

Capital factsheet on separate collection

Note: This ‘Capital factsheet’ has been prepared within the EC study “**Assessment of separate collection schemes in the 28 capitals of the EU**”. The document represents the status-quo of the EU Member States capitals in May2015. The information included in this document has been elaborated for all 28 EU-capitals based on expert interviews with various stakeholders on capital level, e.g. capital administrations, waste management operators, associations etc. as well as further publically available reports, statistics and websites.

All information is cited in the factsheet and a complete list of information sources including the interviews held can be found at the end of this document.

Bratislava	Slovakia
<p>SUMMARY: In Bratislava separate collection takes place solely by bring systems including paper/cardboard, glass, and plastic. Metal bio-waste is collected at civic amenities. The separate collection rate on total municipal waste generation is not very high (21%). In total, 16% of the municipal waste generated is recycled.</p>	
1 Capital general data [3]	
City population (inhabitants)	415 589
City area (km ²)	367.6 km ²
City density (persons/km ²)	1 130 persons/km ²
City climate (mediterranean, continental, oceanic, nordic; relevant for bio-waste collection)	Continental
2. Capital waste data [2]	
Total (municipal) waste generation (t in indicated year)	140 594 t (2013)
Total (municipal) waste generation (kg/cap)	338.3 kg/cap
Total separate collection (kg/cnnap) & (% of generation)	29 978 t, 72.1 kg/cap (21.3% of generated)
Percentage breakdown of total collection for separate collection by fraction	<ul style="list-style-type: none"> • 26% paper and cardboard • 21% glass • 13% plastic • 6% bio-waste • 0.6% metal • 33.4% other
3. Description of overall separate collection systems operating in capital [2]	
<p>Regarding the collection system in Bratislava the company Odvoz a likvidácia odpadu a.s. Bratislava is the responsible subject. On the territory of Bratislava, separated collection of sorted municipal waste is implemented in the following form:</p>	
<p>1. Collection at bring points: carried out through collecting vessels of different colours for paper and cardboard, glass, plastic (including Tetra Pak containers and beverage cans).</p> <ul style="list-style-type: none"> • At the bring points the following types of vessels are used: l containers; 120 l, or 240 l vessels; 1.200 l, or 1.800 l bell-shaped collection bins (only for glass) • Vessels for separated collection are emptied twice a week, bell-shaped collection bin for glass at least once a month. 	

- Metals: separate collecting vessels for this component of municipal waste are not placed on the territory of Bratislava. The inhabitants can deposit metal packages from beverages into collecting vessels designed for collection of plastic. Metals can be handed in civic amenity sites (see below).

2. Collection at Civic amenity sites:

- The fractions collected are paper, glass, plastic, metal, bio-waste (garden waste).
- Other fractions collected are bulky waste, construction waste, waste from greenery, wood, used tyres, liquid packaging board and hazardous components of municipal waste.
- Within civic amenity sites, there are also places established for the **take-back of discarded electrical and electronic equipment** from households.
- Natural persons with permanent residence on the territory of Bratislava have the service of waste deposition free of charge.
- Bio-waste from gardens and parks:** At least 13 civic amenity sites will still be provided for the inhabitants on the territory of the City, in which large-capacity containers will be placed for collection of waste from greenery and in which the inhabitants can hand this waste under supervisory persons during operating hours.

Annual Running Costs: €23 Million (including the costs of collection of mixed municipal waste)

The proportion of separated collection amounts to about 26%, i.e. €6 Million or €14.4/cap

Setup costs: Not available

Coverage: [2]

Separate collection in the city of Bratislava is mainly organised through a bring-point system and by a minor part by civic amenity sites.

The citizens particularly use the bring-point system – about **99% of households**. In 2013, the number of collection bring points in Bratislava reached about 1 100 with in total 14 563 vessels. Collecting vessels in the bring-point system are placed in a manner that **one bring point serves for about 430 inhabitants on average**.

The overview below provides the number of vessels for separate collection:

Year	Type of vessel/commodity	Paper	Glass	Plastic	Total
2013	Container for 1,100 l	3 503	295	3 147	6 945
	Vessel for 120 l/240 l	2 092	1 388	2 332	5 812
	Bell-shaped bin for 1,200 l/1,800 l	0	1 806	0	1 806
	Total	5 595	3 849	5 479	14 563

In addition to the nationwide mandatory sorting of glass, paper and plastic (including Tetra Pak containers – liquid packaging board and beverage cans) by bring points, a **network of civic amenity sites** for the Capital of Bratislava is established, enabling (100% of households) to separate the selected types of wastes to be deposited in a larger amount of commodities.

4. Elements of the collection system

MUNICIPALITIES OR THEIR CONTRACTORS

Bring Collection Points [2]



Fractions collected	Paper, glass, plastic
Number of collection points	1 100 in total that provide the following amounts of vessels: Paper: 5 595 vessels/containers, 1 346 (per 100 000 inhabitants) Glass: 3 849 vessels/containers, 926 (per 100 000 inhabitants) Plastic: 5 479 vessels/containers, 1 318 (per 100 000 inhabitants)

Collected quantities	Paper: 7 470 t Glass: 6 183 t Plastic: 3 789 t					
Setup costs	Not available					
Running costs	Not available					
Source of funding	Waste budget					
Cost to consumer	Free of charges					
 Bring-in Civic Amenity sites [2]						
Fractions collected	Paper, glass, plastic, metal, cardboard, bio-waste, etc.					
Number of sites	13 in total (0.3 per 100,000 inhabitants)					
Collected quantities	Paper: 231 t Glass: 192 t Plastic: 118 t Metal: 170 t Bio-waste (garden waste): 1 795 t					
Setup costs	Not available					
Running costs	Not available					
Source of funding	Waste budget					
Cost to consumer	Free of charge to consumer					
PRODUCERS OR THEIR AGENTS						
 Deposit return system - Bottle bring-back scheme[2]						
Products covered	Glass drink bottles					
Quantity covered by system (in t)	Not available					
Quantity collected by system (in t)	Not available					
Funding mechanism	Deposit on beverage packaging at point of sale					
Consumer cost	0.1 €/bottle					
BARRIERS TO IMPLEMENT SEPARATE COLLECTION [1]						
<ul style="list-style-type: none"> Waste management in Bratislava is devolved by a large number of local authorities, which makes coordinated action and negotiation more complicated and less effective. Socio-economic conditions seem to play an important role in the level of recyclables collected – low-income areas produce significantly less recyclables for collection. 						
5. Materials, quantities and costs						
SUMMARY OF COLLECTION SYSTEMS IN PLACE						
Collected waste (t)	Paper	Glass	Plastic	Metal	Bio-waste	City Coverage
Bring points	7 470	6 183	3 789	Not available	Not available	Paper: 5 595 vessels/containers, 1 346 (per 100 000 inhabitants) Glass: 3 849 vessels/containers, 926 (per 100 000 inhabitants)

						Plastic: 5 479 vessels/containers, 1 318 (per 100 000 inhabitants)
Civic amenity sites	231	192	118	170	1 795	13 Civic amenity sites, (0.3 per 100,000 inhabitants)
Producer / Retailer take-back						
Total	7 701	6 375	3 907	170	1 795	

SUMMARY OF COSTS FOR SEPARATE COLLECTION SYSTEMS IN PLACE (setup costs should be total, running costs annual) [2]

Costs (€)	Authorities / waste management companies		Consumer costs	
	Setup (€)	Running (€/year)	Funding type	Amount (€)
Bring points	[not available]	€5 100 000	Municipal tax	Free
Civic amenity sites	[not available]	€900 000	Municipal tax	Free
Producer / Retailer take-back	[not available]	[not available]	[not available]	€0.1
Total	[not available]	€6 000 000	Municipal tax	€150* / per household

* Share of municipal tax spent on all municipal waste management activities.

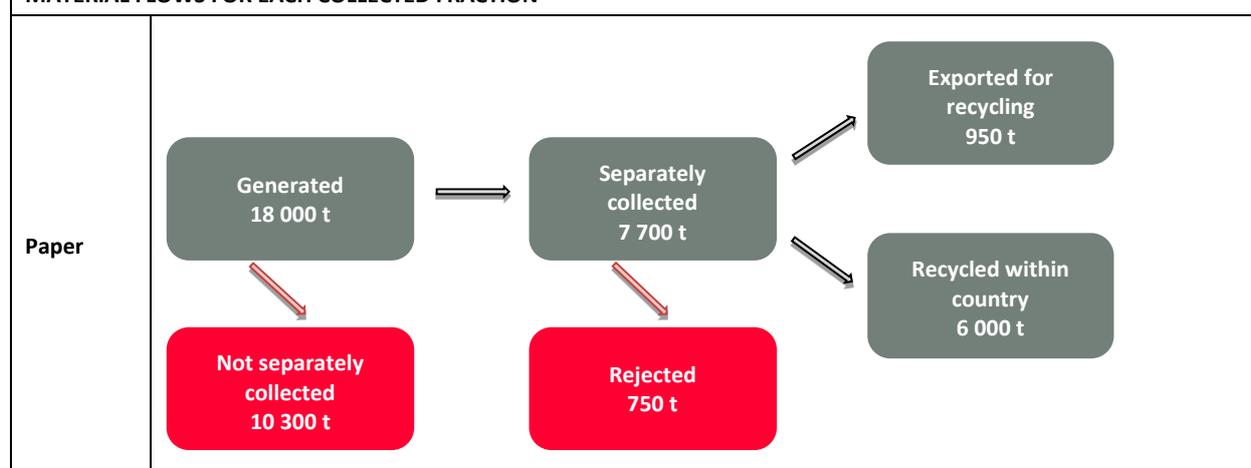
6. Recycling and losses

RECYCLING OF THE COLLECTED WASTE [2]¹

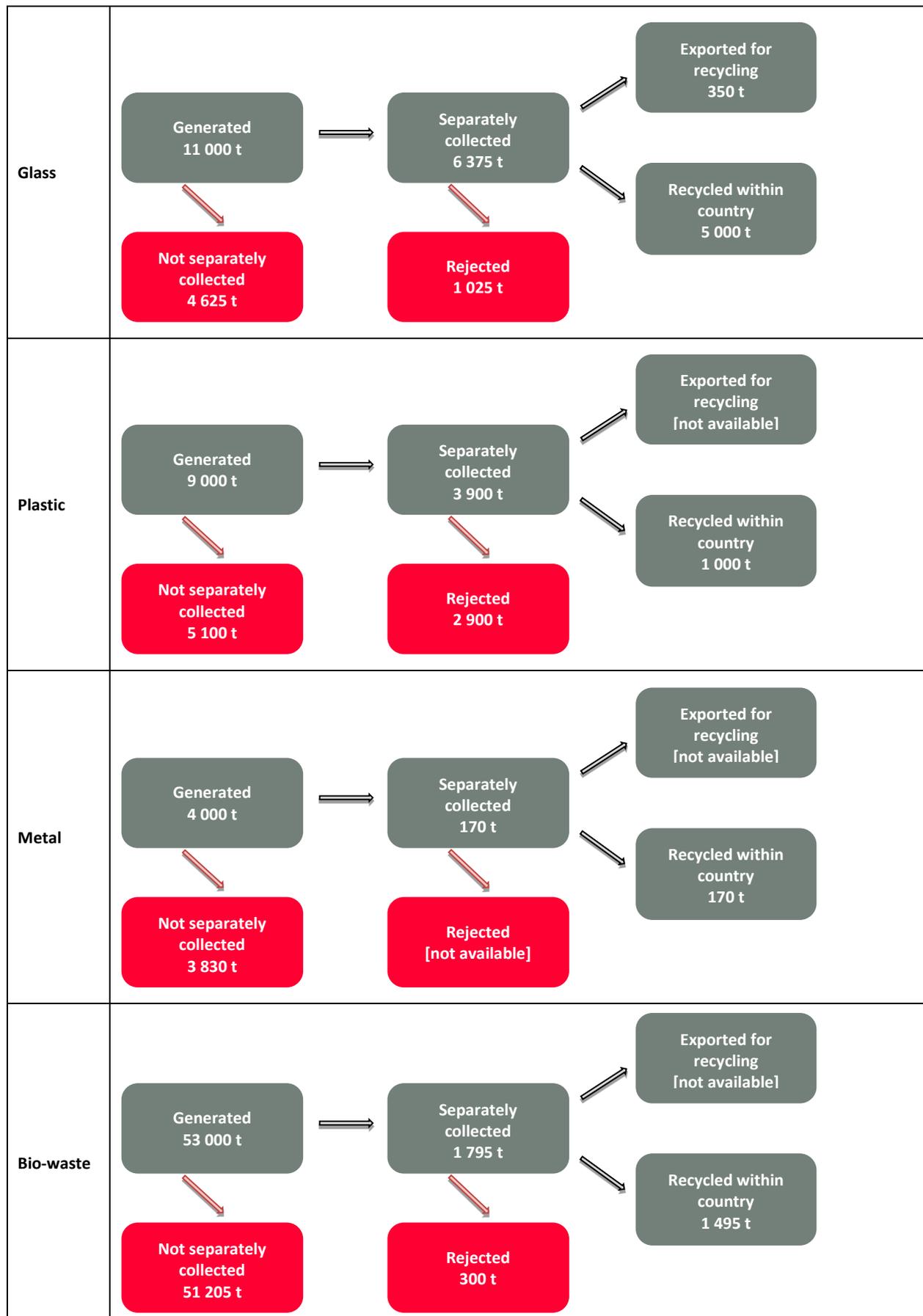
Recycled (t)	Paper	Glass	Plastic	Metal	Bio-waste	Total
Generated	18 000 – 20 000	11 000 – 12 000	9 000 – 10 000	4 000 – 5 000	53 000 – 55 000	95 000 – 102 000
Collected	7 701 (41%)	6 375 (55%)	3 907 (41%)	170t (4%)	1 795 (3%)	19 948
Recycled nationally	6 000	5 000	1 000	170	1 495	13 665
Exported for recycling	950	350	Not available	Not available	Not available	1 300
Rejected	750	1 025	2 900	Not available	300	4 975

7. Material flows

MATERIAL FLOWS FOR EACH COLLECTED FRACTION



¹ Data of **waste generation** per waste stream have been calculated on the basis of residual waste sorting analysis, if data was not directly available. Based on the composition of residual waste (% of each waste fraction) and its total weight amounts per waste fraction can be calculated. Composition was: Paper 13%, Glass 8%, Plastic 7%, Metal 3%, Bio-waste 38%



References

- [1] Program odpadového hospodárstva hlavného mesta Slovenskej republiky Bratislavy na roky 2011 - 2015 (The programme of waste management of the Capital of the Slovak Republic, Bratislava, for the years 2011-2015), <http://www.bratislava.sk/program-odpadoveho-hospodarstva/d-11045577/p1=11069412>
- [2] Informácia o nakladaní s komunálnym odpadom, realizovaní separovaného zberu a recyklácie druhotných surovín. Nakladanie s odpadom realizované spoločnosťou OLO a.s. v roku 2013 (Information on municipal waste handling, execution of separate collection and recycling of secondary raw materials. Waste handling carried out by the company OLO a.s. in the year 2013), <http://www.olo.sk/wp-content/uploads/2014/10/Info-2013.pdf>
- [3] Statistical Yearbook of the Capital of the SR, Bratislava, 2013, waste, <http://slovak.statistics.sk/>