



Interregional Environmental Integration of Waste Management in European Heritage Cities

Three years of knowledge exchanges

◆ THE PROJECT

INTHERWASTE is a five-year European project (2016-2021) that works to improve local and regional policies related to waste management in heritage cities by promoting interregional cooperation. The project focuses on four themes:

- **Waste deposits;**
- **Selective collection;**
- **Urban integration;**
- **Waste minimisation.**

◆ THE RATIONALE

Heritage cities – that is, cities with a historical heritage that are often popular tourist destinations – share a number of similarities that pose challenges for waste management.

- They receive significant inflows of tourists that are not used to the local sorting rules, which result in commensurate levels of unsorted waste generation;
- They often have narrow and winding streets, which are unsuitable for traditional waste management techniques;
- They need to preserve the aspect of their historical centres and protected areas.

The INTHERWASTE project explores solutions to these and other problems characteristic of heritage cities.

◆ THE PARTNERS

The INTHERWASTE project consists of six project partners: five representing local authorities and an advisory partner – the cities and regions network ACR+ (back cover). Find out more about each project partner, their waste management challenges and their activities within INTHERWASTE in the following pages.

◆ THE STEPS

In order to accomplish its mission, INTHERWASTE employs four steps. Each project partner carried out the first two by March 2019 and the remaining two before the end of the project in 2021.

- Fostering learning and exchanges of best practices and policies;
- Integrating the knowledge into action plans;
- Monitoring the implementation of the action plans;
- Sharing the solutions with other European cities.

◆ IN BRIEF

One of the largest cities in Andalusia, Spain, Córdoba relies on services like tourism and trade to sustain its 328,000-strong population. Its old town occupies over 7% of its territory and is the result of a rich and chequered history that goes back to Roman times.

◆ SITUATIONAL ANALYSIS

Municipal waste company SADECO, in operation since 1986, introduced separate waste collection in the city as early as 1994. Thanks to ongoing efforts towards and investments in sustainable waste management, Córdoba has attained high overall recycling rates, exceeding the EU-mandated targets for both 2020 and 2030. Due to the large service component in its economy, OFMSW* accounts for almost half of municipal waste (figure 1). To continue to improve waste management, the company relies on technical exchanges with national and international counterparts and on adapting its practices to the needs and specificity of the different neighbourhoods in Córdoba.

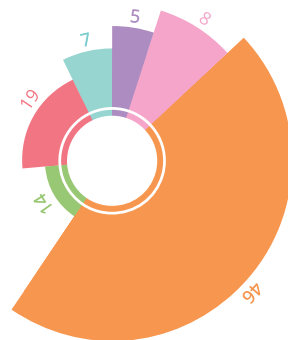


Figure 1: Breakdown of waste in Córdoba by fraction (2016)

■ Glass
 ■ Others
 ■ OFMSW*
 ■ Metal
 ■ Paper
 ■ Plastic

*OFMSW = organic fraction of municipal solid waste

◆ ACTION PLAN

SADECO has incorporated the learnings it derived from INTHERWASTE into a plan comprised of three actions:

- Action 1: the introduction of compacting containers;
- Action 2: the creation of a comprehensive municipal network for repair and reuse;
- Action 3: the creation of an app to promote reuse in the region of Andalusia.



◆ IN BRIEF

The largest settlement in the world-famous idyllic island, the city of Ibiza also relies on the hospitality sector for much of its economic activity. Its old town, which was declared a UNESCO World Heritage Site in 1999, is home to 1,487 dwellers and almost 200 restaurants. The tourist influx to the city is seasonal, with the peak season lasting from May to October.

◆ SITUATIONAL ANALYSIS

Waste is managed differently in the crowded old town compared to the rest of the city. In the former, waste is deposited in underground containers that are three times smaller compared to the overground ones placed in the rest of the city. It is also collected twice more often compared to the rest of the city. In order to avoid disrupting residents and tourists due to noise or odours, waste in this part of town is to be deposited on a schedule. Ibiza does not collect organic waste separately, hence the large proportion of mixed waste in its overall waste generation (figure 2).

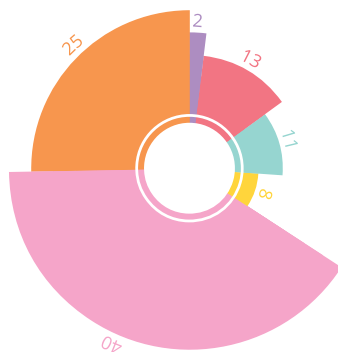


Figure 2: Breakdown of waste in Ibiza by fraction (2016)

■ Glass
 ■ Others
 ■ OFMSW
 ■ Metal
 ■ Textile
 ■ Plastic

◆ ACTION PLAN

Ibiza has incorporated the learnings it derived from INTHERWASTE into a plan comprised of three actions:

- Action 1: the beautification of the underground waste containers and surrounding areas located in the historical centre;
- Action 2: the development of a waste room in the heritage area;
- Action 3: the development of a new waste management ordinance for the city.



Kraków

KRAKOW

◆ IN BRIEF

Poland's second largest city, Krakow, receives an estimated 12 million visitors every year; in contrast, its population is 768,000. It also boasts an old town that is a UNESCO World Heritage Site and a rich cultural, academic and artistic life resulting from its historical importance as a former capital and economic and cultural hub.

◆ SITUATIONAL ANALYSIS

The municipality has sought to incentivise waste separation at source by changing the legislation in 2013 to allow for two-tiered waste collection fees, whereby residents are charged less for separate than for mixed waste. For certain fractions – like textiles – Krakow has set up functional teams that pick up such items upon demand (figure 3).

◆ ACTION PLAN

Krakow has incorporated the learnings it derived from INTHERWASTE into a plan comprised of two actions:

- Action 1: the introduction of underground and semi-underground containers;
- Action 2: the development of a repair and reuse site in the city.

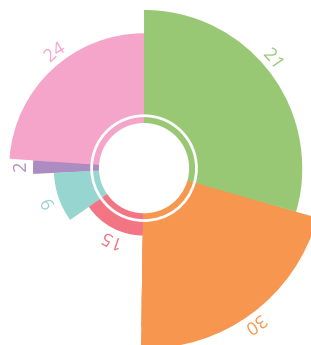


Figure 3: Breakdown of waste in Krakow by fraction (2016)

■ Glass ■ Others ■ OFMSW
■ Metal ■ Paper ■ Plastic



PORTO

◆ IN BRIEF

Portugal's second largest city, Porto has a population of 215,000, a number that is dwarfed by that of the almost three million tourists visiting it annually. Its historical centre, which is also a UNESCO World Heritage Site, is characterised by steep inclines, abrupt altitude differences and narrow roads that often include staircases and are therefore exclusively pedestrian.

◆ SITUATIONAL ANALYSIS

Porto practices selective collection using collective containers for households and door-to-door collection for commercial clients. The former can deposit four fractions of waste (plastic and metal, glass, mixed and paper and cardboard) in containers located throughout the city. Meanwhile, businesses receive differently coloured bags to collect the various waste fractions and bins for food waste.

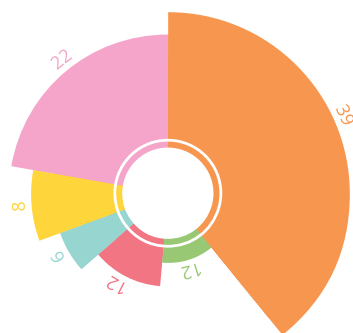


Figure 4: Breakdown of waste in Porto by fraction (2016)

■ Glass
 ■ Others
 ■ OFMSW
 ■ Textile
 ■ Paper
 ■ Plastic

◆ ACTION PLAN

Porto has incorporated the learnings it derived from INTHERWASTE into a plan comprised of five actions:

- Action 1: the development of waste room(s) in the heritage area;
- Action 2: the development of a residential door-to-door selective collection in a restricted area;
- Action 3: local policy review to adjust and update the local regulations regarding waste management and urban cleaning;
- Action 4: the development of a communication strategy to boost the adaptation and transition to the new waste management system;
- Action 5: municipal action plan review to include the specific actions foreseen for the heritage area.

◆ IN BRIEF

Just like the other participants in INHERWASTE, Estonia's capital city receives an inflow of tourists that is significantly larger than its population: 4.4 million yearly versus 450,000 residents. Its charismatic old town is a conflation of hospitality businesses, various services (e.g.: beauty parlors, shops), diplomatic delegations and historical buildings. It also hosts a number of events and festivals over the course of the year.

◆ SITUATIONAL ANALYSIS

Estonia overhauled its waste policy after joining the EU in 2004 to replace its old system based on unsanitary landfills with separate waste collection and door-to-door collection. The changes have enabled Estonia to meet its EU-mandated recycling targets for 2020. In Tallinn, the municipal waste company practices a multi-tiered fee system; the highest fees being for mixed waste and non-recyclable waste and the lowest for separate waste fractions.

◆ ACTION PLAN

Tallinn has incorporated the learnings it derived from INHERWASTE into a plan comprised of two actions. The plan is to be carried out by 2021. The two actions are:

- Action 1: Giving bulky waste a second life through repair and resale;
- Action 2: Mobile Clean Point for hazardous waste.

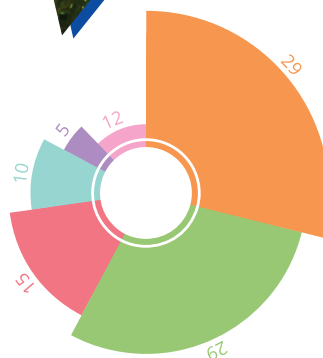


Figure 5: Breakdown of waste in Tallinn by fraction (2016)

■ Glass ■ Others ■ OFMSW
■ Metal ■ Paper ■ Plastic

◆ WHO WE ARE

Based out of Brussels, ACR+ (Association of Cities and Regions for sustainable Resource management) is an international network of cities and regions sharing the aim of sustainable resource management and transitioning towards a circular economy on their territories. By bringing together local and regional actors under the umbrella of the same organisation, we aim to:

- contribute to waste prevention in Europe and internationally;
- promote the transition to circular economy;
- solve the challenges encountered in the implementation of circular economy policies;
- encourage practical action in waste management and sustainable consumption;
- support the harmonisation of concepts and standards in waste management.

◆ OUR ROLE IN INThERWASTE

ACR+ is in charge of providing expertise to the partnership at different stages of the project, thus helping to consolidate the knowledge base. ACR+ also organised a capacity building event to train partner city representatives in the use of different waste monitoring tools for their management at city level ([Pre-waste](#), [Miniwaste](#), [R4R](#), the [EWWWR](#) platform and others). In addition, the association coordinates the communication activities for the project, ensuring its visibility and the dissemination of good practices and policies derived within it.

◆ ACR+ IN NUMBERS



1994

the year ACR+ was founded



100+

number of ACR+ members



25

nationalities represented
in ACR+



1000+

municipalities represented

GOOD — PRACTICES

Over the last three years, four thematic seminars corresponding to the main themes covered by the project were organised. The gatherings enabled the participating cities to present the solutions they implemented to address the various challenges imposed by waste management in UNESCO heritage sites. They also provided

them with insights into what other cities do in this field, drawing from the experience of other project participants, but also of municipalities from other regions and countries. In the end, a total of 50 good practices were identified across the five pilot cities and beyond. Below are some of the most interesting such practices.



CÓRDOBA

These well camouflaged waste rooms, which can be found all across Córdoba's heritage area, serve 32,000 residents and were installed in 2011 as an alternative to underground and other types of containers to avoid conflicts with the city's aesthetics and cultural values.



PORTO

Part of Porto's heritage area, Ribeira is also a hotspot for commercial activities, with restaurants and cafes being the predominant ones. Since 2015, the city has therefore provided a door-to-door collection of different waste fractions, including biowaste, twice a day.



IBIZA

In order to facilitate the recycling of glass by local businesses, Ibiza introduced in 2010 the Individual Wheelie Bin Tipper. This mounted mechanism helps commerces empty their own containers into the larger glass collection containers located around the city by tipping them. It thus contributes to increasing the rate of selectively collected glass.



KRAKOW

Krakow decided to fight single-use plastic consumption, which is common in tourist destinations, by introducing a mandatory fee for 15-50 μm thick plastic bags in 2018. Ranging from 6 to 24 euro cents, this measure should reduce their consumption by 30% in the first year alone.



TALLINN

Since 2015, NGO CupCycle has been promoting a service aimed at helping event organisers avoid the use of disposable cups. The solution consists of a reusable cup, for which a 10 euro cent fee per cup is charged from the event organiser and a 2 euro deposit from event guests. These fees cover the expenses of washing up, logistics, storing and staff.

