



# R4R ONLINE TOOL

Janna Vandecruys  
OVAM

14/05/2014





# R4R Online tool

- Presentation
- Try it out & ask your questions

## R4R Online tool possibilities

- Input general info & external factors
- Input data following R4R methodology
- Indicate which LI are being used in your region & fill in parameters for these LI
- Data benchmark or evolution report
- Instrument report
- Consult good practices



## Regions for recycling - Mozilla Firefox

File Edit View History Bookmarks Tools Help

 Regions for recycling



<https://services.ovam.be/r4r>

## R4R Tool

Welcome to the Regions for Recycling (R4R)-application. R4R is a European project aiming to enable its partners to improve their recycling performance through consistent data comparisons and an exchange of good practices.

In this application you have the opportunity to input a waste related data set for your region, benchmark your region for recycling performances and link the recycling performances to effective legal, economic, sensitizing and technical waste management instruments that are in place in different regions. You also have the possibility to consult a set of good practices that are already in place in several European regions.

### Sign in to the R4R tool:

E-mail:

Password:

Sign In

Create user account

Forgot password

## Consult the help function


### Manuals:

Manual\_UserAccounts&Regions

 R4R\_OnlineTool\_Manual\_User\_accounts&regions.pdf

In this manual is explained how you can create a user account for the R4R online tool, how you can register a new region and how to log in. New regions need to be verified by the administrator of the tool.


Manual\_InputData&GenerateReports

 R4R\_OnlineTool\_Manual\_InputData&GenerateReports.pdf

In this manual is explained how to use the tool once you are logged in: input data from your region, make data and instrument reports and consult good practices.

### Background Documents:

R4R\_External\_Factors

 R4R\_ExternalFactors.pdf


External factors are factors that have an impact on municipal waste generation, selective collection or recycling, or that potentially limit the efficiency of a local instrument, but which the region cannot influence itself. In his document the selected factors for the R4R project are listed up. When you make a report in this online tool, you can compare your region with regions that share the same constraints by filtering on external factors.

R4R\_Local\_Instruments

 R4R\_Local\_Instruments.pdf

This document lists the local instruments (technical, economical, communicative and legal) that are implemented in this online tool.

R4R\_MSW\_Data\_Scope

 R4R\_MSW\_scope\_final\_DRUK.pdf

This document defines the scope of the R4R project, the waste fractions that are included in MSW and the waste fractions that are considered as "recycled" depending on their destination. Two new terms are introduced: 'DREC' (see chapter 4) and 'sorting stage' (see chapter 5). Follow the methodology explained in this document to report your data in this online tool. The indicators that can be calculated under data reports in this online tool are also described in this document.

### Contact details of the administrator:

Koen Smeets Beheerder OVAM

ksmeets@ovam.be

## Specific data Flanders

New  Copy

Datasets	External factors	Datasets	Composition analysis	Instruments	Additional info
2010	✓ 	✓ 			
2011	✓ 	✓ 			
2012	✓ 	✓ 			

## Detail external factors 2011

Completed ⓘ  Save

### External factors (mandatory to fill in):

General	
Area (km <sup>2</sup> ):	<input type="text" value="13521"/>
Population:	<input type="text" value="6350765"/>
① Population density:	<input type="text" value="469,70"/> inh./km <sup>2</sup>

### External factors (non-mandatory to fill in):

Geographic	
① Urban-rural typology:	<input type="text" value="Predominantly urban regions"/>
Demographic	
Average household size:	<input type="text" value="2,30"/>
① Education degree:	<input type="text" value="30-35%"/>
① Foreign-borns:	<input type="text" value="10,10"/>
① Tourism intensity by non-residents:	<input type="text" value="1000-1999"/>
Climatic conditions	
① Köppen climate classification:	<input type="text" value="Temperate oceanic climate (Cfb)"/>
① Precipitation:	<input type="text" value="fully humid (f)"/>
① Temperature:	<input type="text" value="warm summer (b)"/>
Economic	
① Employment rate, persons aged 20-64:	<input type="text" value="70-75"/>



## Specific data Flanders

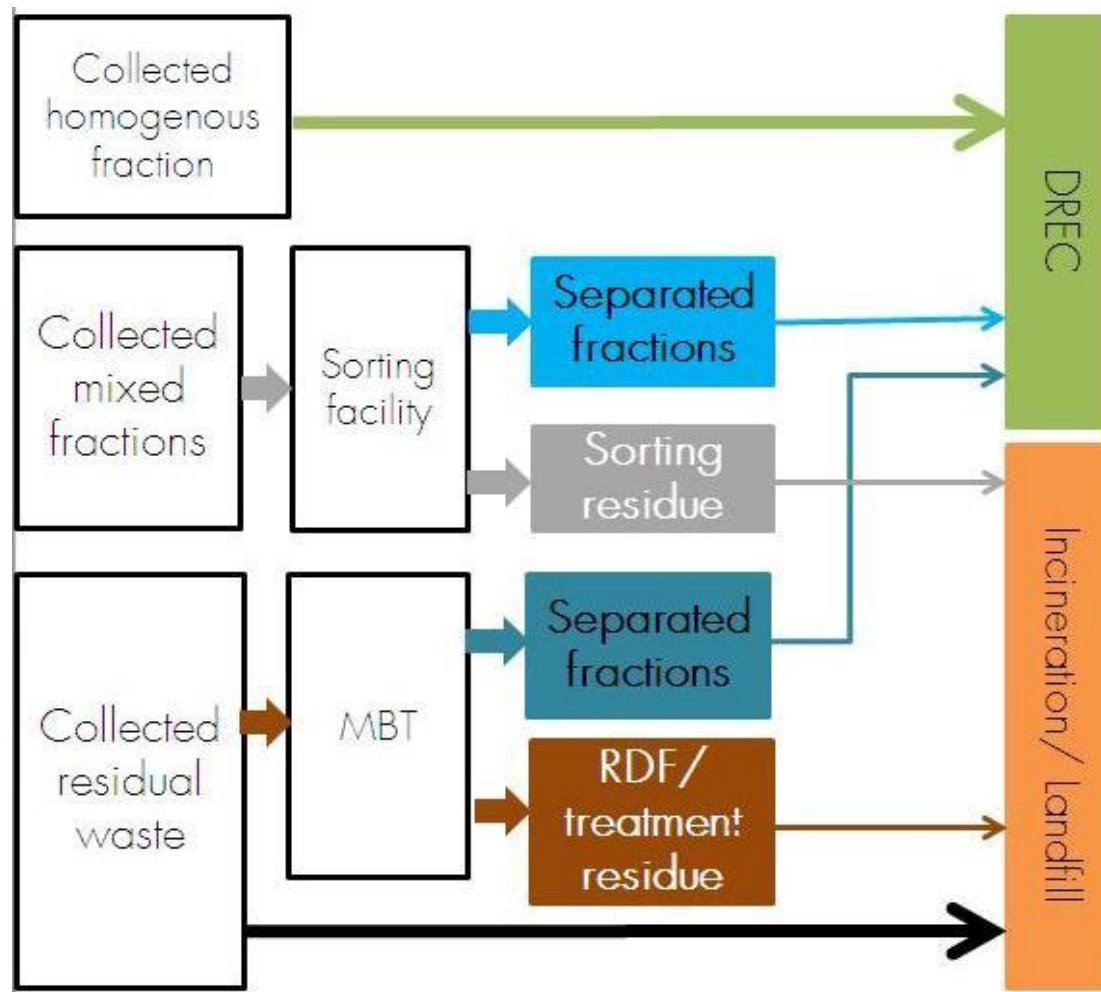
New  Copy

Datasets	External factors	Datasets	Composition analysis	Instruments	Additional info
2010	✓ 	✓ 			
2011	✓ 	✓ 			
2012	✓ 	✓ 			

## Detailed dataset 2011

Preview  PDF  Import  Export  Completed  Save

- (Other) hazardous waste
- Batteries
- Bio-waste
- Bulky waste
- digestate
- Glass
- Medicines
- Metal
- Mineral oils
- Multilayer packaging
- Paper and cardboard
- Plastic
- Residual waste
- Textiles
- Tyres
- Used cooking oils
- WEEE
- Wood



## Manage waste stream Plastic

Do you have data on subcategory (Non-packaging/Packaging) or only for the total of this waste stream?:

Total ▼

Select one or more sorting stages for **Total**: ?

- ? Separated at source & selectively collected
- ? Output sorting facility
- ? Output sorting facility for bulky waste
- ? Output sorting facility for residual waste
- ? Output MBT installation

Population: 6350765

Subcategory	Sorting stage	Treatment	Amount (Tonnes)	Amount (kg/inhabitant)
Total	? Separated at source & selectively collected	? DREC	28997,31	4,57
		? Incineration with energy recovery (R1)	801,58	0,13
		? Incineration without energy recovery (D10)	26,54	0,00
		? Landfilling	85,28	0,01
? Output sorting facility	? Output sorting facility	? DREC	66918,04	10,54
		? Incineration with energy recovery (R1)	0,00	0,00
		? Incineration without energy recovery (D10)	0,00	0,00
		? Landfilling	0,00	0,00
? Output sorting facility for bulky waste	? Output sorting facility for bulky waste	? DREC	39,49	0,01
		? Incineration with energy recovery (R1)	0,00	0,00
		? Incineration without energy recovery (D10)	0,00	0,00
		? Landfilling	0,00	0,00

## Specific data Flanders

New  Copy

Datasets	External factors	Datasets	Composition analysis	Instruments	Additional info
2010	✓ 	✓ 			
2011	✓ 	✓ 			
2012	✓ 	✓ 			

## Composition analysis for waste stream Residual waste

Fraction	% ⓘ	Measured or estimated
Residual waste	100.00 %	Estimated
(Other) hazardous waste		
Batteries		
Batteries - From cars		
Batteries - From households and similar		
Bio-waste		
Bio-waste - Green waste (including pruning wood)		
Bio-waste - Kitchen waste		
Glass		
Glass - Non-packaging		
Glass - Packaging		
Medicines		
Metal		
Metal - Non-packaging		
Metal - Packaging		
Mineral oils		
Multilayer packaging		
Multilayer packaging - Beverage cartons		
Multilayer packaging - Other		
Paper and cardboard		
Paper and cardboard - Non-packaging		

## Composition analysis for waste stream Residual waste

Fraction	% ⓘ	Measured or estimated
Residual waste	77.00 %	Estimated
(Other) hazardous waste		
Batteries		
Batteries - From cars		
Batteries - From households and similar		
Bio-waste	20,00	Estimated
Bio-waste - Green waste (including pruning wood)		
Bio-waste - Kitchen waste		
Glass	3,00	Estimated
Glass - Non-packaging		
Glass - Packaging		
Medicines		
Metal		
Metal - Non-packaging		
Metal - Packaging		
Mineral oils		
Multilayer packaging		
Multilayer packaging - Beverage cartons		
Multilayer packaging - Other		
Paper and cardboard		
Paper and cardboard - Non-packaging		

## Specific data Flanders

New  Copy

Datasets	External factors	Datasets	Composition analysis	Instruments	Additional info
2010	✓ 	✓ 			
2011	✓ 	✓ 			
2012	✓ 	✓ 			



## Local instruments

### ■ Technical (18)

- Door-to-door collection
- Bring bank

### ■ Economical (13)

- Funding of events
- Levy on incineration

### ■ Communicative (12)

- Publicity campaign on TV
- Sorting leaflet

### ■ Legal (9)

- Regional waste management plan
- Landfill ban

## Detail instruments 2011

Add instrument  Completed ⓘ  Save


Add the instruments that are being used in your region. (You can find a document describing the available instruments under 'Help'.) After you have added an instrument, you can fill in some region-specific information about this instrument by clicking on the magnifier.

Code	Category	Subcategory	Instrument	General parameters	Waste streams	Parameters per waste stream	Extra information
ANA-DIG	Technical	Treatment	Anaerobic digestion plant	🔍			🔍
BANK	Technical	Mode of collection	Bring bank		✓ 🔍	🔍	🔍
CAS	Technical	Mode of collection	Civic amenity site (CAS)	🔍	✓ 🔍		🔍
COL REQ	Technical	Mode of collection	Collection by request	🔍	🔍		🔍
COMPOST	Technical	Treatment	Composting plant for biodegradable waste	🔍			🔍
CONDNHV	Technical	Pre-collection	Conditions for the coll of non-household waste		✓ 🔍	🔍	✓ 🔍
DTD	Technical	Mode of collection	Door-to-door collection	✓ 🔍	✓ 🔍	🔍	🔍
MBT	Technical	Treatment	MBT facility	🔍	✓ 🔍		🔍
MIX FRAC	Technical	Pre-collection	Mixed fractions		✓ 🔍	✓ 🔍	🔍
REC-FAC	Technical	Treatment	Recycling facility		✓ 🔍	🔍	🔍
SEP FRAC	Technical	Pre-collection	Separation at the source of one waste fraction		✓ 🔍		🔍
SHOPS	Technical	Mode of collection	Collection in shops	🔍	✓ 🔍	🔍	🔍
SRT-FAC	Technical	Treatment	Sorting facility	🔍	✓ 🔍	🔍	🔍
SRT-FAC-BW	Technical	Treatment	Sorting facility for bulky waste	🔍	🔍		🔍
TRAN-STAT	Technical	Treatment	Transfer station	🔍			🔍

Fill in the general parameters



Fill in the general parameters for instrument 'Door-to-door collection' (DTD):

- ① % by municipality:
- ① % collected via DTD collection:
- ① By municipality or private?:  
- ① Coverage rate:

## Detail instruments 2011

Add instrument  Completed   Save

Add the instruments that are being used in your region. (You can find a document describing the available instruments under 'Help'.) After you have added an instrument, you can fill in some region-specific information about this instrument by clicking on the magnifier.

Code	Category	Subcategory	Instrument	General parameters	Waste streams	Parameters per waste stream	Extra information
ANA-DIG	Technical	Treatment	Anaerobic digestion plant				
BANK	Technical	Mode of collection	Bring bank		<input checked="" type="checkbox"/>		
CAS	Technical	Mode of collection	Civic amenity site (CAS)		<input checked="" type="checkbox"/>		
COL REQ	Technical	Mode of collection	Collection by request				
COMPOST	Technical	Treatment	Composting plant for biodegradable waste				
CONDNHV	Technical	Pre-collection	Conditions for the coll of non-household waste		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
DTD	Technical	Mode of collection	Door-to-door collection	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
MBT	Technical	Treatment	MBT facility		<input checked="" type="checkbox"/>		
MIX FRAC	Technical	Pre-collection	Mixed fractions		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
REC-FAC	Technical	Treatment	Recycling facility		<input checked="" type="checkbox"/>		
SEP FRAC	Technical	Pre-collection	Separation at the source of one waste fraction		<input checked="" type="checkbox"/>		
SHOPS	Technical	Mode of collection	Collection in shops		<input checked="" type="checkbox"/>		
SRT-FAC	Technical	Treatment	Sorting facility		<input checked="" type="checkbox"/>		
SRT-FAC-BW	Technical	Treatment	Sorting facility for bulky waste				
TRAN-STAT	Technical	Treatment	Transfer station				

Select the waste streams for instrument 'Door-to-door collection'



Select the waste streams that are collected via door-to-door collection

Waste stream
<input type="checkbox"/> (Other) hazardous waste
<input type="checkbox"/> Batteries
<input checked="" type="checkbox"/> Bio-waste
<input type="checkbox"/> Bulky waste
<input type="checkbox"/> digestate
<input type="checkbox"/> Glass
<input type="checkbox"/> Medicines
<input checked="" type="checkbox"/> Metal
<input type="checkbox"/> Mineral oils
<input checked="" type="checkbox"/> Multilayer packaging
<input checked="" type="checkbox"/> Paper and cardboard
<input checked="" type="checkbox"/> Plastic
<input checked="" type="checkbox"/> Residual waste
<input type="checkbox"/> Textiles
<input type="checkbox"/> Tyres
<input type="checkbox"/> Used cooking oils
<input type="checkbox"/> WEEE
<input type="checkbox"/> Wood

## Detail instruments 2011

Add instrument  Completed  Save

Add the instruments that are being used in your region. (You can find a document describing the available instruments under 'Help'.) After you have added an instrument, you can fill in some region-specific information about this instrument by clicking on the magnifier.

Code	Category	Subcategory	Instrument	General parameters	Waste streams	Parameters per waste stream	Extra information
ANA-DIG	Technical	Treatment	Anaerobic digestion plant				
BANK	Technical	Mode of collection	Bring bank				
CAS	Technical	Mode of collection	Civic amenity site (CAS)				
COL REQ	Technical	Mode of collection	Collection by request				
COMPOST	Technical	Treatment	Composting plant for biodegradable waste				
CONDNHW	Technical	Pre-collection	Conditions for the coll of non-household waste				
DTD	Technical	Mode of collection	Door-to-door collection				
MBT	Technical	Treatment	MBT facility				
MIX FRAC	Technical	Pre-collection	Mixed fractions				
REC-FAC	Technical	Treatment	Recycling facility				
SEP FRAC	Technical	Pre-collection	Separation at the source of one waste fraction				
SHOPS	Technical	Mode of collection	Collection in shops				
SRT-FAC	Technical	Treatment	Sorting facility				
SRT-FAC-BW	Technical	Treatment	Sorting facility for bulky waste				
TRAN-STAT	Technical	Treatment	Transfer station				

Fill in the parameters per wastestream

Fill in the parameters per wastestream for instrument 'Door-to-door collection' (DTD):

Waste stream		Parameters per waste stream	
Bio-waste	①	Collection recipient	(bio)plastic bag/ container
	①	Maximum volume per collection (litre)	240,00
		Number of collections per year	26
	①	separately at source or co-mingled	separated at source (not mixed with other fractions)
Metal	①	Collection recipient	plastic bag
	①	Maximum volume per collection (litre)	240,00
		Number of collections per year	26
	①	separately at source or co-mingled	co-mingled with other recyclables
Multilayer packaging	①	Collection recipient	plastic bag
	①	Maximum volume per collection (litre)	240,00
		Number of collections per year	26
	①	separately at source or co-mingled	co-mingled with other recyclables
Paper and cardboard	①	Collection recipient	no recipient
	①	Maximum volume per collection (litre)	1000,00
		Number of collections per year	12
	①	separately at source or co-mingled	separated at source (not mixed with other fractions)
Plastic	①	Collection recipient	plastic bag
	①	Maximum volume per collection (litre)	240,00
		Number of collections per year	26
	①	separately at source or co-mingled	co-mingled with other recyclables
Residual waste	①	Collection recipient	(bio)plastic bag/ container
	①	Maximum volume per collection (litre)	240,00

## Specific data Flanders

New  Copy

Datasets	External factors	Datasets	Composition analysis	Instruments	Additional info
2010	✓ 	✓ 			
2011	✓ 	✓ 			
2012	✓ 	✓ 			



## R4R Online tool possibilities

- Input general info & external factors
- Input data following R4R methodology
- Indicate which LI are being used in your region & fill in parameters for these LI
- Data benchmark or evolution report
- Instrument report
- Consult good practices

## Data reports

- Data benchmark reports
- Data evolution reports

Data
Instrument
Good practices
Region info

# Create new data benchmark report

Save

Name:

Description:

If you want to compare regions with the same external factors, use the **Filter options** below, only regions with the chosen values of external factor(s) will appear under 'Regions' below.

► **Filter options:**

**Report data:**

Year:

Indicator:

Regions:

Region
<input type="checkbox"/> Attica region
<input type="checkbox"/> Catalonia
<input type="checkbox"/> Ile-de-France
<input type="checkbox"/> Limerick
<input type="checkbox"/> Lisbon
<input type="checkbox"/> Odense

Waste stream:

Generate benchmark report as PDF

Export data as CSV

## Bio-waste by treatments, 2011

### 1. Selected criteria for benchmarking data

#### 1.1 Regions

- Attica region
- Catalonia
- Ile-de-France
- Limerick
- Lisbon
- Odense

#### 1.2 Indicator

- Indicator 2: Waste stream by treatments (kg/inhabitant)

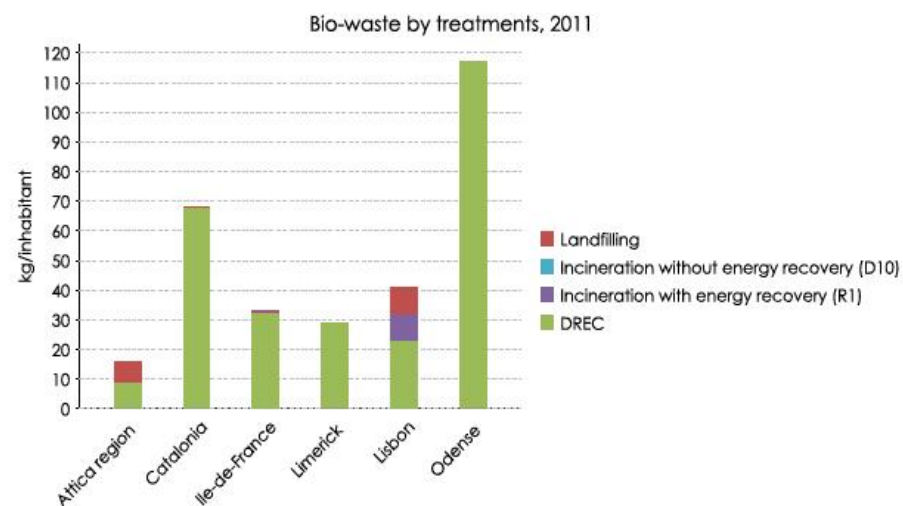
#### 1.3 Waste stream

- Bio-waste

### 2. Data table

kg/inhabitant	Attica region	Catalonia	Ile-de-France	Limerick	Lisbon	Odense
Landfilling	6,64	0,13	0,08		8,96	
Incineration without energy recovery (D10)						
Incineration with energy recovery (R1)			0,30		8,69	
DREC	9,18	67,88	32,64	28,88	23,33	117,12

### 3. Graph



## Instrument reports

- Data
- Instrument
- Good practices
- Region info

New

Name	Description	Date of creation	Results available
No data found			

# Create new instrument report

Save

Name:

Description:

If you want to compare regions with the same external factors, use the **Filter options** below, only regions with the chosen values of external factor(s) will appear under 'Regions' below.

▼ **Filter options:**

- ▶ General
- ▶ Geographic
- ▶ Demographic
- ▶ Climatic conditions
- ▶ Economic
- ▶ Competences
- ▶ Waste-related

**Report data:**

Year:

Waste stream:   Select on instrument

Category:  **Select (sub)category**

- Communicative
  - Addressed
  - Interactive
  - Non addressed
- Economical
  - Fines
  - Grants
  - Waste tax
- Legal
  - ...

Generate instrument report as PDF

Regions: 

Region
<input type="checkbox"/> Sofia

Targetgroup:  **Select targetgroup**

- Children
- Citizens
- Event organisation teams
- Institutions
- Local authorities

## Create new instrument report

Save

Name:

Description:

If you want to compare regions with the same external factors, use the **Filter options** below, only regions with the chosen values of external factor(s) will appear under 'Regions' below.

► **Filter options:**

**Report data:**

Year:

Waste stream:   Select on instrument

Category:

**Select instrument**

- Regional waste management plan
- Technical
  - Mode of collection
    - Bring bank
    - Civic amenity site (CAS)
    - Collection by request
    - Collection in shops
    - Door-to-door collection
    - Mobile CAS
    - Mobile CAS for hazardous waste

Regions:

Generate instrument report as PDF

Region
<input checked="" type="checkbox"/> Catalonia (ES)
<input checked="" type="checkbox"/> Flanders (BE)
<input checked="" type="checkbox"/> Ile-de-France (FR)
<input checked="" type="checkbox"/> Limerick (IE)
<input checked="" type="checkbox"/> Odense (DK)
<input checked="" type="checkbox"/> Styria (AT)

## Local Instruments 2011

## 1. Selected criteria for benchmarking of the use of LI

## 1.1 Regions

- Catalonia (ES)
- Flanders (BE)
- Ile-de-France (FR)
- Limerick (IE)
- Odense (DK)
- Styria (AT)

## 1.2 Instruments

- Technical > Mode of collection > Door-to-door collection

## 2. Local instruments according to the selected criteria

## 2.1 Technical

## 2.1.1 Mode of collection

## 2.1.1.1 Door-to-door collection

Description : The collection of household waste takes place from door to door or from one house to the next. Waste materials are collected from resident's doorstep.

Target group(s) : Institutions, Private companies, Citizens

Possible negative effects :

- Theft of valuable recyclable materials.
- The use of bags for this type of collection rather than a reusable container can expose the bag to tears during filling/collection; these are also susceptible to weather conditions and can be moved/kicked quite easily.

2011	Catalonia (ES)	Flanders (BE)	Ile-de-France (FR)	Limerick (IE)	Odense (DK)	Styria (AT)
In use	x	x	x	x	x	x
Coverage rate		100,00	100,00	58,00	100,00	
% collected via DTD collection		49,00	89,00	74,31	50,00	32,00
% by municipality		100,00	100,00	0,00	100,00	99,00
By municipality or private?	By or on behalf of the municipality	By or on behalf of the municipality	By or on behalf of the municipality	Private	Both (private + by or on behalf of the municipality)	By or on behalf of the municipality
<b>Batteries</b>					x	
Number of collections per year					26	

2011	Catalonia (ES)	Flanders (BE)	Ile-de-France (FR)	Limerick (IE)	Odense (DK)	Styria (AT)
Maximum volume per collection (litre)					10,00	
Collection recipient					plastic bag	
separately at source or commingled					separated at source (not mixed with other fractions)	
<b>Bio-waste</b>	x	x		x		x
Number of collections per year		26		26		39
Maximum volume per collection (litre)		240,00		140,00		240,00
Collection recipient	(bio)plastic bag/ container	(bio)plastic bag/ container		container		container
separately at source or commingled	separated at source (not mixed with other fractions)	separated at source (not mixed with other fractions)		separated at source (not mixed with other fractions)		separated at source (not mixed with other fractions)
<b>Bulky waste</b>	x					
Number of collections per year						
Maximum volume per collection (litre)						
Collection recipient						
separately at source or commingled						
<b>Glass</b>	x			x		x
Number of collections per year				26		13
Maximum volume per collection (litre)				55,00		240,00
Collection recipient	container			container		container
separately at source or commingled	separated at source (not mixed with other fractions)			separated at source (not mixed with other fractions)		separated at source (not mixed with other fractions)
<b>Metal</b>	x	x		x		x
Number of collections per year		26		26		13
Maximum volume per collection (litre)		240,00		240,00		240,00
Collection recipient	(bio)plastic bag/ container	plastic bag		container		container



## Consult good pra

**Filter options:**

- Instruments
- Waste streams
- Regions

- Data
- Instrument
- Good practices**
- Region info

Name	Description	Date of creation	Instruments	Waste streams	Regions	PDF
No data found						



**Try it out & ask your questions**

<https://services.ovam.be/r4r/>



# THANK YOU FOR YOUR ATTENTION !

[www.regions4recycling.eu](http://www.regions4recycling.eu)



14/05/2014