We have never received any concrete request for information. The following sources are publicly available: the biennial evaluation report of the Government to the Parliament, including the report of the meeting of the same in the Committee on Environment, the annual reports of the PRO's, and their annual accounts. This contains at least a description of the operational collection and processing system, the number of products brought into the market, the number of collected waste products with the recycling results, the applicable environmental contribution, and the cost price of the system. Moreover, additional information is available on the OVAM website and on the websites of the PRO's. It would appear that, via the acceptance obligation, more information is available in comparison to products/waste streams that are not covered under the acceptance obligation. The OVAM is of course always prepared to examine how the specific information requirements that certain actors consider necessary can be met in a standardised manner. In addition, the OVAM is always available to provide additional information concerning the policy and the functioning of the PRO's, provided this does not involve disclosure of confidential business information.

3.1.2.3 Proposed decision

It is not necessary to change the start memorandum.

3.1.3 Sub-section [42] A unified system as a result of joint negotiations

3.1.3.1 Comment

If the other Regions do not wish to participate in a uniform, jointly negotiated approach, this would greatly hinder the organisation, monitoring, and execution of a unilateral Flemish approach, and furthermore, a level playing field within Belgium would be rendered impossible and the operational advantages of the same would be lost.

3.1.3.1.1 Position of the BBL, Natuurpunt, OECD, ACV, ABVV, ACLVB, and VVSG

The Bond Beter Leefmilieu (BBL, the umbrella organisation of some 125 environmental groups in Flanders), Natuurpunt (the main association for nature conservation and protection of the landscape in Flanders), the Organisation for Economic Co-operation and Development (OECD), the ACV (Christian trade union confederation), ABVV (Socialist trade union confederation), ACLVB (Liberal trade union confederation), and the Association of Flemish Cities and Municipalities (VVSG) are also strong supporters of a system that is as uniform and geographically widely dispersed as possible, in order to recover the maximum amount of re-usable goods and recyclable components from bulky waste, which in the present case consists of the bulky and difficult–to-handle fraction of the discarded mattresses. For this reason, the organisations request that the OVAM and the other responsible persons in Flanders make extensive efforts to stimulate inter-ministerial discussions with a view to realising a uniform system. The organisations also request that, if a common approach of the three Regions fails, the Flemish Region can continue working further according to their own guidelines. If the other Regions do not wish to participate in a uniform system, the organisations argue for a specific Flemish policy aimed at achieving the objectives of the Implementation Plan.

3.1.3.1.2 Position of VOKA, UNIZO, and the Boerenbond

The VOKA (Flemish network of companies), UNIZO (Union of Self-Employed Entrepreneurs), and the Boerenbond (Belgian Farmers Association) are of the opinion that it is necessary to have a common approach within the various regions because of the single market within Belgium. It is important that this approach respects the market operations and limits the administrative obligations of the various actors to the extent possible. The organisations are also of the opinion that if an EPR is introduced for mattresses, this can only happen if this is done in a uniform manner all over Belgium. An EPR system that only applies to the Flemish territory will create practical and financial problems. An acceptance obligation for mattresses will be introduced via the VLAREMA with effect from 1 January 2018. If it appears that it is not possible to conclude an EPA for the whole of Belgium by 1 January 2018, a change in the VLAREMA must be considered.

3.1.3.1.3 Abstention from earlier positions: Rural Flanders

3.1.3.2 Explanation

As mentioned in 3.2 of the start memorandum, the OVAM also advocates a uniform system for the whole of Belgium, and efforts are constantly being made for joint negotiations about EPAs with the other regions. In its policy concerning discarded mattresses, the OVAM has always involved its counterparts in the other Regions (the BIM and SPW) in the policy process, which started with the study of the implementation of an EPR for mattresses in 2013. Further steps were the introduction of the acceptance obligation for discarded mattresses in the VLAREMA, and the format of the draft start memorandum for the EPA on discarded mattresses. The Governments in the other regions were kept informed about the policy developments via the periodic IRP-EPR (Inter-Regional Platform for Extended Producer Responsibility) meetings. This shall continue for future stages as well. The other regions have always confirmed their interest in the introduction of an EPR for mattresses. This intention was also made part of the Brussels and Walloon waste implementation plans. However, the final step, namely the introduction of a statutory obligation, lefts out. The other Regions stated that they had other priorities in this regard. In Brussels, there is discussion on bundling all decrees into one common waste decree, the “Brudalex”. In Wallonia, this is the revision of the legal framework concerning EPR, both at the decree level as well as at the level of the implementation decrees, as a consequence of the cancellation by the Council of State in 2015, of a number of provisions contained in the Decree of 2010 on the take-back obligation. The procedures for this modification in the legal framework in the other Regions are ongoing. A statutory introduction of an EPR for mattresses shall therefore only be implemented in a subsequent modification round, and thus not before 2018. In addition, it must also be noted that, especially in Wallonia, the policy interest is to apply for this stream other EPR instruments than the imposition of an acceptance obligation.

In short, thus far, the other Regions have not addressed the question of a common approach to the Flemish Region. It is also expected that this will not happen in the short term. It is therefore considered unlikely that a uniform EPA for mattresses will be established in the three Regions via joint negotiations by 1 January 2018.

As can be seen from the above observation, the position of the Environmental and Nature Council of Flanders on the question is divided. The BBL, Natuurpunt, OECD, ACV, ABVV, ACLVB, and VVSG request that the Flemish Region continue working according to its own discretion, while VOKA, UNIZO, and the Boerenbond are of the opinion that a change in the VLAREMA must be considered. The latter organisations thereby endorse the position of the sector that in no case will they conclude an EPA that is limited to Flanders (also see 3.5.4.1 of this report).

3.1.3.3 Proposed decision

The Flemish Government recognises that, in practice, it will be very difficult to establish a policy only at the Flemish level. The Government shall therefore wait until a common approach in the three Regions is possible before introducing an acceptance obligation for mattresses via a modification of the VLAREMA.

OR

The Flemish Government is not prepared to abandon its policy objectives because of the situation in the other Regions. The introduction of the acceptance obligation was preceded by comprehensive policy preparations, which gave the sector sufficient time and opportunity to prepare itself. If the sector is not prepared to negotiate the implementation via an EPA, the producers must draw up an individual waste prevention and waste management plan and submit the same to the OVAM for approval. In this regard, each producer shall be required to take back the discarded mattresses and the OVAM shall require a financial contribution from all producers to compensate for the collection and processing costs for discarded mattresses that are collected by the municipalities. The OVAM is assigned two additional FTEs for this purpose: One auditor and one policy employee for the handling and follow-up of the individual plans.

It is not necessary to implement a modification of the start memorandum.

3.1.4 Sub-section [43] Timing of the introduction of the environmental contribution

3.1.4.1 Comment

The VLAREMA stipulates that the acceptance obligation for all mattresses shall come into force on 1 January 2018. The sector advocates a gradual introduction of the acceptance obligation whereby an environmental contribution shall first be charged for a specific period, before starting with the actual operational aspects. The OVAM does not agree to this, since this would mean that a contribution must be paid when purchasing a new mattress, but that at such time, the free of charge delivering of discarded mattresses is not possible. In addition, anyone who purchases a mattress during the specified period shall pay the invoice for those who make purchases after that period. This is a conflicting signal to the disposer.

3.1.4.1.1 Position of the BBL, Natuurpunt, OECD, ACV, ABVV, ACLVB, and VVSG

The BBL, Natuurpunt, OECD, ACV, ABVV, ACLVB, and VVSG agree with the arguments put forward by the OVAM and consequently reject the gradual introduction. They suggest that the study during the preparation of an EPA include a financing plan for the set-up and operation of a PRO.

3.1.4.1.2 Position of VOKA, UNIZO, and the Boerenbond

VOKA, UNIZO, and the Boerenbond wish to emphasise that the financial picture of the introduction of an EPR system must be properly mapped. The sector expects an increased collection of discarded mattresses during the first years of operation, due to clearing up of historical liabilities. This is also confirmed in the start memorandum. According to the organisations, the gradual introduction of the EPR cannot be ruled out in practice, and the merits of every possible solution to the problem of pre-financing must be investigated during the start-up phase.

3.1.4.1.3 Abstention from earlier standpoints: Rural Flanders

The Council also requests that the environmental contributions for mattresses be regularly reviewed so that they continue to approximate to the actual cost of the acceptance obligation.

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3.1.4.2 Explanation

The financing of the acceptance obligation is regarded as a task for the sector. The Flemish Government, just like the BBL, Natuurpunt, OECD, ACV, ABVV, ACLVB, and VVSG, agrees with the justification of the OVAM as mentioned in 3.6 of the start memorandum. The Flemish Government consequently rejects a gradual introduction of the acceptance obligation. There are alternatives for a gradual introduction, such as a loan from producers or a bank loan. The experience with other acceptance obligations also shows that a gradual introduction is not necessary.

The EPA will include specific provisions concerning the environmental contribution, and will also stipulate that the environmental contribution shall be subject to revision each year (as is also stipulated in other EPA's).

3.1.4.3 Proposed decision

It is not necessary to change the start memorandum.

3.1.5 Sub-section [44-45-46] Need for additional investigation concerning mattresses in the professional market

3.1.5.1 Comment

As regards the mattresses from the professional sector, the Council states that it is important that no time is lost in commencing additional investigations to find missing information. This concerns, for example, the related sub-sectors, the number of mattresses that become available for each sub-sector, the way these streams are currently released and where they go, the differences in composition of mattresses of household origin and possibly also between professional mattresses, the impact of the composition of the mattresses on the processing thereof (for example, the presence of flame retardants).

The Council assumes that investigation, which can be supported by all the parties concerned, can be carried out most efficiently while preparing for an EPA for mattresses. The preparation of an EPA would lead to either the decision taken in consensus concerning the content of an EPA, or a decision that it is possible to find better tools, and that further substantiation of an acceptance obligation for professional mattresses is required.

For this reason, it is also necessary to involve all relevant parties from the sector of mattresses of professional origin in the preparatory discussions as soon as possible. According to reports, this has not happened as yet, for example in the case of the hotel sector, hospitals, re-use centres, etc.

3.1.5.2 Explanation

It is absolutely necessary to collect further data on the professional market. This is a task that the OVAM shall immediately carry out further, after official adoption of the start memorandum. Consultations in this regard will of course be held with the relevant sector organisations. As mentioned in 3.4.1 of the start memorandum, during the EPA negotiations further examination shall be made based on the information collected, about whether any other possible compliance with the acceptance obligations

for mattresses from the professional sector has been identified (for example, specific collection method, specific processing objectives, etc.). It is perfectly possible to include separate chapters in the EPA for, on the one hand, mattresses received from the household market and, on the other hand, mattresses from the professional market. The underlying principle is of course that the acceptance obligation shall apply to all mattresses. We suspect that, in practice, it is difficult to always make a distinction between mattresses for the professional market and other mattresses. This applies to introducing mattresses into the market as well as to the collection of mattresses. An exemption to specific categories could give rise to undesirable upheavals.

3.1.5.3 Proposed decision

It is not necessary to change the start memorandum.

3.1.6 Sub-section [47] A five-year EPA period

3.1.6.1 Comment

The Council agrees to an EPA with a duration of five years. This will make it possible to respond more quickly to a changing market while simultaneously gaining a great deal of experience, which can be taken into account at the time of concluding the next EPA. The rules for EPAs duly observed: maximum duration of eight years, no automatic renewal, can be revised after consultation, can be terminated subject to a termination notice period, etc. The Council emphasises that an EPA is not definitively binding on any single party.

3.1.6.2 Proposed decision

It is not necessary to implement a change in the start memorandum, since the Environmental and Nature Council of Flanders supports the start memorandum in this regard.

3.1.7 Sub-section [49] More attention to remanufacturing/re-usability

3.1.7.1 Comment

The Environmental and Nature Council of Flanders notes that the start memorandum establishes in particular a link between eco-design and higher recyclability. Therefore, a reference is made to the Innomat study that investigates the options of design for disassembly and design for recycling. The encouragement of eco-design with a view to achieving a better remanufacturing/re-usability of mattresses is, according to the Council, also an aspect that must be taken into consideration. For this reason, according to the Council, it is important to make a distinction between “re-use of materials” versus “re-use of mattresses”. Concepts such as “second hand mattress” and “discarded mattress” must be better demarcated from each other.

3.1.7.2 Explanation

It is true that remanufacturing/re-usability is a relevant aspect of eco-design. Therefore, this aspect of remanufacturing/re-usability shall be included in the EPA provisions concerning eco-design. We

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agree that this is not yet sufficiently addressed in the start memorandum and we therefore propose a modification to the start memorandum.

The distinction between “re-use of materials” and “re-use of mattresses” as well as the definition of concepts such as “second hand mattress” and “discarded mattress” will be clarified in the EPA text.

3.1.7.3 Proposed decision

The first sub-section under “Eco-design, prevention and re-use” on page 6 of the start memorandum shall be amended as follows:

“A section of the mattress sector is currently already working on an investigation into the eco-design of mattresses in connection with the Innomat research project. The PRO shall be responsible for incentivising the inclusion and implementation of the policy recommendations from the Innomat study. Persistent research into eco-design of mattresses including recyclability, remanufacturing, and dismantlability is necessary, as well as research on the re-use of mattresses. The PRO must also play a role in stimulating the sales market for the recycled mattress materials. This can be done through investigation and/or the setting up of a specific fund.”

3.1.8 Sub-section [50] Investigation of re-use

3.1.8.1 Comment

With a view to re-use, it is necessary to pay attention to the following in the investigation leading up to an EPA:

- The mapping of the market for the re-use of mattresses;
- And on the basis of the same, considering whether support for the realisation and financing of more (local) re-use is required, and which specific measures must be taken for this, if any;
- The effect of the introduction of the acceptance obligation on the informal and formal second-hand supply of mattresses, by increasing the recycling of mattresses on the supply of good quality of the second-hand market, and by consequence on the re-use of mattresses.
- The concrete effects of the ratio between “second hand mattress” and “discarded mattress” on compliance with the acceptance obligation.
- To determine a set of criteria based on which the requirements to be satisfied by a re-usable mattress may be determined (for example, based on ergonomics, comfort, hygiene parameters).

3.1.8.2 Explanation

This EPA aims to establish an operational collection and processing system for discarded mattresses that currently often end up into bulky waste. According to the waste policy, re-use is preferred to other processing techniques. Consequently, due attention must be paid to options that encourage the re-use of mattresses. It is, however, not possible to completely clear this up fully in advance. Due

account shall certainly be taken of this in the EPA and the implementation of the same in practice. We agree that this is not yet sufficiently addressed in the start memorandum and we therefore propose a modification to the start memorandum.

3.1.8.3 Proposed decision

The first sub-section under "Eco-design, prevention and re-use" on page 6 of the start memorandum shall be amended as follows:

"A section of the mattress sector is currently already working on an investigation into the eco-design of mattresses in connection with the Innomat research project. The PRO body shall be responsible for incentivising the inclusion and implementation of the policy recommendations from the Innomat study on the same. Persistent research into eco-design of mattresses including recyclability, remanufacturing , and dismantlability is necessary, as well as research on the re-use of mattresses. The PRO must also play a role in stimulating the sales market for the recycled mattress materials. This can be done through investigation and/or the setting up of a specific fund."

3.1.9 Sub-section [51] Encouraging eco-design measures

3.1.9.1 Comment

The start memorandum (3.8 Reporting obligation) refers to a processing hierarchy for the total quantity of the materials that arise from processing the discarded mattresses: 1. Re-use, 2. recycling, 3. recovery, and finally disposal (only relevant with regard to reporting). The Environmental and Nature Council of Flanders supports the inclusion of commitments in the agreement with the sector to progress from a lower to a higher processing hierarchy during the EPA period.

In order to improve recycling, the start memorandum also refers not only to eco-design, but also to the provision of information about the various mattress types and materials, their impact on the environment, appropriate product use, and a differentiation of the environmental contribution based thereon. The Council endorses these suggestions. In addition, the Council points out that the stimulation of the sales market for recycled fractions is a necessary tool to improve recycling, which is in line with the focus on "creating sales markets for the recycled fractions" under the Implementation Plan for household waste.

3.1.9.2 Explanation

In 3.4.2, the start memorandum states that the OVAM wishes to impose a minimum percentage of recycled materials, with eventually a consideration of a gradual increase in this percentage over the time. During the EPA negotiations well-balanced processing objectives will be determined. The request of the Environmental and Nature Council of Flanders for commitments to climb from lower to higher into the processing hierarchy during the period of the EPA seems to have been sufficiently incorporated into the start memorandum.

The stimulation of the sales market for recycled materials may be an important lever to support recycling. Investigation into the possibilities of using recycled materials into the production of mattresses is running and must be further supported by the EPA. We agree that this is not yet sufficiently

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addressed in the start memorandum and we therefore propose a modification to the start memorandum.

However, materials that are recovered from mattresses often come back into the market in applications other than mattresses. It is also up to Regional and Federal Governments to create adequate incentives. The Government can, for example, itself stimulate the sale of recyclates by including criteria relating to recycled content in its specifications for public procurements.

3.1.9.3 Proposed decision

The first sub-section under "Eco-design, prevention and reuse" on page 6 of the start memorandum shall be amended as follows:

"A section of the mattress sector is currently already working on an investigation into the eco-design of mattresses in connection with the Innomat research project. The PRO shall be responsible for incentivising the inclusion and execution of the policy recommendations from the Innomat study on the same. Persistent research into eco-design of mattresses including recyclability, remanufacturing, and dismantlability is necessary, as well as research on the re-use of mattresses. The PRO must also play a role in stimulating the sales market for the recycled materials from mattress. This can be done through investigation and/or the setting up of a specific fund."

3.1.10 Sub-section [54] Collection during distribution

3.1.10.1 Comment

The Environmental and Nature Council of Flanders points out that the significance of the acceptance obligation is that the separate collection of discarded mattresses will become mandatory and must be offered by the disposer separately from other waste fractions. Collection via the bulky waste fraction is also no longer permissible under the acceptance obligation. The start memorandum also clarifies that the method of bringing mattresses to a civic amenity site or any other collection point is not easily possible for all disposers, since not everyone has access to suitable means of transportation.

3.1.10.1.1 Position of the BBL, Natuurpunt, OECD, ACV, ABVV, ACLVB, and VVSG

In view of this consideration, the BBL, Natuurpunt, OECD, ACV, ABVV, ACLVB, and VVSG have preferred a "1-for-1" recovery by retailers, brokers, and producers without compensation, supplemented with collection via civic amenity sites.

3.1.10.1.2 Position of VOKA, UNIZO, and the Boerenbond

VOKA, UNIZO, and the Boerenbond do not approve of the mandatory "1-for-1" recovery by retailers, brokers, and producers without compensation. The main problems are the hygienic aspect, the moisture problems, the risk of spontaneous combustion, and the problem of limited storage space. The organisations do approve of voluntary take-back, as is already being done by a number of traders, and this must be supplemented by collection via civic amenity sites.

3.1.10.1.3 Abstention from earlier positions: Rural Flanders

In view of the decision of the Flemish Government to modify the VLAREMA with the acceptance obligation for mattresses, the Environmental and Nature Council of Flanders points out that the policy instrument to implement the acceptance obligation, in this case is an EPA, has to maximise the advantages and to minimise the disadvantages of the EPA.

3.1.10.2 Explanation

The tool of the acceptance obligation makes the mattress producers and importers responsible for the management of the discarded mattresses. The core of the acceptance obligation is defined by Section 3.2.1.1. of the VLAREMA, which states: "The acceptance obligation for the retailer means that, if a consumer purchases a product, it is mandatory to take back the corresponding product that the consumer discards, free of charge. The brokers are required to accept discarded mattresses received by the retailers free of charge, in proportion to the delivery of products made by them to the retailers. The producers are required to accept the discarded mattresses that are brought in by the retailers or brokers, free of charge, and to ensure the useful application or disposal of the same therefore in proportion to the delivery of products made by them to the retailers or brokers."

The Flemish Government supports the position of the OVAM and consequently that of the BBL, Natuurpunt, OECD, ACV, ABVV, ACLVB, and VVSG. An exception to this general provision concerning mandatory collection by the distribution network is only possible if the sector proposes an equivalent alternative. In the absence of an equivalent alternative, the mandatory free-of-charge collection of discarded mattresses in the distribution network shall apply.

3.1.10.3 Proposed decision

It is not necessary to change the start memorandum.

3.1.11 Sub-section [55] Mandatory cooperation with municipalities

3.1.11.1 Comment

In view of the VLAREMA, household waste is collected in cooperation with the municipalities, unless otherwise specified in Sections 3.3 and 3.4. The latter is not the case in subsection "3.4.8. Discarded mattresses". According to the same section, an arrangement must be made with the municipalities and intermunicipal waste organizations for the collection and financing of mattresses that are discarded by private disposers. This arrangement can also be elaborated in the EPA.

3.1.11.2 Explanation

An arrangement must be made with the municipalities and intermunicipal waste organizations concerning the collection and financing of mattresses that are discarded by private disposers. The concrete arrangement in this regard shall, however, not be elaborated in the EPA, but in a model agreement. This is also mentioned in 3.5 of the start memorandum: the PRO will be required to draw up a model agreement with the public-law legal entities, which will comprise the practical modalities for

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collection, as well as a compensation arrangement for civic amenity sites. The EPA itself shall contain provisions for the creation of this model agreement.

3.1.11.3 Proposed decision

It is not necessary to change the start memorandum.

3.1.12 Sub-section [56] No quantitative collection target

3.1.12.1 Comment

The Environmental and Nature Council of Flanders notes that the OVAM does not intend to formulate any quantitative collection targets. The Council can endorse this proposal. In view of the (current) significant negative value of mattresses in the waste phase on the one hand, and the limited "mobile" character of mattresses on the other hand, a free collection system would, in principle, suffice to attract almost all discarded mattresses.

3.1.12.2 Proposed decision

It is not necessary to implement a change in the start memorandum, since the Environmental and Nature Council of Flanders supports the start memorandum in this regard.

3.2 INTERAFVAL

3.2.1 Duration of the Environmental Policy Agreement

3.2.1.1 Comment

Interafval (intermunicipal organization) advocates a period of five years for the EPA. This is a new acceptance obligation for a waste stream that has not been separately collected till date. In order to quickly respond to the changing market for collection, Interafval proposes that the EPA be concluded for a period of five years.

3.2.1.2 Proposed decision

It is not necessary to change the start memorandum, since Interafval endorses the viewpoint of the start memorandum in this regard.

3.2.2 Scope of the EPA

3.2.2.1 Comment

According to the start memorandum, the sector is appealing for a limitation of the acceptance obligation to mattresses from the household market. Like the OVAM, Interafval also feels that this is not appropriate. The free-of-charge collection of mattresses from the household market via civic amenity sites can have a knock-on effect for mattresses from the professional market. Nothing prevents the development of a different approach in the EPA for mattresses from the household market and

mattresses from the industrial market. This is also true for the Waste Electrical and Electronic Equipment (WEEE) EPA.

3.2.2.2 Proposed decision

It is not necessary to change the start memorandum, since Interafval endorses the viewpoint of the start memorandum in this regard.

3.2.3 Mandatory free-of-charge collection via the distribution network

3.2.3.1 Comment

For Interafval, the best preferred method for the collection of discarded mattresses is that they should be collected by retailers, similar to a 1-for-1 system for WEEE. This will then be supplemented through collection via civic amenity sites. For many families, it is impossible to transport a discarded mattress to the civic amenity site. Mattresses are large and not everyone has a car suitable for transporting a mattress.

3.2.3.2 Proposed decision

It is not necessary to change the start memorandum, since Interafval endorses the viewpoint of the start memorandum in this regard.

3.2.4 Mandatory collaboration via municipalities

3.2.4.1 Comment

Interafval is not requesting a deviation from mandatory collaboration with municipalities for the collection of discarded mattresses. Mattresses are now already being discarded at civic amenity sites, though in many cases not source-separated. Even if there is collection by retailers, many families will want to deliver their discarded mattresses to the civic amenity sites. At the time of purchasing a new mattress, the discarded mattress shall not always be handed over to the retailer. The VLAREMA therefore sees the need for an arrangement with the municipalities and intermunicipal waste organizations for the collection and financing of mattresses that are discarded by private disposers. Interafval proposes that the disposal of mattresses from civic amenity sites may be organised via a regional transhipment station (RTS), similar to the WEEE collection. This will also be taken into account when compensating local authorities.

3.2.4.2 Explanation

As mentioned in 3.5 of the start memorandum, the arrangement for the collection and financing of mattresses discarded by private disposers shall be defined in a model agreement.

3.2.4.3 Proposed decision

It is not necessary to change the start memorandum.

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3.2.5 Eco-design

3.2.5.1 Comment

Interafval favours the inclusion of concrete, enforceable commitments from the sector with regard to eco-design in the EPA. It is best if this is not limited to the use of specific materials that are recyclable, but is kept open to commitments relating to dismantlability of mattresses.

3.2.5.2 Explanation

In this regard, we refer to the explanation under 3.1.7.2 of this report.

3.2.5.3 Proposed decision

The start memorandum will be modified as mentioned in 3.1.7.3 of this report.

3.3 GO4CIRCLE

3.3.1 Market operation

3.3.1.1 Comment

GO4CIRCLE is careful when stating that an instrument of the acceptance obligation has yielded very good results. In fact, extra collections were achieved for example, with regard to WEEE and batteries, but for tyres, for example, it is worthwhile to question the added value of an acceptance obligation, especially with regard to the materials policy.

If, however, an acceptance obligation is implemented, we can only approve it if we are fully involved in the system and the system also respects the market operation. GO4CIRCLE will not accept the introduction of a new monopolistic system. Experience has shown that such systems run counter to the sustainable development of the market in question, stifle entrepreneurial initiative, including the associated innovation, and above all, give rise to endless disputes about compensation for expenses, software systems, etc. The mention in the note that the PRO's must conclude "contracts" with collectors/processors also raises many questions. If these are cooperation contracts as a sort of recognition, we can accept them. If on the other hand, these are contracts that will replace contracts between the current customers and collectors, this would be unacceptable to GO4CIRCLE.

The unrestricted choice of the industrial waste disposer is a fundamental requirement for a company recognised within the system, as well as the preservation of the market price being set up between the disposer and the collector/processor.

3.3.1.2 Explanation

The OVAM is familiar with the position of GO4CIRCLE concerning the extended producer responsibility. The attitude of GO4CIRCLE is critical, particularly with regard to the involvement of the producers in the market for collection and processing. On the other hand, the OVAM is convinced of the added value that this instrument can mean for the materials policy. We would like to point out the good results

that are achieved with other streams. In 2015, Ernst & Young also conducted a study for the OVAM on the impact of EPR on the market operation, in which the criticism of GO4CIRCLE was further investigated. The policy report supports the choices of the Flemish policy (see http://www.ovam.be/uitgebreide-producentenverantwoordelijkheid-upv).

The start memorandum states the following in 3.5: "The PRO shall organise the further disposal from the collection points and civic amenity sites, and the processing of the mattresses. For this, the PRO will be required to conclude contracts with collectors and/or processors." The acceptance obligation introduced in the VLAREMA places the responsibility for collecting and processing of discarded mattresses on the mattress producers and importers. In the collective fulfilment of the acceptance obligation via an EPA, it is therefore a task of the PRO to organise an operational and financing system for the same. Since the general provisions under the acceptance obligation require that the collection must be done free of charge (VLAREMA section 3.2.1.1, also see 3.1.10.2 of this report), the contracts concluded by the PRO will be a reliable (partial) substitute for existing contracts between customers and collectors.

3.3.1.3 Proposed decision

It is not necessary to change the start memorandum.

3.3.2 Reporting obligations

3.3.2.1 Comment

As regards the reporting obligations, we advocate that the administrative burden for the operators should be as low as possible, by using an efficient system in which the operators as an important target group should be involved to the maximum extent during the development of the same. In short, unlike in the Recytyre case, for example, in which operators are burdened with a non-operational and complex computer system.

3.3.2.2 Explanation

In 3.8, the start memorandum states that the PRO shall strive for minimal administrative charges on its affiliated members and the operators. In this regard, it is also stated that the PRO shall jointly consider every suggestion for administrative simplification with the relevant actors. The question from GO4CIRCLE therefore seems to have been adequately addressed in the start memorandum.

3.3.2.3 Proposed decision

It is not necessary to change the start memorandum.

3.3.3 Signing of the EPA

3.3.3.1 Comment

GO4CIRCLE also requests its involvement during the signing of the EPA. Our members are not producers or importers, but their operations in this waste stream can be fundamentally affected by the acceptance obligation. For this reason, it is necessary to involve us as a full partner.

3.3.3.2 Explanation

According to the EPA Decree, GO4CIRCLE can join the EPA as a party, on the request of the sector federations that represent the producers.

3.3.3.3 Proposed decision

It is not necessary to change the start memorandum.

3.3.4 Uniform system for Belgium

3.3.4.1 Comment

We are also asking for a system that can work in an identical manner for the entirety of the Belgian territory.

3.3.4.2 Explanation

In this regard, we refer to the explanation under 3.1.3.2 of this report.

3.3.4.3 Proposed decision

In this connection, we refer to the explanation under 3.1.3.3 of this report.

3.3.5 Scope and Objectives

3.3.5.1 Comment

We advocate that the substantive approach should be sufficiently ambitious, but also tempered with pragmatism. It makes no sense to generate large quantities of materials for which no economically viable sales market can be found. Thus we feel that a step-by-step approach is recommended, first for the private market, then for the industrial market, and further, that recycling percentages be imposed gradually. In this regard, it is important that adequate investments can be made in the collection, sorting/treatment, and the final processing of the collected material. The EPA must also include measures to increase the sale of the recycled materials, preferably to Belgian companies, who could use these materials in their production processes. Our members can contribute to the same by making their expertise available, preferably in a structured manner (for example, a separate entity could be set up for this research, with separate funding). The use of innovative tools from the various regions is recommended here.

3.3.5.2 Explanation

The Flemish Government does not agree that the acceptance obligation for discarded mattresses shall be limited to mattresses from the private market in an initial phase. The acceptance obligation that was introduced in the VLAREMA applies to mattresses received from the household as well as the industrial market. The EPA must therefore draw up an arrangement for all mattresses in which it is perfectly possible, wherever appropriate, to include separate chapters for mattresses from the household market on the one hand, and for mattresses from the industrial market on the other.

GO4CIRCLE proposes to impose recycling percentages gradually. This is identical to the request from the Environmental and Nature Council of Flanders . We also refer to the explanation contained in 3.1.9.2 of this report.

As regards measures to increase the sales of recovered materials, we refer to the explanation under 3.1.9.2 of this report.

3.3.5.3 Proposed decision

The start memorandum will be modified as mentioned in 3.1.9.3 of this report.

3.3.6 Financing/Eco-design

3.3.6.1 Comment

We also advocate to adequately differentiate in the financing of the management body, between the contributions that producers and importers are required to pay, so that there really is an incentive to modify mattresses to ensure more optimal recycling.

3.3.6.2 Explanation

In 3.6, the start memorandum states that when the PRO determines the amount of the environmental contribution, it may also be examined to what extent differentiation is possible, for example, according to the type of mattress and the related environmental impact. Differentiation with a view to more optimum recycling is included herein.

3.3.6.3 Proposed decision

It is not necessary to change the start memorandum.

3.3.7 Materials story

3.3.7.1 Comment

The federation also has questions concerning an acceptance obligation that would not really signify added value for the recycling of materials. Conversion into energy is obviously an added value, but the major challenge clearly lies in the materials story. In this regard, we can by and large agree with the start memorandum drafted by the OVAM.

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3.3.7.2 Proposed decision

It is not necessary to modify the start memorandum since GO4CIRCLE endorses the start memorandum in this regard.

3.3.8 Amount of environmental contribution

3.3.8.1 Comment

As regards the specified contribution of 13.5 euros, we feel that this is a little on the low side. It seems more prudent to require an amount of 15 euros to ensure adequate opportunities for further initiatives. If, over the course of time, it appears that the contribution can be lowered, this can also always be decided.

3.3.8.2 Explanation

Section 3.6 of the start memorandum states that the amount of the environmental contribution has been estimated at 13.50 euros per mattress in the regulatory impact analysis (RIA) for the introduction of an acceptance obligation for discarded mattresses. This figure only provides an estimate of the expected amount of the environmental contribution, and must certainly not be interpreted as an already established environmental contribution. It shall be a task of the PRO to determine the amount of the environmental contribution, taking into account the collection and processing costs. The EPA will include specific provisions concerning the environmental contribution, and will also stipulate that the environmental contribution shall be subject to revision each year (as is also stipulated in other EPAs).

3.3.8.3 Proposed decision

It is not necessary to change the start memorandum.

3.4 HORECA VLAANDEREN

3.4.1 Retailers, brokers, and producers

3.4.1.1 Comment

Point 1.1, last line: Obviously, mattresses only appear in our sector in accommodation establishments companies. It is also not clear to us whether these companies would be affected by the last line under point 1.1: “retailers, brokers, and mattress producers are obliged to report to the OVAM annually concerning the fulfilment of the acceptance obligation”.

Point 2, sub-section 3: Are our accommodation establishments companies to be regarded as “producers”?

Point 3, penultimate sub-section: We are assuming that only a small number of hotels will import mattresses from abroad, but if this is to be investigated further, we would be happy to be involved in this research.

3.4.1.2 Explanation

The definition of "producer" is contained in Section 1.2.1, §2, 68. of the VLAREMA. For accommodation establishments companies , point c of this definition is of interest: "any natural or legal entity that is established within the territory and makes available on the market on a professional basis for the first time a product within the territory, whether or not for personal use". This means that a accommodation establishments companies is considered as a producer, if the company directly purchases the new mattress(es) from a foreign company, and therefore being considered itself as an importer of the mattress(es). In that case, the company is required to fulfil the acceptance obligation and is therefore also required to fulfil the reporting obligation as per 1.1 of the start memorandum. In practice, the PRO shall take over this task if the producer joins the collective system.

As already stated under 3.1.5.2 of this report, the OVAM shall during further data collection related to the professional market also enter into consultations with relevant sector organisations, including Horeca Vlaanderen,. If it appears from this that the members of Horeca Vlaanderen are effective importers of mattresses, Horeca Vlaanderen shall also be involved in the EPA negotiations. This is also mentioned as such in 3.1 of the start memorandum.

3.4.1.3 Proposed decision

It is not necessary to change the start memorandum.

3.4.2 The processing of discarded mattresses at present

3.4.2.1 Comment

Point 2, sub-section 1: The following is stated: "The mattresses are mostly collected via the bulky waste fraction, and as such, end up in an incinerator." In our view, this may possibly not apply to mattresses from our accommodation establishments companies. Is the above statement based on research and are the mattresses from the accommodation establishment sector taken into consideration in this research?

3.4.2.2 Explanation

Discarded mattresses from the professional sector (including the accommodation establishment sector) are generally not collected via the bulky waste fraction since this is industrial waste. Presumably, a lot of small companies dispose of their discarded mattresses via the bulky waste fraction. Incineration shall generally be the most common processing technique for such mattresses. We do not know of operators who recycle mattresses in Flanders on a large scale. Moreover, in most cases incineration is cheaper than recycling, and there are indications that this type of mattress is often more difficult to recycle than the mattresses from the private market. Further data collection on mattresses in the professional sector (as provided in 3.4.1 of the start memorandum) will reveal the most common collection and processing method currently used for mattresses from the professional sector.

3.4.2.3 Proposed decision

It is not necessary to change the start memorandum.

3.4.3 Professional market

3.4.3.1 Comment

At the bottom of page 4: The following is stated: “the OVAM will, in collaboration with the sector, soon collect further information concerning the mattresses in the professional market (the number of mattresses in use, their composition, the collection method used at present, etc.). Based on this information, it shall be further examined whether an alternative implementation of the acceptance obligation for mattresses from the professional sector can be found (for example, specific collection method, specific processing objectives, etc.)." Since, among other things, our accommodation establishment sector shall be closely examined, we would be happy to be involved in this.

3.4.3.2 Explanation

As already stated above, the OVAM shall enter into consultations with the relevant sector organisations, including Horeca Vlaanderen, during the collection of data concerning the professional market.

3.4.3.3 Proposed decision

It is not necessary to change the start memorandum.

3.4.4 Collection and treatment

3.4.4.1 Comment

Page 6, first sub-section under “Collection and Processing”: The following is stated: “In accordance with the general provisions concerning the acceptance obligation in the VLAREMA, the retailers, brokers, and producers will, in principle, be required to receive discarded mattresses free of charge, both at the time of purchase at a point of sale as well as in case of home delivery (1-for-1). Will this therefore also apply to mattresses received from accommodation establishments companies ?

It is stated further on: "Discarded mattresses from citizens shall also be collected via civic amenity sites (1-for-0)." Why does this only apply to mattresses from citizens?

3.4.4.2 Explanation

The “1-for-1” acceptance obligation for distribution also applies, in principle, to accommodation establishments companies that import mattresses from abroad, and are therefore producers. But since these companies only import mattresses for personal use, this provision is not actually relevant to them. These companies shall only be required to ensure the proper collection and processing of their own imported mattresses after these are discarded. If these companies opt for a collective implementation of their acceptance obligation (via the EPA), they will be able to avail of the services of the PRO.

In view of the municipal responsibility for household waste, most civic amenity sites are not accessible or only allow restricted access for companies. Moreover, the law concerning the acceptance obligation for producers only imposes the obligation to collaborate with the municipalities for household waste.

////////////

3.4.4.3 Proposed decision

It is not necessary to change the start memorandum.

3.4.5 Consultation

3.4.5.1 Comment

Page 7 penultimate sub-section before point 3.6: The following is stated: "Apart from households, discarded mattresses are also generated by professional actors such as hotels, prisons, hospitals, nursing homes, etc., which often do not have any access to civic amenity sites. Provisions for collection must be made here as well. Presumably, the logistics are less problematic since the mattresses are discarded in large numbers." As stated earlier, we would be happy to be involved in these consultations. So far, we have not been contacted by the OVAM concerning this matter.

3.4.5.2 Explanation

The OVAM shall, after official approval of the start memorandum, start on the further data collection on the professional market. In this regard, consultations will obviously be held with relevant sector organisations, including Horeca Vlaanderen.

3.4.5.3 Proposed decision

It is not necessary to change the start memorandum.

3.4.6 Introduction into the market

3.4.6.1 Comment

Point 3.6, sub-section 1: What exactly does the phrase "Bringing a new mattress onto the market" mean?

3.4.6.2 Explanation

To answer this question, we refer to the explanation under 3.4.1.2 of this report.

3.4.6.3 Proposed decision

It is not necessary to change the start memorandum.

3.5 FEDUSTRIA, COMEOS, NAVEM, AND THE INDIVIDUAL COMPANIES

Fedustria, Comeos, and Navem expressed a joint position concerning the start memorandum. The OVAM also received individual remarks from the following companies: Forme&Style, Meubelen Gaverzicht, Fito Leuven, Gero Meubelen, Heim-Pollé, Limpa Meubelen, Auping Plaza Geel, Auping Plaza Brasschaat, Meubelen De Keizer, Meubelen Ponsaerts, Woonark, Colifac, Krea, Time2Sleep, Verberckmoes, and Zitidee. Since the individual companies all presented the same position as the sector federations Fedustria, Comeos, and Navem, these remarks were also jointly dealt with in the present report.

////////////

Fedustria, Comeos, Navem, and the individual companies were jointly referred to as “the sector” exactly as in the start memorandum.

3.5.1 Scope

3.5.1.1 Comment

As stated in the start memorandum, the sector calls for a provisional restriction of the acceptance obligation be limited to mattresses from the household market. The reasons for this are various, and in this regard, we would like to repeat the arguments we have already submitted to the OVAM:

- At present, there is a lack of knowledge of, on the one hand, the number of mattresses in use in the professional market. On the other hand, it is also unclear in what manner the relevant parties from the sector organise the replacement of their discarded mattresses (after how many years, through what channels, etc.). As long as this information is not known, it is not feasible to involve the professional market in this matter.

- The sector noted that there is still lot of diversity within the professional market. Thus, for example, hospital mattresses, which are industrial waste in practice, are often treated as “medical waste”, which again implies a specific regulation. These mattresses are also collected via a completely different circuit and it is desirable to continue with this practice.

- The mattresses received from the professional market have a different chemical composition to the mattresses received from the private market, which is at least conducive to the recycling of the same – on the contrary. Thus, mattresses in the professional market contain flame-retardant resources, for example, which is not the case with private mattresses. This obviously has an impact on recycling.

- The physical characteristics of the mattresses within the healthcare sector are different to those from the household sector. For example, these mattresses are often lighter and thinner, which is due to factors such as ergonomics for the nursing staff.

- The subject of eco-design is not a consideration within the professional market, while the start memorandum focuses a great deal of attention on this subject.

- In the meantime, the MIP project Innomat is also ongoing, and this should provide us with additional insights, which will be required for the further elaboration of the EPR. Innomat also focuses solely on the private market.

The sector is committed to further collaborating with the OVAM in collecting data on the professional market. In a subsequent phase, it can be examined to what extent include this sector in the EPR.

3.5.1.2 Explanation

In this regard, we refer to the explanation under 3.1.5.2 of this report.

3.5.1.3 Proposed decision

It is not necessary to change the start memorandum.

3.5.2 Collection and processing

3.5.2.1 Comment

In the start memorandum, it is correctly stated that the sector appeals for a voluntary return of mattresses via the distribution network, supplemented with collection via civic amenity sites.

- In the summer of 2015, Fedustria conducted a survey among dealers concerning the return of discarded mattresses. The reasons for the inability to take back discarded mattresses are clear: both the hygienic aspect as well as the lack of storage space constitute the main issues. There are many dealers who already take back mattresses - on a voluntary basis - and this service to their customers shall also be continued in the future. Therefore, it is an adequate alternative in addition to collection via civic amenity sites.

- At present, the OVAM has been unable to demonstrate in any way that there is a need to develop a third system in addition to these two collection channels. It is very difficult to communicate three different collection channels to the consumer. In addition, it is the task of the sector to organise the take-back and recycling of discarded mattresses at the lowest possible cost. Each initiative that involves an extra cost must first be thoroughly investigated both in terms of the need as well as the practical feasibility of the same.

The sector also proposes that one must start with collection via civic amenity sites, supplemented by voluntary collection via the distribution network, which in their opinion appears adequate and will also clearly bring Fedustria into the picture. Fedustria is prepared to evaluate this working method, after a specific period of time, for example, after one year.

3.5.2.2 Explanation

In this regard, we refer to the explanation under 3.1.10.2 of this report. We certainly appreciate concerns about extra costs and the practical problems experienced by some retailers. We do not agree with the sector concerning the issue of greater complexity in communication to consumers. A take-back of mattresses by all retailers seems easier to communicate than an arrangement under which some retailers will take back mattresses and some will not, or under which mattresses may only be returned in certain situations (for example, in case of home delivery).

3.5.2.3 Proposed decision

It is not necessary to change the start memorandum.

//////////////

3.5.3 Financial aspects

3.5.3.1 Comment

The introduction of an EPR for mattresses is not only an operational challenge, but also a major financial challenge. In addition, we also expect an increased collection of discarded mattresses during the first years of operation, due to the clearance of historical liabilities. As a consequence, we continue to appeal for a gradual introduction of the EPR in which a recycling fee shall be collected for a specific period before starting with the effective operational aspects. This pre-financing is necessary in order to cover a part of the costs of clearing up historical liabilities. Valumat vzw can investigate possible avenues for a phased start-up.

3.5.3.2 Explanation

In this regard, we refer to the explanation under 3.1.4.2 of this report.

3.5.3.3 Proposed decision

It is not necessary to change the start memorandum.

3.5.4 Uniform system for Belgium

3.5.4.1 Comment

Finally, we would like to emphasise once again that the sector will not sign any EPA that is limited to just one of the Regions. If an EPR is introduced for mattresses, this must be done in a uniform manner throughout Belgium, preferably even all over Europe. The development of various systems per Member State implies a competitive disadvantage for our local producers and dealers.

3.5.4.2 Explanation

In this regard, we refer to the explanation under 3.1.3.2 of this report.

3.5.4.3 Proposed decision

In this connection, we refer to the explanation under 3.1.3.3 of this report.

4 DECISION

The responses and observations on the start memorandum are mixed. In general, there appears to be broad support for an acceptance obligation for discarded mattresses at the Belgian level. Interafval fully agrees with the start memorandum and the sector also does not appear to be totally averse to accepting the same. The attitude of GO4CIRCLE is in line with their general position on acceptance obligations, and depends on the method of implementation in practice.

Most of the actors request that the EPA focus adequate attention on eco-design, including re-usability and recoverability, and on stimulating the sales market for recycled fractions. These are legitimate concerns that will be better addressed by amending the start memorandum. In an initial phase, the priority will be on source-separated collection of the discarded mattresses to achieve a more high-quality treatment. The aspects concerning eco-design and reuse will be developed while doing so.

It does not seem very likely that by 1 January 2018 a uniform EPA for mattresses in the three Regions will be developed through joint negotiations. If the sector is not prepared to negotiate the implementation of the acceptance obligation in the Flemish Region via an EPA, the producers shall each be required to draw up an individual waste prevention and waste management plan, and to submit it to the OVAM for approval. Such individual compliance with the acceptance obligation is, however, not ideal, for either the sector or the Government. In case of individual waste prevention and waste management plans, there is less impact on eco-design, re-use, stimulation of the sales markets, etc. In addition, the provision of compensation for mattresses collected via municipal civic amenity sites will be a more complex issue.

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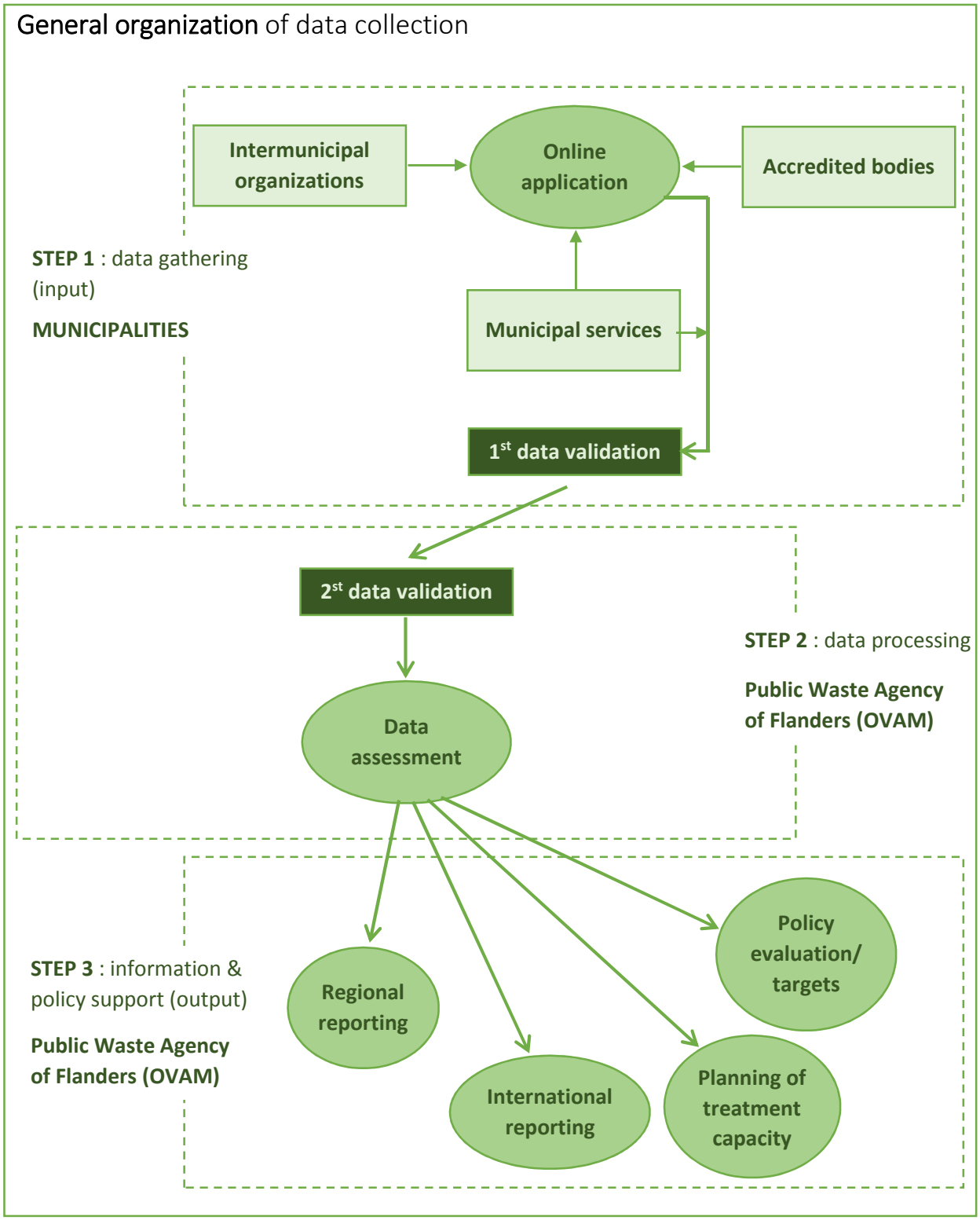
Waste statistics on municipal solid waste (MSW) in Flanders organised by the Public Waste Agency of Flanders (OVAM)

The document concerns only the data collection of municipal solid waste, not of industrial waste.



The establishment of a well-functioning data reporting system is crucial for the comparability of data. The following steps are crucial in setting up a well-functioning and reliable data information system on the collection and treatment of municipal solid waste in Flanders.

Step 1: Data gathering

- Assembled data: waste type, collection method, collection frequency, amount, type of collection, waste collecting company, destination, treatment company, comments, …
- All data on municipal solid waste are collected **at one central point** : the 308 municipalities (central body)
- Reporting tool: Database + electronic questionnaire
- The municipalities validate the data received from their own services, from private collectors and from accredited bodies such as FostPlus, Recytyre, Bebat, …
- The data are expressed in tonne or in kg/inhabitant; volumes are recalculated to weights via a standardized conversion table

Requirements:

- Clear definitions on different waste types (household solid waste, bulky waste, small hazardous waste, …) and limited number of waste codes
- Standardized reporting system, codes, …
- Fixed planning (with deadlines)
- All users (municipalities, intermunicipal organizations, accredited bodies) are trained and get support by e-mail and by telephone; a guidance manual for filling in the reporting tool is available
- One central body at the level of the municipalities for the data gathering and validation
- Quality control and validation of the data received require an adequate and competent staff at the local level
- Training of the operators of the information system on the input and validation procedures and technical background

➔ Yearly, the municipalities inform the OVAM with comparable data

Step 2: Data processing

- Quality control by the OVAM of the data received
  ➔ Reliable statistics
  ➔ Significant data
- Data processing of the data received

Requirements:

- One central body at the national/regional level for the data gathering and validation
- Quality control and validation of the data received require an adequate and competent staff at the national/regional level
- Training of the operators of the information system on the input and validation procedures and technical background

Step 3: Output

- Data used for :
  - Policy evaluation/targets
    - Assessment of the progress with regards to the targets (e.g. goal = max … kg residual waste/inhabitant)
    - Benchmarking of the performances of the municipalities on waste management
    - Working out time series, indicators, …
  - Planning of necessary treatment capacity (close down old incinerator, …?)
  - Regional reporting
    - MIRA-report : state of the environment (Flemish government)
    - OVAM-report on municipal solid waste data
  - International reporting
    - Eurostat

Requirements:

- Professional staff for the statistical processing of the validated data

All data and information in the three steps of this data management system is digital transferred between the involved parties. This method is implemented by a web-based application, connecting the several data providers. Each provider is responsible for the delivered data. The municipalities perform the quality assurance & quality control in step 1; the OVAM performs the quality assurance & quality control in step 2 and 3.

Mail to the board of Aldermen and Mayor

Municipal waste inventory 2015: start of survey

Dear board,

As is done each year, the OVAM sends all municipalities a survey to assess the qualitative and quantitative aspects of municipal waste management issues. The information helps us to monitor the waste and materials policy in Flanders. We are convinced that this survey also can contribute within the municipality as a useful instrument to evaluate the local waste and materials policy implementation. Please deliver these documents (letter + annexes) to your staff who will be involved in completing the Online Waste Survey.

The OVAM waste survey is done completely digital, both the "Online Waste Survey" for figures as well as the "Municipal waste and materials policy 2015" online survey for qualitative data.

Since 15 February 2016, you can complete the waste data for the year 2015 via the online application "Online Waste Survey". You will find the survey at the following location: https://services.ovam.be/enquetehas/.

Your municipality has already made use of this application. The user name and the password are still valid. When entering the data, we request you to take into account the considerations listed in Annex 1.

Complementary to the waste data (collected quantities), there is also a survey that assesses the qualitative data of your municipal waste management policy. You can find the link to the online questionnaire "Municipal waste- and materials policy 2015" on the homepage of the Online Waste Survey. You can also find a list of all the questions (in PDF format) to assist you in completing the web survey. For this survey the same password has to be used.

Please complete and submit **before April 1th, 2016**

- the waste data for 2015 and close the online application ("declare complete");
- the online questionnaire "Municipal waste and materials policy 2015".

Some intermunicipal cooperation partnerships complete themselves the entire inventory survey for the municipalities of their operating area. In such cases, the municipality doesn't have to complete any data itself. It is, however, responsible for ensuring that the data are complete and correct. At the end, the information will be used to evaluate the municipality waste management policy. The municipality copies the data from the list provided by the intermunicipal organization to the list of the municipality. If additions or corrections are necessary, the municipality may add them in its list. If the data of the municipality are complete and correct, please set the survey on "Complete". Each municipality will do this on its own.

Annexes are limited to the processing certificates of roadside mowing. Please upload these digitally

in the online survey “Municipal waste- and materials policy 2015”.

Please note that processing certificates of roadside mowing must therefore no longer be sent by email. Please keep the other data and documents about the municipal waste- and materials policy available in digital or hard copy format. In this manner, you can prove, whenever requested by the OVAM, that everything was duly carried out as mentioned in your survey.

The annual municipal waste survey is based on the following regulations:

1. Order of the Flemish Government of 17 February 2012 on the sustainable management of material cycles and waste materials (VLAREMA), Chapter 7 “Recording and reporting on waste and material data”. This chapter determines which data the municipalities and intermunicipal organizations have to communicate to the OVAM with regard to the waste collected or generated by them.

2. The implementation plan for Environmentally responsible management of household waste (approved by the Flemish Government on 14 December 2007, Belgian Official Gazette 7 January 2008), Part IV Programming, 4.1 Supporting programme, Action 1, 2.2. monitoring, evaluating and reporting.

For further information about this survey “Municipal waste survey 2015”, please do not hesitate to contact our services.

Thank you very much for your kind cooperation.

Yours sincerely,

Koen Smeets

Koen Smeets

Engineer

Mail to the intermunicipal organizations

Municipal waste inventory 2015: start of survey

Dear Sir/Madam Chairman,

As is done each year, the OVAM sends all municipalities a survey to assess the qualitative and quantitative aspects of municipal waste management issues. The information helps us to monitor the waste management policy in Flanders. We are convinced that this survey also can contribute to evaluate the local waste and materials policy implementation t within your intermunicipal cooperation partnership. Please deliver these documents (letter + annexes) to your staff who will be involved in completing the Online Waste Survey.

For your information, hereby the content of the letter that is sent to all the municipalities.

The OVAM waste survey is done completely digital, both the “Online Waste Survey” for figures as well as the “Municipal waste- and materials policy 2015” online survey for qualitative data.

Since 15 February 2016, you can complete the waste data for the year 2015 via the online application “**Online Waste Survey**”. You will find the survey at the following location: https://services.ovam.be/enquetehas/. Your municipality has already made use of this application. The user name and the password are still valid. When entering the data, we request you to take into account the considerations listed in Annex 1.

Complementary to the waste data (collected quantities), there is also a survey that assesses the qualitative data of your municipal waste management policy. You can find the link to the online questionnaire “Municipal waste- and materials policy 2015” - on the homepage of the Online Waste Survey. You can also find a list of all the questions (in PDF format) to assist you in completing the web survey. For this survey the same password can be used.

Please complete and submit **<u>before 1 April 2016</u>**

- the waste data for 2015 and close the online application (“declare complete”);

- the online questionnaire “Municipal waste- and materials policy 2015”.

Some intermunicipal cooperation partnerships complete themselves the entire inventory survey for the municipalities of their operating area. In such cases, the municipality does not have to complete any data itself. It is, however, responsible for ensuring that the data are complete and correct. At the end, the final information will be used to evaluate the municipality waste management policy. The municipality copies the data from the list provided by the intermunicipal organization to the list of the municipality. If additions or corrections are necessary, the municipality may add these in its list. If the data of the municipality are complete and correct, please set the survey on “Complete”. Each municipality will do this on its own.

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For further information about this survey “Municipal waste survey 2015”, please do not hesitate to contact our services. Thank you very much for your kind cooperation.

Yours sincerely,

Koen Smeets

Koen Smeets

Engineer

Statistics on the re-use sector in Flanders

Step 1: Data gathering

- Assembled data:
    - Eclips: all data on product flow, such as waste type, amount, selling data, recycling data, …
    - Excel-file OVAM (Public Waste Agency of Flanders): financial data, such as revenue, sales, …
    - Excel-file VSAWSE (Flemish Subsidy Agency for Employment and Social Economy): financial and economic data related to social employment
- All data are collected **at one central point** : the 31 re-use centres headed by KOMOSIE asbl
- Reporting tool: Database + 2 Excel-files
- The data are expressed in tonne; non-weighted products counted and the amounts are allocated to the correct fraction based on a standardized list of average weight per product agreed by the OVAM and the re-use centres

Requirements:

- Clear definitions on different good types (EEE, books&multimedia, do-it-yourself, …) and limited number of waste codes
- Standardized reporting system, codes, list of average weight per product, …
- Fixed planning (with deadlines)
- All users are trained and get support by e-mail and by telephone; a guidance manual for filling in the reporting tool is available
- One central body at the level of the re-use centres for the data gathering and validation

➔ Comparable data

Step 2: Data processing

- Quality control by KOMOSIE asbl of the data received
  ➔ Reliable statistics
  ➔ Significant data
- Second verification of the data by a company reviser:
  ➔ Verification of the data of each individual re-use centre by comparing all information received (reports send to the municipalities, data from Eclips, data from Excel-files, …)
  ➔ Adaptations if necessary
- KOMOSIE asbl and company reviser: data processing of the data received

Requirements:

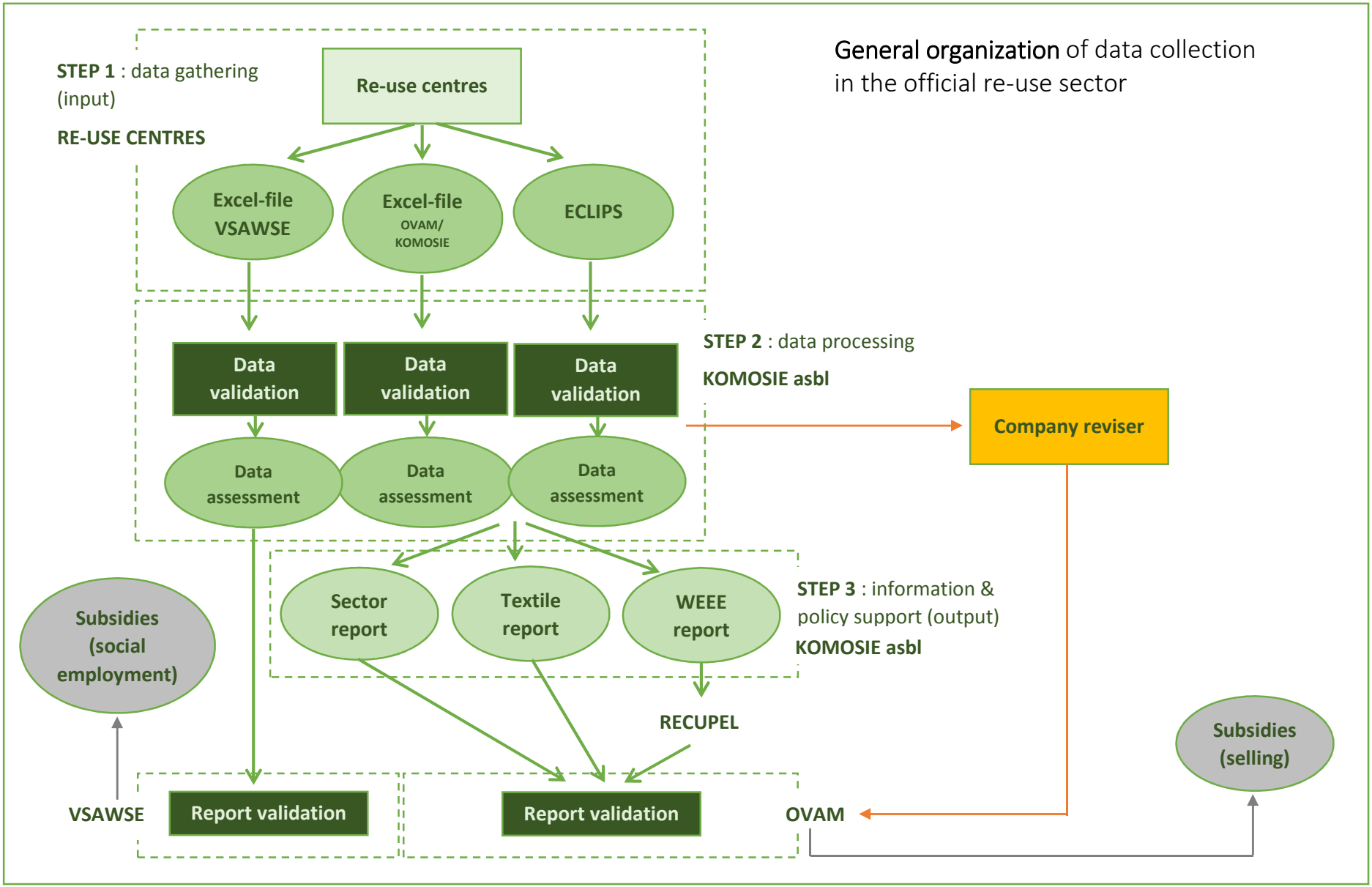
- One central body for the data gathering and validation
- Quality control and validation of the data received require an adequate and competent staff of the central body and the company reviser
- Training of the operators on the input and validation procedures and technical background

Step 3: Output

- Data used for :
  - Disbursement of subsidies:
    - Subsidies on sales granted by the Public Waste Agency of Flanders (OVAM) to each individual re-use centre
    - Subsidies on social employment granted by the Flemish Subsidy Agency for Employment and Social Economy (VSAWSE) to each individual re-use centre
  - Policy evaluation/targets : sector report
    - Assessment of the progress with regards to the targets (e.g. goal = min … kg goods re-used/inhabitant)
    - Benchmarking of the performances of the re-use centers
    - Working out time series, indicators, …
  - Follow-up:
    - WEEE-report validated by RECUPEL
    - Textile report

Requirements:

- Professional staff for the statistical processing of the validated data


General organization of data collection in the official re-use sector
STEP 1 : data gathering (input)
RE-USE CENTRES
Re-use centres
Excel-file VSAWSE
Excel-file OVAM/ KOMOSIE
ECLIPS
Data validation
Data validation
Data validation
STEP 2 : data processing
KOMOSIE asbl
Company reviser
Data assessment
Data assessment
Data assessment
Sector report
Textile report
WEEE report
STEP 3 : information & policy support (output)
KOMOSIE asbl
Subsidies (social employment)
RECUPEL
Subsidies (selling)
VSAWSE
Report validation
Report validation
OVAM

Flanders
State of
the Art

How to start a Re-use Shop? An overview of more than two decades of re-use in Flanders.

TOGETHER WE
MAKE TOMORROW
MORE BEAUTIFUL

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INTRODUCTION

The re-use sector in Flanders represents a strong network that has been creating jobs tailored to the needs of vulnerable target groups while, at the same time, realising significant benefits for the environment. It is its structural embedment into the Flemish waste policy that has made this successful combination a reality. Consolidation followed thanks to a number of crucial initiatives: the linking to the employment policy, close collaboration with the municipalities and intermunicipal partnerships, the pursuit of professionalization accompanied by ongoing monitoring and quality control, a carefully conceived communications policy, the support provided by a highly structured umbrella organisation and – last but not least – the daily commitment and personal endeavours of over 5.000 staff.
The present brochure contains general and practical information, facts that are based on 20 years of experience within Flanders. We hope to raise sufficient enthusiasm in the reader to convince him or her to start, or to continue to contribute to, the further expansion of the re-use of products within his or her municipality or region.
The brochure is the result of the close collaboration between OVAM[1] and KOMOSIE[2]. OVAM is the central focal point for the Flemish waste- and materials policy and has from the very beginning supported very warmly the re-use activities in Flanders. KOMOSIE npo stands for Federation of Environmental Entrepreneurs in the Social Economy, the umbrella organisation of all accredited re-use centres in Flanders. This non-profit organisation is active in the social profit sector at the crossroads of the environment and social economy.

[1] Public Waste Agency of Flanders (established in 1981), Stationsstraat 110, 2800 Mechelen, Belgium, **www.ovam.be.**
[2] Federation of Environmental Entrepreneurs in the Social Economy, Uitbreidingstraat 470, 2600 Berchem, Belgium, **www.komosie.be.**

1. FLANDERS: SOME BACKGROUND INFORMATION

Flanders is the northern federated entity of Belgium. The 3 regions in Belgium operate with a parliament as their legislative body and a government as the executive power and are each individually competent and responsible for their environmental policies. With its 6.410.705 million inhabitants spread over 13.522 km^2, Flanders is one of the most urbanized regions in Europe. The high density population in Flanders significantly affects its waste management policy in general and the collection systems of the municipal solid waste in particular.

2. CREATION OF THE RE-USE SECTOR IN FLANDERS: THE MOST SIGNIFICANT SUCCESS FACTORS

At the closing of the eighties, beginning of the nineties of the previous century, a number of OCMW agencies (Public Social Welfare Centres) and other social and environmental organisations initiated re-use activities. Re-usable goods were sorted out from the bulky household waste citizens set out for collection. Residents could call to their goods picked up or bring it to the re-use centre. The still re-usable goods were then resold cheaply. The inspiration for this initiative originated in the Netherlands, where organisations had for some time already been experimenting with employment projects that combined ecology with job creation.

Some re-use centres pursued a **social objective**. Their prime goals were the creation of employment opportunities for low-skilled and long-term jobless individuals and making inexpensive goods available to people from vulnerable target groups. A limited number of re-use centres operated exclusively out of **environmental considerations.** Their aim was to reduce the massive accumulation of waste through the recovery of re-usable and recyclable fractions and to raise people's awareness of ecological issues, urging them to act with greater concern for the environment and attention to re-use of products.

The combination of environmental care and the employment of vulnerable groups on the labour market became possible through the alignment of the Flemish social economy policy (by making subsidies available towards the recruitment and training of low-skilled workers) and the Flemish environmental policy (through the incorporation of re-use activities and by assigning the unique position of the re-use centres in Flemish waste management policy). This alignment was important for the development and evolution of the re-use centres in Flanders.

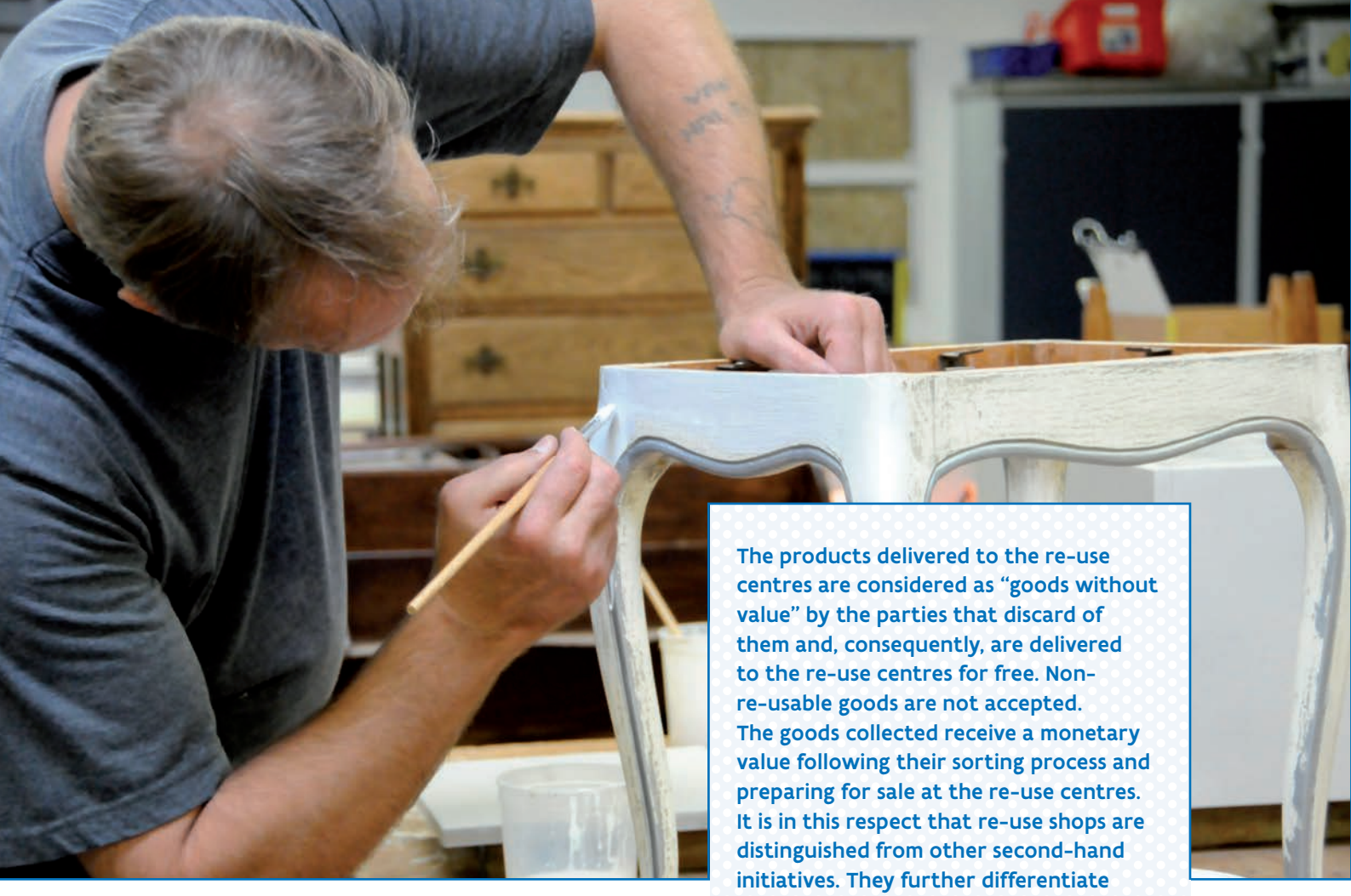
Success factor 1:

Quite rapidly in the development of the Flemish re-use sector the link was established between re-use and social employment.

In **1992**, the 'Volkshogeschool Elcker-ik' organised the first **training** programme for individuals wishing **to start a re-use centre**[3]. Mostly employment agencies followed these initial training courses. They were searching for new projects to help their target public find meaningful employment. Because of the success of these training courses, 'Elcker-ik' arose the idea to participate in supporting the development of the re-use centres in Flanders, by providing information to the authorities and other organisations, through the introduction of training programmes, by structuring the existing re-use activities into a consultative body that would represent the interests of the re-use sector and by achieving further professionalization.

At the start of 1993, there were only 5 re-use centres in operation. These re-use centres were barely known at policy level. In 1995, 18 centres were active and 13 were on the point to start.

[3] Thanks to the support of the King Baudouin Foundation's Environmental Fund and the then Flemish Minister for the Environment and Housing, N. De Batselier.



The products delivered to the re-use centres are considered as "goods without value" by the parties that discard of them and, consequently, are delivered to the re-use centres for free. Non-re-usable goods are not accepted. The goods collected receive a monetary value following their sorting process and preparing for sale at the re-use centres. It is in this respect that re-use shops are distinguished from other second-hand initiatives. They further differentiate themselves from recycling companies in that they do not operate industrial installations. Their focus is directed towards re-use, although somewhat less than half of the recovered waste is no longer fit for resale in "The Re-use Shop". Useful applications are being sought for this unsalable fraction of the goods.

The majority of the Re-use Shops chose to operate under the legal form of non-profit organisations.

In **1993**, OVAM requested the 'Volkshogeschool Elcker-ik' to conduct a study on the feasibility of the re-use centres and their role in preventing and managing waste materials. This study entered a plea for policy support for the re-use centres and their embedding into the Flemish Waste Management Plan. Based on the findings of this study, OVAM decided to introduce the activities of the re-use centres into its own waste policy[4]. The re-use centres and their activities had started to gain a foothold on Flemish soil.

The Solid Waste Management Plan 1991-1995 defined a mandatory door-to-door collection of bulky household waste at least twice a year in charge of the municipality and a sorting out of any recyclable materials[5]. This forced the municipalities and the intermunicipal partnerships to redesign their municipal solid waste policy.

Success factor 2:

The incorporation of the re-use centres into the Flemish waste management policy also secured their embedment into the local waste policy.

[4] Re-use Centres in Flanders, report drawn up on commission from OVAM, Filip Lenders, 'Volkshogeschool Elcker-ik', Antwerp, 1993.
[5] Solid Waste Management Plan 1991-1995, p.139.

The re-use centres rapidly profiled themselves as an indispensable link in the household waste collection and received a complementary role in the municipal waste policy. Proper coordination, collaboration, and the demarcation of responsibilities with and vis-à-vis the municipalities and intermunicipal partnerships were necessary to ensure the viability of the re-use centres. The municipality remained responsible for the collection of bulky household waste. The core of the re-use activities contained the collecting, processing and selling of discarded but still usable goods. Non-re-usable, defective and worn-out goods were not accepted.

The initial programme participants that in the meantime had started the first re-use centres continued to meet with one another as the challenges which they encountered were common to all of them. This led to the formation of the Federation of Flemish Re-use Centres (KVK) in **1994**.

Success factor 3:

The Federation of Flemish Re-use Centres (KVK) united nearly all re-use centres and figured as the driving force behind the development of the re-use policy in Flanders.

The main **objectives of this federation** were to provide the re-use centres with guidance in their further professionalization by means of information exchange and assistance and by acting as their representative partner vis-à-vis the competent authorities.
OVAM annually subsidised the activities of the KVK with a grant of 25.000 euros, and this for at least 5 years.
The Federation of Flemish Re-use Centres have in the course of the years gained valuable experience in matters of expansion of, and support for, activities that combined the environmental protection with social employment. Following an expansion of the KVK in July 2008, it became known as the Federation of Environmental Entrepreneurs in the Social Economy (KOMOSIE npo). Aside from its re-use activity, KOMOSIE has in the meantime likewise added the areas of energy-saving and food leftovers to its activities.

Continuity and further professionalization figured as the absolute requirements and starting principles for the ongoing growth of the re-use centres in Flanders. The re-use centres needed to continue their expansion both internally and externally.

- **Internal growth** by enhancing the efficiency of the collection, treatment and selling of the goods, with full attention paid to: training, good management, financial support and publicity.
- **External growth** by enlarging the social support and expanding the re-use activity in Flanders. Crucial in this were agreements related to operating area's to avoid unnecessary competition amongst the re-use centres, the dissemination of an uniform concept, the pursuit of collaboration with the municipality via model contracts, obtaining financial support (start-up and investment bonuses), and an uniform registration and reporting method of the results achieved.

Success factor 4:

The professionalization of the re-use centres was important to consolidate the position achieved within the waste policy.

3. INTEGRATION OF THE RE-USE CENTRES INTO THE FLEMISH WASTE- AND MATERIALS MANAGEMENT POLICY

As of **1995**, the Flemish re-use centres were in the possibility to conclude agreements individually with OVAM[6]. As a result, the re-use centres annually received during four successive years a subsidy of 12.447 euros. In order to be eligible for this subsidy, the centres were required to participate in supporting the Flemish prevention and recycling policy and to report annually their activities to OVAM.

As a result, the Federation has since 1995 been surveying all centres in an uniform manner. Initially, this was done via an extensive written questionnaire. In 1998, this survey method became computerised.

The operations of the re-use centres were for the first time included into the **Household Waste Implementation Plan 1997 - 2001.** This plan defined, amongst others, an increase in the number of re-use centres. The collection activities needed to be intensified by their further expansion, through the conclusion of cooperative agreements with the municipalities, and by providing subsidies to start-up re-use centres. OVAM and the Federation of Flemish Re-use Centres would in mutual consultation continue to develop the re-use activities in Flanders. The financial support of 24.790 euros[7] spread over 4 successive years was continued.

Conditions towards the granting of this subsidy included, amongst others:

- the availability of a shop;
- the acceptance by the shop of at least 4 re-usable waste flows;
- the organisation of free collections;
- availability of trained personnel;
- delivering to OVAM of the annual report, all reports and each and every amendment to statutes;
- using the subsidy for investments and deliver the evidence thereof.

The re-use centres became definitively embedded within the Flemish waste policy and started to gain greater momentum.

3 PILLARS OF A RE-USE CENTRE

- **Preventing waste generation by promoting re-use of products. The sold re-usable goods accounted in 2014 for a reduction of 65.000 tonnes of CO2.**
- **Creating employment for low-skilled and long-term jobless workers. The re-use centres are offering a job, training and future prospects to over 5.000 individuals that, for divers reasons, are offered few or no opportunities in the traditional labour market.**
- **Combating poverty by offering inexpensive quality goods to people living on a limited budget.**

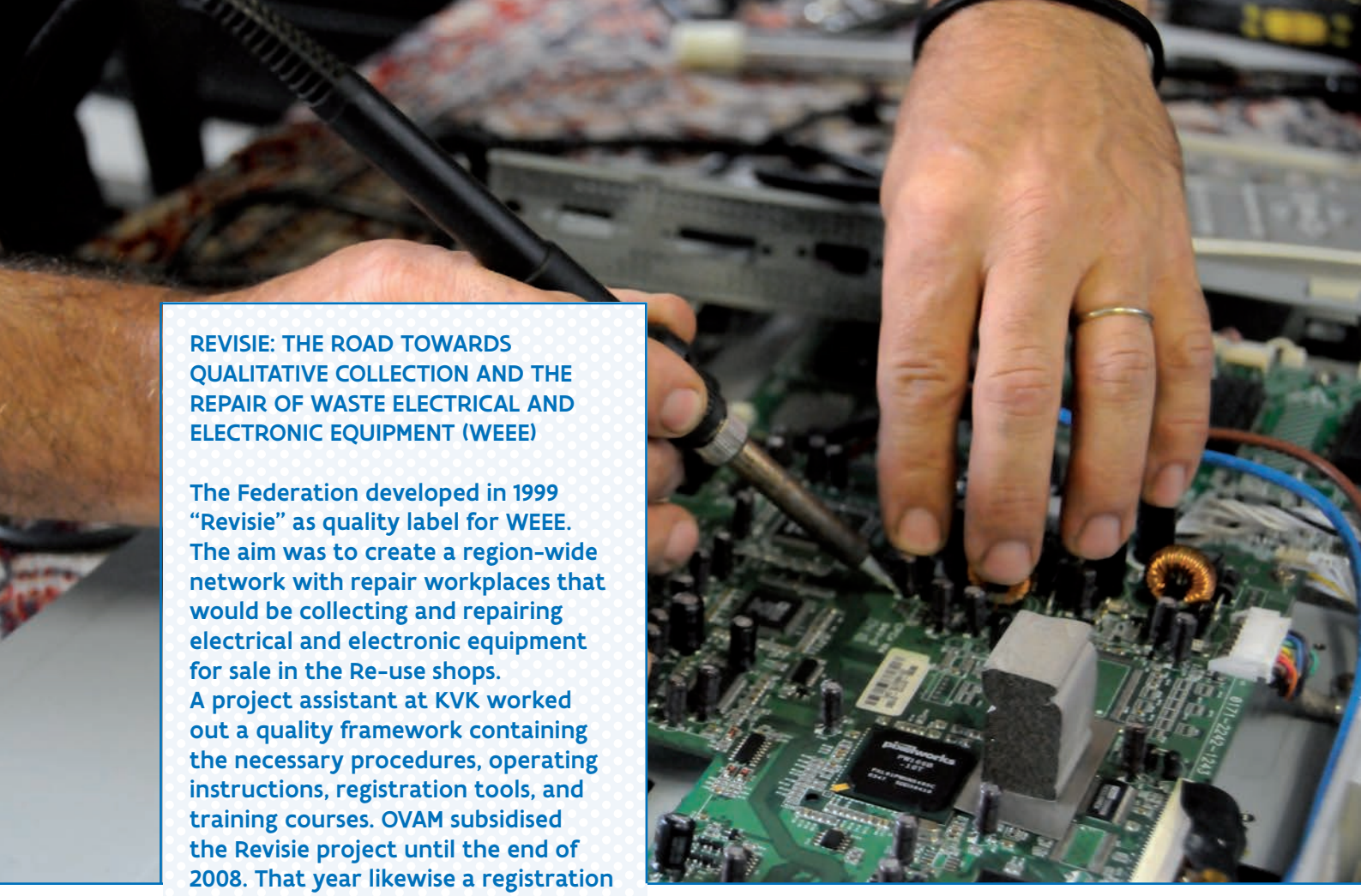
[5] 24 November 1995 accord in principle of the then Flemish Minister of the Environment, Mr. Theo Kelchtermans, with the proposal by OVAM to conclude agreements between OVAM and the Flemish Re-use Centres.
[6] The Flemish Government maintained this one-time start-up subsidy of 24.790 euros per accredited re-use centre until 2004.

OVAM, in mutual consultation with the KVK and the Association of Flemish Cities and Municipalities (VVSG), worked out **a guideline for the conclusion of a cooperative agreement between the municipality and the re-use centre.** Municipalities that concluded this cooperative agreement with an accredited re-use centre received from the **Flemish Government**[8] within the framework of the Environmental Covenant an annual subsidy of 0,13 euro per resident, with a minimum of 1.240 euros and a maximum van 6.197 euros. In exchange, the municipalities informed the population about the re-use activities within their territories and about the possibility to bring re-usable goods to the respective re-use centres. Many municipalities installed a container for re-usable goods at their recycling yard and reimbursed the re-use centres via a fee per tonnage for the collected re-usable goods.

Municipalities of more than 40.000 inhabitants were required to have a re-use centre within their territory. By 2001, every Flemish inhabitant had to have access to a re-use shop in the vicinity. In the meantime, the operating area serviced by a re-use centre was expanded to include at least 75.000 inhabitants. In effect, a given size was needed within the framework of the ongoing professionalization. The increase in the number of inhabitants per operating area led to a number of mergers amongst re-use centres.

The next Flemish Household Waste Implementation Plan took it one step further. The re-use centres were required to increase their performance to a re-use result of 5 kg per inhabitant per year by the end of 2007, thus to achieve half a volume of re-usable material from the bulky waste[9]. Moreover, the re-use centres needed to strive for independence in order to be able to operate autonomously in the future. In this process, proper training of their personnel and further professionalization of management practices were essential requirements.

[8] Option 5 of the Municipal Environmental Covenant 1997- 1999.
[9] Household Waste Implementation Plan 2003 – 2007, Action 26, p. 95.



REVISIE: THE ROAD TOWARDS QUALITATIVE COLLECTION AND THE REPAIR OF WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)

The Federation developed in 1999 "Revisie" as quality label for WEEE. The aim was to create a region-wide network with repair workplaces that would be collecting and repairing electrical and electronic equipment for sale in the Re-use shops.
A project assistant at KVK worked out a quality framework containing the necessary procedures, operating instructions, registration tools, and training courses. OVAM subsidised the Revisie project until the end of 2008. That year likewise a registration programme for the various WEEE activities has been introduced.
In 2015, "Revisie" has become a strong embedded quality label within the sector. Some 300 collaborators are employed in 19 repair workplaces and deliver quality equipment and devices to more than 60 Re-use shops.
The re-use centres are collecting WEEE via their own collecting channels (customers that deliver WEEE or have it picked up at home) and via Recupel[10]. To this end, KOMOSIE has concluded an agreement with Recupel. This agreement provides access for those centres that repair WEEE in accordance with the "Revisie" quality system.
This agreement also defines the rules (questions of logistics, facts and figures, qualitative and financial matters) and allows the access to re-usable WEEE via both the intermunicipal partnerships and via Recupel's distribution channels.

The plan determined that repair activities done by re-use centres ought to be encouraged. To this end, investments were needed in a network of repair workplaces, these being specialised workplaces where the inspection, testing and repair of discarded electrical and electronic equipment and devices are carried out on a larger scale. Moreover, the re-use of these appliances needed to be promoted and supported communicatively on a large scale. It is with that in mind that the repair- and re-use centres developed the **"Revisie"** quality label.

[10] Recupel: Producer Responsibility Organisation for the implementation of the legal take-back obligation of waste electrical and electronic equipment in Belgium, www.recupel.be

Re-use centres further were expected to try to achieve greater qualitative service and to constantly keep in mind the dual social objective, namely making inexpensive goods available to the poorer segments of the population and promoting employment for vulnerable target groups. With the Department Employment (employment and social economy) the sector cooperated on the alignment of personnel growth.

The implementation plan also defined the financial responsibility of local authorities and provinces with regard to their support for the re-use centres. Re-use centres contributed to local social employment and preventing the incinerating or landfilling of re-usable goods. Municipalities concluded clear agreements with the re-use centres on questions of awareness-raising and financing and ensured their maximum access to re-usable goods[11].

A new milestone was reached in 2003. The notion of the **Re-use centre** became definitively **embedded legally in the then Waste Decree.** At the same time, the basis was laid towards the elaboration of an **accreditation and subsidy decision** aimed at enabling the further structural growth of the re-use centres[12].

The next **Implementation Plan for Environmentally Responsible Household Waste Management (2008-2015)** supports anew the operation of the re-use centres[13]. The network of accredited re-use centres is being further expanded, with a main focus on quality control, professionalization, and sustainability. Repair activities continue to be encouraged. Re-use centres, product re-use, and repair work are being integrated into the sustainable materials policy. The target groups (the existing and potential clients) need to be continuously approached via awareness programmes and relevant information.

As a result of the effective work of the KVK, **the re-use centres were via the VLAREA[14] integrated into the legal take-back obligation of waste electrical and electronic equipment (WEEE).** This discarded electrical and electronic equipment collected by or in charge of the municipality must first be sorted out in re-usable and non-re-usable WEEE. For this process, the municipalities may have appeal to the re-use centres that have been **accredited** by OVAM. The VLAREA has in the course of time changed frequently. The legal take-back obligation of WEEE was expanded. The re-use centres maintained their role and place in the implementation of the legal take-back obligation of WEEE.

The **conditions** for the accreditation and the subsidising of the re-use centres[15] were stipulated in a decision of the Flemish Government.

[11] Implementation Plan for Household Waste 2003 – 2007, Action 36, p. 111.
[12] Decree concerning provisions supportive of the 2004 budget, 19 December 2003 (Belg. Off. Jrn. 31 December 2003) Article 14§9 and Article 16§8.
[13] Implementation Plan for Environmentally Responsible Household Waste Management 2008-2015, Action programme "Product re-use via re-use centres and other (social) projects" p. 68.
[14] Order of the Flemish Government of 17 December 1997 on the establishment of the Flemish regulations regarding the prevention and management of waste, section 3.5 Brown and White goods Art.3.5.2.
[15] Decision of 20 May 2005.

In 2012, OVAM broadened its scope from a Waste into a Materials Policy. Novel in this is the focus on the closing of the materials loop. Undoubtedly, this framework will present new opportunities for the re-use sector. The sector can play a part in the further disassembly and purposeful sorting of the collected goods, with its focus on the re-use of raw materials within the context of a circular economy.

Up to and including the year 2013, the cooperation between the municipality and the re-use centre had been incorporated into the cooperative agreement between the Flemish Government and the local authorities. Thanks to this cooperation, municipalities received extra resources, as already mentioned. In 2014 this cooperative agreement has been terminated. A recent embedment into VLAREMA offers a new framework for the continuation of this cooperation. The legal basis for this extra VLAREMA[16] provision is article 9, §1, of the recent Materials Decree.

The above illustrates the strong collaboration between OVAM, KVK (currently KOMOSIE) and the municipalities represented by the Flemish Association of Cities and Municipalities (VVSG). This collaboration forms part of the basis of the professional development of the network of re-use shops in Flanders.

[16] Order of the Flemish Government of 17 February 2012 on the sustainable management of material cycles and waste materials

4. PROFESSIONALIZATION OF THE RE-USE SECTOR

4.1. THE RE-USE SHOP AS A STRONG BRAND

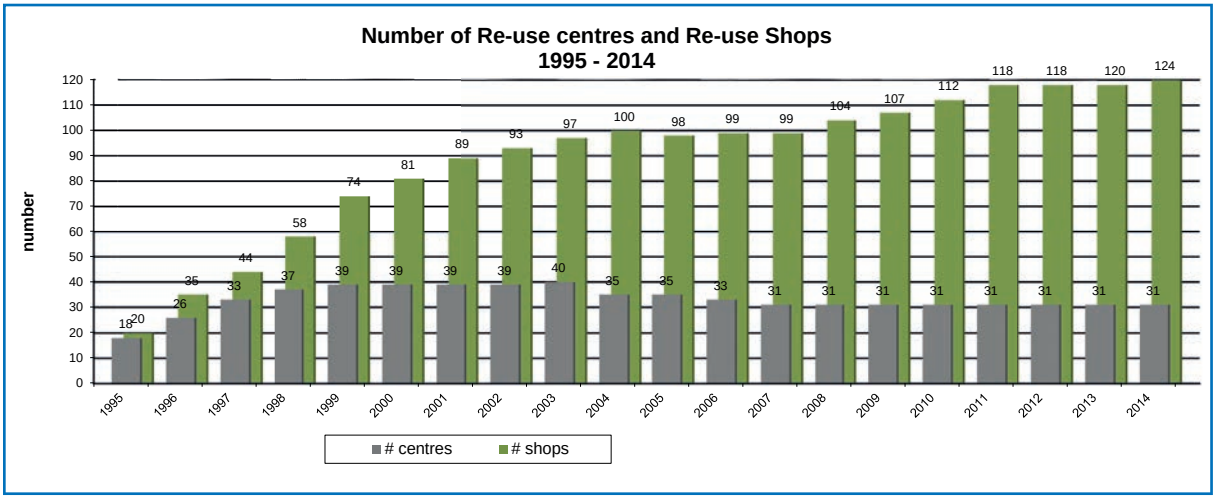
The re-use shops had success, but had to struggle with an image problem. Quite a number of these shops were seen as rather messy and dirty. The quality of goods for sale differed from shop to shop. The Flemish consumer came to look upon these re-use shops as "poor folks outlets". Amongst the public at large, there was great threshold to step inside them. In other words, a lot of work to do to change that negative image.

In 2002, 66 Re-use Shops then in operation decided to bundle their forces and through a joint strategy and shared values they managed to develop a (quality)brand: "The Re-use Shop/ De Kringwinkel" was born! By means of this common brand name it became possible to work out a Flemish communications campaign and develop a clear recognisable house style.

Further agreements were made about the quality of the service and the offered products.

de kringwinkel

Begin 2015, there are 125 Re-use Shops[17] in Flanders that communicate in an uniform way, abide by strict (self-imposed) quality management standards, and are basing their decisions on the principles of socially responsible entrepreneurship. The launching of the brand name was a highly needed strategic choice to ensure the sector's growth.



Graph 1: Overview of the number of re-use centres and Re-use Shops (1995 - 2014). The number of shops at the start of the year 2000 fluctuates around 100 but has risen by 2014 to 124 shops. The shops use an uniform house style and joint communications.

[17] 1 centre decided to opt out of this network of re-use shops. It operates 2 shops.

4.1.1 Joining forces for marketing and communication

The common strong brand name enables the Re-use Shops to group means and forces in the areas of communication and marketing. An annual communications campaign is being worked out by and for the sector. Whereas during the start-up years, The Re-use Shop/De Kringwinkel wished with the slogan **"Originality is not expensive"** to place the main focus on the affordability and the originality of the offered products, the Re-use Shops in 2014 introduced a new baseline with the slogan **"Re-use means Winning".** The buyer wins by getting an interesting commodity; the provider of the products wins by giving them new life. The shop worker has managed to get a job that fits him or her. And the environment likewise comes out a winner by increasing re-use of used products. A professional communication agency has been engaged to collaborate on the image campaign for Flanders. This campaign is likewise enhanced through local communications by the Re-use Shops themselves, using the same style. This way, the Re-use Shops are able to use their limited budget to achieve optimum awareness. Customers are being invited at regular intervals to special action days such as the Retro Day and Re-use Shop Day.

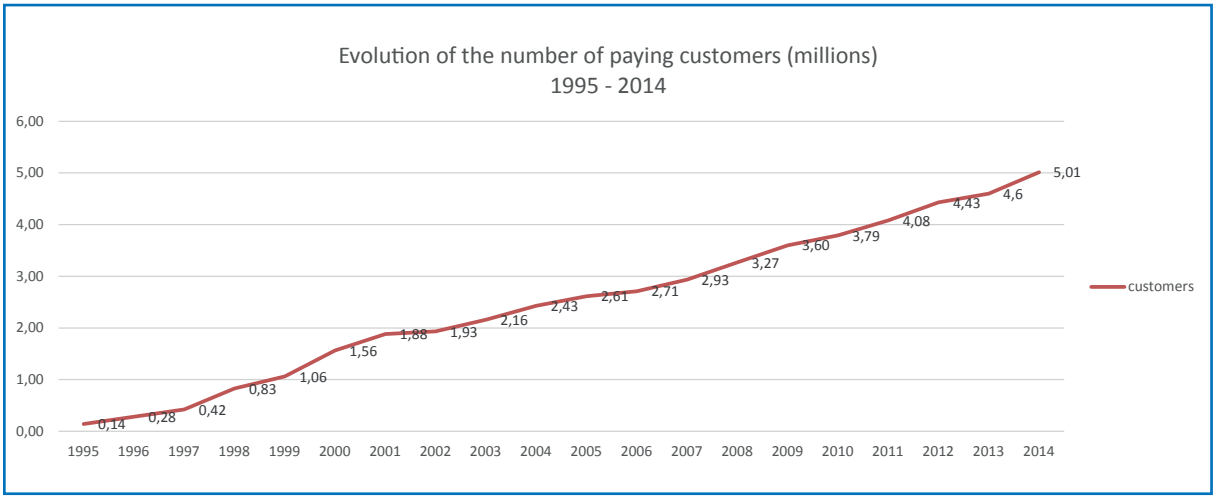
4.1.2 Joining forces towards a shop policy

The Re-use Shops collaborate in developing a professionally functioning operation and organisation. They operate within a framework of agreed quality parameters, both for what concerns the management of their organisation and the outfitting of the shops as well as the service towards their customers. In order to be able to determine objectively the way in which a customer experiences and reacts to a shop, they are collaborating with a professional agency. By means of a questionnaire listing 67 criteria worked out by the shops themselves, they are inspected **at least bi-annually by an external auditor and annually conduct a self-evaluation of their operations.** By means of an online reporting system they gain insight into areas that require concrete improvements. In order to assist them, KOMOSIE has developed an inspirational guide of 'good practices' and offers ongoing training and support services that concentrate on those common areas open to improvements. In addition, members that fail to achieve satisfactory scores are offered extra assistance and guidance.

4.1.3 The Re-use Shop/De Kringwinkel: it works!

A quality brand name generates trust and recognition amongst the customers. The most recent survey (2012) conducted among 1.000 Flemish consumers about their perception of The Re-use Shop/De Kringwinkel shows that 70% of them are familiar with the concept. Out of the 70%, half have already visited a Re-use Shop/De Kringwinkel, more than one-third of them have sometimes brought goods to a shop or called a shop for a house collection.

The Re-use Shops have in the meantime been able to address themselves to a broader public. Their customers are no longer limited to people with limited purchasing power. The ever changing range of products, plus also social and ecological considerations, is ensuring a varied customer base.



Graph 2: Number of paying customer in millions (1995-2014).
The number of paying customers is increasing and totals 5.01 million in 2014. The growing success of the network can be partially attributed to a well thought-out communications policy coupled to the rising popularity of second-hand goods.

4.2. K^2-KWADRAAD – QUALITY FOR RE-USE CENTRES

K^2-kwadraad started following the introduction of the brand name 'The Re-use Shop'/De Kringwinkel'. A brand name has an inside and an outside. The outside forms the communication towards the consumers whereby the Re-use Shop/ De Kringwinkel promises them to deliver top quality services. It is then up to the Re-use Shop/De Kringwinkel to realise their promise on the inside: the internal operational and organisational methods used by the Re-use Shop/De Kringwinkel in order to meet the quality standards to which they have committed themselves.

"It's not enough to demand good results, the challenge is to create the necessary conditions to achieve the requirements."

In order to achieve this internal quality in a sustainable way, it is important that The Re-use Shop/De Kringwinkel looks further than the quality of the products and services. The totality of the processes, conditions, and organisational systems around these products and services – in other words, the 'organisational quality' – must be kept in proper working order if the organisation is indeed intent upon guaranteeing its label quality not just once but continuously.

The project focussed on the quality of the organisation started in 2002. The project was given the name "K^2-kwadraad". K^2 stands for Kwaliteit voor Kringloopcentra (=Quality for Re-use Centres), or K x K = K^2

Organisational quality demands a global approach. In this process, the EFQM model was selected. EFQM stands for European Foundation for Quality Management. It is a model that does not define in minute detail what you should or should not do. It does, however, point out what is important for your organisation and leaves it up to you to choose your own tempo, your approach, and your tools.

THE K²-KWADRAAD PROJECT MAY BE DIVIDED INTO 3 PHASES:

Phase 1: 2003 → 2005: developing the model and the tools
Phase 2: 2005 → 2007: roll-out into de sector
Phase 3: 2007 → 2010: internal and external embedment of quality and the model

Phase 1 was primarily funded by the Minister for Social Economy. During this phase, the EFQM model was adapted to the re-use sector and practical tools were developed and implemented. In addition, many tools were developed around process management: manuals, templates in Word and Visio, training and workshops, individual coaching on the shop floor ...

Phase 2 was partially funded by the Minister for Social Economy and by over 18 re-use centres. With the roll-out, a common 'quality language' was developed amongst the participating centres. This happened in different waves: every year, new centres were able to participate in the project with their own adapted annual programme. Attention remained focused on both the operational and the management levels, with a set of training programmes and workshops.

Phase 3 was wholly funded by the participating re-use centres. In order that the quality operation within the re-use sector be not dependent on subsidies, the coordination of quality was, as of 2011, financed by the Federation out of membership fees. At KOMOSIE a member of the staff is working on quality and innovation, assisted by the employees responsible for quality at the re-use centres.

4.3. TO MEASURE IS TO KNOW: REGISTRATION AND REPORTING

From the very beginning, a great deal of attention was paid to registration and reporting. Initially, this was done via a locally installed software system (Triage). This system was inexpensive to purchase but required a lot of money for its back-up, updates, and licences. Later on it was decided to invest, qua sector, in one single online registration system via a central server (ECLIPS), thus optimization of the centralisation of data. ECLIPS is made up of a number of modules which are used to follow up the logistical functions of a centre with professional efficiency: dispatching (planning transports), processing and repair of goods, stock management, route planning, maintaining customer data, registration of work hours, cash register, reporting, waste registration ... moreover, ECLIPS keeps track of the incoming and outgoing flow of goods (inflow, re-use, residual waste, recycling). In this way, the re-use centres are informed of what is being collected from every customer, from which municipality, and via which collection channel

OVAM makes a reporting system available. The annual reporting and the use of uniform weight tables have enabled OVAM and the Re-use Shops to group and process the collection data and calculate the re-use percentages in a consistent way. This makes it possible, year after year, to follow up the results and gain insight into the development of the re-use activity in Flanders.

These results form the basis for further support, new initiatives, the expansion of a network of Re-use Shops, its continued integration into the Flemish waste and materials policy, and to work out policy and vision for the future. Via bench learning, the re-use centres likewise are able to exchange their knowledge. Why does a given re-use centre collect more goods while employing fewer personnel? What is the turnover of the textile product group of one re-use shop vis-à-vis another comparable shop?

A RE-USE CENTRE? A RE-USE SHOP?

The Flemish Government in 2005 established the criteria for the accreditation and subsidising of the re-use centres.

Some examples:

- **the operating area needs to contain at least 75.000 inhabitants;**
- **a shop needs to remain open for at least thirty hours a week;**
- **the total shop floor of the re-use centre shall measure at least 400 m2 and correspond to an equivalent of at least 1m2 per 200 inhabitants within the assigned operating area;**
- **a re-use centre shall offer at least the following six product groups: electrical and electronic equipment, clothing, furniture, leisure-time goods, household goods, and diverse items.**

KOMOSIE also developed additional quality criteria for the Re-use Shop/De Kringwinkel.

Some examples:

- **Accessibility: route description on website, street visibility of the shop, availability of car and bicycle parking spaces, accessibility of the shop via public transit, wheelchair and pram access.**
- **Entry and reception: friendly reception of customers on their entering the shop and on the phone.**
- **Shop comfort: structured lay-out of the shop featuring spacious aisles, the availability of shopping baskets.**
- **House style and recognisability of The Re-use Shop/De Kringwinkel: clear and unambiguous communication with the customer.**
- **Look and Feel: shops are brightly lit, properly ventilated and airy, clean and sober in their organisation and outfitting, and featuring correct product displays.**
- **Payment and departure: smooth and friendly payment, availability of bancontact, attention to line-ups at the checkout counter.**

5. THE RE-USE SECTOR IN THE YEAR 2015

5.1. 31 RE-USE CENTRES, AND AS MANY OPERATING AREAS

In 2015, the re-use sector consists of 31 individual and autonomous enterprises, each one with its own well-assigned operating/collection area: a conglomeration of cities and municipalities where the re-use centre is allowed to collect and sell goods. These unique operating areas have been established and are defined by a decision of the Flemish Government (2005).

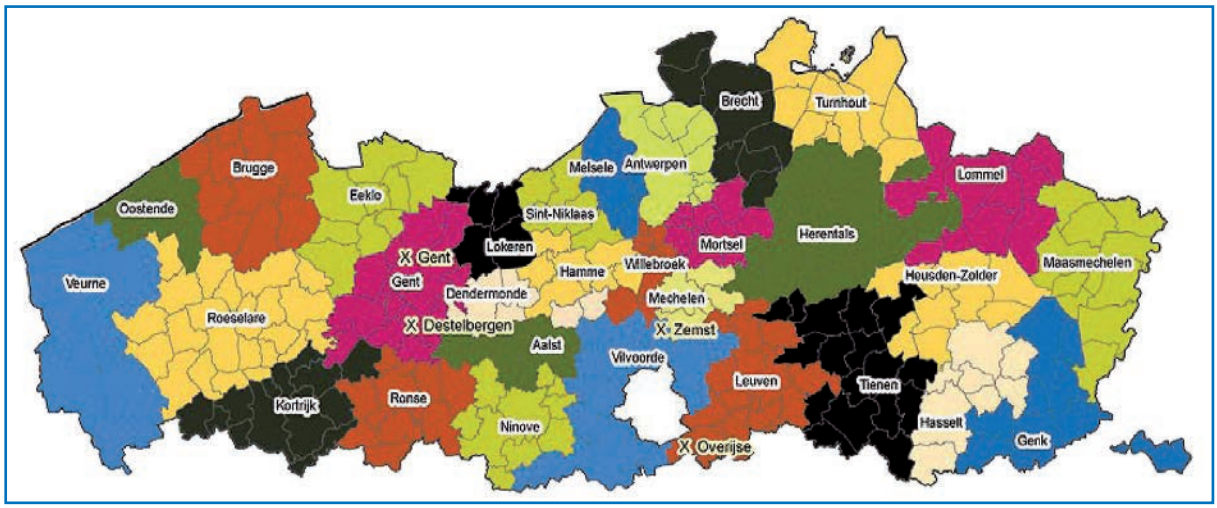


Figure 1: Overview of the operating/collection areas of Re-use Centres in Flanders (2015).

Within most municipalities, only one accredited re-use centre is responsible for the collection of re-usable goods, on behalf of, and in cooperation with, the local authorities. This system ensures less competition amongst the centres themselves and stimulates collaboration through, for instance, an exchange of their practical experiences.
A wide diversity exists amongst these different centres, both amongst the centres themselves (activities, number of shops, personnel ...) and their operating area (size, rural versus urban...). The assignment of these area has developed historically out of the successive formations and agreements. Each re-use centre has received an accreditation from OVAM.

OVAM divides the re-use centres in 2 groups, namely centres that operate on a broader scope (22) and the traditional ones (9).

The whole of Flanders is being served by a territorial network of re-use centres. The success of the re-use activity can be attributed to working with accredited re-use centres within an assigned operating/ collection area. This ensures that the competition amongst the centres is being maintained at a stimulating level. A operating/collection area covers on- average- of 200.000 inhabitants.

5.2 TRADITIONAL RE-USE CENTRES AND CENTRES OF BROADER SCOPE

A traditional re-use centre concentrates on the systematic collection, sorting and sale of goods with a view to their re-use (= selective collection). These centres have been accredited for product re-use, as stated in VLAREMA; in other words, the basis condition for this process is that the goods be collected (before acceptation) after visual pre-selection for re-use. The sorting, inspection, and the repair work also are part of the basic activity.

A broader scope centre likewise carries out overall collection of, for instance, WEEE via door-to-door collection and by using containers, but without visual pre-selection of the goods. OVAM considers this method as a waste activity, which makes these centres subject to the provisions imposed by VLAREMA.

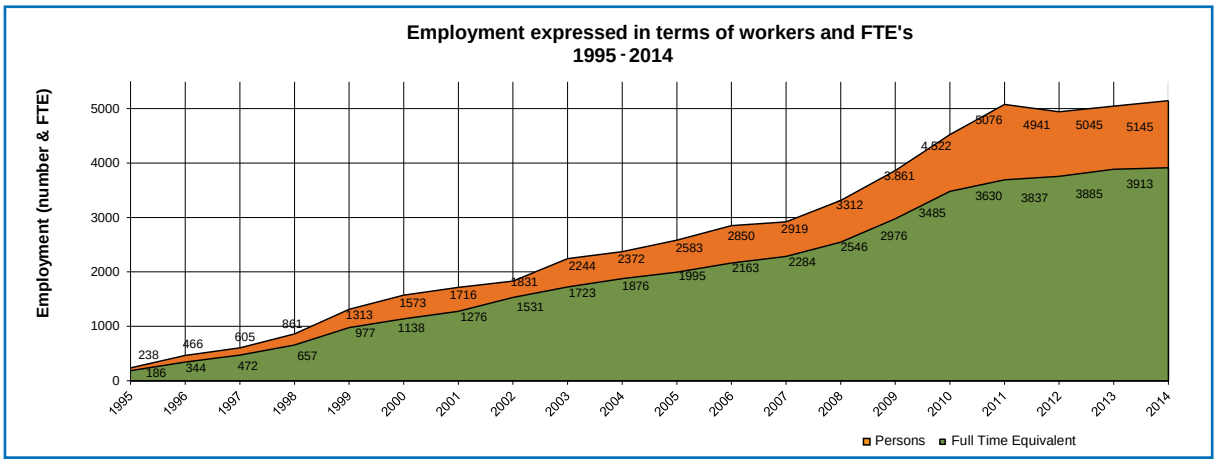
Some re-use centres have developed **extra activities with regard to product re-use,** such as, for instance, a repair workplace for WEEE or a sorting centre for textile products.

The collection method is determined in the Implementation Plan for Environmentally Responsible Household Waste Management. It concerns a minimum obligatory service to the citizens. Re-usable goods need to be collected door-to-door for free (because of the 6% VAT ruling) or may be disposed of at the re-use centre. Another possibility is the delivery of re-usable goods to the recycling yard. A good collaboration with the local authorities is crucial for successful collections.

5.3. SOCIAL EMPLOYMENT

As already mentioned above, aside from the element of re-use, the creation of social employment is the second fundamental objective pursued by the re-use centres. Re-use centres offer employment especially to individuals that have little or no access to a meaningful job in the regular labour market. The centres offer training and instructional programmes and enhance people's chances of reintegration into the labour market. Management staff within the re-use sector account for some 1/5th of total employment. The required tasks and professional know-how of the staff are in a re-use centre as diverse as within a normal business organisation, ranging from collection with the pickup van or the truck, sorting and storage, repairing, sale inside the shop, to personnel guidance, administration, and day-to-day management.

In 2014, the sector employed 5.145 persons, and this via various statutes such as employment for disadvantaged people in a sheltered work environment, employment care, work experience and "article 60" in the OCMW legislation. This article allows an OCMW to offer employment to an individual who is entitled to a living wage or financial aid. This measure serves a dual objective. People are given the opportunity to gain practical work experience and practise work attitudes, thus reinforcing their chances for sustainable employment. At the same time, they are building social security rights. The employment of such individuals is defined in time. Depending on their age, they receive an employment contract of 1 to 2 years' duration (the period needed to accumulate social security rights). The OCMW often collaborate with re-use centres in engaging workers under article 60. The OCMW functions legally as the employer, while the re-use centre makes use of the services of the employee. Approximately 1 out of 4 FTEs in de sector are currently working under that statute.



Graph 3: Employment figures in terms of workers and FTEs (1995-2014).
At the start-up of the sector there was a considerable rise in the social employment figures. However, the past few years there is little or no increase: this may be attributed to the limited budget that is being freed up by the subsidising authority for the recruitment of additional personnel. The total personnel complement consists for circa 20% of key supervisory staff. These employees are responsible for the management of the organisation and for providing guidance to the collaborators. Eighty percent of the personnel are workers recruited from vulnerable target groups. They perform tasks such as collecting, sorting, preparing goods for shop display, repairing and selling products.

In addition to job creation for individuals with minimal job opportunities in the regular labour market, the re-use centres also offer other social benefits. A lot of centres today collaborate closely with OCMW agencies and present a product assortment that is attuned to the needs of the most disadvantaged social groups. Their offer may range from financial discounts on purchases in The Re-use Shop/De Kringwinkel to, for example, a selection of free products to newcomers.

[18] The 6% VAT ruling was granted in 2000 to all re-use centres with an accreditation as socio-economic enterprises and with proviso that the collected goods be acquired free of charge.
[19] VTE = full-time equivalent

5.4. SOME SPECIFIC FIGURES

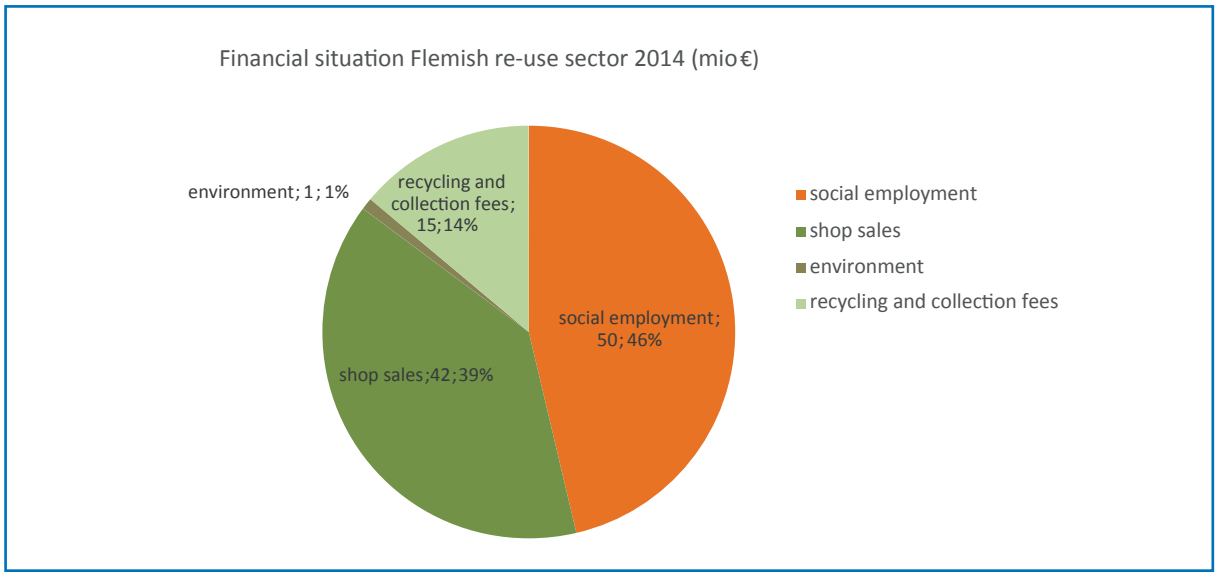
5.4.1. A healthy financial policy

Making profit is not a goal in itself for the Re-use Shops. Nonetheless, a healthy financial policy is a necessary condition to enable them to realise their other objectives with respect to the environment and to the creation of sustainable employment opportunities. The pursuit of a stable personnel policy and profitability is a pure necessity for the Re-use Shops. This goal may be achieved through the creation of well-organised and structured Re-use Shops. A number of pioneer re-users in the Netherlands failed because they paid too little attention to this particular aspect. Re-use Shops that have to rely on heavy subsidies or on the goodwill and assistance of volunteers for their daily operations are not to be encouraged[20]. It makes good sense for Re-use Shops to pursue an independent course towards business-economic viability. By being able to trust in their own resources and become self-reliant, they minimize their financial uncertainties.

By offering a wide assortment of goods at a very affordable price, the Re-use Shops have been successful in realising a solid turnover. By judiciously playing these trump cards, they have been able to attract a very broad clientele: people from the lower income groups, environment-conscious buyers, bargain hunters, etc.
The quality of, and a warranty policy on, the products on sale have played an essential role. Basic products are sold at low prices: at 10% to 30% of their original market value. High quality products, vintage and antique collectibles are priced somewhat higher. It relates to products that are also in high demand in other second-hand stores and for which there exists a specific market. Prices are set to discourage dealers. Prices differ amongst the various Re-use Shops. Each product is indeed unique and priced individually by other collaborators.
Re-use Shops operate with a high turnover of the delivered and sold products. Given the nature of the goods, maintaining large or strategic stocks offers no financial gains (unless it pertains to seasonal articles for Christmas, Easter, and Saint Nicolas Day). Because of the low prices, the costs for keeping a product in stock for an extended time cannot be justified by its return. The sector to a large degree depends on capital goods. Investments are made in buildings, transportation means, repair workplaces, ...

The total turnover is made up from shop-generated sales and subsidies. Shop revenue is generated from the sale of re-usable goods (39%) in The Re-use Shop/De Kringwinkel. Other revenues are generated from the sale of materials to the recycling sector and tonnage fees for the collections (14%). Subsidies on the average account for 47% of the total turnover. The subsidies given for employment are the most significant (46%). These employment subsidies constitute the engine that drives the growth of the re-use centres, but also the other environmental subsidies (OVAM – 1%) are and remain important to ensure the viability of the centres[21].

[20] Re-use Centres Environmental friendly Processing of Household Waste, 1993, UIA, Environmental Institute.
[21] The Re-use Centres in Flanders, Follow-up Report 2009, p.39..



Graph 4: Financial situation of the re-use sector.
On an annual basis, the total turnover in 2014 amounted to roughly 110 million euros, 39% of which derives from the sale of second-hand products, 14% from the tonnage fees for collections and the sale of recyclable materials, 1% from OVAM's environmental subsidy, and 46% from employment subsidies.

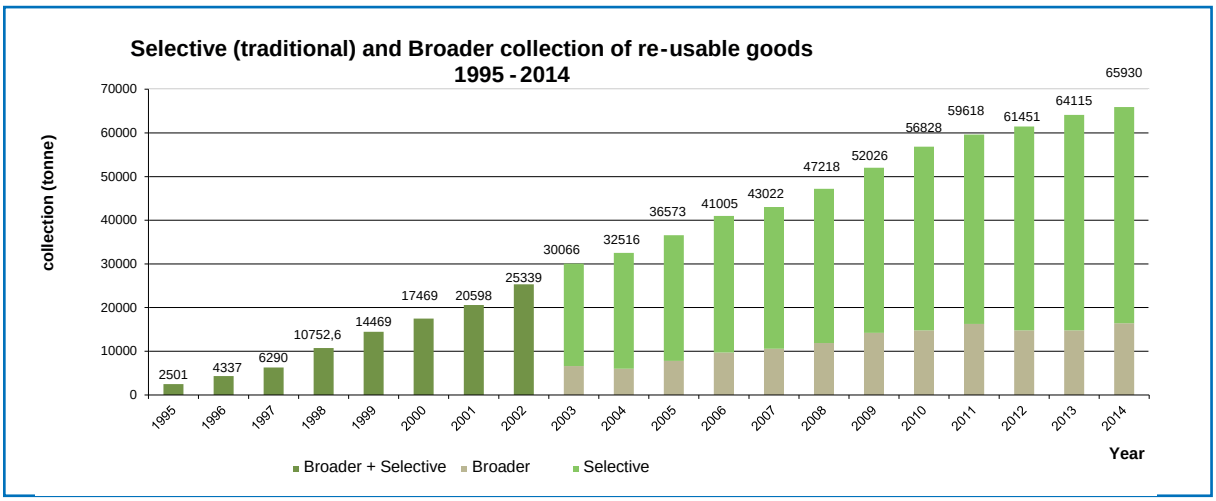
The subsidy percentages are decreasing year after year; own income from sales, recycling, and services (tonnage fees) accounts for more than half of the turnover figure.

At the sector level, the net result amounts to some 5% of the total turnover. As social economy-oriented, the sector engages itself to reinvest this net result in the creation of employment.

Graph 5: Shop turnover in million euros, excl. VAT (2001-2014).
The total shop turnover amounts to 45 million euros in 2014. This result has been realised through the sale of re-usable products in the Re-use Shops.

5.4.2 Collection in kg/inhabitant and per collection method (traditional/broader)

More than 3/4 of the total collection is carried out selectively, whereby only re-usable goods are accepted. Less than 1/4 of the collection is done by the broader scope method, which concentrates especially on textile goods (collection via street containers and kerbside collection) and waste electrical and electronic equipment (WEEE) (overall collection at recycling yards and from retailers).



Graph 6: Selective (traditional) and broader collection of re-usable goods (1995-2014). The collection of re-usable goods in 2014 amounts to 65.930 tonnes, 75% of which selectively (only the re-usable products are collected) and 25% by the broader method (without distinction between re-usable and non-re-usable (waste) products). The broader collection primarily collects textile product groups and electrical and electronic equipment.

In 2014, 40% of all of these goods was delivered to the Re-use Shops; 28% were picked up by The Re-use Shop/De Kringwinkel itself from private residents and businesses; 19.5% were collected from the recycling yards and 12.5% ended up at the Re-use Shops via other channels (textile containers, dealers in electrical products ...).

5.4.3 Re-use in kilogram, per product group and per inhabitant

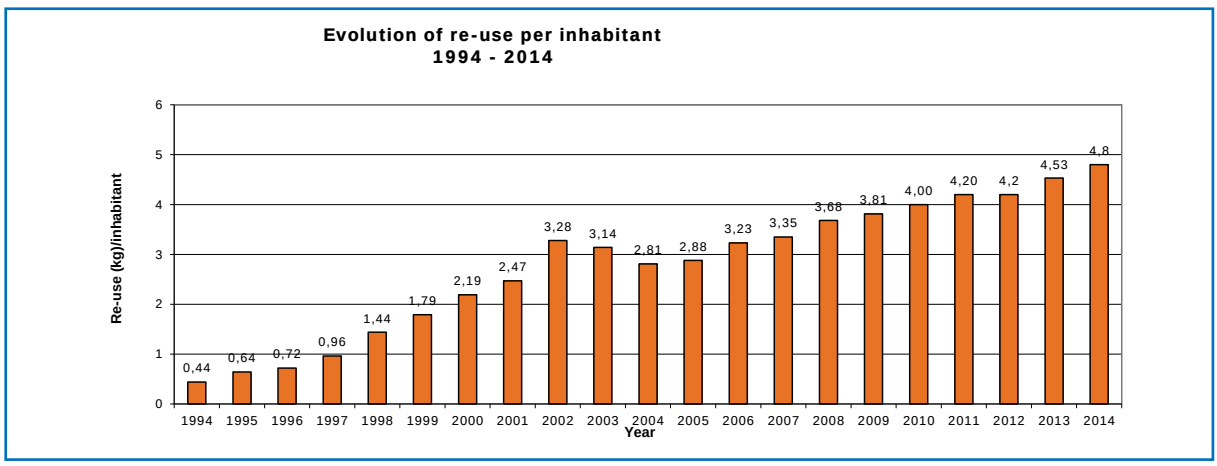
The following table shows the **collections of the various re-usable fractions.** Practically everything that can be found in the average household is being collected for re-use. Furniture, WEEE, and textiles represent – at least in mass/weight – the most important products in 2014. WEEE forms a significant part of the entire collection. A large portion of these goods is being collected overall by 2 re-use centres on behalf of Recupel. Out of this total collection of electrical and electronic equipment, only a small percentage is effectively being repaired. The re-use percentage for WEEE is therefore low.

Of the total quantity of collected products, approximately half are being resold in one of the shops. In addition, the table provides a summary of the **re-use expressed in kilogram and in euros.** Furniture, leisure-time items, and textile goods are the most sold fractions (by weight/mass). Looking at the turnover figures, we note a totally different ranking. Textiles are by far more popular than the other product groups and account for 1/3 of the realised sector sales. The selection for local re-use of textiles hence remains a very important point for attention.

	collection (kg)	%	Re-use (kg)	%	Re-use (€)	%
WEEE large white	4.269.545	6%	621.794	2%	1.335.885	3%
WEEE refrig./freezer	2.888.115	4%	261.807	1%	479.595	1%
WEEE other	8.112.856	12%	1.253.851	4%	2.326.189	5%
WEEE television/screens	3.981.285	6%	183.464	1%	141.211	0%
Books musical multimedia	4.451.866	7%	1.357.580	4%	3.187.110	7%
Do-It-Yourself	1.552.139	2%	1.912.569	6%	499.756	1%
Gas appliances. and other	205.634	0%	140.876	0%	278.960	1%
Household goods	5.060.675	8%	3.700.748	12%	8.051.827	18%
Furniture	19.336.322	29%	12.938.934	42%	9.787.929	22%
Textiles	9.550.358	14%	3.172.558	10%	15.019.564	33%
Transportation	650.700	1%	291.836	1%	924.759	2%
Leisure-time items	5.807.781	9%	5.109.234	17%	3.343.108	7%
TOTALE FRACTION	**65.867.276**	100%	**30.945.253**	100%	**45.375.893**	100%

Table 1: Summary of collection and re-use per fraction in 2014.
Furniture items and WEEE are the largest fractions in the collection.

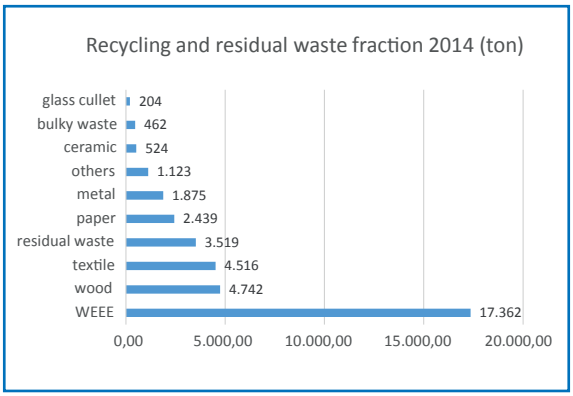
In consultation with OVAM, the sector targeted a goal of 5 kilogram of re-use per inhabitant for 2015, meaning that the average Flemish resident would buy 5 kg of re-usable product per year from a Re-use Shop/De Kringwinkel. According to the forecast, the sector result in 2015 will come in at 4,9 kg/resident. The sector, in consultation with OVAM, is considering a new target by 2022. The realisation of this goal has become a societal challenge, whereby both the sector and the local authorities play an important role.



Graph 7: Evolution of re-use per inhabitant (1994-2014).
The re-use per inhabitant in 2014 is 4,8 kg/resident and forms an important parameter for the sector. The rise of this parameter follows the trend of the preceding years.

5.4.4 Recycling and residual waste

Approximately 55% of the total goods inflow is non-re-usable (= not resalable as second-hand products in the Re-use Shops). This inflow is subsequently processed on a professional way. The following graph offers a summary of the most important removed fractions (2014). Some 5% of the total collected volume is non-re-usable or non-recyclable and is being disposed of as residual waste.

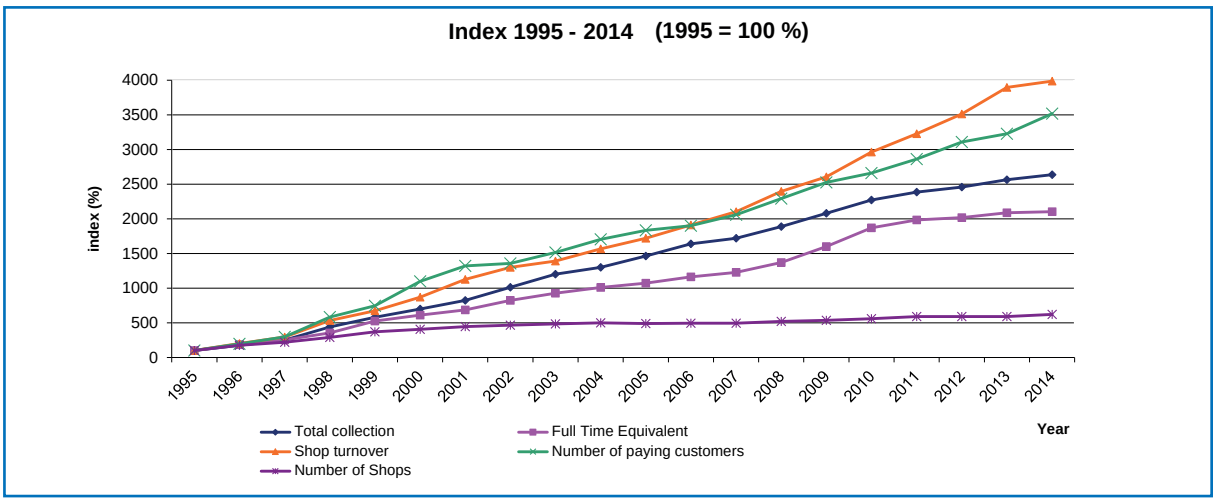


Graph 8: Removal of recyclable fractions and residual waste 2014 (tonne).
The total removal of recyclable fractions amounted to 36.764,82 tonnes. A large portion of that consists of WEEE that is being collected within the framework of the legal take-back obligation. These removed recyclable fractions are subsequently being processed by specialized and authorized recycling facilities.

5.4.5 Summary graph

The following graph offers a summary of the most significant results realised through re-use activities in Flanders.

The 1995 value is taken as reference (100%). The graph shows the evolution of the total collection, employment (in FTEs), the number of shops, the shop turnover, and the number of paying customers. For the sake of completeness, we have to mention that, as of 2013, the sector has been operating with a new – OVAM approved – item list based on the new average weights. The year 2013 then needs to be considered as a new benchmark.



Graph 9: Evolution of the total collection, employment (in FTE's), the number of shops, the shop turnover, and the number of paying customers, with 1995 as the reference year.
This graph shows the evolution of the most important sector results, percentage wise. The 1995 reference value is equated with 100%. The graphic shows the steady growth of collections and re-use, but also exposes a historical lag in increase in the employment rate. Because of budgetary savings at the level of the subsidising authorities, the employment growth within the sector has not followed proportional the increase in collections.

6. A WORD OF EXPLANATION: GLOSSARY

Code of Good Practice for the re-use of WEEE contains an overview of criteria for re-use of used electrical and electronic equipment. Electrical and electronic equipment that does not meet these re-use criteria shall, from an environmental point of view, be rejected. OVAM is of the opinion that such equipment needs to be considered as waste once the owner of such devices no longer wishes to retain them for his own purposes. Used electrical and electronic equipment that does not meet the re-use criteria but may potentially still qualify for re-use can be prepared for such purpose by a repair workplace. This process of preparation for re-use must meet certain conditions. This code of good practice will be integrated in a law.

The Re-use Shop/De Kringwinkel: The Re-use Shop project is the major cooperative partnership within the re-use sector, directed and supported by KOMOSIE vzw. The Re-use Shop functions as quality label and brand name of a group of re-use centres that have adopted an identical house style, an uniform communications mode and strict quality standards. It is, in fact, this project that has given the re-use sector a visible and tangible presence in Flanders.

ECLIPS: since 2013, ECLIPS has functioned as the software system for the registration of the goods flow, from collection to sales. It enables the re-use centres to process their registrations more correctly and more efficiently with a new item list (with average weights/mass). The system is built up of different modules to allow the members themselves to select the desired complexity of the system. An extensive reporting module makes it possible to generate information from the system.

Ecoscore: is the score assigned to the electrical equipment in The Re-use Shop/De Kringwinkel. The score compares the annual cost price of the second-hand device to that of a new energy-saving one. Account is taken of the purchase price, the consumption costs (electricity and hydro) and the estimated lifespan. http://www.dekringwinkel.be/kw/energie-en-hergebruik-de-kringwinkel-engageert-zich/ecoscore-_91.aspx

Re-use: any operation by which products or components that are not waste, are used again for the same purpose for which they were originally conceived.

Repair workplace: accredited and specialised testing and repair workplace for WEEE and belonging to the "Revisie" network.

Federation of Environmental Entrepreneurs in the Social Economy (KOMOSIE vzw): was formed in 1994 under the name Federation of Flemish Re-use Centres (KVK) with the aim to support the re-use centres in Flanders in their interests towards the authorities. For instance, KOMOSIE successfully managed to secure for its members a lowered VAT rate (6 %). In time, its involvement gradually expanded into the areas of providing professional advice about quality care, the organisation and lay-out of the shops, registration and reporting.

Re-use Centre: a legal entity accredited by OVAM that operates a collection service, a sorting and sales area and that, within its own assigned operating area, collects, stores, sorts, and repairs potentially re-usable goods in order to re-used.

Social Employment Place: a facility offering employment to all persons afflicted with an occupational disability that are willing and ready to work and who are excluded from the regular economic labour loop. A social employment place aims the recruitment of individuals excluded from the labour market with the purpose of an improved integration into the society.

Recycling yard is a licensed facility where residents and, in some cases, also business enterprises, are permitted to depose off on certain days and at certain times, under supervision, sorted household waste and possibly also waste materials similar to household waste. A recycling yard enables the sorting of household waste at source with a view to achieving their maximum recycling.

Revisie: to guarantee the quality of electrical equipment, The Re-use Shop/De Kringwinkel uses the "Revisie" quality label. This label assure the customer that an electrical device from The Re-use Shop/ De Kringwinkel will work properly and safely. In specialised repair workplaces, every device will be subjected to a thorough technical inspection, professionally repaired (if necessary), tested and fully cleaned. Quality, safety and energy consumption are paramount considerations in this operation.

Social Economy: consists of a diversity of enterprises and initiatives that, in their objectives, prioritise the realisation of certain social benefits and in the process respect the following basic principles: priority of work over capital, democratic decision-making, social integration, transparency, quality, and sustainability.

Sorting Centre for Textiles: serves for the collection and sorting of textile products collected via, amongst others, street containers and kerbside collection.

Tonnage Fee: refers to the fee per tonne that the re-use centre receives from the municipality or the intermunicipal partnerships for the collection of still re-usable goods within its operating area. In this way, it is avoided that still re-usable goods become mixed with the residual/bulky waste. This fee can be calculated on the basis of the volume of collected kilos, the volume of re-used kilos, the number of residents contacted, or a combination of any of these parameters. This tonnage fee does not represent an allowance or a subsidy but is a fee paid for services delivered.

Preparing for re-use: checking, cleaning or repairing recovery operations, by which products or components of products that have become waste are prepared so that they can be re-used without any other pre-processing.

Editors: Anne Vandeputte (OVAM), Veroniek Lemahieu (OVAM), Tine Van Rumst, Hans Pauwels, Tim Wagendorp, Els Poelmans, Jurgen Blondeel, Marc Willem (†) (KOMOSIE).
Photos: Komosie vzw

V.U.: Danny Wille, OVAM, Stationsstraat 110, 2800 Mechelen, 2015

This project is co-funded by the European Union

URBANREC – Bulky waste Factsheet

This factsheet aims to present your local situation regarding bulky waste management, including the framework, the collection and sorting schemes in place, overall quantities and specific instruments implemented to promote bulky waste re-use, recycling and proper treatment. It will be used to assess the starting situation and identify room for improvement.

Please fill in this factsheet with your local/regional information. If you think any further information is important to detail your situation, do not hesitate to add some comments. Moreover, if some data are not available, please specify the reason. If discrepancies within your territory make it difficult to give an average situation, make sure to explain it in a short text. Any picture can be added if you think it clarifies the descriptions. Do not hesitate to add relevant information (other waste fractions, regional instruments…) if it is missing in the tables. Make sure to discuss with the other partners gathering data on the same territory as yours so that the information you provide are complementary, consistent and possibly not overlapping.

For any question regarding the factsheet, please contact ACR+ (Jbb@acrplus.org - bs@acrplus.org)

Timeline for this assignment:

Date	Activity
15/11/2016	Definitive version of the factsheet uploaded
15/12/2016	**Factsheets completed by territories – feedback from ACR+**
15/01/2017	**Final version of the factsheets sent to AIMPLAS - feedback**
31/01/2017	Final factsheets sent to AIMPLAS
End of Feb 2017	Submission of the report D1.1

List of the abbreviations used:

Abbreviation	Signification	Definition
C&D	Construction and Demolition	Waste that arises from construction and demolition activities. It mostly consists of inert waste
CAS	Civic Amenity Site	A guarded, fenced-off area where residents can dispose of and sort out their household waste into receptacles in order to be recycled or otherwise treated, under the control of an on-site supervisor.
EEE	Electrical and Electronic Equipment	Electrical or electronic devices
LA	Local authority	Municipality or group of municipalities responsible for waste management (collection and/or treatment)
MCAS	Mobile Civic Amenity Site	A temporary installation in a public area where residents can dispose of and sort out their household waste in order to be recycled or otherwise treated. Unlike a regular CAS, the mobile CAS is only open or limited periods and is generally smaller.
PAYT	Pay as you throw	The system of waste collection in which waste producers pay for the waste collection depending on the quantity of waste produced.
WEEE	Waste Electrical and Electronic Equipment	Discarded electrical or electronic devices as defined in the WEEE Directive 2012/19/EU

TERRITORY

Name	Flanders	
Population	6,477,804 (1/1/2016) 6,444,127 (1/1/2015)	
Density	477 inhabitants/km^2 (1/1/2015) (13,522km^2)	
Urbanisation class	C	

Short presentation (please detail the specificities of your territories: typology of the housing, socio-demographic elements, weather…). If your organisation is a group of municipalities, please explain its composition and its organisation. Please specify the roles and responsibilities of your territory regarding waste management: waste collection/treatment…

Situated in west of Europe, Belgium shares a land border with the Netherlands in the north, Germany and Luxembourg in the east, France in the south and a sea border with the United Kingdom to the west.

Belgium is a federal state with two types of entities: the communities (the Flemish, French and German-speaking Communities) and the regions (the Flemish and Walloon Regions and the Brussels-Capital Region), which each have their own government and parliament. In Flanders, the region and community authorities are merged into one government and one parliament.

The regions are territorial entities. The Flemish Region territory coincides with the Dutch language area. The Walloon Region territory covers the French and German language areas. The Brussels-Capital Region is authorised in the bilingual Brussels-Capital area.
The regions manage everything that concerns the interests of Flemish people, people from Brussels and Walloons. They exercise their authorities with regard to international affairs, the economy, employment, housing, public works, energy, transport, the environment and environmental planning in their territory. Also the waste management is regional determined.

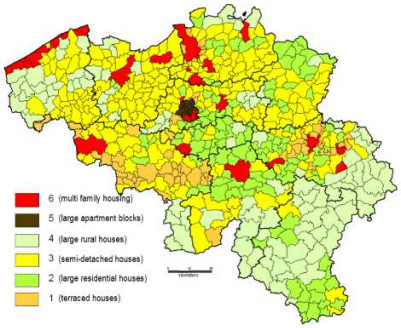
Belgium has a varied climate (temperate maritime climate). Rainfall is mild and stable throughout the year. Summer days are sunny. Winters are mostly overcast. The average daytime temperature is between 1° C (January) and 21° C (August).

The Flemish region, a low-lying territory with a coastline along the North Sea, occupies the northern part of Belgium and covers an area of 13,522 km2 (44.29% of Belgium). It is one of the most densely populated regions of Europe with 477 inhabitants per km².

The Flemish Region comprises five provinces, each consisting of administrative arrondissements that, in turn, contain municipalities (in total 308 municipalities in Flanders).

The Belgian federated entities (including Flanders) can act internationally for their own competences. They are active at international and at European level and can conclude treaties. This sub-statal right to conclude treaties is unique in the world. Flanders thus also has its own foreign policy and plays an important part in the Belgian EU Presidency.

A vast majority of the Flemish dwellings are single family houses (80%). This percentage has not changed significantly over time. Of these single family houses, almost half are detached houses, the most common building type in Flanders. Semi-detached and terraced housing makes up for 21% and 25% of the total amount of houses. The remaining 20% of residences are part of a multifamily housing stock. The vast majority (95%) of these multi-family houses are apartments, and only a marginal fraction is studios, lofts, etc. (5%). (2001-2005; http://www.lehr.be/Reports/PHP_Potential_of_LEHR.pdf)



The demographic projections of the Federal Planning Bureau and the Directorate-General Statistics and Economic Information indicate that the Belgian population should grow from 11.1 million in 2013 to 11.9 million in 2030 (+7%) and 12.5 million in 2060 (+13%). The number of private households in Belgium should rise from 4.8 million in 2013 to 5.3 million in 2030 (+11%) and 5.8 million in 2060 (+21%). The results are based on a set of hypotheses regarding the future evolution of birth and death rates, international and domestic migration and, as far as households are concerned, the evolution of the different ways of living together. The figures show that on the long-term, the number of households is increasing faster than the population growth, this due to ageing (which entails a significant increase in the number of single households) and the emergence of new ways of living together. (http://www.plan.be/publications/publication-1322-nl-demografische+vooruitzichten+2013+2060+bevolking+huishoudens+en+prospectieve+sterftequotienten)
Some demographic trends will have a negative impact on the waste management in Flanders, as published in study on March 2015, such as:

- The middle-aged population class (30-50 year-olds) is characterized by a proper waste separation and collection. Within the population, ageing leads to a decreasing importance of families with children and middle-aged (30-50 year olds) two-income couples. Elderly also encounter physical constraints which results in a less good source-separated collection. Ageing occurs everywhere in Flanders, but even more in more peripheral areas
- Rejuvenation (a decrease in the number of young people), which will occur even more in the suburbs of the big cities than in the big cities themselves, creates an additional risk for waste collection, given the lower environmental awareness and thus a less responsibility-oriented attitude in waste collection of young couples and single people (often with low incomes)
- Middle-income families will decrease relativity in importance due to a higher income inequality. Since both the lower and highest socio-economic classes run behind in attitude and collection behavior, this creates a supplementary risk.

Urbanisation class:
A: 50 – 100% of population living in multi-family houses
B: 30 – 49% of population living in multi-family houses
C: 20 – 29% of population living in multi-family houses

D: 8 – 19% of population living in multi-family houses E: 0 – 7% of population living in multi-family houses

GENERAL FRAMEWORK (IF A REGIONAL FACTSHEET IS FILLED FOR YOUR TERRITORY, DO NOT FILL IN THE GREY PART)

At which level is the waste regulation voted?	☐ National ☒ Regional
Main regulation on waste	***Please present the main regulation and the main content (responsibilities for municipal waste management – planning, operational level, priorities, specific obligations….).*** The waste regulation in Belgium is a regional matter. The *OVAM* is responsible to establish and control the implementation of the waste-, soil- and materials policy. The *municipalities* are legally responsible for the implementation of the policy regarding municipal waste and to ensure that the citizens can easily carry out the outlined municipal (solid) waste policy. They can provide power to the intermunicipal organizations (such as IMOG). The *citizens* are responsible to comply with the established regulations. The waste legislation and policy in Flanders implement the **European Framework Directive (EC) 2008/98**. This Directive sets the basic concepts and definitions related to waste management. It explains when waste ceases to be waste and becomes a secondary raw material (so called end-of-waste criteria), and how to distinguish between waste and by-products. The Directive lays down some basic waste management principles: it requires that waste has to be managed without endangering human health and harming the environment, and in particular without risk to water, air, soil, plants or animals, without causing a nuisance through noise or odours and without adversely affecting the countryside or places of special interest. Also the waste management hierarchy is presented. The Directive introduces the "polluter pays principle" and the "extended producer responsibility". It incorporates provisions on hazardous waste and waste oils and includes recycling and recovery targets to be achieved by 2020: 50% preparing for re-use and recycling of certain waste materials from households and other origins similar to households, and 70% preparing for re-use, recycling and other recovery of construction and demolition waste. In Flanders, on December 14, 2011 the **Materials Decree** (see annexe 1 for the articles that apply to household, and more specifically to bulky waste) was approved and replaces the Waste Decree that was implemented since 1981. The Material Decree is a legal framework that assumes a complete view on the material chain which is essential to find a lasting solution to the waste problem. It anchors the sustainable materials management in Flanders. Parallel to the decree, the VLAREA was replaced on the same date by a new implementation order: the **VLAREMA** (the Flemish regulations for the sustainable management of material cycles and waste, see annexe 2 for the articles that apply to household, and more specifically to bulky waste). The VLAREMA contains more detailed implementation rules on (special) waste, materials, selective source-separated collection, transport, the obligation to register and the extended producer responsibility.
Regional waste	***If there is a regional waste strategy, please give the main outlines: main objectives, activities foreseen (implementation of civic amenity sites, promotion of re-use…).***

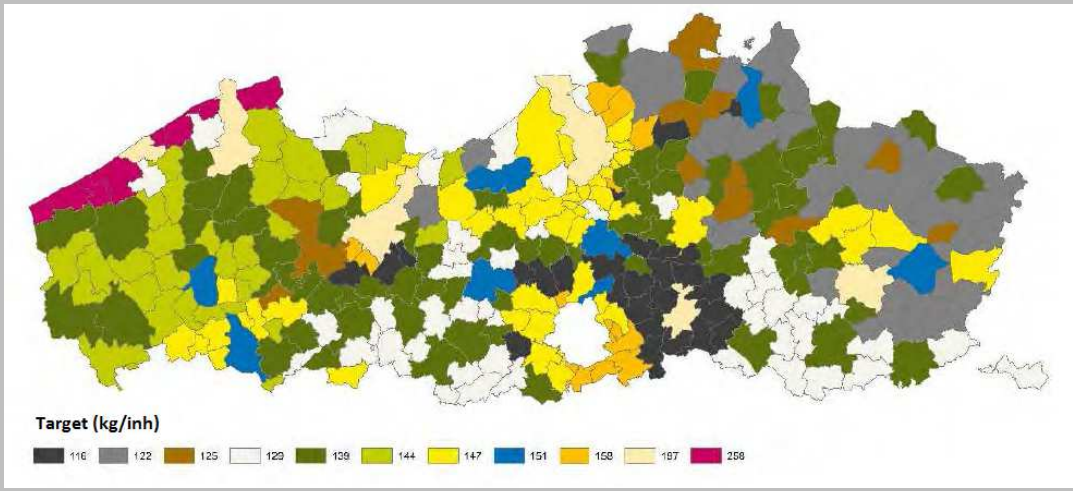
strategy (Name and general content)	The Flemish government defines the working methods of the waste management. Nevertheless, the municipalities are responsible for the daily operation and management within the legal framework of an implementation plan that aims at setting priorities, targets and general strategies to organise the waste management in the region for the coming years. A lot of streams are collected source-separated in order to promote a useful application (re-use, recycling, composting, …): e.g. glass, textile, re-usable articles, plastic bottles and flacks, metal packaging and drink cartons, paper and cardboard, … Certain material streams such as asbestos-containing construction and demolition waste are collected source-separated in order to carry out landfilling or incineration in a controlled and environmentally responsible way. Small Hazardous Household Waste is collected separately in order to be treated on an environmental sound way. The remaining household solid waste that is not source-separated (the residual waste), consists of household residual waste, mixed bulky waste and municipal waste (waste from swiping and cleaning roads and waste from public garbage cans along the road). On September 16, 2016 the Flemish Government approved a new **Implementation Plan for Household Waste and Similar Industrial Waste** (see annexe 3 for the executive summary). This implementation plan replaces the previous implementation plan and contains the main policy measures, targets and actions in order to further decrease the quantity of residual waste from households and similar waste from companies. The Plan will run until 2022 and contains the concrete targets that must be met by 2022. The new plan has been worked out in close cooperation with the umbrella federations (e.g. VVSG (municipalities), Interafval (waste incinerators), Go4Circle (waste collectors and treatment centres), KOMOSIE (re-use centres)) and other actors in the waste and materials sector. The European directives, the evaluations of previous plans and scientific research were also taken into account. The plan translates the Flemish waste and materials policy in the coming years into specific implementation actions, both for households and for companies, with a focus on the local level. It gives ideas and tools for the municipalities to make work of waste prevention and re-use, an improved source-separated selection and recycling and less street litter, in collaboration with the citizens, associations and companies. Also at municipal level, the **police regulation** points out more specifically the responsibilities of the citizens within the waste regulation: what (not) to bring to the civic amenity sites, what are the opening hours of the civic amenity site, how does the payment at the civic amenity site takes place, how to use the civic amenity site, when does the selective collection takes place, what (not) to present during the selective collection, how to use the containers, what to do with bulky waste, what in case of infringements, fines, … In all municipalities a **waste collection calendar** is distributed to all citizens and gives more information on the local waste policy: when does the door-to-door collection takes place, location and opening hours of the civic amenity site, … Recently, the waste collection calendar is supplemented by the 'Recycle'-app that is freely available.
Specific regulation on bulky waste (who is	***Please explain the regulation and framework related to bulky waste, if any: responsibilities, possibilities for collection and treatment, regulation on illegal dumping…*** In Flanders, bulky waste can be **collected** on three different ways : *By the municipality*

responsible, precisions?)	- by a fixed door-to-door collection, - by a door-to-door collection on demand (via the purchase in advance of a sticker, via an advanced payment, …) *By the citizen* - by bringing the bulky waste to the civic amenity site (CAS). In general, the door-to-door collection on demand and the bring method to the civic amenity site are preferred, because it is proven that in those cases less goods that cannot be considered as bulky waste (recyclable goods, re-usable goods, source-separated waste, …) are present. It is also economically less efficient to collect the bulky waste door-to-door on a fixed time since at the collection time a lot of households don't have bulky waste that has to be collected (already brought to the CAS because of a lack of space, more expensive than bringing by themselves to the CAS, no bulky waste produced, …). In Flanders, an average of 10 kg/inhabitant of goods are collected as reusable goods from which 5 kg/inhabitant is resold in the re-use shop. The collection of re-usable goods can happen in different ways by: - door-to-door collection on demand (organized by the re-use centres) - bringing the bulky waste to the CAS equipped (with a specific container for re-usable goods) - bringing the bulky waste to the re-use centre - other collection methods (e.g. bring banks, private initiatives such as TROC, internet second hand sites, … for which data don't exist and is by consequence not included in the abovementioned 10 kg) The **VLAREMA** defines the waste streams that require a source-separated collection (and who are therefore not considered as bulky waste). It also defines the minimum and the maximum tariffs to be paid for the collection of bulky waste. The **Implementation Plan for Household Waste and Similar Industrial Waste** defines among others the targets and the actions to be taken for the bulky waste: - Municipalities with large amounts of bulky waste (and therefore high residual waste figures) will get guidance from OVAM to conceive an action plan. Through visitations and/or roundtables the policy and the situation of each municipality will be analysed. Also, the local re-use will be mapped. - From 2017 on, the OVAM will examine which instrument can promote re-use, refurbishment, selective collection and recycling of furniture (both households and industrial). Based on the research results, the most appropriate mix of instruments will be introduced. This could lead to a new extended producer responsibility (EPR), but other instruments are also possible. - Introduction of an extended producer responsibility of mattresses from January 1, 2018. For the **treatment of mixed bulky waste**, the main part is incinerated with energy recovery (93%), the other small remaining part is landfilled (7%). **Illegal dumping** in Flanders is defined as followed : the abandonment or dumping of waste at unregulated places and times and in the wrong containers. It involves consciously avoiding the household or industrial waste collection. Illegal dumping is banned by the material decree and the police regulation. At the moment, a study is ongoing to have more details about the amount, the cost, the composition, the locations and the perpetrators of illegal dumping in Flanders. These

	figures provide the baseline to develop policies against illegal dumping and formulate targets. The policy (with emphasis on prevention, enforcement and an example function) aims a significant reduction in the amount of illegal dumping in Flanders.
Existing re-use / recycling targets on bulky waste (general, by material fraction…)	***Please indicate the quantitative targets applicable to bulky waste***

Instead of setting one single quantitative target number for household waste for all municipalities with a correction factor to be able to compare the different municipalities, the new implementation plan sets up clusters of comparable municipalities based on an existing social-economical typology of municipalities.
Each municipality can produce in 2022 up to the amount of **residual waste** (including mixed bulky waste) that has been assigned to the cluster to which it belongs:

Cluster	Denomination	Target
Cluster V1	In the suburbs	116kg/inh
Cluster V2	In rural zones	139kg/inh
Cluster V4	Rural and agricultural municipalities with industrial activity	
Cluster V5	Medium sized cities	
Cluster V3	Very rural municipalities with strong ageing	144kg/inh
Cluster V6	little urbanized municipalities with demographic decline	129kg/inh
Cluster V9	Small agricultural municipalities	
Cluster V7	Strongly urbanized municipalities with low income	147kg/inh
Cluster V8	Cities and agglomerations with an industrial character	
Cluster V10	Agglomerative municipalities with tertiary activity	
Cluster V11	Residential suburbia with high income	158kg/inh
Cluster V12	Rural or urbanized countryside with strong economic growth	122kg/inh
Cluster V13	Rurban (Rural urban) municipalities with industrial activity and demographic	125kg/inh
Cluster V14	Regional cities	151kg/inh
Cluster V15	Big and regional cities	197kg/inh
Cluster V16	Coastal municipalities	258kg/inh



If all local authorities achieve the fixed targets, an average of 141 kg of residual waste per inhabitant will be produced in 2022 (compared to 157 kg/inh in 2014).

	The figure consists of household solid waste, as well as waste produced by shops and small amounts of industrial waste. It is also important to note that the total amount of household solid waste (residual waste and source-separated waste) may not increase even if the population growth increases. Each intermunicipal organization also has a target number of maximum residual waste to produce (for example 144 kg/inh for IMOG), but the main target is the target defined on municipal level. Other targets: - Effective **re-use** achieved through the re-use centres: 7 kg per capita by 2022 with a re-use rate (sold / collected ratio) of at least 50% - The amount of **plastics** in the residual waste will be reduced with 50% compared to 2014
Existing EPR schemes for bulky waste: ☒ WEEEs ☐ Furniture ☒ Batteries ☒ Other? (Specify): packaging waste (regulated by an interregional cooperation agreement), cars In the scope of the URBANREC project the OVAM has taken the initiative to investigate whether a take back obligation for **mattresses** would be a feasible option in Flanders. The OVAM negotiated a starting document for an environmental policy agreement implementing a take back obligation of discarded mattresses. This *starting note* (see annexe 4 is the official start for the discussions on an environmental policy agreement as described in the procedures of the Flemish Decree of 5 April 1995 concerning general provisions related to environmental policy. Following the procedure, this starting note was submitted to the Flemish Government for approval. The starting note constitutes the basis for negotiations and outlines the main objectives of the Flemish Region. In a following step the stakeholders were invited to submit their views and comments on this starting note. After this public participation procedure a concluding note has made up summarizing all comments and strategic policy choices to be made (see annexe 5). In 2017 interregional discussions will be started in order to investigate whether a take back obligation for mattresses is a feasible policy option at the Belgian level. In 2017, the OVAM will investigate if an EPR scheme for **furniture** in Flanders is feasible and if it can produce an added value. **Packaging waste** : all companies that bring packaged products onto the Belgian market are subject to the so-called take-back obligation. This means that they are legally responsible for the sustainable processing of the packaging after the products are consumed. In practice, they can join Fost Plus (Belgian packaging PRO) as it would be very difficult to organize this themselves. They pay a contribution that is calculated based on the quantity and type of packaging that they bring into the market. Fost Plus uses these financial resources for processing the packaging in the most sustainable manner. A total of 86% of the packaging that is declared to Fost Plus is now recycled on a sustainable way.	
Local waste strategy (Name and general content, if any)	See regional waste strategy
General organisation of bulky waste collection	In Flanders, collection takes place by the municipalities or on behalf of the municipalities. The bulky waste can be **collected** in three different ways :

	By the municipality - by a fixed door-to-door collection, - by a door-to-door collection on demand (via the purchase in advance of a sticker, via an advanced payment, …) *By the citizen* - by bringing the bulky waste to the civic amenity site (CAS). In Flanders, 10 kg/inhabitant of goods are collected as reusable goods from which 5 kg/inhabitant is resold in the re-use shop. The collection of reusable goods can happen in different ways by: - door-to-door collection on demand (operated by re-use centre) - bringing the bulky waste to the CAS (equipped with a specific container for reusable goods) - bringing the bulky waste to the civic amenity site - bringing the bulky waste to the re-use centre - Other collection methods (e.g. bring banks, private initiatives such as TROC, internet second hand sites, … for which data don't exist and is by consequence not included in the abovementioned 10 kg). The collection of bulky waste should be as much source-separated as possible. Re-usable goods can be disposed in a re-use centre and recyclable goods can be separated for recycling. In that case, the door-to-door collection on demand and the civic amenity site are seen as the best collection methods, because it is proven that these collection schemes allow a better separation and less damage of the collected goods. At the end more goods are re-used and recycled and only a less fraction ends up for final disposal.
Existing recycling targets on bulky waste (if different than national/regional)	N/A

DEFINITION AND SCOPE OF BULKY WASTE

National definition of bulky waste	**<u>Regional</u> definition of bulky waste in Flanders** : waste generated by the normal functioning of a private household and the similar waste, that doesn't fit in the collection container/bag due to their size, nature and/or weight, both collected door-to-door, as well as the residual fraction collected in de civic amenity sites that remains for incineration and landfilling (VLAREMA).
Is the local definition the same definition as the national/regional one?	☒ Yes ☐ No
If different from the legal definition, specify it	

Specify the categories included in your scope for bulky waste:

☒ Household bulky waste

☒ Non-household bulky waste (if yes, please specify: industrial waste similar in nature, composition and quantity to household waste)

☒ Cleaning up illegal dumping (partly : if it concerns a small piece, such as a little sofa for example, a community worker disposes it in the mixed bulky waste container in the CAS; large illegal dumps on the other hand are cleared ex officio by the government and if that's the case, the waste isn't considered as household solid waste)

☒ Other (specify: residual fraction in de civic amenity sites that remains for incineration and landfilling)

COLLECTION SCHEME

The data mentioned for each collection scheme, concern data of 2015. The descriptive legislative information concerns the new actions and targets disclosed in the Implementation plan that came into force in September 2016.

In order to be able to report detailed data on the management of mixed bulky waste and source-separated waste streams, the OVAM organized a detailed survey on the management of household waste and similar industrial waste. For the source-separated waste streams, we focussed on the waste streams that would end up in the mixed bulky waste if selective collection did not exist. In this way it is easier to compare the Flemish situation to the situation in regions with less profound source-separated collection.

The survey on household waste and similar industrial waste was sent to all 308 municipalities. These municipalities reported about 34.000 waste records (combination of waste, collection method, treatment facility, quantity). The OVAM did a quality control and validation of these data and transformed the data into the waste statistics that are presented in the different chapters of this factsheet. See www.ovam.be for more information.
Annexes 6, 7, 8 contain a schematic representation of the methodology of the data collection and validation for household and similar industrial waste and the documents sent to the municipalities and intermunicipal organizations.

Separately a survey for the re-use centres was set up by KOMOSIE. After the data collection by KOMOSIE (umbrella organisation for re-use centres) the data are reported to OVAM for validation, quality control and generation of statistics at Flemish level. Annexe 9 contains a schematic representation of the methodology of the data collection and validation for the materials that are re-used in re-use centres.

CIVIC AMENITY SITES (CAS)

A guarded, fenced-off area where residents can dispose of and sort out their household waste into receptacles in order to be recycled or otherwise treated, under the control of an on-site supervisor.

Are CAS in use in the territory? ☒ Yes ☐ No **Number of CAS in the territory:** 335

A CAS is a licensed establishment with an implementation of title I of the VLAREM, where individuals and under some conditions also companies can deposit sorted household waste and possibly industrial waste similar to household waste, under supervision and on appointed days and hours.

According to the legislation

- a CAS is mandatory for every municipality of more than 10,000 inhabitants. A municipality of more than 30,000 inhabitants needs to add a CAS per started disc of 30,000 inhabitants.

or

- 90% of the inhabitants live up to max. 5 km away (in a nutshell) of a civic amenity site to which he can access.

At the moment, 95.8% of the Flemish population lives at about 5 km from an existing CAS.

A total of 286 municipalities dispose of a CAS. Seven municipalities of more than 10,000 inhabitants, don't have a CAS and 26 municipalities with more than 30,000 inhabitants have only one CAS. Inhabitants of those municipalities can leave their waste in CAS of municipalities that belong to the same intermunicipal organization.

In total, 11.1% of the waste collection in CAS concerns mixed bulky waste and 90.7% of the mixed bulky waste collected, is collected via the CAS.

Number of visitors per year: In the annual survey, the number of visitors is not asked. Given the large amount of waste collected in the CAS, we know that the CAS are frequently visited.

Accessibility (if data are heterogeneous among CAS, please present the most common situation)

The legal framework (implementation plan and VLAREMA) defines the working methods of the civic amenity sites (e.g. min opening hours, min type of waste fractions,...). Nevertheless, the municipalities are responsible for the daily operation and management within the rules of the implementation plan.

Opening time (days in a week): min 1 evening / week + on Saturday

Open on Saturday ☒ Yes ☐ No

Opening hours: from …… to …….

Since the municipalities or the intermunicipal organization are responsible for the daily operation and management, the opening hours vary a lot.

In general, given their importance for the municipality, the CAS are often open (five days a week with a minimum of 3-4 hours a day). The opening hours change also in function of the need of the population (opening hours depending on the season).

Since the municipalities or the intermunicipal organization are responsible for the daily operation and management, the information depends on them and varies CAS by CAS.

Control of the access? ☒ Yes ☐ No **Mode of control (cards, ID, type of vehicle…):** card, ID, type of vehicle, … (depending on the CAS)

Limitations? ☒ Yes ☐ No **Type of limitation (number of visits? / Volume?):** number of visits, volume (depending on the CAS or both applicable for one CAS)

Conditions for accepting waste (fee, limits, proof of payment the waste fee…): being a resident in the municipality or intermunicipal organization, sometimes second residence owners are also accepted, payment for certain fraction (e.g. mixed bulky waste).

Some fractions aren't accepted in the CAS: old and expired medicines and gas bottles that are not mentioned on the list of small hazardous waste. Nevertheless, to make sure that those goods don't end up in the residual waste, most CAS accept them by exception.

Is there an employee providing support/assistance: ☒ Yes ☐ No

Non-household waste accepted? ☐ Yes ☒ Only certain types of waste, when indicated in the environmental permit ☐ No

Types of non-household waste accepted: industrial waste similar in nature, composition and quantity to household waste

Conditions for accepting non-household waste (fee, limits…): For SMEs with limited amounts of industrial waste, it can be more effective if they can rely on existing municipal collection systems. For limited quantities of source-separated collected waste fractions, the involvement of a private company can mean high costs. The implementation plan encourages all local authorities to admit companies to their collection channels (door-to-door or bring method on a short distance) and to sensitize them to do so, but only if the industrial waste is similar to household waste in nature, composition and quantity:

- arising from activities of the same nature as the activities of the normal operation of a private household
- amounts are similar to the amount of household waste of an average family (+/- three residual waste bags of 60 kg each two weeks or one container of 22.5 kg)
- for the paper and cardboard and for the plastic bottles and flasks, metal packaging and drink cartons the limitations are established in the accreditation of FostPlus
- for the other fractions, the municipality can define quantity restrictions

The collection takes place following the principle of "the polluter pays". The tariffs are described in the tax regulations.

Local authorities can also collect by exception a bigger amount of similar industrial waste than the established maximum for similar industrial waste, if the real cost of collection and processing is invoiced and if a separate business entity is established.

The local authorities are asked to encourage SMEs on their territory to selectively deposit small amounts of waste in their CAS. In this way, the Flemish government strives for a more source-separated collection, also among companies.

Waste collected

Average number of fractions sorted: The minimum number of fractions sorted, is 16

Re-use container/section? ☒ Yes (not obligatory, but frequently provided) ☐ No

% of municipal waste collected in CAS :

In Flanders, different collection methods exist. The % of municipal solid waste collected in the CAS compared with the other collection methods (door-to-door, on demand, re-use centre, municipal depot, traders, schools, district collection, …), is 39%. The following table shows the % per fraction:

Waste stream	Collected via other collection ways (t)	Collected via CAS (t)	% of municipal waste collected in CAS
Rockwool, isolation material	0.0	35.0	100%
PVC waste	0.0	277.3	100%
Hard plastics	13.1	12,736.9	100%
Hazardous wood waste	105.3	48,750.4	100%
Drywall	28.0	8,053.4	100%
Asbestos-containing C&D waste	176.1	25,971.8	99%
Roofing	27.9	3,129.3	99%
Flat glass	116.2	10,080.8	99%
Cellular concrete	27.1	1,527.5	98%
Mixed metals	821.7	30,388.3	97%
Mixed plastics	553.7	18,911.2	97%
Non-hazardous wood waste	3,371.3	109,329.8	97%
Mixed bulky waste	**14,088.5**	**137,704.0**	**91%**
C&D waste	28,873.0	256,048.6	90%
Other WEEE	2,394.7	18,988.4	89%
Pruning wood and trunks	13,903.1	86,531.7	86%
Inert C&D waste, ceramic	8,555.0	49,700.0	85%
Garden waste, mixed	55,090.5	266,240.6	83%

Small hazardous waste	4,128.4	17,317.0	81%
Televisions and monitors	2,584.1	7,188.5	74%
Animal waste of individuals	3.8	4.6	54%
Refrigerators and freezers	5,698.9	4,971.8	47%
Large household appliances	10,276.5	4,581.2	31%
Paper and cardboard, mixed	346,011.5	84,574.1	20%
White glass	67,694.7	10,293.7	13%
Coloured glass	78,230.4	10,131.6	11%
Textile	45,109.7	4,862.3	10%
Municipal waste	37,749.2	2,507.8	6%
Plastic bottles and flasks, metal packaging and drink cartons	87,613.1	5,501.7	6%
Agricultural film	41,083.5	1,775.7	4%
Glass, mixed	28,166.3	1,010.0	3%
Street waste	9,110.2	153.0	2%
Household waste (residual fraction)	786,761.8	853.5	0%
Biodegradable waste	256,265.8	0.0	0%
TOTAL	**1,930,506.6**	**1,222,837.0**	**39%**

Collected fractions:

☒ Cardboard + paper
☒ Wood
☒ WEEE
☐ Furniture
☐ Mattresses
☒ Textiles
☒ Hard plastics
☒ Mixed bulky waste
☐ Different containers for burnable/non-burnable

☐ Big toys
☐ Carpets
☐ Other plastics
☒ Metal
☒ Green waste (fine garden waste, pruning wood, tree trunks; kitchen waste is not obligatory, but if accepted, it's under strict conditions)
☒ C&D waste
☒ Chemical waste (*small hazardous waste*)
☒ Batteries (*small hazardous waste*)

☒ **Other (specify):** pruning wood, flat glass, frying fats and oil, pure rubble, bonded asbestos, tree trunks, fine garden waste

The fractions mentioned above, are an obligatory minimum. Municipalities can choose to separate in more fractions if desired (e.g. mattresses, other plastics,…).

Collected quantities in CAS

Type of fraction	Destination	Quantities (t/yr)
Sorted fractions (homogeneous fractions collected in a specific container)	**Re-use (of materials)** **IMPORTANT NOTE :** Data on municipal solid waste assembled by the municipalities don't imply data on the re-usable goods collected by the re-use centres. The concept 're-use' here means goods that aren't send to a waste processor, but that are collected and disposed elsewhere without changing the composition (e.g. soil removed to build a house and used elsewhere to heighten the plot).	**31,762.2 (or 4.93 kg/inh)**
	Recycling	**572,433.5 (or 88.37 kg/inh)**
	Composting	**324,907.3 (or 50.41 kg/inh)**
	Temporary storage	**130.4 (or 0.01 kg/inh)**
	Dismantlement	/
	Sorting centre	/
	Incineration with energy recovery	**54,974.9 (or 8.53 kg/inh)**
	Incineration without energy recovery	/
	Landfilling	**105,431.5 (or 16.4 kg/inh)**
	Drying/separating	**54.1 (or 0.01 kg/inh)**
	Other	**9,318.6 (or 1.44 kg/inh)**
Mixed fractions (residual fractions mixing different types of waste)	**Sorting centre**	/
	Incineration with energy recovery	**127,680.0 (or 20.3 kg/inh)**
	Incineration without energy recovery	/
	Landfilling	**10,024 (or 1.6 kg/inh)**
	Drying / Separation	/

MOBILE CIVIC AMENITY SITES (MCAS)

A temporary installation in a public area where residents can dispose of and sort out their household waste in order to be recycled or otherwise treated. Unlike a regular CAS, the mobile CAS is only open or limited periods and is generally smaller.

Are MCAS in use in the territory? ☒ Yes ☐ No

Number of MCAS system (set of containers used in different locations) in the territory: 1 (2015)
The first real MCAS opened his doors in Flanders on the 1/6/2016 (in Vilvoorde). Mobile (or pop-up) civic amenity sites are at the moment most of the time pilot projects (implemented by the intermunicipal organization Incovo, IVAREM and the municipality of Huldenberg).

In the intermunicipal organization IVAREM, residents can bring during an afternoon their recyclable waste materials. Trailers are not allowed: the aim of the MCAS is to provide access to people with a reduces mobility to dispose of their recyclable goods.

In Huldenberg, six waste streams will be collected once a month (with the PAYT-system): mixed bulky waste, stone rubble, ceramics, aerated concrete, pruning wood, scrap wood and plaster. In association with extern service providers, there will also be a container for small hazardous household waste and for re-usable goods.

The municipality of Etterbeek installs already a mobile CAS since 2005, once a month, alternately in one of three locations, where it is possible for the inhabitants to come with household bulky waste and small hazardous household waste, but not with industrial waste, C&D waste and source-separated household waste.
Inhabitants need to sign in with their ID-card. The maximal volume to bring each opening time is 3 m³.
The data of this MCAS was not collected separately, but was inserted in the data of the CAS.

Type of MCAS in use:
☐ Truck (specify – van<3,5t; lorry>16t; lorry>32t):….
☐ Containers
☐ Other (specify): …….

Number of visitors per year: Data not yet available

Accessibility

Number of different collection areas where MCAS are proposed: data not yet available.
The aim of the MCAS is to provide access to people with a reduces mobility to dispose of their waste and recyclable or reusable goods.

Types of areas in use (public space, parking lots, market places…):
public space, parking lots, market places, … all places that can reach as many residents as possible with a reduces mobility

Opening time (days in a month): …….

Opening hours: from …… to …….

Open on Saturday ☒ Yes ☐ No

Control of the access? ☒ Yes ☐ No **Mode of control (cards, ID, type of vehicle…):** ……

Limitations? ☒ Yes ☐ No **Type of limitation (number of visits ? / volume?):** ……

Conditions for accepting waste (fee, limits, proof of payment the waste fee,…): ……..

Is there an employee providing support/assistance: ☒ Yes ☐ No

Non-household waste accepted? ☐ Yes ☐ Only certain types of waste ☐ No

Types of non-household waste accepted: ……

Conditions for accepting non-household waste (fee, limits…): ……..

Waste collected

Average number of fractions collected: data not yet available

Re-use container? ☐ Yes ☐ No

% of municipal waste collected in MCAS : data not yet available

Collected fractions:

- ☐ Cardboard
- ☐ Wood
- ☐ WEEE
- ☐ Furniture
- ☐ Textiles
- ☐ Mattresses
- ☐ Hard plastics
- ☐ Mixed bulky waste
- ☐ Different containers for burnable/non-burnable
- ☐ Big toys
- ☐ Carpets
- ☐ Other plastics
- ☐ Metal
- ☐ Green waste
- ☐ C&D waste
- ☐ Chemical waste
- ☐ Batteries

INSERT A PICTURE HERE

Collected quantities in MCAS

Data not yet available

Type of fraction	Destination	Quantities (t/yr)
Sorted fractions (homogeneous fractions collected in a specific container)	Re-use	
	Recycling	
	Dismantlement	
	Sorting centre	
	Incineration with energy recovery	
	Incineration without energy recovery	
	Landfilling	
Mixed fractions (residual fractions mixing different types of waste)	Sorting centre	
	Incineration with energy recovery	
	Incineration without energy recovery	
	Landfilling	

RE-USE CENTRES

A centre operated by or on behalf of a local authority or by an association (charity, social economy organisation) where people can donate products/waste that are then prepared for re-use (checking, cleaning, and possibly repairing) and made available for redistribution or sales.

Data concern 2015

Are re-use centres available in the territory? ☒ Yes ☐ No

Number of re-use centres in the territory: 31 (2015)

Operated by: ☐ Local authorities ☐ Charity organisation ☒ Other (specify): individual and autonomous enterprises (non-profit, social economy) – See annexe 10

By reusing products, waste is reduced. The re-use centres take care of the collection, the sorting and the selling of re-usable goods.

Since the start, OVAM actively supports the development of the re-use sector. OVAM's support focuses on four areas:

- Policy: The OVAM recognizes the re-use sector as a unique partner for environmentally responsible product re-use and waste prevention. OVAM accredited the re-use centres and determines their operating area. The conditions are described in the resolution of 2005 of the Flemish Government.
- Financial support: The re-use centres receive annual subsidies for their achievements. These are determined on the basis of the number of inhabitants and the amount of sold products in their working area.
- Consultation: The re-use centres are united in the non-profit organization Komosie asbl. OVAM and Komosie regularly consult and collaborate on initiatives on waste and materials policy.
- Follow-up: A follow-up report annually compiles the achievements, goals and developments.
- Communication and support of the sector: the OVAM together with KOMOSIE developed a brochure on how to set up a re-use centre and distributed this document for free (see annexe 10).

Key-success factors of the re-use centres:

- Linking re-use, social employment, social protection and protection of the environment
    - Waste prevention through re-use and extending life span of household goods
    - Job creation for low-skilled and long-term unemployed people
    - Tackling poverty by offering low priced goods to people with limited means
- Inclusion of re-use in the local waste management policy
- Establishment of a strong umbrella organization (Komosie asbl)
- Professionalization of the re-use sector (defined targets, …)
- Measurement is the key to knowledge
- Re-usable goods are donated and disposed of in a re-use shop, a CAS or are collected for free by the collection service
- Re-use centres sort-out the goods. Some goods are repaired. No re-usable goods are recycled or removed on an environmental friendly way
- The goods are available at an affordable price
- Electronics and electronic devises are revised and are sold with a warranty of one year

In 2015, the re-use sector consisted of 31 individual and autonomous enterprises, each one with its own well-assigned operating/collection area: a conglomeration of cities and municipalities where the re-use centre is allowed to collect and sell goods. These unique operating areas have been established and are

defined by a decision of the Flemish Government (2005). An operating/collection area covers an average of 200,000 inhabitants.

Overview of the operating/collection areas of re-use centres in Flanders (2015)

Within most municipalities, only one accredited re-use centre is responsible for the collection of re-usable goods, on behalf of, and in cooperation with, the local authorities. This system ensures less competition amongst the centres themselves and stimulates collaboration through, for instance, an exchange of their practical experiences. A wide diversity exists amongst these different centres, both amongst the centres themselves (activities, number of shops, personnel ...) and their operating area (size, rural versus urban...). The assignment of these area has developed historically out of the successive formations and agreements. Each re-use centre has received an accreditation from OVAM.

Data on re-use centres might be challenging to collect (e.g. from the charity sector). Please specify the scope for which you could retrieve the data which are presented below:

In 2017, KOMOSIE asbl (the network of non-profit organisations involved in recovery and energy-cutting activities in Flanders) will analyse the different methods of calculation of re-use products to link the supply and sale of products to re-use. Based on this analysis, the monitoring of the re-use sector will be further refined and made more transparent. A methodology will be developed and implemented so that the re-use target and also the re-use of each municipality can be more transparent and better monitored.

Nevertheless, at this moment, the re-use centres gather already a lot of information: KOMOSIE and other partners set up a registration system (ECLIPS) for the management of the collected goods, from collection to the sorting en selling process. This registration system, financed by an European Interreg IV project ("Zicht op hergebruik", 01/05/2009-31/12/2013), was created by the Flemish and Dutch federation of re-use centres and members of re-use centres and is the official registration and reporting system for the OVAM and is used by 30 centres who all employ the same criteria for registration of the collected goods, recyclable and waste materials up to sold articles.

Collected items in the re-use centres:
Re-usable goods:

- Re-usable EEE under specific conditions: EEE large household appliances, EEE cool/freeze, EEE television/monitor, other EEE (before EEE can be considered as re-usable, they have to be tested and checked by the criteria of 2nd hand products versus waste (criteria based on environmental and health conditions, see attachment "Code of good practice for the re-use of (W)EEE")
- If also sellable: books/music/multimedia, do-it-yourself, gas appliance and remaining, other household commodities, furniture, textile, transport, leisure goods

Non-re-usable goods:
The non-useable products are sorted for recycling and re-use of materials of the products or as last solution as waste.

- *Recyclable materials*:
  - Stored and registered by type after checking the collected goods for repair and preparation for re-use/sale : glass, wood, metals, iron, lamps, multi stream, paper, Styrofoam, hard plastics, plastics
  - Separately collected for recycling: cork and candle remnants
- *Waste*: residual waste, mixed bulky waste, wrapping film, packaging, industrial waste

Data on weight are collected in three different ways :
Goods taken to the re-use centre

- if the re-use centre doesn't have an appliance to weigh, the re-use centre counts the incoming/outgoing pieces and allocates the amounts to the correct fraction based on a standardized list of average weight per product agreed by the OVAM and the re-use centres.
- if the re-use centre has a weighing system, the incoming/collected goods are weighted.

Goods taken to containers (in or outside the CAS) or collected door-to-door

- the goods are weighted (e.g. textile from textile container)

After sorting out,

- the remaining waste fractions are registered by weight;
- the remaining waste and materials for recycling are registered by type and weight.

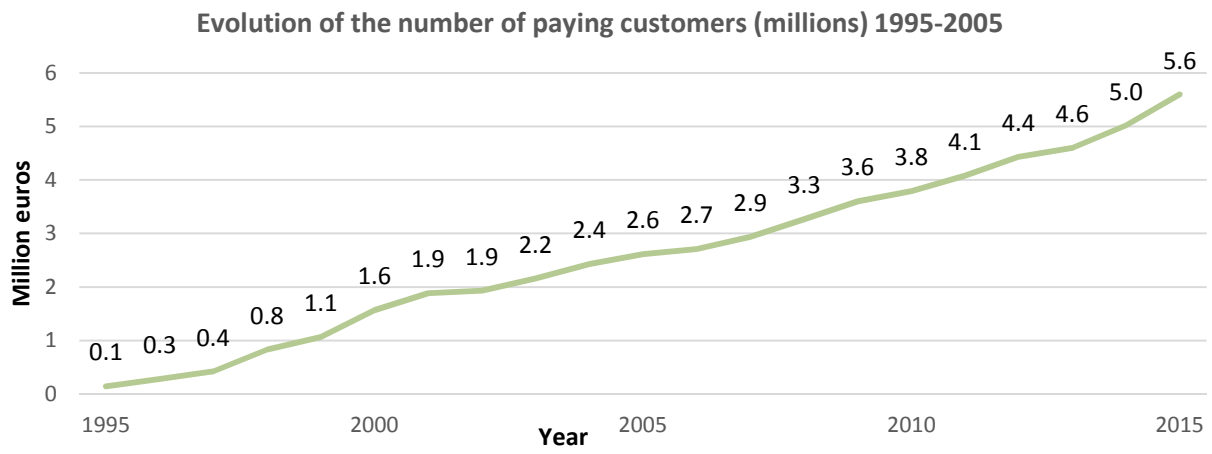
In 2017, a study will be done in order to examine the possibilities and cost to install a weigh system in all re-use centres at some levels of the process of the goods in order to obtain more accurate figures.

For the data collection, the commercial and other non-profit re-use initiatives (internet, private second hand shops, …) are not taken into account.

Number of visitors (donors) per year:

Given the width variety of ways to bring re-usable goods to the re-use centres (see '***Type of collection***'), it is not feasible to collect data on the number of donors per year. Only the disposed kilos are counted.

The number of clients per year are estimated in function of the pay desk transactions. In 2015, 5.6 million paying customers where counted.



Type of collection

☒ Brought by donors
☒ Link with a CAS
☒ On demand
☒ On kerbside (textile)
☐ Other (specify):

The collection method concerns a minimum obligatory service to the citizens and is determined in the VLAREMA. The municipality has to encourage re-use by concluding at least an agreement with a re-use centre accredited by the OVAM. The agreement contains minimum provisions on awareness raising, mutual referral function, collection methods, the residual waste and the fee for re-usable goods.

Re-usable goods need to be collected door-to-door for free (because of the 6% VAT ruling) or may be disposed of at the re-use centre. Another possibility is the delivery of re-usable goods to the civic amenity site. A good collaboration with the local authorities is crucial for successful collections.

Also, a difference is made between an inclusive collection and a source-separated collection :

Type of collection	Share
Brought by inhabitants	42%
Inhabitants on demand	23%
Inclusive collection WEEE CAS	11%
Re-use container CAS	5%
Inclusive collection WEEE electro business	3%
Textile container on the street	4%
Textile container CAS	3%
Door-to-door textile	2%
Clearing houses	2%
Other: remaining containers CAS, companies, …	4%

Products/waste accepted

☒ Household furniture
☒ Business furniture
☒ EEE
☒ Household goods
☒ Leisure time items
☒ Books & Multimedia
☒ Do-it-yourself
☒ Transportation
☒ Gas appliances and others
☒ Clothes (textiles)
☐ Other (specify):……

OVAM divides the re-use centres in 2 groups, namely centres that operate on a broader scope (9) and the traditional ones (22).

A traditional re-use centre concentrates on the systematic collection, sorting and sale of goods with a view to their re-use (= selective collection). These centres have been accredited for product re-use, as stated in VLAREMA; in other words, the basis condition for this process is that the goods be collected after visual pre-selection for re-use (before acceptation). The sorting, inspection, and the repair work also are part of the basic activity.

A broader scope centre likewise carries out overall collection of, for instance, WEEE via door-to-door collection and by using containers, but without visual pre-selection of the goods. OVAM considers this method as a waste activity, which makes these centres subject to the provisions imposed by VLAREMA.

Some re-use centres have developed extra activities with regard to product re-use, such as, for instance, a repair workplace for WEEE or a sorting centre for textile products. Mostly it concerns agreements and contracts for logistics and social jobs for collections and transport of recyclable materials.

What's not accepted in a re-use centre?
Large quantities of a particular product, non-reparable goods, food/drinks, objects with advertising of tobacco, chemicals and dangerous products (thinners, detergents, aerosols, medicines, munition, gas bottles, car batteries), packaging material (jams- and other used jars, pharmacy bottles, …), heating and gas (oil heater, fuel oil heater, gas heater, heating oil tank), transport material (tyres, trailers, motorbikes, safety helmets, …), …

In general, good quality is important.

Operations

☐ Waste collection
☒ Preparation for re-use
☒ Repairing
☒ Awareness raising (communication campaign, de Kringwinkel)
☒ Sales of products
☒ Sales of recycled materials
☒ Other (specify): collection of re-usable goods

Number of employees: 5,353 (4,115 fulltime equivalents) (2015)
Number of social economy employees: 80% = 4,282 (3,292 fulltime equivalents) (2015)

Relations with the local authority (if operated by charities)

☒ Subsidies (Ministry of Employment, regional, on municipal level)
☐ Collection of waste (in some CAS)
☐ Treatment of disposable fractions
☒ Other (specify): prevention of waste, treatment of recyclable fractions, upcycling (repair café, …), collection of reusable bulky waste (in partnership with the intermunicipal organizations)

Re-used products	**Quantities (t/yr)**
Furniture	**13,203.6**
Among which : mattresses	No data available, but almost none, for hygienic reasons
EEE	**1,948.4** (large household appliance: 600.4t; cool/freeze: 247.3t; television/monitors: 119.2t; other: 981.5t)
Household goods	**3,671.6**
Leisure time items	**4,907.5**
Books & Multimedia	**1,305.4**
Clothes	**3,154.1**
Do-it-yourself	**1,386.7**
Transport	**312.4**
Gas appliance and remaining	**49.4**
Not specified in fractions	**2,473.0**
TOTAL RE-USE	**32,412.1t sold of 69,550.1t collected** → an average of 5.017kg/customer (2015)

Other fractions	Destinations	Quantities (t/yr)
Sorted fractions (homogeneous fractions collected in a specific container)	Re-use	32,412.1
	Recycling	34,448.6
	Dismantlement	/
	Sorting centre	/
	Incineration with energy recovery	/
	Incineration without energy recovery	/
	Landfilling	/
Mixed fractions (residual fractions mixing different types of waste)	Sorting centre	/
	Incineration with energy recovery	4,651.8
	Incineration without energy recovery	/
	Landfilling	/

Sorted fractions → recycling	t/yr
Recycling WEEE (large household appliance)	3,197.2
Recycling WEEE (cool/freeze)	2,474.0
Recycling WEEE (other)	7,786.0
Recycling WEEE (television/monitors)	3,567.6
Recycling other	601.4
Recycling wood	5,390.4
Recycling ceramic	727.4
Recycling metal	1,913.9
Recycling paper	2,583.4
Recycling textile	5,951.2
Recycling glass	234.7
Recycling no-re-use activity	21.3
TOTAL	34,448.6

Mixed fractions → incineration with energy recovery	t/yr
Bulky waste	609.0
Residual waste	3,675.9
Unspecified waste	366.8
TOTAL	4,651.8

KERBSIDE COLLECTION (door-to-door collection)

*The collection of household **bulky waste** takes place from door to door or from one house to the next. Waste materials are collected from resident's doorsteps at regular frequency*

Is kerbside collection in use in your territory? ☒ Yes, but more for other fractions, bulky waste is not often collected door-to-door anymore ☐ No

Frequency of collection (per month): not determined, depending on the municipality, but not a lot of municipalities still collect (mixed) bulky waste door-to-door.

In total 0.4% of the door-to-door collection concerns mixed bulky waste and 4.5% of the mixed bulky waste collected, is a door-to-door collection.

% of the population covered: if a municipality decides to collect the bulky waste door-to-door, every resident is covered

Operated by: ☒ Local authorities ☐ Charity organisation ☐ Other (specify):

Type of lorry: ☒ with compactor ☒ platform lorry ☐ Others (specify) ……

Type of transport (e.g. van<3,5t, lorry>16t, lorry>32t): > 3,5t- <16

Conditions for accepting waste (fee, limits, proof of payment the waste fee…): payment of the waste fee, well sorted (in case of the source-separated fractions)

Accepted waste

The door-to-door collected household solid waste:

In general, at least following household solid waste streams need to be collected door-to-door source-separated:

- paper & cardboard (min monthly)
- glass bottles and jars (if no bring banks, min every month)
- biodegradable waste (min every two weeks in certain municipalities)
- textile (min four times a year)
- plastic bottles and flasks, metal packaging and drink cartons (min every three weeks)

Mixed fractions collected door-to-door:

- residual waste (min every two weeks)

Accepted bulky waste when door-to-door collection:

Accepted waste in the door-to-door collected bulky waste : waste generated by the normal functioning of a private household and the similar industrial waste, that doesn't fit in the collection container/bag due to their size, nature and/or weight (wood, WEEE, furniture, mattresses, hard plastics, metal, ... all depending on the municipality or intermunicipal organization). Every municipality or intermunicipal organization have a detailed list of what is accepted and what is refused.
On the other hand, the high tariffs of the bulky waste collection door-to-door encourage the residents to source-separate the big fractions at the CAS.

☐ Cardboard
☒ Wood
☒ WEEE (not always accepted, link with re-use centre)
☒ Furniture
☒ Mattresses
☐ Other (specify):
☒ Hard plastics
☐ Other plastics
☒ Metal
☐ Green waste
☐ C&D waste
☐ Textiles

Collected quantities by kerbside collection

Data concern 2015 and all fractions collected door-to-door (not only bulky waste).

Type of fraction	*Destination*	*Quantities (t/yr)*
Sorted fractions (homogeneous fractions collected in a specific container)	**Re-use (of materials)**	**976.5 (or 0.15kg/inh)**
	Recycling	**462,201.4 (or 71.72kg/inh)**
	Dismantlement	/
	Sorting centre	/
	Incineration with energy recovery	**527.5 (or 0.07kg/inh)**
	Incineration without energy recovery	/
	Composting	**297,365.3 (or 46.1kg/inh)**
	Drying/separation	**8.3**
	Landfilling	**420.1 (or 0.06kg/inh)**
Mixed fractions (residual fractions mixing different types of waste)	**Sorting centre**	/
	Incineration with energy recovery	**712,939.3 (or 110.6kg/inh)**
	Incineration without energy recovery	/
	Drying/separation	**64,350.4 (or 9.98kg/inh)**
	Landfilling	**5.9**

COLLECTION ON DEMAND (door-to-door collection on demand)

*The collection of household **bulky waste** in front of a house after appointment (taken by phone, via a website,…).*

In total, 61% of the door-to-door collection on demand concerns mixed bulky waste and 1.7% of the mixed bulky waste collected, is a door-to-door collection on demand.

Is the collection on demand in use in your territory? ☒ Yes ☐ No

% of the population covered: the whole population

Operated by: ☒ Local authorities ☐ Charity organisation ☒ Other (specify): re-use centre (only for the reusable goods)

Type of lorry: ☒ with compactor ☒ platform lorry

Type of transport (e.g. van<3,5t, lorry>16t, lorry>32t):

Conditions: ☒ limited calls per year : depending on the waste stream, for bulky waste min twice a year

☒ fee (specify amount): depending on the waste stream, for bulky waste min €0.05/kg, max €0.6/kg

☒ limited to certain conditions (specify): good quality (in case of re-use centres)

Accepted waste

☐ Cardboard	☐ Hard plastics
☐ Wood	☐ Other plastics
☒ WEEE	☒ Metal
☒ Furniture	☐ Green waste
☒ Mattresses	☐ C&D waste
☐ Textiles	☐ Hazardous waste
☐ Other (specify): ……..	

The door-to-door collected household solid waste on demand:

In general, following household solid waste streams are collected on demand :

- Pruning wood : min four times a year, in green regions
- Bulky waste : min twice a year
- Re-usable goods (continuously)

The bulky waste accepted door-to-door on demand depends on the municipality. In general it concerns waste generated by the normal functioning of a private household and the similar industrial waste, that doesn't fit in the collection container/bag due to their size, nature and/or weight (wood, WEEE, furniture, mattresses, hard plastics, metal, ...). Every municipality or intermunicipal organization have a detailed list of what is accepted and what is refused.

High tariffs and extra effort to organize the bulky waste collected door-to-door on demand, encourage the residents to source-separate the big fractions at the CAS.

Collected quantities

Data concern 2015 and all fractions collected door-to-door on demand (not only bulky waste).

Type of fraction	*Destination*	*Quantities (t/yr)*
Sorted fractions (homogeneous fractions collected in a specific container)	**Re-use (of materials)**	**955.0 (or 0.15kg/inh)**
	Recycling	**354.9 (or 0.07kg/inh)**
	Dismantlement	/
	Sorting centre	/
	Incineration with energy recovery	**10.0**
	Incineration without energy recovery	/

	Composting	**315.4 (or 0.05kg/inh)**
	Landfilling	/
Mixed fractions (residual fractions mixing different types of waste)	**Sorting centre**	/
	Incineration with energy recovery	**2,625.1 (or 0.41kg/inh)**
	Incineration without energy recovery	
	Landfilling	**40.7 (or 0.01kg/inh)**

OTHER SPECIFIC COLLECTION SCHEME

Any collection scheme not belonging to the previous categories (collection in shops, take back systems…).

(Description / Where is the collection taking place? / Which waste streams are collected? / Who does organise the system? / Please present the general principles and associated quantities)

A minimal fraction of waste (12%, of which 1.2% is mixed bulky waste) is collected via other collection scheme, such as the **municipal depot, traders, schools, district collection (bring banks for glass or textile containers for example) and others**.

Waste streams that are more collected via the other collections schemes instead of the door-to-door collection (on demand), the CAS or bringing the goods to the re-use centre, are : agricultural film, municipal waste (including street waste), coloured glass, white glass, textile, large household appliance and refrigerators and freezers.

Bring banks/(underground) containers

Since glass can infinitely be recycled, the number of bring banks for glass is related to the number of residents : minimum one bring bank (transparent + coloured glass) per 1,000 residents has to be placed . A difference is made between coloured and white glass.

Also textile containers are placed alongside the public road. It is intended that only still wearable clothes are put in the containers. The content of the textile containers is taken to a sorting centre where the clothing is manually sorted out. Still wearable clothing is re-used. Clothing that is no longer wearable, is pressed into bales and is intended for the rag industry.

In Antwerp, the first underground sorting street opened in 2006. In the meanwhile, underground containers are placed in more than 23 districts, mostly in neighborhoods with lots of small houses or little traffic. To have access to the containers, residents need a pass on which they transfer money. A source-separated collection needs to be done (PMD, kitchen waste, paper&cardboard, residual waste, glass). In 2019, Antwerp wants to have installed 5,500 containers that reaches 100,000 residents.

Even though the quality of source-separated waste streams is less when the waste is collected via underground containers, it is proven that, under proper quality control, underground containers are useful when:

- congested roads complicate the door-to-door collection;
- source-separated storage is difficult for a longer period when smaller housing;
- a regular door-to-door collection implies that one must keep the different fractions at least 1 to 2 weeks, which is not evident for e.g. organic-biological waste or diapers.

Collection via distributors

To fulfil the legislative obligations of waste and material management, Producer Responsibility Organizations (PRO) are formed in order to facilitate the organization. Manufacturers, importers and related organisations to the products are free to enter the PRO. Hereby some examples:

- **Valorfrit** is a non-profit organization that is responsible for the management and collection of used animal and vegetable oils and fats; **Valorlub** is the PRO for waste oil
- **BEBAT** ensures the collection, sorting and recycling of batteries
- **Recupel** is a non-profit association responsible for organising the collection and processing of discarded electr(on)ic appliances and light bulbs
- **Febelauto** is a non-profit organization founded by several profession federations of the automotive sector and responsible for both the organization and monitoring of the entire process of collection, treatment and recycling of end-of-life vehicles in Belgium
- **Recytyre** is the PRO for waste tyres
- **Pharma.be**, the general association of the pharmaceutical industry, takes care of the collection of old and expired medicines through pharmacies
- **Fost Plus** and **VAL-I-PAC** are non-profit organizations responsible for the promotion, coordination and financing of source-separated collection, sorting and recycling of respectively household packaging waste and industrial packaging waste in Belgium. **IVC** is the interregional packaging commission that monitors the implementation of the legislation on the prevention and management of packaging waste

For mattresses, some distributors already organize a voluntary take-back.

An example of the way the federations are organized: the Green Dot ( )

The Green Dot logo appears on much of the **packaging** for products used on a daily basis. It indicates that the company bringing the packaged product onto the market is a member of Fost Plus, and pays a contribution for the treatment of the packaging when it becomes a waste material. Each company's contribution is based on the quantity and the type of packaging it brings onto the market. At the end of 2015, Fost Plus had 5,017 members.

The Green Dot logo does not automatically mean that the packaging was made of recycled materials, nor it is a guarantee that the packaging on which the logo is printed, will be recycled (this depends on the material that was used), nor does the Green Dot logo indicate how you should sort your packaging.

The Green Dot logo is found on packages all over Europe. Fost Plus is part of Europe Packaging Recovery Organizations, the umbrella organization of packaging organizations that is responsible for the collection and recycling of packaging in their country, like Fost Plus. All of the member organizations of PRO Europe use the Green Dot logo. PRO Europe is responsible for managing the licensing of the Green Dot logo and ensures that the logo is used as it should be.

SORTING FACILITY FOR NON REUSABLE BULKY WASTE

A facility intended to segregate recyclables such as paper and cardboard, glass, wood and metals <u>from the collected bulky waste</u> through manual sorting, manual sorting belts and/or automatic processes such as air flow or optical separators.

Are there bulky waste sorting centre in use in your territory? ☒ Yes ☐ No

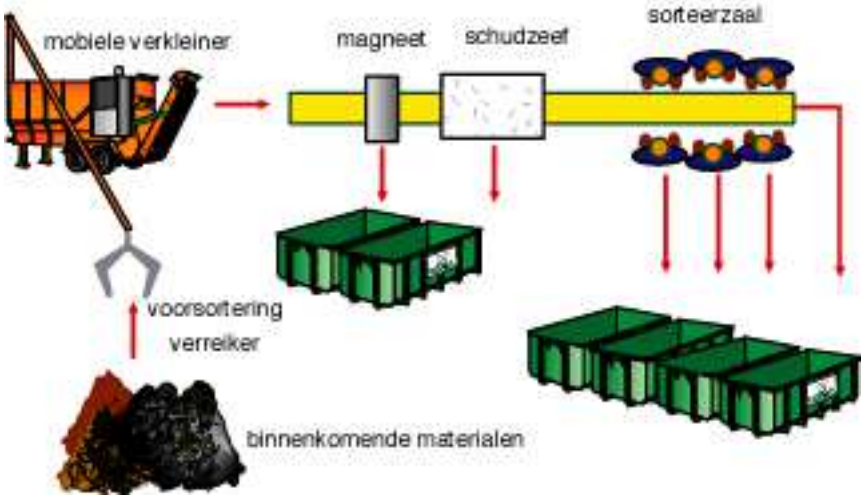
Number of bulky waste sorting centres: 1 **Total capacity:** 20,000 - 30,000 t/yr

General description of the process (*type of sorting lines, manual sorting…). Any diagram or figure presenting the process is welcome.*

In the CAS there's an extensive sorting process in different containers (based on type of fraction). Most of these waste fractions go to recycling, after being clustered. Nevertheless, the CAS still have a container for objects who exist out of different materials (e.g. wood, plastic,…). This 'mixed stream containers' go to the sorting facility for bulky waste as this mixed bulky waste still contains a lot of valuable materials. Also the source-separated wood fraction, collected in the CAS, goes into a sorting facility.

1. **<u>Sorting facility for mixed bulky waste:</u>**

First, before going into the shredder, big objects with a homogenous composition (e.g. carpets) are pre-sorted. Afterwards the mixed bulky waste goes into a shredder to reduce the size, then passes a magnet to sort out the iron and at last goes to a sorting hall where it is possible to sort out valuable materials. The inert materials are taken out by a shaking sieve. Also a dust extraction takes place.



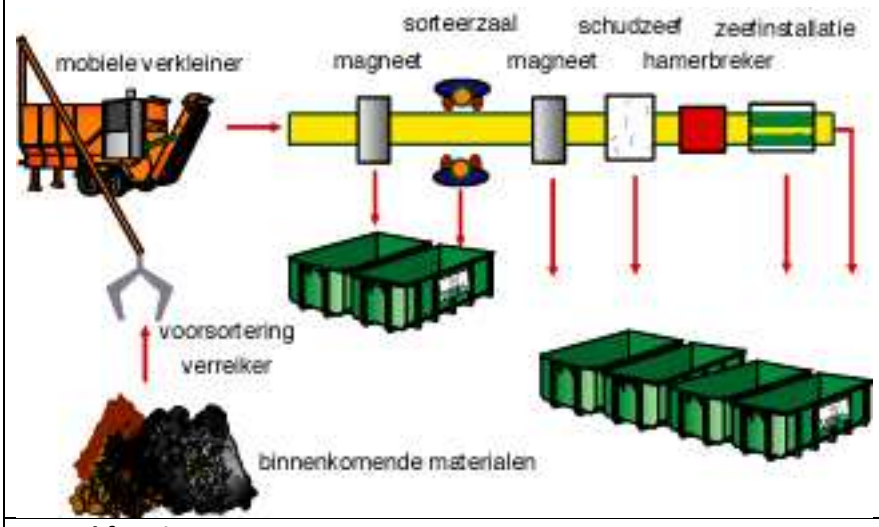
The end product is a mixture of small and larger parts that are not larger than 35 cm. The total volume reduction is at least 75%. This end product goes to the incineration with energy recuperation.
The inert materials and the extracted dust are landfilled.

Due to the current economic market of recyclable goods it isn't achievable to do a manual sorting after schreddering (in a sorting cabine) to sort out valuable materials of the mixed bulky waste.

1. **<u>Sorting facility for wood waste:</u>**

In the sorting center the wood is shredded to reduce the size. A magnet takes out the iron and non-ferro materials and different shaking sieves split up the wood plaques in different sizes.

The end product of the non-treated wood waste fraction is sold as new raw material for e.g. the chipboard industry; the end product of the treated wood waste is sold as raw material for the energy industry. The residue of both fractions goes to the incineration installation.



Sorted fractions:

- ☐ Cardboard
- ☐ Wood
- ☐ Furniture
- ☐ Textiles
- ☐ Mattresses
- ☐ Other (specify): ……..
- ☐ Hard plastics
- ☐ Other plastics
- ☐ WEEE
- ☒ Metal
- ☐ C&D waste

Average sorting residues rate (%): …….

INSERT A PICTURE HERE

Collected quantities

Type of fraction	***Destination***	***Quantities (t/yr)***
Sorted fractions (homogeneous fractions collected in a specific container)	Re-use	
	Recycling	
	Dismantlement	
	Incineration with energy recovery	
	Incineration without energy recovery	
	Landfilling	
Sorting residues	Incineration with energy recovery	
	Incineration without energy recovery	
	Landfilling	

COMPOSITION ANALYSIS

A composition analysis consists in various measurements aiming at assessing the average composition (i.e. the distribution of the various waste fractions) within a mixed waste stream (e.g. residual waste or mixed bulky waste).

Have you already performed a composition analysis for mixed bulky waste? ☒ Yes ☐ No

For which bulky waste stream:

☒ Mixed bulky waste collected in CAS
☒ Mixed bulky waste collected on the kerbside/on demand
☐ Mixed bulky waste entering the sorting facilities
☐ Other (specify):……..

Year of the latest composition analysis: 2011

Are you planning to do one over the course of the project? ☐ Yes ☒ No
If yes, please specify when:…….

If a composition analysis on bulky waste has been performed on your territory, please specify the proportion (in %) of the various material fractions.

The % in the table below show the proportion of various material fractions in the bulky waste in the CAS and when collected door-to-door:

Composition of the bulky waste CAS		Composition of the bulky waste Door-to-door collection	
Combustible	52.49%	Combustible	49.83%
Inert material	17.86%	Wood	28.21%
Wood	12.33%	Mattresses	7.74%
Mattresses	7.42%	Plastics (HDPE)	4.29%
Carpets	3.64%	Carpets	3.78%
Plastics (HDPE)	3.38%	Ferro metals	3.31%
Plastics (PVC)	1.44%	Inert material	1.67%
Ferro metals	0.89%	Small hazardous waste	0.73%
Styrofoam	0.32%	Plastics (PVC)	0.21%
Glass	0.09%	Non-ferro metals	0.13%
Small hazardous waste	0.06%	Organic-green	0.06%
Non-ferro metals	0.05%	Glass	0.03%
Other	0.03%	Other	0.02%
Organic-green	0.00%	Styrofoam	0.00%

Please specify the waste stream concerned by the composition analysis (e.g. mixed fraction in CAS, mixed bulky waste collected on the kerbside, mixed fractions entering bulky waste sorting centre…).
The waste stream concerned by the composition analysis is the mixed bulky waste in the CAS and collected door-to-door.

Do not hesitate to add lines to the tables for missing.
The % in the table below outline the % of the materials in function of the kg/inh

Material fractions	*Mixed fraction of bulky waste in CAS*	*Mixed bulky waste collected on the kerbside* (Data of 2011)	
Annual quantities (t/yr)	30kg/person/year (93%)	2.3kg/person/year (7%)	
Cardboard (and paper)		0.73%	
Wood		19.56%	
WEEE		1.64%	
Furniture		42.70%	
Mattresses		8.67%	
Fixtures and fittings		1.76%	
Upholstery			
Wooden furniture			
Plastic furniture			
Garden furniture		2.26%	
Hard plastics		6.78%	
Other plastics			
Metal			
Green waste		0.03%	
C&D waste		5.40%	
Small hazardous waste		0.05%	
Textiles (incl. carpets)		5.97%	
Residual fraction			
Tyres		0.04%	
Scrap-iron		1.40	
Glass		1.30%	
Garbage bag		1.34%	
Styrofoam		0.20%	
Transport		0.17%	
Please specify the size of fine elements, if any (in mm)			

FINANCIAL DATA

Average costs for **bulky waste management**: *please indicate* ***the cost borne by local authorities*** *for collection and treatment, i.e. the total technical costs minus the incomes from material sales and possible subsidies:*

	CAS	Mobile CAS	Re-use	Kerbside	On demand	Illegal dumping	Total
…. €/t							
…. €/visitor							

Door-to-door collection of household solid waste (residual waste, biodegradable waste, PMD, paper&cardboard, textile, bulky waste and green waste)

The amount of the collection costs depends on several variables, including the overhead costs of equipment (e.g. collection car), staff costs, but also the number of collection points per collection tour. The collection costs consist largely of overhead costs, such as equipment and staff. Regardless of the quantity of waste offered at every house, the collection truck must drive his round.

This means that the waste collection costs don't vary linearly with the increase/reduction in the volume of the fraction. The average collection cost of all waste fractions collected door-to-door in Flanders is about € 30 per capita per year.

Re-use sector
The total operating income of the re-use sector amounts to 113 million euros (2015) and consists mainly of own revenues and grants. The companies in the re-use sector deploy in many cases activities outside the re-use shop activity, such as social restaurants and ironing workshops. It is not possible to separate exactly the financial results of these activities on a global level.

The own revenues are earned from:
- The retailing of reusable goods: 50.5 million euros (2015; 44% of the global revenues);
- Service fees (collection of goods) and non-re-use activities (6 million euros)
- Sale of recycling fractions (2.3 million euros).

In addition, the re-use sector receives grants:
- Social economy subsidies (43 million euros, 39% of global sales);
- Operating grants (3 million, 3% of global sales);
- 4.7 million comes from tonnage fees.

How do citizens pay for waste management:
☒ Tax (no link with waste production, e.g. based on property value)
☒ Fee (with no link with waste production, e.g. based on the number of inhabitant)
☒ PAYT system (in relation with the waste production.)
Please specify how the PAYT system is calculated: per kg or per volume
The municipalities in collaboration with the intermunicipal organizations determine the cost and the way the costs are calculated within the PAYT system and thus vary within the territory within legally defined limits by the government (see below).
The cost of bulky waste is calculated in function of the volume or the weight.

Please provide any further information explaining how citizens pay for bulky waste management

The local governments use three types of payment for municipal solid waste:
- Variable interpretation costs (including fees)
- Flat-rate tax
- Own resources of local governments

The minimum and maximum variable costs of bulky waste collection are determined in the VLAREMA:
- Civic amenity site : min €0.02/kg; max €0.3/kg
- Door-to-door: min €0.05/kg; max €0.6/kg

200kg = 1m³

On top of the variable cost, the municipality or intermunicipal organization can also charge fixed costs for collection or disposing waste at the CAS.

Economic instruments in place :

Type of instrument	**Yes**	**No**	**Describe the instrument**
PAYT system	☒	☐	Pay as you throw: When disposing the waste, a rate will be charged based on how much waste is collected (per kg or per volume)
Fees for companies	☐	☐	

Fines for illegal dumping	☒	☐	The fine for illegal dumping consists of the price for clearing and treatment of the waste and/or a penalty or a condemnation
EPR system	☒	☐	In order to increase the efficiency, the EPR is organized by sector (PRO) and not by every producer separately. EPR's are therefore legally organized via an environmental agreement. Examples of collection systems are: - Recupel: WEEE - BEBAT: batteries - Fost Plus : packaging waste - Recytyre: tires Disposing WEEE in the CAS or in the shop when buying a new one is for free, since a Recupel-contribution is paid when buying a new one.
Other (specify): - levies - investments in CAS/re-use centres - free collection	☒	☐	- The environmental tax on waste is regulated since January 1, 2012 by the Material Decree, starting at article 44. The basic principle is that the polluter pays. The waste charges have partly a funding nature (MINA Fund) but also and above all a regulating function. The regulatory effect arises from the differentiation of the charge rates in function of the nature of the processing and of the nature of the waste. In Flanders a levy is charged for landfilling, incineration of waste. In addition, an environmental levy exists for disposing, incinerating, sorting and pre-treating of Flemish waste outside the Flemish region. - Civic amenity sites and re-use centres have a great importance within the waste/materials management. - Because of the value of the materials, e.g. metals and textile are mostly collected for free.

LEGAL INSTRUMENTS

Mandatory separately collection scheme in force: ☒ Yes ☐ No

Which waste streams: paper&cardboard, plastic bottles and flasks, metal packaging and drink cartons, glass, pruning wood, biodegradable waste, mixed bulky waste, textile, WEEE, metals, wood (type A and B), reusable goods, flat glass, hard plastics, small hazardous waste, frying fats and oil, pure rubble, other C&D waste, asbestos-containing C&D waste, trunks, fine garden waste, medicines.

Landfill bans (VLAREMA 4.5.1): ☒ Yes ☐ No

Which waste streams are banned: waste that can be recycled and can be incinerated, such as mixed municipal waste, source-separated waste in view of their useful application, waste that by nature, quantity or homogeneity according to the best available techniques is appropriate for re-use or material recycling, combustible fractions or fractions that are appropriate for material recycling resulting from

the sorting or treatment of household waste or industrial waste similar to household waste, old and expired medicines and all waste streams subjected to an incineration ban.

Incineration bans(VLAREMA 4.5.2): ☒ Yes ☐ No
Which waste streams are banned: waste that by nature, quantity or homogeneity according to the best available techniques is appropriate for re-use or material recycling (the ban doesn't apply for following waste used for producing energy, if the caloric value is higher than 11,500 kJ/kg: vegetable waste from agriculture and forestry, vegetable waste from the food industry, fibrous vegetable waste that comes from sorting, screening and washing the raw pulp and paper production, wood and cork), untreated bulky waste and source-separated industrial waste.

Others (specify) :
EPR (Extended Producer Responsibility): The producer is responsible for the collection, recycling and final treatment of his product (and the packaging) and the costs incurred when his product becomes a waste material. In certain cases, a recycling target needs to be reached. This responsibility stimulates the producer to think about the life cycle of his product. The producer may delegate this responsibility, at his expense, to another organisation (e.g. accredited body).

Interregional Cooperation Agreement on the prevention and management of packaging waste 1997, renewed in 2009 (Accreditation Fost Plus period 2014-2018): In the mid 1990's, the reduction of the total production of residual waste became an issue and as a consequence sorting and recycling of recyclable waste materials became mandatory. The Flemish Government made the producers/ importers more and more responsible for the collection, recycling and treatment of its products on their own cost, after use. This producer responsibility formed the basis of the current packaging waste management in Flanders (Belgium). The separate collection of Plastic bottles and flasks, Metal packaging and Drink cartons (PMD), initiated by the Flemish Government, was started up by Fost Plus in a number of municipalities, in collaboration with those municipalities. Note that not only PMD was collected, but also paper-cardboard and glass packaging. In 1994, the European Parliament and the European Council approved the Directive on Packaging and Packaging Waste. The aim was to improve prevention and management and recycling of packaging waste. Fost Plus was created in the same year as a non-profit organization by representatives of both producers and importers of packaging, packaging materials and packaged products, Retailers and Trade federations. Fost Plus is financed by its members. These include all the companies that put packaged household products onto the Belgian market, the so-called parties responsible for household packaging (5,217 members = 775kT household packaging, 93% market coverage). The obligations of the parties responsible for household packaging are twofold: an information obligation and a take-back obligation. Both obligations are legally incorporated in the Interregional Cooperation Agreement on the prevention and management of packaging waste (1996), which created the legal framework for the management of packaging waste in Flanders and the two other regions in Belgium. In accordance to this Cooperation Agreement revised in 2008 the following targets need to be achieved: recovery target of 90%, of which 80% should be recycled (material recycling)

Municipal police regulation
Each municipality has a municipal police regulation drawn up by the council. It includes everything allowed and not allowed on municipal territory and the public domain, also in terms of waste management.

Legal targets
The different legal targets and actions to take are described in the European Framework Directive (EC) 2008/98, the Material Decree, the VLAREMA and the Implementation Plan for Household Waste and Similar Industrial Waste.

COMMUNICATION AND INFORMATION ON BULKY WASTE

Local communication strategy for bulky waste: ☒ Yes ☐ No

Description of the communication strategy *(Main objectives, target audience, main messages: re-use, illegal dumping, CAS…)*

The OVAM communicates to intermediates (intermunicipal organizations, local administrations, re-use centres, …), who further disseminate the message to the citizens.
The main objectives of the communication is to inform the citizens on their obligations regarding the waste management (such as the sorting rules, the costs, …) and on how to prevent waste production.

Communication instruments in use:

☒ Sorting leaflet? (waste calendar, waste newspaper)
☒ Awareness raising campaigns
☒ Website (www.ovam.be; site of every municipality, site of every intermunicipal organization)
☐ Other (specify):……..
☒ Sorting ambassadors (some intermunicipal organizations, such as for example INCOVO, employ a waste steward)
☒ Agents at CAS
☐ Re-use maps/guides

Please describe the communication instruments in use (target audience, concrete organisation, resources involved, responses from the inhabitants, results…)

Recycle app
Recycle! is a joint initiative of Bebat, Fost Plus and Recupel, with the collaboration of the intermunicipal organizations. The application gives an overview of all waste collections in each street via a collection calendar and for which reminders can be set, all collection points nearby with additional information on opening hours and closing days (including CAS, re-use centres, collection points for batteries and electronics) and a sorting guide that helps to sort the waste correctly.

Waste collection calendar
The waste calendar gives information about the collection days and collection hours, the method of collection, the sorting specifications, the CAS, … Sometimes additional information is given regarding the actions taken by the concerned municipality.

Since the collection scheme varies per district/street/… the calendar is adapted to each address. A new resident gets the waste calendar on the moment of registration.

Waste newspaper
The purpose of the waste newspaper, mostly edited by the intermunicipal organizations, is to inform people about everything related to environmental policy and waste prevention. Municipalities can also publish their own articles, what gives them the opportunity to present local actions, achievements, changes in the waste policy, … and to clarify the relationship between the intermunicipal organizations and the municipality in question.

Websites
The websites of the municipalities and intermunicipal organizations give clear information about the different waste issues (waste calendar, what's allowed/what's not allowed, what changes, …).

DATA ON SPECIFIC FRACTIONS

Information on collection and sorting		Collection		Treatment			
		Method of collection	**Collected quantities**	**Destination**	**Quantities**	**Please specify the destination** *(e.g. paper mill, …)*	**Please, specify the type of transport** *(e.g. van<3,5t, lorry>16t, lorry>32t)*
MATTRESSES							
Separation at the source?	☒ Yes ☒ No Not obligatory, but separated in some CAS and possibility to bring back to some shops when buying a new one	**CAS**	*No specific data for mattresses available*	Re-use	*No specific data for mattresses available*	*No specific data for mattresses available*	*No specific data for mattresses available*
If no, within which fraction is it collected?	Mixed bulky waste	**MCAS**	*No specific data for mattresses available*	Recycling			
% of mattresses within the fraction	8.67% (data of 2011)	**Re-use**	*Not a lot, due to hygienic reasons*	Dismantlement			
Are mattresses then sorted at a later stage?	☐ Yes ☒ No	**Other (specify)**	*No specific data for mattresses available*	Incineration with energy recovery			
Specify the sorting stage:				Incineration without energy recovery			
				Landfilling			

Information on collection and sorting		Collection		Treatment			
		Method of collection	**Collected quantities**	**Destination**	**Quantities**	**Please specify the destination** (*e.g. paper mill, …*)	**Please, specify the type of transport** *(e.g. van<3,5t, lorry>16t, lorry>32t)*
FIXTURES AND FITTINGS							
Separation at the source?	☐ Yes ☒ No	**CAS**	*No specific data available specifically for fixtures and fittings*	Re-use	*No specific data available specifically for fixtures and fittings*	*No specific data available specifically for fixtures and fittings*	*No specific data available specifically for fixtures and fittings*
If no, within which fraction is it collected?	Mixed bulky waste	**MCAS**	*No specific data available specifically for fixtures and fittings*	Recycling	*No specific data available specifically for fixtures and fittings*	*No specific data available specifically for fixtures and fittings*	*No specific data available specifically for fixtures and fittings*
% of fixtures and fittings within the fraction	*No specific data available for fixtures and fittings*	**Re-use**	*No specific data available specifically for fixtures and fittings*	Dismantlement	*No specific data available specifically for fixtures and fittings*	*No specific data available specifically for fixtures and fittings*	*No specific data available specifically for fixtures and fittings*
Are fixtures and fittings then sorted at a later stage?	☐ Yes ☒ No	**Other (specify)**	*No specific data available specifically for fixtures and fittings*	Incineration with energy recovery	*No specific data available specifically for fixtures and fittings*	*No specific data available specifically for fixtures and fittings*	*No specific data available specifically for fixtures and fittings*
Specify the sorting stage:				Incineration without energy recovery	*No specific data available*	*No specific data available specifically*	*No specific data available*

					specifically for fixtures and fittings	*for fixtures and fittings*	*specifically for fixtures and fittings*
				Landfilling	*No specific data available specifically for fixtures and fittings*	*No specific data available specifically for fixtures and fittings*	*No specific data available specifically for fixtures and fittings*

Information on collection and sorting		Collection		Treatment			
		Method of collection	**Collected quantities**	**Destination**	**Quantities**	**Please specify the destination** (*e.g. paper mill, …*)	**Please, specify the type of transport** *(e.g. van<3,5t, lorry>16t, lorry>32t)*
UPHOLSTERY (SOFAS, ARMCHAIRS, ETC.) – PLEASE SPECIFY:							
Separation at the source?	☒ Yes ☒ No Yes, when brought to re-use centres	**CAS**	*No specific data for upholstery available*	**Re-use**	*No specific data for upholstery available*	*No specific data for upholstery available*	*No specific data for upholstery available*
If no, within which fraction is it collected?	Mixed bulky waste	**MCAS**	*No specific data for upholstery available*	**Recycling**	*No specific data for upholstery available*	*No specific data for upholstery available*	*No specific data for upholstery available*
% of upholstery within the fraction	42.70% (data of 2011 for mixed bulky waste collected door-to-door)	**Re-use**	*No specific data for upholstery available*	**Dismantlement**	*No specific data for upholstery available*	*No specific data for upholstery available*	*No specific data for upholstery available*
Are upholstery then sorted at a later stage?	☐ Yes ☒ No	**Other (specify)**	*No specific data for upholstery available*	**Incineration with energy recovery**	*No specific data for upholstery available*	*No specific data for upholstery available*	*No specific data for upholstery available*
Specify the sorting stage:				**Incineration without energy recovery**	*No specific data for upholstery available*	*No specific data for upholstery available*	*No specific data for upholstery available*
				Landfilling	*No specific data for upholstery available*	*No specific data for upholstery available*	*No specific data for upholstery available*

Information on collection and sorting		Collection		Treatment			
		Method of collection	**Collected quantities**	**Destination**	**Quantities**	**Please specify the destination** *(e.g. paper mill, …)*	**Please, specify the type of transport** *(e.g. van<3,5t, lorry>16t, lorry>32t)*
WOODEN FURNITURE (E.G. BOOKCASES, CUPBOARDS, WARDROBES, WOODEN CHAIRS, WOODEN GARDEN FURNITURE, ETC.) -PLEASE SPECIFY							
Separation at the source?	☒ Yes ☒ No Yes, when taken to re-use centres	**CAS**	*Data not available specifically on wooden furniture*	**Re-use**	*Data not available specifically on wooden furniture*	*Data not available specifically on wooden furniture*	*Data not available specifically on wooden furniture*
If no, within which fraction is it collected?	*Mixed bulky waste*	**MCAS**	*Data not available specifically on wooden furniture*	**Recycling**	*Data not available specifically on wooden furniture*	*Data not available specifically on wooden furniture*	*Data not available specifically on wooden furniture*
% of wooden furniture within the fraction	*Data not available specifically on wooden furniture*	**Re-use**	*Data not available specifically on wooden furniture*	**Dismantlement**	*Data not available specifically on wooden furniture*	*Data not available specifically on wooden furniture*	*Data not available specifically on wooden furniture*
Are wooden furniture then sorted at a later stage?	☐ Yes ☒ No	**Other (specify)**	*Data not available specifically on wooden furniture*	**Incineration with energy recovery**	*Data not available specifically on wooden furniture*	*Data not available specifically on wooden furniture*	*Data not available specifically on wooden furniture*
Specify the sorting stage:				**Incineration without energy recovery**	*Data not available specifically on wooden furniture*	*Data not available specifically on wooden furniture*	*Data not available specifically on wooden furniture*

				Landfilling	*Data not available specifically on wooden furniture*	*Data not available specifically on wooden furniture*	*Data not available specifically on wooden furniture*

Information on collection and sorting		Collection		Treatment			
		Method of collection	**Collected quantities**	**Destination**	**Quantities**	**Please specify the destination** (*e.g. paper mill, …*)	**Please, specify the type of transport** *(e.g. van<3,5t, lorry>16t, lorry>32t)*
PLASTIC FURNITURE (E.G. PLASTIC CHAIRS, PLASTIC GARDEN FURNITURE) - PLEASE SPECIFY							
Separation at the source?	☒ Yes ☒ No Yes, when taken to re-use centres	**CAS**	*Data not available specifically on plastic furniture*	**Re-use**	*Data not available specifically on plastic furniture*	*Data not available specifically on plastic furniture*	*Data not available specifically on plastic furniture*
If no, within which fraction is it collected?	Mixed bulky waste	**MCAS**	*Data not available specifically on plastic furniture*	**Recycling**	*Data not available specifically on plastic furniture*	*Data not available specifically on plastic furniture*	*Data not available specifically on plastic furniture*
% of plastic furniture within the fraction	*Data not available specifically on plastic furniture*	**Re-use**	*Data not available specifically on plastic furniture*	**Dismantlement**	*Data not available specifically on plastic furniture*	*Data not available specifically on plastic furniture*	*Data not available specifically on plastic furniture*
Are plastic furniture then sorted at a later stage?	☐ Yes ☒ No	**Other (specify)**	*Data not available specifically on plastic furniture*	**Incineration with energy recovery**	*Data not available specifically on plastic furniture*	*Data not available specifically on plastic furniture*	*Data not available specifically on plastic furniture*
Specify the sorting stage:				**Incineration without energy recovery**	*Data not available specifically on*	*Data not available*	*Data not available*

					plastic furniture	*specifically on plastic furniture*	*specifically on plastic furniture*
				Landfilling	*Data not available specifically on plastic furniture*	*Data not available specifically on plastic furniture*	*Data not available specifically on plastic furniture*

Information on collection and sorting		**Collection**		**Treatment**			
		Method of collection	**Collected quantities**	**Destination**	**Quantities**	**Please specify the destination** (*e.g. paper mill, …*)	**Please, specify the type of transport** *(e.g. van<3,5t, lorry>16t, lorry>32t)*
TEXTILES The mentioned data concern mostly cloths, curtains, carpets, sheets, … (all the loose textile pieces). No data available off each different textile fractions.							
Separation at the source?	☒ Yes, for cloths, not for mattresses, furniture textile, carpets, … ☐ No	**CAS**		**Re-use**		Re-use centre	*The type of transport depends on the company who collects the textiles*
If no, within which fraction is it collected?	Mixed bulky waste / household waste	**MCAS**		**Recycling**		Re-use centre, textile trading company, sorting company, non-	

						governmental organizations	
% of textiles within the fraction	5.97% of the mixed bulky waste is textile (incl. carpets) (data of 2011)	**Re-use**		**Dismantlement**	/		
Are textiles then sorted at a later stage?	☒ Yes ☒ No	**Other (specify)**		**Sorting centre**	/		
Specify the sorting stage:				**Incineration with energy recovery**	/		
				Incineration without energy recovery	/		
				Landfilling	/		

Information on collection and sorting		**Collection**		**Treatment**			
		Method of collection	**Collected quantities**	**Destination**	**Quantities**	**Please specify the destination** (*e.g. paper mill, …)*	**Please, specify the type of transport** *(e.g. van<3,5t, lorry>16t, lorry>32t)*
HARD PLASTICS							
Separation at the source?	☒ Yes ☐ No	**CAS**		**Re-use**	(no specific data available)		*The type of transport depends on the company who collects the hard plastics*

If no, within which fraction is it collected?	N/A	**MCAS**		**Recycling**		Waste management company	
% of hard plastics within the fraction	N/A	**Re-use**		**Dismantlement**			
Are hard plastics then sorted at a later stage?	☐ Yes ☒ No	**Other (specify)**		**Incineration with energy recovery**			
Specify the sorting stage:				**Incineration without energy recovery**			
				Landfilling			

Information on collection and sorting		Collection		Treatment			
		Method of collection	**Collected quantities**	**Destination**	**Quantities**	**Please specify the destination** *(e.g. paper mill, …)*	**Please, specify the type of transport** *(e.g. van<3,5t, lorry>16t, lorry>32t)*
TYRES							
Separation at the source?	☒ Yes ☐ No Not obligatory, but separated in most of the CAS + possibility to bring back to the garage or the tire centre + possibility to call a collector Tires are not allowed in the bulky waste	**CAS**	The tires collected in the CAS are afterwards picked up by the Recytyre partners. 1,500t (2015)	Re-use			*The type of transport depends on the company who collects the tires*
If no, within which fraction is it collected?		**MCAS**	N/A	Recycling			
% of tyres within the fraction		**Re-use**	/	Dismantlement			
Is tyres then sorted at a later stage?	☐ Yes ☐ No	**Other**		Incineration with energy recovery			
Specify the sorting stage:				Incineration without energy recovery			

				Landfilling			

Recytyre asbl, the management body (PRO) for waste tires in Belgium, was founded on February 9, 1998 by the six major tire manufacturers and importers, together with some other related organizations.

In order to implement the **extended producer responsibility** for waste tires, the government, the regions and the professional sector have negotiated environmental agreements that give substance to the regional laws and describe in detail the obligations and targets.

When buying a new tire, an **environmental contribution** (fee) has to be paid. This is a fixed amount depending on the type of tire. This contribution applies to all new tires sold on the Belgian market, except on new passenger cars or light commercial vehicles.

The financing of the costs for the collection and environmentally friendly processing of waste tire is carried by an environmental contribution. The environmental contribution reflects the cost of the overall process, from collection to processing.

Tires are collected in different ways:
Via the garage or tire dealer :
- When buying a new one : ‘one-to-one’ principle (free exchange of one old tire with a new one)
- Without purchasing a new one : ‘one-to-zero’ principle, with a maximum of four tires per family

Registered CAS of Recytyre:
- The tire types that the CAS can accept, are limited
- The tires must fall within the terms of the Recytyre-system with a maximum of 4 tires per family.

Collector
- For bulk waste tires that do not meet the conditions described above
- Recytyre appeals to partners
- Pick-up and processing costs have to be paid

Information on collection and sorting		Collection		Treatment			
		Method of collection	**Collected quantities**	**Destination**	**Quantities**	**Please specify the destination** *(e.g. paper mill, …)*	**Please, specify the type of transport** *(e.g. van<3,5t, lorry>16t, lorry>32t)*
WOOD							
Separation at the source?	☒ Yes ☐ No	**CAS**		Re-use		Social employment centre, re-use centre	*The type of transport depends on the company who collects the wood*
If no, within which fraction is it collected?	Mixed bulky waste	**MCAS**		Recycling		Waste management company, social employment centre, re-use centre, sorting centre	
% of wood within the fraction		**Re-use**		Dismantlement			
Is wood then sorted at a later stage?	☒ Yes ☒ No It depends if the mixed bulky waste is brought to a sorting centre or not	**Other (own municipal service / intermunicipal organizations, private organisations, other)**		Incineration with energy recovery		Incinerator, waste management company, waste collection company	
Specify the sorting stage:				Incineration without energy recovery			

				Landfilling		Waste collection company	
Wood can be collected in different ways : - A waste collection company places a container at home and comes to pick it up when full or after a determined period - By bringing the wood to a CAS - Some municipalities or intermunicipal organizations organize a door-to-door collection on demand, once or twice a year Wood has to be source-separated ; it's also important to make a distinction between hazardous and non-hazardous wood.							

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OTHER INFORMATION

General problems encountered with the collection of the bulky waste:

- Still too much recyclable material in the mixed bulky waste that is incinerated (wood, metal, other recyclable materials; wood and metal are mandatory to be taken out of the bulky waste – before or after collection).
- Often the products consist of different materials, which complicates recycling.
- According to the regulation the mixed bulky waste may not contain reusable goods. This rather subjective criterion, however, is difficult to interpret both for inhabitants and collectors: e.g. civic amenity sites are reluctant to install a container for re-usable goods, to avoid discussions between the supervisors and the citizens (free deposit of re-usable goods versus bulky waste that has to be paid).
- Not all the CAS have the space and means for placing extra containers.
- Less interest of the collectors if the good (well-earned) fractions are taken out of the bulky waste before they arrive (e.g. bulky waste collected on the kerbside, cooking oil in the CAS, …).
- Companies and organizations don't know well enough the possibilities for re-use, so a big potential to enhance the re-use sector isn't used. Also the option for purchasing re-usable goods is not enough explored.

Areas for improvement for the collection of the bulky waste:

The total amount of (mixed) bulky waste in the municipalities has already declined over the years. This is the result of

- the sustained efforts of the municipalities, the intermunicipal organizations and other actors involved in the waste policy since the early 90s to sensitize the Flemish population to selectively sort out as much as possible for re-use and recycling;
- the obligation of the municipalities to charge the population for the collection of mixed bulky waste (the pay-as-you-throw principle);
- a tight supervision during the disposing of the bulky waste in the civic amenity site in order to refuse recyclable/re-usable waste and in order to guide the residents to the right container to use.

Further reducing the amount of mixed bulky waste is not an end in itself if this would result in an increase in the amount of municipal solid waste, but some recommendations could be taken into account for a higher reusability or recycling :

Door-to-door collection

- It is advised to enhance the awareness raising of the citizens to bring the re-usable goods to the re-use centre or call the re-use centre to pick the goods up. This will not only reduce the amount of mixed bulky waste, but it will also permit a better quality control.
- The municipalities who pick up door-to-door bulky waste, wood and metal on the same day, should increasingly sensitize the population to better sort out the three fractions in advance. This because they are still often offered mixed with as a result that they all end up in the mixed bulky waste stream.

CAS

- Increasing the fee of mixed bulky waste in municipalities where it is currently low, will reduce the supplied amount of mixed bulky waste in the CAS. A payment system in which the amount of mixed bulky waste is measured or weighed and where the payment occurs per volume or per weight seems to be most efficient system.
- Placing separate containers in the CAS to sort out more materials, can contribute to a better recycling and less mixed bulky waste.
- Informing municipalities and CAS by exemplary municipalities.
- A good supervision at the CAS.
- A good sensitizing of the population.

- A separation of mixed bulky waste in a 'to incinerate' fraction and an 'inert' fraction (landfilling).

Collaboration with re-use centres

- An intensified collaboration between the intermunicipal organizations and the re-use centres.
- When a door-to-door collection on demand, the resident should be informed better regarding the re-usability of materials.
- A continuous awareness raising of the population through advertising and local newspapers regarding reuse of goods.
- Installation of a container specifically for re-usable goods in each CAS and an increased sensitization and an increased supervision of the staff of the CAS to prevent that re-usable material end up in the mixed bulky waste fraction (training of supervisors).

Awareness raising

- Because it is proven that an increased awareness raising of the population has a positive effect on the efforts that people make in terms of sorting and recycling, a continuous awareness raising for a waste management focused on re-use and recycling, is necessary.
- If additional measures are introduced, it is important always to accompany it with additional awareness raising and information.

Other specific actions that will be taken to improve the collection of bulky waste:

- Municipalities with large amounts of (mixed) bulky waste (and therefore high residual waste figures) will get guidance from the OVAM to draw up an action plan. Through visitations and / or roundtables the policy and the situation on the ground will be analysed. Also, the local reuse will be mapped.
- From 2017 on, the OVAM will investigate which instrument can promote the re-use, the refurbishment, the separated-source collection and the recycling of furniture. According to the research results, the most appropriate instrument mix will be implemented.
- Implementation of an extended producer responsibility for mattresses by January 2018.
- Stimulate re-use at companies and organizations: re-use initiatives will collaborate more closely to make re-use generally more accepted, by:
    - a more active communication with companies and organizations (among other regarding the best practices) to raise awareness of the benefits of re-use and of the services of re-use initiatives;
    - actions to collect re-usable goods (collective collection on company sites, projects in spacious office buildings, ...);
    - office furniture and 'business clothing' will be taken into account while implementing the actions of the Implementation Plan established for furniture and textiles.

CONTACT DETAILS

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