




## 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.

Lisbon	Portugal
<p><b>SUMMARY:</b> Lisbon is covered partly by a co-mingled door-to-door system for packaging and partly with a door-to-door system targeting paper and cardboard. The door-to-door systems are complemented by bring points. Bio-waste is only collected from some businesses and public gardens. Significant improvement is possible for all fractions, except for glass which achieves already relatively high efficiency.</p>	
<p><b>1 Capital general data</b></p>	
City population (inhabitants)	511 667 persons (2013) [1]; (resident population in given year excl. temporary population, e.g. tourists, workers)
City area (km <sup>2</sup> )	100.05 km <sup>2</sup> (2013) [1]
City density (persons/km <sup>2</sup> )	5 165.3 persons/km <sup>2</sup> (2013) [1]
City climate (mediterranean, continental, oceanic, nordic; relevant for bio-waste collection)	Mediterranean
<p><b>2. Capital waste data</b></p>	
Total (municipal) waste generation (t in indicated year)	291 703.71 t (2014) [2]
Total (municipal) waste generation (kg/cap)	564 kg/cap (2013) [1]
Total separate collection (kg/cap) & (% of generation)	98 kg/cap (2013) [1]; 21.8% of generation (2014) [2]
Percentage breakdown of total collection for separate collection by fraction	<ul style="list-style-type: none"> <li>• 34.5% paper and cardboard (2013) [1]</li> <li>• 24.4% glass (2013) [1]</li> <li>• 18.9% plastic and metal (2013) [1]</li> <li>• 22.3% bio-waste (2013) [1]</li> <li>• 0.001% batteries (2013) [1]</li> </ul>
<p><b>3. Description of overall separate collection systems operating in capital</b></p>	
<p>Under Law Decree 239/97 of 9 September 1997, the <b>Municipality of Lisbon is responsible for the municipal waste collection</b> generated in the municipality area and the transportation to waste treatment and recovery centres. The municipality is responsible for the waste collection in businesses with a maximum production of 1 100 litres per day. <b>Private waste management companies</b> are responsible for the collection from major waste generators (e.g. supermarkets).</p> <p>The waste collection system in the Municipality of Lisbon is organised through a <b>door-to-door collection</b>, a bring point collection system, civic amenities and collection on request from both households and businesses.</p> <p>The waste collected from households and businesses are collected together to optimize the waste collection routes.</p> <p>Valorsul is the corporation responsible for the waste management of 19 municipalities in the Lisbon metropolitan area including the Lisbon municipality. The municipality is paid according to the amount of separate municipal waste (paper and cardboard, glass and packages) delivered to Valorsul’s waste treatment and recovery centres.</p>	

<p><b>Paper and cardboard:</b> Door-to-door collection is used since 2003 although the major element in use are still the bring collection points.</p> <p><b>Glass:</b> Bring collection points. Glass door-to-door collection is only available for businesses.</p> <p><b>Packages:</b> This fraction includes plastic, metal and cardboard packages. Bring collection points are still the major element available but are gradually being substituted by door-to-door collection.</p> <p><b>Bio-waste:</b> Door-to-door collection is only available for businesses; bio-waste can also be delivered to certain civic amenity sites.</p>	
<p><b>Annual Running Costs:</b></p> <ul style="list-style-type: none"> <li>• 45 815 000 € (2013) [1] overall total costs for waste management in the municipality;</li> <li>• 29 377 921 € (2014) [2] operation costs of the municipal waste department</li> </ul>	
<p><b>Setup costs: Not available</b></p>	
<p><b>Coverage:</b></p> <ul style="list-style-type: none"> <li>• 57% of households with door-to-door collection (2011) [2].</li> <li>• 36% of households with separate door-to-door collection (2011) [2].</li> <li>• 43% of households with bring collection points (2011) [2]. Different types where not every bring collection point accepts all of the municipal waste fractions.</li> </ul>	
<p><b>4. Elements of the collection system</b></p>	
<p><b>MUNICIPALITIES OR THEIR CONTRACTORS</b></p>	
<p> Door-to-door collection of source separated waste</p>	
<p><b>Fractions collected</b></p>	<p>Paper and cardboard, glass (only businesses), packaging, batteries, bio-waste (only businesses: restaurants or similar) [2]</p>
<p><b>Collection frequency</b></p>	<p><b>Paper and cardboard:</b> 1 day per week (households); 1 to 5 days per week (businesses) [2]  <b>Glass:</b> 1 to 3 days per week (businesses) [2]  <b>Packages:</b> 1 to 2 days per week (households); 1 to 3 days per week (businesses) [2]  <b>Bio-waste:</b> 6 to 7 days per week (businesses) [2]</p>
<p><b>Coverage of collection</b></p>	<p><b>Paper and cardboard:</b> 36% (households and businesses) [2]  <b>Glass:</b> 0% households (only for businesses; coverage information not available)  <b>Packages:</b> 36% (households and businesses)  <b>Bio-waste:</b> 0% households (only for businesses; information not available)</p>
<p><b>Annual collected quantities</b></p>	<p><b>Collected quantities in 2013:</b>  <b>Residual waste:</b> 130 298.15 t (households and businesses) [2] &amp; 254.65 kg/cap  <b>Paper and cardboard:</b> 9 996.76 t (households and businesses) [2] &amp; 19.54 kg/cap  <b>Glass:</b> 930.1 t (businesses) [2] &amp; 1.82 kg/cap  <b>Packages:</b> 5 872.54 t (households and businesses) [2] &amp; 11.48 kg/cap  <b>Bio-waste:</b> 238 t (businesses and public gardens) [2] &amp; 0.47 kg/cap</p>
<p><b>Setup costs</b></p>	<p><b>Not available</b></p>
<p><b>Running costs</b></p>	<p><b>Not available</b></p>
<p><b>Source of funding</b></p>	<p>Municipal tax [2]  The households and businesses are taxed in the water bill based on the water consumption ratio.  The tax distinguishes between households (0.1710 €/m<sup>3</sup>) and businesses (0.8023 €/m<sup>3</sup>).  Waste budget [2]</p>
<p><b>Cost to consumer (annual)</b></p>	<p>See above</p>

 <b>Bring Collection Points</b>	
<b>Fractions collected</b>	Paper and cardboard, glass, packaging, batteries Different types of bring collection points where some do not accept all municipal waste fractions
<b>Number of collection points</b>	1 329 (total) (2015) (259.74 per 100 000 inhabitants) [2] <ul style="list-style-type: none"> <li>• 303 for all fractions (paper and cardboard, glass, packaging and batteries)</li> <li>• 878 for glass only</li> <li>• 148 where some points do not accept all fractions (impossible to divide by fraction(s) accepted)</li> </ul>
<b>Collected quantities</b>	<b>Paper:</b> 2 320.7 t (2013) [2] & 4.54 kg/cap <b>Glass:</b> 7 838.82 t (2013) [2] & 15.32 kg/cap <b>Packages:</b> 1 690.78 t (2013) [2] & 3.30 kg/cap <b>Batteries:</b> 4.34 t & 0.009 kg/cap
<b>Setup costs</b>	<b>Not available</b>
<b>Running costs</b>	<b>Not available</b>
<b>Source of funding</b>	Municipal tax [2] Waste budget [2]
<b>Cost to consumer</b>	Free
 <b>Bring-in Civic Amenity sites</b>	
<b>Fractions collected</b>	Paper and cardboard, glass, packages
<b>Number of sites</b>	28 5.47 per 100 000 inhabitants [2]
<b>Collected quantities</b>	<b>Paper and cardboard:</b> 2 550.16 t (2013) [2] & 4.98 kg/cap <b>Glass:</b> 823.98 t (2013) [2] & 1.61 kg/cap <b>Packages:</b> 1 471.16 t (2013) [2] & 2.88 kg/cap
<b>Setup costs</b>	<b>Not available</b>
<b>Running costs</b>	<b>Not available</b>
<b>Source of funding</b>	Municipal tax [2] Waste budget [2]
<b>Cost to consumer</b>	Free of costs
<b>BARRIERS TO IMPLEMENT SEPARATE COLLECTION</b> Although the municipality of Lisbon is 100% covered by the separate collection system, the main barriers to increase and further develop it are: <ul style="list-style-type: none"> <li>• The waste separation rate is mainly dependent of the population participation. As such social initiatives are conducted to create more awareness within the population.</li> <li>• Lack of space in the streets to place more bring collection points and in buildings to allow the door-to-door collection.</li> </ul>	

5. Materials, Quantities and costs						
SUMMARY OF COLLECTION SYSTEMS IN PLACE						
Collected waste (t)	Paper and Cardboard	Glass	Packages	Bio-waste	Batteries	City Coverage
Door-to-door	9 997	930	5 873	238		36% (households and businesses)
Co-mingled						
Bring points	2 321	7 839	1 691		4.34	1 329 (259.74 per 100 000 inhabitants)
Civic amenities	2 550	824	1 471			28 (5.47 per 100 000 inhabitants)
Producer / Retailer take-back						
<b>Total</b>	<b>14 868</b>	<b>9 593</b>	<b>9 035</b>	<b>238</b>	<b>4.34</b>	
SUMMARY OF COSTS FOR SEPARATE COLLECTION SYSTEMS IN PLACE (setup costs should be total, running costs annual)						
Costs (€)	Authorities / waste management companies		Consumer costs			
	Setup (€)	Running (€/year)	Funding type	Amount (€)		
Door-to-door	Not available	Not available	Municipal tax Waste budget	Free		
Co-mingled	Not available	Not available	Not available	Not available		
Bring points	Not available	Not available	Municipal tax Waste budget	Free		
Civic amenities	Not available	Not available	Municipal tax Waste budget	Free		
Producer / Retailer take-back	Not available	Not available	Not available	Not available		
<b>Total</b>	Not available	29 377 921 € (2014)	Municipal tax Waste budget	Free		
6. Recycling and losses						
RECYCLING OF THE COLLECTED WASTE						
Recycled (t)	Paper	Glass	Plastic & metal	Bio-waste	Total	
Generated	Not available	Not available	Not available	Not available	Not available	
Collected	14 867.62	9 592.90	9 034.48	238	33 733	
Recycled nationally	Not available					
Exported for recycling						
Rejected						

## References

- [1] Portugal National Statistics Institute website, [www.ine.pt](http://www.ine.pt), 2015
- [2] PT City Council 2015, Interview with the City Council - Urban Hygiene Department, Mr. Manuel Severino, 2015