

## 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.

VILNIUS	LITHUANIA
<p><b>SUMMARY:</b> In Vilnius 20% of households are covered by door-to-door separate collection for paper, cardboard, glass and plastics (separately), the rest of the households must deliver those fractions to bring points and civic amenity sites. Also bio-waste (garden waste) can be delivered at civic amenity sites. In addition, a deposit and return system is in place for all kind of packaging products, primarily drink containers. Altogether, the capture rates of all dry recyclables are low.</p>	
<b>1 Capital general data</b>	
City population (inhabitants)	537 152 [1]
City area (km <sup>2</sup> )	401 [1]
City density (persons/km <sup>2</sup> )	1 339.5 [1]
City climate (mediterranean, continental, oceanic, nordic; relevant for bio-waste collection)	Continental
<b>2. Capital waste data</b>	
Total (municipal) waste generation (t in indicated year)	289 725 [2]
Total (municipal) waste generation (kg/cap)	539.37 [2]
Total separate collection (kg/cap) & (% of generation)	60 kg/cap; 11.3% of generated
Percentage breakdown of total collection for separate collection by fraction	<ul style="list-style-type: none"> <li>• 21% paper and cardboard</li> <li>• 20% glass</li> <li>• 8% plastic</li> <li>• 14% metal</li> <li>• 35% bio-waste</li> <li>• 3% others</li> </ul>
<b>3. Description of overall separate collection systems operating in capital</b>	
<p>Vilnius city municipality is responsible for organisation of collection and disposal of waste and <b>separate collection of recyclables like paper, glass, plastic</b>, etc. Service providers for collection of waste and recyclables are selected by the municipality through tendering procedures.</p> <p>Waste collection and disposal, operation of bring points and Civic amenity sites are financed from the municipal waste tax levied from the homeowners; <b>door-to-door collection of source separated recyclables is financed by manufacturers and importers</b>. Municipality appointed waste collectors provide door-to-door collection services for paper, mixed cans, glass and plastic bottles for private houses. Owners of individual houses have signed contracts for the use of containers for separate waste collection. Residents of apartment houses must deliver recyclable waste to Bring points (located in the distance of 50 - 500 meters from homes) and Civic amenity sites (one Civic amenity site per 50 000 inhabitants), operated by municipality appointed contractors.</p> <p>The <b>deposit and return system</b> is a set of organisational, administrative, financial, informational and other measures, which are implemented by a system administrator in order to return the deposit for packaging products, which was paid at the time</p>	

of sale, to all users, to ensure that returned packaging to the producers and (or) manufacturers is reused, and disposable packaging waste is handled in accordance with the packaging waste management priorities [3]. The packaging (glass bottles) are returned to the point of sale (supermarkets, shops and etc.). Others packing waste (including glass bottles) can also be delivered to the collection points called "Eko taškas". This is a supplementary waste collection system organised by the manufacturers and importers association and financed by manufacturers and importers. Collection points can be found in comfortable locations and provide services for inhabitants of Vilnius, Kaunas, Radviliškis, Alytus, Mažeikiai and Palanga cities.

**Paper and cardboard:** Paper and cardboard is collected from individual homes in Vilnius separately in door-to-door collection system. In addition the general public can also deliver this to Bring sites and Civic amenity sites. Residents of apartment houses must deliver paper and cardboard to Bring points and Civic amenity sites.

**Glass:** Glass is separately is collected from individual homes in Vilnius in door-to-door collection system, and can also be delivered to Bring sites and Civic amenity sites. Residents of apartment houses must deliver glass to Bring points and Civic amenity sites. Glass bottles can be delivered to deposit and return points paying back the money .

**Plastic:** Plastic is separately collected from individual homes in Vilnius in door-to-door collection system, and can also be delivered to Bring sites and Civic amenity sites. Residents of apartment houses must deliver plastic to Bring points and Civic amenity sites. Plastic waste can be delivered to Deposit and return points.

**Metal:** Metal is separately collected and can be delivered to Bring points and Civic amenity sites. Metal packaging can be delivered to Deposit and return system points paying back the money.

**Annual Running Costs: Not available**

**Setup costs: v**

**Coverage:**

- 20% of households (individual) have door-to-door separate collection containers for some fractions (paper and cardboard, glass, plastic).
- 80% of households must deliver paper and cardboard, glass, plastic and metal to Bring points and Civic amenity sites.




#### 4. Elements of the collection system

##### MUNICIPALITIES OR THEIR CONTRACTORS



Door-to-door collection of source separated waste (yellow bag for paper and green bag for green/garden waste)

<b>Fractions collected</b>	Paper, glass, plastic[2]
<b>Collection frequency</b>	Paper: every two weeks [2]
	Glass: every two weeks [2]
	Plastic: every two weeks [2]
<b>Coverage of collection</b>	<b>Not available</b>
<b>Annual collected quantities<sup>1</sup></b>	<b>Paper:</b> 105 t
	<b>Glass:</b> 376 t
	<b>Plastic:</b> 307 t
	<b>Metal:</b> 10 t
	<b>Composit packaging:</b> 17 t
<b>Setup costs<sup>2</sup></b>	396 200.19 €
<b>Running costs<sup>1</sup></b>	612 982.51 €
<b>Source of funding</b>	Manufacturers' and Importers' funding, state funding
<b>Cost to consumer (annual)</b>	<b>Not available</b>

 <b>Bring Collection Points operated by contractors</b>	
<b>Fractions collected</b>	Paper, glass, plastic, metal
<b>Number of collection points</b>	1 041 (3 123 containers) (1 per 515 inhabitants) [2]
<b>Collected quantities</b>	<b>Paper:</b> 3 320 t & 6.2 kg/cap [2]
	<b>Glass:</b> 1 985 t & 3.7 kg/cap [2]
	<b>Plastic:</b> 1 298 t & 2.4 kg/cap [2]
	<b>Metal:</b> 84 t & 0.16 kg/cap [2]
<b>Setup costs</b>	<b>Not available</b>
<b>Running costs</b>	<b>Not available</b>
<b>Source of funding</b>	Municipal service tax
<b>Cost to consumer</b>	<b>Not available</b>
 <b>Bring-in Civic Amenity sites operated by municipality</b>	
<b>Fractions collected</b>	Paper, glass, plastic, metal, others etc.
<b>Number of sites</b>	5 and 0.90 per 100 000 inhabitants [2]
<b>Collected quantities</b>	<b>Paper:</b> 20 t & 0.04 kg/cap [2]
	<b>Glass:</b> 36 t & 0.06 kg/cap [2]
	<b>Plastic:</b> 17 t & 0.03 kg/cap [2]
	<b>Metal:</b> 8 t & 0.01 kg/cap [2]
	<b>Bio-waste (garden waste):</b> 11 183 t & 20.82 kg/cap [2]
	<b>Others</b> 938 t & 2kg/cap [2]
<b>Setup costs</b>	<b>Not available</b>
<b>Running costs</b>	<b>Not available</b>
<b>Source of funding</b>	Municipal service tax
<b>Cost to consumer</b>	<b>Not available</b>
<b>PRODUCERS OR THEIR AGENTS</b>	
 <b>Deposit and return system - Bottle bringback scheme</b>	
<b>Products covered</b>	Plastic soft drink bottles, cardboard soft drink bottles, glass drink bottles, metal tins
<b>Quantity collected by system (in t)</b>	<b>Plastic soft drink bottles:</b> 1 112 [2] <b>Cardboard soft drink bottles:</b> 3 450 [2] <b>Glass drink bottles:</b> 4 335 [2] <b>Metal cans:</b> 4 448 [2]
<b>Funding mechanism</b>	Manufacturer's and Importer's funding
<b>Manufacturer's and Importer's cost</b>	<b>Plastic soft drink bottles:</b> 0.14 €/kg [4] <b>Cardboard soft drink bottles:</b> 0.03 €/kg [4] <b>Glass drink bottles:</b> 0.04 – 0.07€/bottle [4]

<b>Metal cans: 0.35 €/kg [4]</b>						
<b>BARRIERS TO IMPLEMENT SEPARATE COLLECTION</b>						
<ul style="list-style-type: none"> <li>Separate collection in Vilnius is operated by 5 private companies, selected by Vilnius municipality through tendering, which makes coordinated action and negotiation more complicated and less effective.</li> <li>Payment procedure does not encourage separate collection as all customers pay the same amount despite if they use or they don't use any of the separate collection systems.</li> </ul>						
<b>ADDITIONAL FINDINGS</b>						
In Lithuania are two associations of manufacturers' and importers' (PI "Pakuočių tvarkymo organizacija" and PI "Žalias taškas") which unites all manufacturers and importers. The Associations are responsible for packaging waste collection and are financed by manufacturers and importers.						
<sup>1</sup> Only partly data of 2014.						
<sup>2</sup> State funding.						
<b>5. Materials, Quantities and costs</b>						
<b>SUMMARY OF COLLECTION SYSTEMS IN PLACE</b>						
Collected waste (t)	Paper	Glass	Plastic	Metal	Bio-waste	City Coverage
<b>Door-to-door</b>	105 <sup>3</sup>	376 <sup>3</sup>	307 <sup>3</sup>	10 <sup>3</sup>	N/A	20 000 000 containers (average volume 0.12 m <sup>3</sup> ) in individual houses (from 2013-2014) for separate collection of packaging waste (paper/ cardboard, plastic, glass) 21 000 containers (in volume 0.6 m <sup>3</sup> ) containers for collection of bio-waste from individual houses [2], [4]
<b>Co-mingled</b>						
<b>Bring points</b>	3 320	1 985	1 298	84		1 041 (3 123 containers) (1 per 515 inhabitants) [2]
<b>Civic amenities</b>	19	36	17	8	8 320	5 (0.90 per 100 000 inhabitants) [2]
<b>Producer / Retailer take-back</b>	3 450	4 335	1 112	4 448		
<b>Total</b>	<b>6 894</b>	<b>6 732</b>	<b>2 734</b>	<b>4 550</b>	<b>8 320</b>	
<sup>3</sup> Only partly data of 2014.						

<b>SUMMARY OF COSTS FOR SEPARATE COLLECTION SYSTEMS IN PLACE (setup costs should be total, running costs annual)</b>				
<b>Costs (€)</b>	<b>Authorities / waste management companies</b>		<b>Consumer costs</b>	
	<b>Setup (€)</b>	<b>Running (€/year)</b>	<b>Funding type</b>	<b>Amount (€)</b>
<b>Door-to-door separate</b>	396,200.19 <sup>1</sup>	612,982.51 <sup>2</sup>	Based on Manufacturer and Importer Responsibilities	Not available
<b>Door-to-door co-mingled</b>	Not available	Not available	Not available	Not available
<b>Bring points</b>	Not available	Not available	Municipal service tax	Not available
<b>Civic amenities</b>	Not available	Not available	Municipal service tax	Not available
<b>Producer / Retailer take-back</b>	Not available	Not available	Based on Manufacturer and Importer Responsibilities	€0.03 - 0.35 [3]
<b>Total</b>	396,200.19 <sup>1</sup>	612,982.51 <sup>2</sup>	Municipal tax	€51/ per tonne <sup>3</sup> [2]

<sup>1</sup> State funding.  
<sup>2</sup> Only partly data of 2014.  
<sup>3</sup> Share of municipal tax spent on all municipal waste management activities.

**6. Recycling and losses**

**RECYCLING OF THE COLLECTED WASTE<sup>1</sup>**

<b>Recycled (t)</b>	<b>Paper</b>	<b>Glass</b>	<b>Plastic</b>	<b>Metal</b>	<b>Bio-waste</b>	<b>Total</b>
<b>Generated</b>	50 992	22 019	39 113	6 374	95 320	289 725
<b>Collected</b>	6 894	6 732	2 734	4 550	11 183	31 296
<b>Recycled nationally</b>	Not available	Not available	Not available	Not available	Not available	Not available
<b>Exported for recycling</b>	Not available	Not available	Not available	Not available	Not available	Not available
<b>Rejected</b>	Not available	Not available	Not available	Not available	Not available	Not available

<sup>1</sup> 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. [5]

## References

- [1] Statistics Lithuania  
<http://db1.stat.gov.lt/statbank/selectvarval/saveselections.asp?MainTable=M3010211&PLanguage=0&TableStyle=&Buttons=&PXSId=3767&IQY=&TC=&ST=ST&rvar0=&rvar1=&rvar2=&rvar3=&rvar4=&rvar5=&rvar6=&rvar7=&rvar8=&rvar9=&rvar10=&rvar11=&rvar12=&rvar13=&rvar14=....>
- [2] The Environmental Protection Agency (EPA), Report for 2013 year  
(<http://atliekos.gamta.lt/cms/index?rubricId=70bfc9c1-5c33-4d83-95a5-123ba8070877>)
- [3] Lithuanian Packaging and Packaging Waste Management Law / Lietuvos Respublikos pakuočių ir pakuočių atliekų tvarkymo įstatymas (as last amended XI-517, TAR, 2001-09-25, i.k. 10110101STA00IX-517) [https://www.e-tar.lt/portal/lt/legalAct/TAR.9D1ADB9E1518/TAIS\\_471654](https://www.e-tar.lt/portal/lt/legalAct/TAR.9D1ADB9E1518/TAIS_471654)
- [4] Green points ([http://www.ekotaskas.lt/lit/APIE\\_EKOTASKA/51](http://www.ekotaskas.lt/lit/APIE_EKOTASKA/51))
- [5] Vilnius region waste management system development, Feasibility Study, 2010, SWECO