

#ZeroWasteCities

# Starting Scenarios to become a Zero Waste City

## Scenario 3: Going beyond just recycling to total tackle waste generation

# Introduction

Adopting and implementing a local zero waste strategy allows municipalities to save resources, create jobs and concretely go down the path of circularity. However, the diversity of situations in Europe does not allow for each city to follow general guidelines and, depending on where they're already at, the priority policies needed to achieve zero waste differ regularly.

Therefore, this publication is part of a series of scenarios written by Zero Waste Europe to give guidance to specific contexts commonly found across Europe. We do not aim to be comprehensive, nor to define a specific context precisely matching one municipality. Instead we want to identify just some of the realities we see municipalities face on a daily basis, and provide adapted paths towards becoming zero waste.

## Baseline scenario

### Geographical context

- Between 100,000 - 500,000 inhabitants, medium-large municipality
- Between 200-500 inhabitants per km<sup>2</sup>: medium density

### Waste management context

- Very high municipal waste generation, between 550 - 800 kilograms of waste per inhabitants per year;
- High separate collection rate, between 50% and 70%, including high capture rates for most dry recyclables. Bio-waste collection remains low though, with no PAYT system;
- High reliance on incineration over landfill. Sometimes, waste is imported from elsewhere in Europe to meet the high incineration capacity requirements;
- Most incineration plants have some form of energy capture which is fed into the local energy system. Less than 10% of the non-recyclable waste is landfilled;
- Several waste prevention measures are in operation locally already but they are uncoordinated and all organised voluntarily with little direct involvement from the city.

# What are the main policies to focus on?

## 1. Begin the transition away from incineration:

With contracted goals to meet and profits required to be made, incinerators create a lock-in effect for the continued need of waste to be generated. At the next available opportunity, it is crucially important to begin transitioning away from this disposal method. The capacity for waste incineration should be reduced as soon as possible, with a clear timetable for eventual phase-out adopted. With the right prevention and recycling policies in place, cities can ensure they will be generating much less waste than before and therefore no longer in need of the same incineration capacity.

### To go further, read:

- [Zero Waste Europe's policy briefing on why a rethinking of the current EU Landfill target is needed](#)
- [The case study on Capannori](#)

## 2. Amend existing treatment & disposal sites to prioritise sorting and capture of recyclables:

Cities should be amending existing sites and plants to ensure as much recyclable waste is captured as possible before disposal, and that any disposed waste is safely pre-treated. “Material Recovery and Biological Treatment (MRBT)” systems are those that combine biological treatment and sorting equipment that allow cities to “stabilise” the organics that are included in residual waste, so as to minimise their impact once buried in a landfill, while also helping to recover key materials still found in residual waste after separate collection. MRBT systems also ensure the necessary infrastructure already exists to deal with an increasing volume of recyclable materials being captured, as a city’s collection system improves once a zero waste strategy is implemented.

### To go further, read:

- [Zero Waste Europe's policy briefing on what MRBT is and how it can an effective tool to transitionally manage dwindling residual waste totals](#)
- [The case study of Contarina](#)

### 3. Embed the need for waste prevention across the city:

Municipalities should look at waste prevention through two lenses - what is in their direct and indirect spheres of influence. Within their direct sphere of influence is the ability to require only reusable products used in all public spaces and events, some cities have already implemented a total ban on single-use plastic items in such events. Furthermore, such policies can include embedding criteria within all public procurement tenders & services which prioritise those who focus on circular solutions/policies, as well as the ability to design a collection system which prioritises reuse & repair over recycling. This includes greater access to reuse centres and repair initiatives for key materials like electronics, textiles and furniture. The collection & washing of nappies is also an important policy solution which should be part of this action plan.

#### To go further, read:

- [The case study on Halle 2, Munich's innovative reuse hub](#)
- [The case study of Roubaix](#)

### 4. Optimise the collection & recycling system, especially for organics:

Start by conducting a residual waste assessment to better understand what items & materials continue to not be separated for recycling. If the capture of organics is low, prioritise this by providing all households with the necessary equipment (bin / bags) to separate these materials. For households who can, provide them with either equipment or financial incentives (e.g. discounts etc) to encourage them to home compost. For those in more densely populated areas, identify locations where community compost sites can be established for several households to use. If neither can be done at the scale needed, begin plans to build a central composting plant, or if not, anaerobic digestion, to sustainably manage the organic waste.

#### To go further, read:

- [The case study of Milan](#)
- [The case study of Parma](#)

# Conclusion

In this situation, the foundations for a successful zero waste strategy are already established. Yet much more is needed to be done in order to truly work towards becoming zero waste, namely through a reduction in waste incineration and in total waste generation. Both will require longer-term policy-making but both bring huge potential benefits for both the environment and local community. Non-recyclable waste can be reduced dramatically by more effectively collecting organics, embedding waste prevention as the priority over recycling and by maximising the recovery of materials through technologies which efficiently sort waste before pre-treatment.

**This publication is part of a three-part series.**

→ **Read the other scenarios.**

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Zero Waste Europe is the European network of communities, local leaders, experts and change agents working towards the elimination of waste in our society. We empower communities to redesign their relationship with resources, and to adopt smarter lifestyles and sustainable consumption patterns in line with a circular economy.



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