


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.



Warsaw	Poland
<p>SUMMARY: Warsaw has introduced a new waste collection system in August 2014 that includes the source separated collection of glass and bio-waste as well as the co-mingled collection of plastic, metal, paper and cardboard within door-to door collection schemes. In 2014 19.92 % of the total waste collected in Warsaw was covered by a separate collection scheme. The financing system applied is a fixed fee with PAYT elements where the annual cost to consumers are higher if separate collection is not applied.</p>	
1 Capital general data	
City population (residents)	1 724 404 in 2014 [1] (p. 22)
City area (km ²)	517.24 in 2014 [1] (p. 22)
City density (persons/km ²)	approximately 3 334 in 2014 [1] (p. 22)
City climate (mediterranean, continental, oceanic, nordic; relevant for bio-waste collection)	Continental
2. Capital waste data	
Total (municipal) waste generation (t in indicated year)	Collected municipal waste in 2014: 638 568.43 t [PL City Hall 2015a] ¹
Total (municipal) waste generation (kg/cap)	Collected municipal waste in 2014: 370.3 kg/cap (own calculations)
Total separate collection (kg/cap) & (% of generation)	73 kg/cap & 19.92% of the total amount of waste collected (127 202.83 t) [PL City Hall 2015a]
Percentage breakdown of total collection for separate collection by fraction	In 2014 : [PL City Hall 2015a] Recyclable materials: 61 110.71 t; 48.04%; <ul style="list-style-type: none"> • Paper & cardboard: 2 999.33 t • Glass: 9 112.11 t • Plastic: 1 151.5 • Metal: 144.74 t • Mixed packaging waste: 47 639.92 t Bio-waste: 15 343.58 t; 12.06%; Other: 50 738.47t; 39.9% <ul style="list-style-type: none"> • Bulky waste: 32 703.04 t; 25.71%; • WEEE: 155.29 t; 0.12%; • Hazardous waste: 89.98 t; 0.07%;

¹ Lack of data on waste generation in Warsaw. Only amount of collected waste is known based on reports prepared by entities providing waste collection in the city. [PL City Hall 2015a]

	<ul style="list-style-type: none"> Construction and demolition (C&D) waste: 14 876.57 t; 11.70%; Remaining waste collected separately: 2 913.59 t; 2.30%. (percentages calculated based on total of 511 375.66 t mixed municipal waste collected in 2014).
3. Description of overall separate collection systems operating in capital	
<p>A <u>new waste collection system</u> has been introduced to all 18 districts of Warsaw as of August 2014 (prior, since February 2014, the new separate waste collection system covered only 8 districts). Residents segregate their waste into three different containers/bags, which are: [3]</p> <ul style="list-style-type: none"> Red containers/bags; Green containers/bags; Black containers. <p>Paper and cardboard: dry waste paper and cardboard is separately collected in red containers/bags. [3]</p> <p>Glass: waste glass bottles and jars (without caps - should be placed into the red containers/bags) is separately collected in green containers/bags. [3]</p> <p>Plastic: plastic packaging is separately collected together (co-mingled) with paper and cardboard in red containers/bags. [3]</p> <p>Metal: metal cans are separately collected together (co-mingled) with plastic, paper and cardboard in red containers/bags. [3]</p> <p>Remaining (mixed) municipal waste is collected in black containers. [3]</p>	
<p>Annual Running Costs: for municipal waste management in Warsaw (including separate waste collection) was 265 000 000 PLN (66 250 000 €) in 2014. [PL City Hall 2015a]</p>	
<p>Setup costs: Not available</p>	
<p>Coverage: Based on submitted declarations: 69.74% of residents have chosen separate waste collection and 30.26% non-separate waste collection [PL City Hall 2015a]</p>	
4. Elements of the collection system	
MUNICIPALITIES OR THEIR CONTRACTORS	
 Door-to-door collection of source separated waste	
Fractions collected	Glass and bio-waste (green waste and biodegradable waste) as defined by [§4 [5]]
Collection frequency	Glass: minimum monthly in single-family house areas and areas of blocks and apartments as defined by [§20 [5]]
	Bio- waste: monthly between May and November as defined by [§7 [5]]
Coverage of collection	Not available
Annual collected quantities	Glass (no differentiation on door-to-door and bring system was available): 9 098.61 t (glass packaging) and 13.5 t (glass) in 2014. [PL City Hall 2015a]
	Bio-waste (no differentiation on door-to-door and bring system was available): 15 343.58 t in 2014. [PL City Hall 2015a]
Setup costs	Not available
Running costs	Not available
Source of funding	Waste budget + Pay as you throw (PAYT) charges [PL City Hall 2015]
Cost to consumer (annual)	<p>Single family houses – monthly charges: (as defined by [§4 PL WAW CWM 2015])</p> <ul style="list-style-type: none"> Separate waste collection: 30-60 PLN (7-15€) depending on the size of the household (number of persons). Non-separate waste collection: 36-72 PLN (9-18€) depending on the size of the household (number of persons).

	Residents of blocks and apartments – monthly charges: (as defined by [§3 PL WAW CWM 2015]) <ul style="list-style-type: none"> Separate waste collection: 10-37 PLN (2-10€) depending on the size of the household. Non-separate waste collection: 12-45 PLN (3-11€) depending of a size of the household.
 Door-to-door collection of co-mingled recyclables	
Fractions collected together in one bin/bag	Plastic, metal, paper and cardboard (dry waste) as defined by [§11 [5]] Only co-mingled door-to-door separate waste collection system of plastic, metal and paper and cardboard (dry waste) is provided [PL City Hall 2015]
Collection frequency	Minimum monthly in single-family house areas and minimum weekly in areas of blocks and apartments as defined by [§20 [5]]
Coverage of collection	Not available
Annual collected quantities	Paper and cardboard (no differentiation on door-to-door and bring system was available): 2 584.44 t (paper and cardboard packaging) and 414.89 t (paper and cardboard) in 2014. [PL City Hall 2015a]
	Metal (no differentiation on door-to-door and bring system was available): 144.74 t (metal packaging) in 2014. [PL City Hall 2015a]
	Plastic (no differentiation on door-to-door and bring system was available): 1 132.78 t (plastic packaging) and 18.72 t (plastic) in 2014. [PL City Hall 2015a]
Setup costs	Not available
Running costs	Not available
Source of funding	Waste budget + Pay as you throw (PAYT) charges [PL City Hall 2015]
Cost to consumer (annual)	Single family houses – monthly charges: (as defined by [§4 PL WAW CWM 2015]) <ul style="list-style-type: none"> Separate waste collection: 30-60 PLN (7-15€) depending on the size of the household (number of persons) → annual costs: 84-180€. Non-separate waste collection: 36-72 PLN (9-18€) depending on the size of the household (number of persons) → annual costs: 108-216€. Residents of blocks and apartments – monthly charges: (as defined by [§3 PL WAW CWM 2015]) <ul style="list-style-type: none"> Separate waste collection: 10-37 PLN (2-10€) depending on the size of the household → annual costs: 24-120€. Non-separate waste collection: 12-45 PLN (3-11€) depending of a size of the household → annual costs: 36-132€.
 Bring-in Civic Amenity sites owned by the city	
Fractions collected	Based on law regulations (as specified in [§4.2 (1) PL AKCOiM 1996]), at the area of Separate Waste Collection Point Sites (PSZOK in Polish) collection of at least fractions such as: overdue medicines and chemicals, waste batteries and accumulators, waste electronic and electrical equipment (WEEE), furniture and other bulky waste, waste tyres, green waste as well as construction and demolition (C&D) waste, should be provided. [PL City Hall 2015]
Number of sites	0 (currently owned by the city). Planned development: 2 sites (tender processes were already announced). The estimated (optimistic) execution time is May 2015. [PL City Hall 2015]
Collected quantities	Not available
Setup costs	Not available
Running costs	Not available

Source of funding	Waste budget + Pay as you throw (PAYT) charges [PL City Hall 2015]
Cost to consumer	Free of charge [PL City Hall 2015]
 Bulky waste separate collection (organised by the city)	
Products covered	Bulky waste
Quantity covered by system (in t)	Not available
Quantity collected by system (in t)	32 703.04 t in 2014 [PL City Hall 2015a]
Funding mechanism	Waste budget + Pay as you throw (PAYT) charges [PL City Hall 2015]
Consumer cost	Free of charge (included in PAYT charges) [PL City Hall 2015]
 Separate Waste Collection Point (PSZOK in Polish) owned and operated by STENA Recycling (outside the auspices of the city [PL City Hall 2015a])	
Products covered	Private site (owned and operated by STENA Recycling): glass, paper and cardboard, plastic packaging, metals, textiles, WEEE, bulky waste and hazardous waste (waste accumulators, oil filters, solvents, oil paints, toner cartridges, aerosols, overdue medicines and thermometers). [4]
Quantity covered by system (in t)	Not available
Quantity collected by system (in t)	Not available
Funding mechanism	Not available
Consumer cost	Mostly free of charge; charges are collected in case of bulky waste and C&D waste (e.g. 5-100 PLN [approx. 1-25€] per piece, depending on type and size of waste). [4]
 Textiles / Used Clothes Collection (outside the auspices of the city [PL City Hall 2015a])	
Organized actions for textiles / used clothes collection	
Products covered	Mainly used clothes and textiles are collected in bags in front of households (announcements are spread a few days earlier). In some places containers for used clothes and textiles collection are also set.
Quantity covered by system (in t)	Not available
Quantity collected by system (in t)	Not available
Funding mechanism	Organized and financed by public benefits organizations: n/a
Consumer cost	Free of charge

 Used Batteries Collection (outside the auspices of the city [PL City Hall 2015a])	
Organized actions for used batteries collection	
Products covered	Used are collected in containers set in public places, i.e.: authorities offices, schools and shops etc.
Quantity covered by system (in t)	Not available
Quantity collected by system (in t)	Not available
Funding mechanism	Extended producer responsibility (EPR) scheme
Consumer cost	Free of charge
 WEEE / Used Accumulators Collection (outside the auspices of the city [PL City Hall 2015a])	
WEEE and used accumulators return system	
Products covered	WEEE and used accumulators may be returned during purchase of the new equipment in shops.
Quantity covered by system (in t)	Not available
Quantity collected by system (in t)	Not available
Funding mechanism	Extended producer responsibility (EPR) scheme
Consumer cost	Free of charge
BARRIERS TO IMPLEMENT SEPARATE COLLECTION Despite informative campaigns, among residents who have decided on separate waste collection (based on declarations), some of them do not perform this. Main reasons of such situation include: [PL City Hall 2015a] <ul style="list-style-type: none"> – Lack of available space in households needed for containers positioning; – Lack of available space in households for bins/bags to collect waste fractions; – Difficulties in splitting into different kind of fractions. 	
ADDITIONAL FINDINGS The new waste management system was introduced in Warsaw in February 1, 2014 (8 districts). Since August 2014 the remaining 10 districts are now covered by the system. Therefore, presented data for 2014 do not represent the fully adopted separate waste management system in Warsaw. There were problems with obtaining data on waste, i.e. lack of publicly available reports on waste management in Warsaw. The City Hall collects only information from entities providing waste collection in the city on amounts of collected waste. No information on amounts of generated municipal waste was/is available. Before 2013 local / regional authorities were not obliged to collect any information with regards to municipal waste generation, collection and management. No data from the past (reports publicly available such as those published by the Main Statistical Office present data on waste generation except for municipal waste).	

5. Materials, Quantities and costs						
SUMMARY OF COLLECTION SYSTEMS IN PLACE IN 2014						
Collected waste (t)	Paper	Glass	Plastic	Metal	Bio-waste	City Coverage
Door-to-door		9 112.11			15 343.58	
Co-mingled	2 999.33	n/a	1 151.50	144.74		
Bring points						
Civic amenities						
Producer / Retailer take-back						
Total	2 999.33	9 112.11	1 151.50	144.74	15 343.58	
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	PAYT scheme	24-180 annually		
Co-mingled	Not available	Not available	PAYT scheme	24-180 annually		
Bring points	Not available	Not available	Not available	Not available		
Civic amenities	Not available	Not available	PAYT scheme	Free of charge		
Producer / Retailer take-back	Not available					
Total	Not available	66 250 000	Not available	Not available		
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	Not available
Collected	2 999.33	9 112.11	1 151.50	144.74	15 343.58	28 751.26
Recycled nationally	Not available					
Exported for recycling						
Rejected						
ADDITIONAL FINDINGS						
Required recycling level and preparation for re-use of fractions such as: paper, metal, plastic and glass was 16.64% and met the requirement level (i.e. at least 12% in 2014 [§3b PL AKCOiM 1996]). [PL City Hall 2015a]						
No further information on how recycling looks like and how it is measured was obtained.						

References

- [1] Powierzchnia i ludność w przekroju terytorialnym w 2014 r. (Area and population in the territorial profile in 2014), Main Statistical Office: <http://stat.gov.pl/obszary-tematyczne/ludnosc/ludnosc/powierzchnia-i-ludnosc-w-przekroju-terytorialnym-w-2014-r-7,11.html>
- [2] Bank Danych Lokalnych (Local Data Bank), Main Statistical Office (website): <http://stat.gov.pl/>
- [3] Jak segregować odpady – krótki przewodnik (How to segregate waste – a short guide), Warsaw's City Hall (website): <http://czysta.um.warszawa.pl/web/strony/jak-segregowac-odpady>
- [4] STENA Ekostacja – jakie odpady przyjmujemy (STENA Ecostation – what kind of waste we collect), STENA Ekostacja: <http://stenaekostacja.pl/jakie-odpady-pryjmuujemy/>
- [5] Uchwała Rady Miasta Stołecznego Warszawy nr XLIX/1366/2013 z dnia 7 stycznia 2013 r. w sprawie uchwalenia Regulaminu utrzymania czystości i porządku na terenie miasta stołecznego Warszawy z późn. zm. (The Resolution No. XLIX/1366/2013 issued on January 17, 2013 by Warsaw's City Council on keeping cleanliness and order within the city of Warsaw with subsequent amendments), Warsaw's City Hall: <http://bip.warszawa.pl/NR/exeres/286FDEDE-C0EB-4254-8C23-F9300DA80BA7,frameless.htm>
- [6] Uchwała Rady Miasta Stołecznego Warszawy nr V/85/2015 z dnia 13 lutego 2015 r. w sprawie wyboru metody ustalenia opłaty za gospodarowanie odpadami komunalnymi, ustalenia stawki takiej opłaty oraz ustalenia stawki opłaty za pojemnik o określonej pojemności (The Resolution No. V/85/2015 issued by the Warsaw's City Council on February 13, 2015 on the method to determine charges for waste management (...)), Warsaw's City Hall: <http://bip.warszawa.pl/NR/exeres/A702B0F3-C93B-4551-9F5C-FE1426F26F2A,frameless.htm>
- [7] Ustawa z dnia 13 września 1996 r. o utrzymaniu czystości i porządku w gminach z późn. zm. (tekst ujednolicony: Dz.U. 2013 nr 0 poz. 1399) (the Act on Keeping Cleanliness and Order in Municipalities of September 13, 1996 with subsequent amendments, consolidated text: Polish Journal of Law 2013 no. 0 item 1399), Computer-based Legal Researcher: <http://isap.sejm.gov.pl/DetailsServlet?id=WDU20130001399>
- [8] Telephone Interview with the City Hall, Municipal Waste Department, Ms. Monika Geras, March 10, 2015
- [9] Information provided by Email from the City Hall, Municipal Waste Department, Ms. Monika Geras, March 13, 2015