

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.

Tallinn	Estonia
<p>SUMMARY: In Tallinn, there are a number of waste management models for separate collection of waste operating in Tallinn run by the municipality and private actors. Tallinn collects around 53% of the municipal waste separately, accounting for separately collected municipal and packaging waste. Almost 100% of households are covered with door-to-door separate collection of paper and bio-waste and a co-mingled door-to-door collection of mixed packaging materials</p>	
<p>1 Capital general data</p>	
City population (inhabitants)	419 830 inhabitants (as of 1 January 2013)
City area (km ²)	159.35 km ²
City density (persons/km ²)	2 635 persons/ km ²
City climate (mediterranean, continental, oceanic, nordic; relevant for bio-waste collection)	Continental
<p>2. Capital waste data</p>	
Total (municipal) waste generation (t in indicated year)	202 011 t in 2012 [1]
Total (municipal) waste generation (kg/cap)	481.17 kg/cap
Total separate collection (kg/cap) & (% of generation)	256.97 kg/cap : 53% of generation (accounting for separately collected municipal and packaging waste)
Percentage breakdown of total collection for separate collection by fraction	<ul style="list-style-type: none"> • 40% paper and cardboard [1] • 21% glass [1] • 10% plastic [1] • 5% metal [1] • 14% bio-waste [1] • 10% other [1]
<p>3. Description of overall separate collection systems operating in capital</p>	
<p>The Tallinn City Environment Department is responsible for organising and developing waste management, organising procurement, inspecting and supervising packaging waste collection. The municipal police provide supervision and district administrations contribute to awareness raising, supervision and collection of park and garden waste [2]. Tallinn city is divided into 13 areas for organised waste collection [3]. There is an obligation for the residential buildings, businesses and other organisations to join the municipal organised waste collection scheme [1] [2]. Organised waste collection covers municipal mixed waste, paper and cardboard, bio-waste and bulky waste; however packaging waste is not covered by the municipal organised waste collection scheme [4]. Under producer responsibility packaging waste is collected through a network of packaging collection stations [1].</p>	

There are a **number of waste management models** for separate collection of waste operating in Tallinn. In the organised waste collection model the municipality chooses, through a public procurement process, a waste management company to provide waste collection services to waste generators [1]. In so-called free-market waste collection model, municipal waste management service market is open to all eligible waste management companies. Waste generators (residents and businesses) choose appropriate permitted waste collection service provider [1]. Another waste collection model is operated by the Tallinn Waste Centre, a municipal establishment under the jurisdiction of Tallinn Environment Department, established in 2013 to provide more centralised municipal waste collection service for the city, supervise and mediate actions of waste collection providers and waste generators [1].

Under organised waste collection scheme mixed municipal waste, paper and cardboard and bio-waste are collected with door-to-door separate containers which are located next to residential buildings [1]. These waste types can only be handed over to the waste management company with contractual rights to serve in the area or, in case of free market, to a company with appropriate waste permit. In 2014, out of 13 designated waste collection areas in Tallinn, three areas (Haabersti, Kristiine, Kesklinn) had a temporary free market with organised waste collection from a specific type of container (deep waste containers), five areas (Nõmme, two Mustamäe areas, Kesklinn (Vanalinn) and Pirita) had a temporary free market for waste collection, and five areas were covered by the organised waste collection (two areas in Põhja-Tallinn and three in Lasnamäe) [1]. Five of thirteen areas had a contract with the Tallinn Waste Centre [4].

Paper and cardboard: Paper and cardboard are separately collected as part of the door-to-door collection system operated by the municipality and can also be brought to the civic amenity sites or bring points operated by private operators.

Glass: Collected as part of the door-to-door co-mingled collection system and can also be brought to the civic amenity sites or bring points operated by private operators.

Plastic: Collected as part of the door-to-door co-mingled collection system and can also be brought to the civic amenity sites or bring points operated by private operators.

Metal: is collected as part of door-to-door co-mingled collection system and can be brought to civic amenity site or bring point operated by private operators.

Annual Running Costs: Not available

Setup costs: Not available

Coverage: ~100% of households with door-to-door separate collection [6] under the requirements for organised waste collection stated in the Waste Act (JäätS), but the number does not represent the actual coverage data

4. Elements of the collection system

MUNICIPALITIES OR THEIR CONTRACTORS

 Door-to-door collection of source separated waste	
Fractions collected	Paper & cardboard, bio-waste, bulky waste [5] residual waste [6]
Collection frequency	Paper & cardboard: 1-2 times a week [6]
	Bio-waste: bi-weekly to 1-3 times a week [6]
Coverage of collection	Paper & cardboard: Not available
	Bio-waste: 100% (under organised waste collection system) [6]
Annual collected quantities	Paper & cardboard: Not available only the total number for all collection systems in place available
	Bio-waste: Not available only the total number for all collection systems in place available
Setup costs	Not available
Running costs	Not available
Source of funding	Pay as you throw charge (PAYT)
Cost to consumer (annual)	Paper disposal free of charge for consumers [6] For residual waste and bio-waste charges for consumers are approximately 2 to 10 euro per container emptying [6], charges for bulky waste collection approximately 7-18 euro per m ³ ;

	depending on the type of waste, size of container, collection frequency, collection area and service provider [4] [6]. Annual costs: Not available
 Bring Collection Points	
Fractions collected	Textiles and clothing waste
Number of collection points	21 (total) [2014] [7] 4.8 (per 100 000 inhabitants)
Collected quantities	Textiles and clothing waste: 764 t & 1.82kg/cap [2012] [1]
Setup costs	Not available
Running costs	Not available
Source of funding	Waste budget
Cost to consumer	Free
 Bring-in Civic Amenity sites	
Fractions collected	Unprocessed food, scrap metal, plastic, large building waste (stones, concrete, etc.), paper and cardboard, usable old furniture, tyres (up to 8 tyres at a time), electrical and electronics waste (incl. fridges and TV sets), packaging, bio-waste, glass sheets, hazardous household waste [8]
Number of sites	5 (total) 1.2 (per 100 000 inhabitants) additional Civic Amenity sites open for four months on Aegna island] [2014] [8]
Collected quantities in 2012 (not including packaging waste)	Paper: 182.97 t and 0.44kg/cap [6]
	Glass: 29.46 t and 0.07kg/cap [6]
	Plastic: 0 t [6]
	Metal: 0 t [6]
	Bio-waste: 572.67 t & 1.36 kg/cap (garden waste) [6]
Setup costs	Not available
Running costs	Approximately 2500 € per Civic Amenity site monthly [6]
Source of funding	Waste budget, consumer fees [6]
Cost to consumer	Free drop off for Tallinn residents for certain waste types [6]; 0-60 €/ item/cubic metre/kg depending on the type of waste, size, operator and Civic Amenity site [8]
PRODUCERS OR THEIR AGENTS	
 Bring Collection Points – separate collection of packaging waste	
Products covered	Paper, glass, plastic, metal packaging
Number of collection points	274 [1] 65.3 per 100 000 inhabitants
Quantity collected by system (in t)	Paper and cardboard (including beverage carton): 31 823 t [2012] [1] Glass: 22 359 t [2012] [1] Plastic: 11 112 t [2012] [1] Metal: 3 426 t [2012] [1]

	Mixed packaging *: 17 543 [2012] *mixed packaging has not been included in the totals – not possible to disaggregate
Funding mechanism	Included in the price of the product packaging at point of sale
Consumer cost	Free, or contract based fee [6]
 Door-to-door collection of co-mingled recyclables	
Products covered	Mixed packaging waste collected through collection bag (private housing estates or neighbourhoods)/container service (apartment buildings).
Quantity covered by system (in t)	Not available
Quantity collected by system (in t)	17 543 t in 2012 [1]
Funding mechanism	Included in the price of the product packaging at point of sale [9]
Consumer cost	Free for residents [9], or price paid by the consumer (business) depending on the contract with the collector [6]
 Deposit refund system	
Products covered	Plastic bottles, glass bottles, beverage cans packagings
Quantity covered by system (in t)	Plastic packaging: 1 517.18 t [2012] [10] Metal packaging: 822.75 t [2012] [10] Glass packaging: 3 241.01 t [2012] [10]
Quantity collected by system (in t)	Plastic packaging: 1 346.836 t [2012] [10] Metal packaging: 513.524 t [2012] [10] Glass packaging: 2 774.262 t [2012] [10]
Funding mechanism	Deposit on beverage packaging at point of sale
Consumer cost	Until February 2015 the deposit was: 0,04 €/ Non-refillable plastic package up to 0.5 l (incl. 0.5 l); 0,08 €/ Non-refillable plastic package above 0.5 l (excl. 0.5 l), all volumes: non-refillable metal package, non-refillable glass package, refillable glass package From February 2015 the price for all types of beverage packaging is 0.1 € [11]
BARRIERS TO IMPLEMENT SEPARATE COLLECTION <ul style="list-style-type: none"> • Waste collection market and most of the waste management companies are owned by private stakeholders, restricting local authorities' participation in organising waste management to waste collection procurement and supervision [1] • The results of the public waste collection procurement is often disputed, hence some of the Tallinn municipal districts have a free market in operation regarding waste collection services [1] • In the free market model with a number of eligible waste management companies operating at the same time, it is challenging to gather data and ensure transparency and accountability [6]. The ability and willingness of waste management companies to provide high quality service varies as it depends on the company selected and tender requirements, resulting in regional price and service quality variations [1] • The free market model compromises the ability of the local authority to meet its waste collection targets [1] • As local authorities are restricted to organising waste collection procurement and supervision and with the introduction of the changes to the Waste Act in 2014, and further legislative changes in 2015, local authorities are no longer liable to be the only client of the waste collecting companies, resulting in the Tallinn Waste Centre having to compete on the free market with other waste collecting companies [1] 	

- Waste Reporting System, which is part of the Environmental Register, collects data from annual waste reports submitted by waste handling companies with appropriate registration certificate, integrated environmental permit or waste permit. Waste reports contain data on the amounts of separately collected waste according to waste type. However, it is not possible to retrieve data on the amount of waste collected by a specific waste collection system [12]

ADDITIONAL FINDINGS

In addition to organised waste collection in Tallinn, packaging waste, which is under producer responsibility, is collected through a network of packaging collection stations [1]

For residents hazardous municipal waste can be disposed of free of charge in specialised bring points, Lukoil collection containers, civic amenity sites and organised waste collection network scheduled by the local authority, or taken directly to the licenced waste management company. Organisations and businesses can dispose of their hazardous wastes through contracting licensed collection operator [13]

5. Materials, Quantities and costs

SUMMARY OF COLLECTION SYSTEMS IN PLACE

Collected waste (t)	Paper	Glass	Plastic	Metal	Bio-waste	City Coverage
Door-to-door						Not available
Co-mingled						Not available
Bring points						21 (Textile) + 4.8 per 100 000 inhabitants (as above)
Civic amenities	182.97	29.46	0	0	572.67	5 + 1.2 per 100 000 inhabitants (as above)
Producer responsibility. Bring collection point – separate collection of packaging waste	31 823 (including cardboard and beverage carton)	22 359	11 112	3 426		
Producer responsibility. Co-mingled packaging waste	17 543*					
Retailer take-back (Deposit refund system)				514		
Total** ***	43 480	22 359	11 129	5 018	15 037	

*It has not been possible to disaggregate this quantity of mixed packaging waste.

** excluding deposit return scheme and co-mingled packaging waste.

*** sum of the components does not match the total shown here. It has not been possible to ascertain through which method some of the reported separately collected waste was in fact collected. The totals shown here reflect the total collected by the municipality and the totals collected by the EPR scheme.

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	fee [6]	Not available		
Co-mingled	Not available	Not available	Not available	Not available		
Bring points (textile)	Not available	Not available	waste budget	free[6] /fee for business		
Civic amenities	Not available	150 000 [6]	waste budget, consumer fees	free[6] / 0-60€ [8]		
Producer responsibility. Bring collection point – separate collection of packaging waste	Not available	Not available	included in the price of packaging at the point of sale	free, or contract based fee. Amount [not available]		
Producer responsibility. Co-mingled packaging waste	Not available	Not available	included in the price of packaging at the point of sale	free/ fee for businesses. Amount [not available]		
Retailer take-back (Deposit refund system)	4 – 4.5 million € [6]	Not available	deposit on the beverage packaging at the point of sale	deposit 0.1 € [11]		
Total	Not available	Not available	Not available	Not available		
6. Recycling and losses						
RECYCLING OF THE COLLECTED WASTE*						
Recycled (t)	Paper	Glass	Plastic	Metal	Bio-waste	Total
Generated	11 657[1] **	Not available	17 [1] **	1 592 [1] **	15 037[1] **	Not available
Collected	Not available	Not available	Not available	Not available	Not available	Not available
Recycled nationally	Not available	Not available	Not available	Not available	Not available	Not available
Exported for recycling	Not available	Not available	Not available	Not available	Not available	Not available
Rejected	Not available	Not available	Not available	Not available	Not available	Not available
<p>* Using the Waste Reporting System it is not possible to retrieve data on the amount of separately collected waste in Tallinn has been recycled, exported etc. due to the fact that separately collected wastes are being collected from numerous municipalities and directed to waste handling company as a total. Waste handling company is not required to hold records of volumes and types of separately collected waste from a specific municipality; the system therefore shows only aggregate numbers. Most of the collected fractures shall be recycled. The assumption is also that waste collected is waste generated [12]</p> <p>**Excluding separately collected packaging waste data for 2012 [1]</p>						

References

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