

SYSTEM OF HAZARDOUS WASTE COLLECTION IN TALLINN, ESTONIA

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Tallinn - General information

Demography

Population	431 339 as of 1.06.2014
Number of households	183 800
Area (km ²)	159,33
Population density (number of inhabitants/km ²)	2 707,2

General waste data

Year of the following waste data	2012
Sum of all waste streams excl. residual & bulky waste (kg/inhabitant/year) (Use indicator 1 or 2 from the R4R Online Tool)	269,59
Residual waste (including sorting residues) (kg/inhabitant/year) (Use indicator 8 or 9 from the R4R Online Tool)	226,19
Total waste (add up the previous two)	495,78
Sum of all waste streams excl. residual & bulky waste to DREC (kg/inhabitant/year) (Use indicator 3 of the R4R Online Tool)	247,2

General information about Good Practice „System of household hazardous waste collection“

Level of implementation – municipality

Target group – citizens, small offices

Duration – since 2000

Waste stream - Households hazardous waste
(chemicals incl. pesticides, mercury-containing goods,
batteries, medicines, solvents, mineral oils etc.)

Legal framework

- Waste Act entered into force 1.05.2004 with amendments
- The Government Regulation nr 102 entered into force 06.04.2004 with amendments
- Municipal waste management regulations 2011 as amended

Main local instruments involved

Technical

- Separation at the source of one mixed waste fraction
- Mixed fractions (WEEE & batteries, medicines)
- Collection in shops (batteries, WEEE)
- Civic amenity site (CAS)
- Recycling facility

Main local instruments involved

Economical

- Financial support for municipalities
- Fine for illegal dumping
- Fines for non-respect of the sorting guidelines

Communicative

- Publicity campaign on TV
- Publicity campaign in a local newspaper
- Website
- Help line

Main local instruments involved

Legal

- Extended producer responsibility (EPR) for WEEE & batteries
- Local waste management plan
- Stepwise growth of recycling targets
- National waste management plan
- Ban on landfilling
- Responsibility for municipal waste management
- Mandatory selective collection
- Waste collection permits

Short description

- Hazardous household waste collection can be implemented through a network of collection points in different places on the municipality territory. Points can be located:
- in densely populated areas of the city
- Collection point is more attractive if it is close to where waste is generated. Installation of collection points near residential buildings gives appreciable results on the separate collection rate of hazardous waste.
- at GAS stations
- Usually stations are open around the clock and for car owners it is comfortable to dispose of hazardous waste in the collection points as they fill their car up for example.
- on the parking at the shopping centres

Objective

- To improve the hazardous waste collection rate and increase recycle of hazardous materials.
- To increase the amounts of recyclable waste-materials – mineral oils, WEEE and etc.;
- To minimize the environment impact of hazardous waste production.



Method used to identify the good practice

Different methods were implemented in Tallinn to find the most suitable ones. Experiences of neighboring countries were analysed and the possibility of their transfer in Tallinn was investigated with the participation of an expert group. A system of collection points is not ideal because it has some disadvantages but undoubtedly very effective in the long perspective.

External Factors

Economic factors

- The service of collection points is quite expensive and requires ongoing financial support. Gross domestic product (GDP) per inhabitant in purchasing power standard (PPS) as a percentage of the EU-27 average is 50-75 in Tallinn.

Competences

- According Waste Act 2004 municipality must organize hazardous waste collection on its territory.



Preparation phase

- What is the number of hazardous waste collection points needed for residential areas with dense buildings and for areas with mostly private houses?
- In which places is it best to arrange the items for the highest use?
- What types of household hazardous waste will be collected? What is the treatment capacity available in the region and in the nearest neighborhood for every type of waste?
- What size the collection points for the separate collection of hazardous waste should be?
- How the service of network points will be organized? How will it be financed?

Technical implementation

A collection point must be:

- equipped with ventilation (preferably compulsory), internal lighting, chemically resistant floor;
- lockable;
- equipped with the necessary reservoirs for collection of sorted hazardous waste;
- equipped with the necessary equipment to provide first aid, with information materials and pointers to assist in the sorting of hazardous waste.

Communicative implementation

A regularly published note in the local papers about collection points is important, as well as information about what kind and in what amounts hazardous waste can be brought. Also, information is provided to local residents through the website, social media, training programs for children, distribution of brochures and TV spots.





Key success factors

- To promote the system.
- Do not change the location of collection points without providing an alternative.
- Presence of consultant.
- Instructions how to use the collection point must be clear and accessible

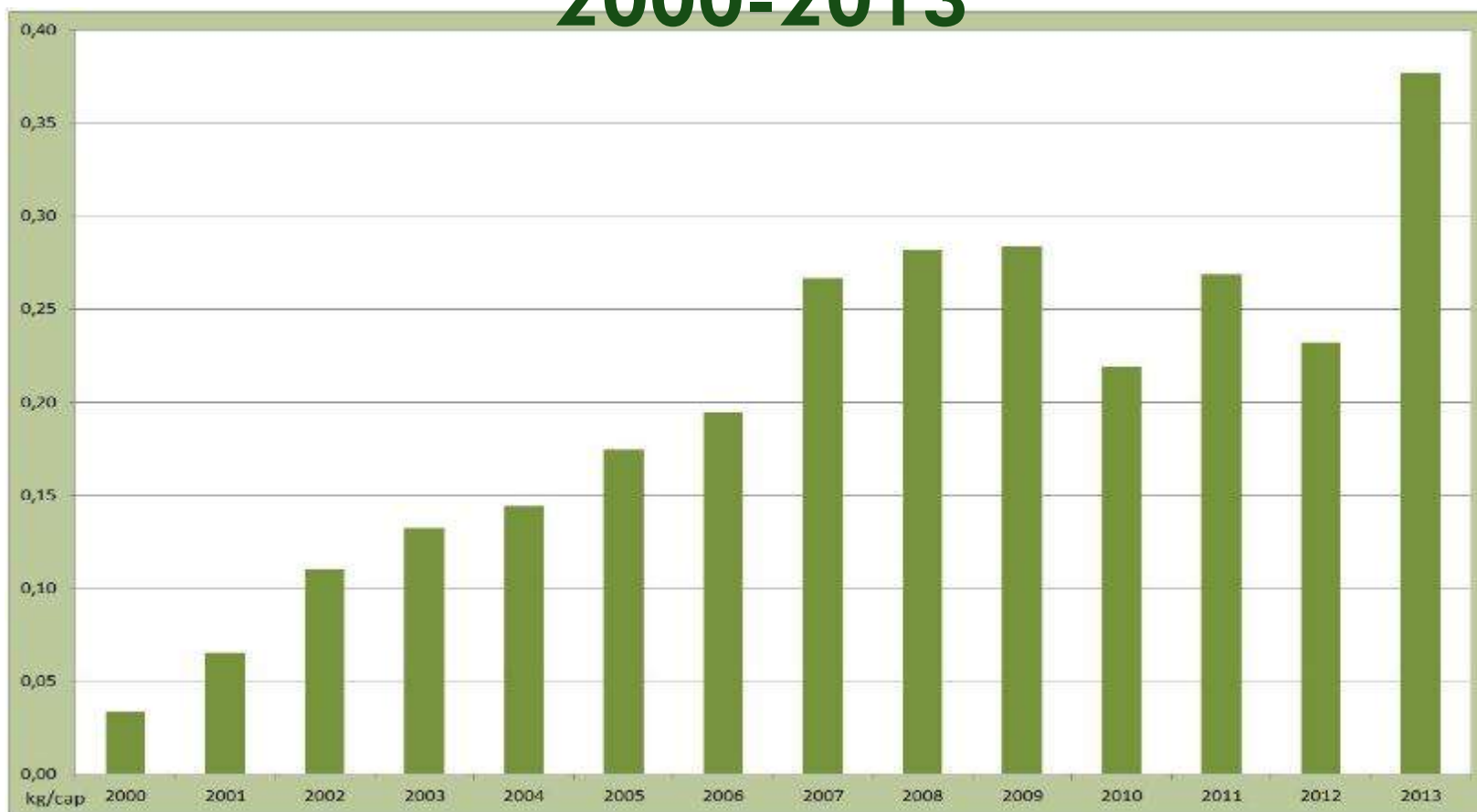
Resources 1

- Costs from city budget. Tenders for construction and managing.
- The cost of one container (collecting point) varied from 3 700 € to 4 500 € in 2005 depending on the size of the item (20-30 m³).

Resources 2

- The cost for managing a single collection point ranged from 46 € per month in 2004 to 70 € per month in 2013.
- Only one fraction – car batteries provides revenues, because the local batteries treatment facility pays for the recovered materials.
- Initial starting investments are about 70 000 € (collection points infrastructure with about 15 collection points with necessary equipment plus one year of services)

Hazardous waste collection in Tallinn 2000-2013





Other results 1

- The hazardous waste collecting system is effective (about 16 % of all hazardous households waste are collected through that system in the city in 2013)
- The quality of materials for recycling is remarkably better, as well as the recycling rate, in comparison with sorting facilities.

Other results 2

- Recovery and recycling possibilities are available for many different types of hazardous waste. For example oils and paints are incinerated with energy recovery and heat production.
- The system reduces littering in the city and surrounding areas.
- The system constantly needs maintenance, which entailed the creation of additional jobs.

Lessons learned - negative

- It is very difficult to replace with another collection system because consumers are already accustomed to the proposed system.
- It is not necessary to change the location of collection points. |
- Littering around the collection point if it opened a short time.



Lessons learned - challenges

- System works effectively for the residents, but not for enterprises.
- It is important to limit the amount of hazardous waste taken from one individual.
- Growth of the number of visitors directly depends on public awareness of the system.

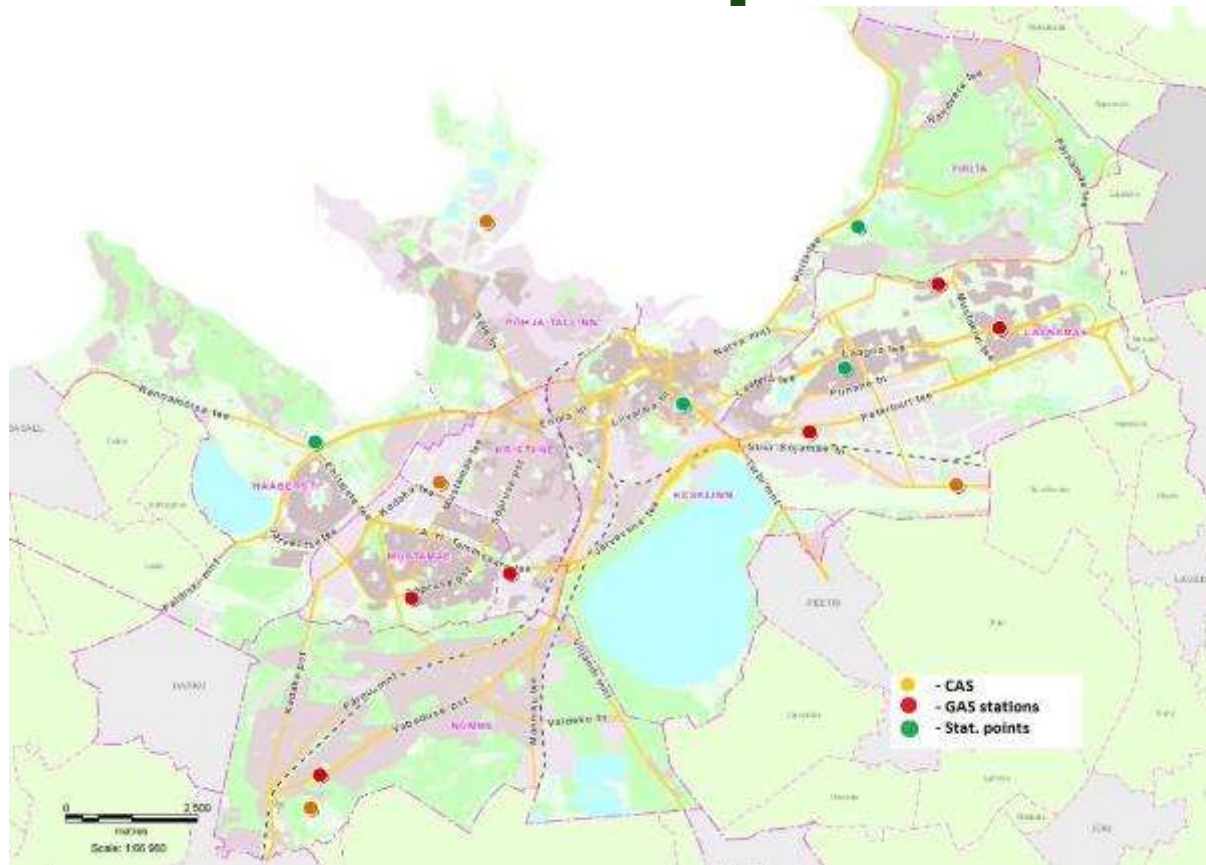


Producer responsibility organisations logos:





Collection points



industrial areas

residential areas (private houses)

residential areas (apartments)

THANK YOU FOR YOUR ATTENTION !

www.regions4recycling.eu

