



# ZERO WASTE AMBASSADOR CURRICULUM



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**The BEZWA project (Building a European Zero Waste Academy)** was an Erasmus+ funded collaboration between five organisations with the main aim to create a strong educational framework in support of the zero waste cities movement in Europe.



[Društvo Ekologi brez meja](#) is one of the leading Slovenian NGOs dedicated to improving the state of our environment – focusing on efficient resource use and active citizenship. Most of their activities deal with waste at its source and they also run the Slovenian network of zero waste municipalities.



[Let's Do It Foundation](#) is a social enterprise that consults, trains and mentors public and private organisations to help scale societal change and innovation for successful implementation of zero waste and circular economy principles. LDIF also directly advocates and promotes policies and develops tools to create new solutions.



[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 advocate for sustainable systems and the redesign of our relationship with resources, to accelerate a just transition towards zero waste for the benefit of people and the planet.



[Estonian University of Life Sciences](#) has priorities in academic and research activities, which provide the sustainable development of natural resources necessary for the existence of Man as well as the preservation of heritage and habitat. Research is carried out in three institutes: Institute of Forestry and Engineering, Institute of Agricultural and Environmental Sciences, and Institute of Veterinary Medicine and Animal Sciences. We are the first in Estonia to provide education about waste management.



[Tallinn University](#) is a modern and dynamic research university in Estonia with a leading role in promoting an intelligent lifestyle through education, research, and a unique collaboration across disciplines. We view an intelligent lifestyle as making research-based decisions in order to improve society in general and the well-being of its citizens.



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# INTRODUCTION



## WHAT IS THE ZERO WASTE AMBASSADOR TRAINING COURSE AND WHY IS IT IMPORTANT?

The European Union is steadily increasing its focus on moving to a circular economy, as evident by recent programmes like the Green Deal. A more effective way of handling waste and resources, increasing the reuse and recycling of materials will thus be a priority for governments in the coming years. Considering half of the EU Member States were unable to meet the 50% municipal solid waste recycling target in 2020 and are lagging behind the 2024 mandatory bio-waste separate collection requirement and the 2025 55% recycling target, there is a clear and urgent need to support the waste management sector to become more circular. It is stuck at the old goal of a recycling society, while waste prevention remains mostly a thing of nominal support and is largely deferred to activists. Achieving greater circularity requires constant work with local stakeholders, especially improving the skills and knowledge related to better resource management.

It is within this context and the subsequent urgent need for change that the authors decided to create a structured curriculum to facilitate training of Zero Waste Ambassadors.

The aim of the course is to strengthen and spread zero waste competences among changemakers across Europe, and to empower them to support and drive their communities towards long term systemic change. This curriculum provides educators with a framework and a set of activities to be able to teach the most important concepts and practical knowledge of how to implement zero waste strategies at the local level.

In order to drive the transition towards a zero waste society in Europe, local level, community-led change is imperative. For communities to be leading change, they need active, informed and energetic ambassadors working within them, helping support local authorities in policy design and the wider community with the implementation of zero waste strategies. The curriculum was designed in a way so that any group or individual looking to organise zero waste trainings for potential new ambassadors can easily use the framework and resources provided within this document. The authors believe that by making this curriculum and supporting material publicly available, they will help to enable the scaling up of zero waste knowledge and practical ability to apply such thinking across Europe, playing an important role in the continent's transition to zero waste – one community at a time.

## RELATION TO THE EUROPEAN SKILLS AGENDA AND KEY COMPETENCES FOR LIFELONG LEARNING

The Zero Waste Ambassador curriculum also supports the European Skills Agenda.<sup>1</sup> In particular by contributing to its Action 6: Skills to support the twin transition (to a Green and Digital EU), namely:

- Developing a European competence framework on education for climate change, environmental issues, clean energy transition and sustainable development, which will spell out the different levels of green competence.
- Supporting the development of a core green skills set for the labour market to guide training across the economy with a view to creating a generation of climate, environment and health conscious professionals and green economic operators.
- Helping to integrate environmental and climate considerations into school, higher education, vocational education and training, as well as professional training.

The design of the curriculum also took into account competences as defined by European Council's *Recommendation on Key Competences for Lifelong Learning*.<sup>2</sup> All those competences are covered, naturally some in greater detail than others, with multilingualism the only one not being specifically taken into account. However, since the training course and materials are in English, which is not the mother tongue of most EU citizens, an improved linguistic competence is expected in most cases – at least an improvement of waste-related vocabulary.

## AUTHORS AND THE CREATION OF THIS CURRICULUM

This curriculum has been created as part of the Erasmus+ funded project “Building a European Zero Waste Academy”. The authors are from five organisations, bringing together necessary experience and expertise in the field:

- Zero Waste Europe: the main umbrella organisation in Europe for zero waste related work and research
- Ekologi brez meja: civil society organisation with long experience in national and local zero waste work and advocacy
- Let's Do It Foundation: civil society organisation with experience in active citizenship projects, environmental awareness and non-formal education
- Estonian University of Life Sciences, chair of rural building and water management: long term experience in teaching waste management and treatment
- Tallinn University, school of educational sciences: scientific knowledge of educational psychology

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<sup>1</sup> [European Skills Agenda for sustainable competitiveness, social fairness and resilience](#), European Commission, 2020

<sup>2</sup> [Recommendation on Key Competences for Lifelong Learning](#), European Council, 2018

The curriculum was developed in several stages, with a 2021 pilot training event with a test group in Slovenia forming its core. First, information was collected through an open call for participants for the training course, where applicants had to share their background and motivation for joining the course. This gave insight into the main target group, their general profile, knowledge and needs for capacity building. Since from the beginning the aim was to create a longer learning process (a training course) than just one on-site training event, the pilot training course already included pre- and post-tasks for the learners, as well as webinar before and after the on-site training event, each of them giving further input for curriculum development. The post-task, which was about engaging with local stakeholders, helped to test and get feedback on the training format and content and its usefulness for the learners. Finally the project team also conducted interviews with all the people from the test group 4 months after the on-site training event (18 interviews), to assess the impact of the course in a longer time frame.

## DEFINITIONS

To avoid any confusion, this section includes definitions of key terms related to the process and design of the training course. For content related questions consult the Zero Waste Training Handbook instead.

A **training course** is the implementation of a curriculum.

A **learner** is a participant of the training course (a person who is participating in the learning process).

An **educator** is a trainer or facilitator (a person who teaches, trains or facilitates people to help learners to acquire knowledge, competence or virtue).

**Zero waste** is the conservation of all resources by means of responsible production, consumption, reuse and recovery of products, packaging and materials without burning, and with no discharges to land, water, or air that threaten the environment or human health. This is the definition of Zero Waste as adopted by the Zero Waste International Alliance.

A **Zero Waste Ambassador** is a person who can argue, convince, advise local decision makers on zero waste policies and business models, with at least a medium level of zero waste expertise.

**Competences** are a combination of knowledge, skills and attitudes. As described in "Key competences for lifelong learning" by European Commission:<sup>3</sup>

**Knowledge** is composed of the concepts, facts and figures, ideas and theories which are already established, and support the understanding of a certain area or subject.

**Skills** are defined as the ability to carry out processes and use the existing knowledge to achieve results.

**Attitudes** are the disposition and mindset to act or react to ideas, persons or situations.

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<sup>3</sup> [Key competences for lifelong learning](#), European Commission, 2019



# CURRICULUM DESIGN





## OVERALL GOALS AND OBJECTIVES

The objective of the curriculum is to guide educators to teach and empower their learners with a scientific approach to become Zero Waste Ambassadors at a medium level of expertise who:

- will improve their local waste management systems and advocate for a zero waste approach to benefit the environment and local economy (eg. advise local decision makers on zero waste policies and business models),
- are actively willing to champion sustainable waste management and reduction in all areas of the local community,
- will strive to promote zero waste values that will be vital in communicating proper reduction and disposal methods.

The main target group of the curriculum are members of different community groups and organisations, operating on local, regional or the national level. But this curriculum is also suitable for individuals with high levels of motivation from related sectors (municipalities themselves, waste management, repair, reuse...). They can already be experienced activists or are only starting to take interest in influencing waste management policies in their communities.

## EXPECTED ACHIEVEMENTS AND RESULTS

Learners shall demonstrate that the acquired competences match the target ones specified for each chapter of this curriculum. On top of that some evaluation activities are proposed.

Learners will increase their competences in three focus areas, elaborated on the next page:

- technical,
- policy and advocacy,
- soft (social) skills.

These were chosen as experiential high level groupings of often overlapping competences and serve to make easier sense of the curriculum. The competences themselves were drawn from a discussion on what makes a good Zero Waste Ambassador, informed by the authors' existing contacts and experiences in this field, supplemented by a further analysis of current gaps. In essence they are a minimal set that answer the question of what sort of learner would be most successful at driving zero waste related change at the local level.

## ZERO WASTE AMBASSADOR COMPETENCE MATRIX

Competences	Technical	Policy and advocacy	General social skills
<b>Attitudes</b>	<ul style="list-style-type: none"> <li>Valuing the zero waste approach to resource management<sup>4</sup> and its general contribution to human wellbeing and environmental conservation</li> <li>Valuing a data-based approach and critical thinking towards data sources and analysis</li> </ul>	<ul style="list-style-type: none"> <li>Valuing transparent and participatory policymaking</li> <li>Proactivity in finding and creating solutions</li> </ul>	<ul style="list-style-type: none"> <li>Confidence, positivity, patience, empathy, trying to see things from different perspectives</li> <li>Valuing the support of quality motivation of stakeholders</li> </ul>
<b>Knowledge</b>	<ul style="list-style-type: none"> <li>What is zero waste, what it is not, manifestations of zero waste, its place in the circular economy</li> <li>What is the zero waste city model, what can local authorities do to reduce waste and why this is important, best practice examples</li> <li>Basic understanding of origins, forms and hazards of key waste streams, and their prevention and reuse potentials</li> <li>What are preferred waste management, reduction and treatment options, and why some are better than the others (zero waste hierarchy)</li> </ul>	<ul style="list-style-type: none"> <li>What are the relevant prevention and reduction policies (as well as the importance of reducing waste, not only recycling)</li> <li>What is the legislative framework for the adoption of those policies at the European, national and local levels</li> </ul>	<ul style="list-style-type: none"> <li>The essence and importance of quality motivation (three basic psychological needs)</li> <li>How to hold effective meetings</li> <li>Basics of how humans learn</li> <li>Communication tools and approaches</li> </ul>
<b>Skills</b>	<ul style="list-style-type: none"> <li>Ability to apply zero waste principles to different practical contexts (analyse waste problems and suggest basic solutions for prevention or elimination of the consequences of existing waste pollution)</li> <li>Ability to work with data: make decisions based on data, collect and compute data, read and use it in various situations, assess the quality of data</li> </ul>	<ul style="list-style-type: none"> <li>Ability to advocate for zero waste (understanding legislation and the political landscape, public speaking, finding allies)</li> <li>Ability to lead and to spread the zero waste philosophy</li> </ul>	<ul style="list-style-type: none"> <li>Ability to understand, relate and engage with different stakeholders and map their needs (communication adapted to different groups, understanding human behaviour)</li> <li>Ability to assess one's own skill level in being a Zero Waste Ambassador</li> <li>Ability to direct one's learning more effectively</li> </ul>

<sup>4</sup> Producing only what we need, keeping it in use for as long as possible, trying to put it back into circulation after use, creating no harm during disposal...

## BASIS FOR SELECTING PARTICIPANTS FOR THE TRAINING

The participants (learners) can be selected based on their interest and experience in zero waste activities, working with municipalities and other local stakeholders. Additional criteria for selection of participants can be their motivation letters and positions within their organisations. They should already have some understanding of zero waste principles, but perhaps lack the skills to properly advocate for it. Think of different sectors connected to zero waste and creating appropriate criteria for participant selection in the application process. As the focus of this curriculum is a transition towards zero waste on the level of municipalities, ideally the learners should be active on the local level, either formally or informally.

### Example of used criteria for the application process:

Who can apply?

- They work (including volunteering) in the field of waste management, zero waste, circular economy or any other sustainability field.
- At least some of their work is focused on the local (municipality) level.
- They are in the beginning level of their zero waste journey and want to know more.

To support and bring more transparency to the selection process it is advised to prepare some questions to help to understand the motivation of the participants, and foresee the potential impact they could have taking this training on their municipality and/or local waste management system.

Below are **example questions to help you with the selection process** and give you more information about the participants. After each question one can find the motivation behind it and the insights it can provide.

- **What is zero waste to you?** (Aim: to see the level of understanding of zero waste, is it mainly in terms of lifestyle, or does the person think of it also in the sense of systemic change. For the training it is advisable that the participants have thought a bit beyond lifestyle level already).
- **In your opinion what are the roles of different stakeholders in order to achieve the transition towards zero waste?** (Aim: to see if the person recognizes the potential impact by the role of each stakeholder. For the training it is advisable if participants know at least how the municipality and waste management roles work).
- **If and what kind of experiences do you have at a local level (community groups, municipalities etc.) regarding zero waste or any other sustainability topic?** (Aim: to see the areas of work which could be developed further within zero waste initiatives).
- **What excites you about this training opportunity and how would it support your existing work to bring zero waste principles to communities?** (Aim: to see the motivation behind the application and potential impact that this training could have for the community).

## ON-SITE TRAINING FORMAT AND PREPARATION

The format was designed as a five day training. The example agenda disclosed in Annex 1 is just a recommendation for educators on how to design their own training events. They are free to change this agenda and adapt it to the situation at hand.

### When planning a training there are some general things to consider:

- length of the training,
- objectives of the training,
- length of the session,
- training material that will support the learning process,
- training location,
- registration and promotion of the training.

### Diversity of approaches: teaching and learning methods

While planning the sessions please refer to the Trainer's part of the handbook.<sup>5</sup> Each educator has the freedom to decide which learning methods to use, but for those who need more practical guidance, some examples are included with each content chapter.

*Key to remember:*

To support the learning process one should create a motivating learning environment that will support the three basic psychological needs of the learners:

- relatedness,
- competence,
- autonomy.

For more information on how these needs can be supported in training settings, read the learning motivation chapter of the handbook.<sup>6</sup>

### What to keep in mind when planning sessions to maximise learning:

The Trainer's checklist of the handbook presents some guiding principles. Educators can also reflect on the pilot training programme format, as the suggested activities were prepared to be compliant with both session objectives and best session planning practices.

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<sup>5</sup> Zero Waste Training Handbook, BEZWA, 2022

<sup>6</sup> "Learning motivation aka how to get everyone on board on environmental issues?" in Zero Waste Training Handbook, BEZWA, 2022



# CONTENT OF THE CURRICULUM



The training course covers different zero waste aspects and approaches combined with diverse learning methods and sustainability topics. Each section consists of a short introduction to the topic, key objectives to cover minimum competences and some suggestions to go deeper into the topic – to level it up. These are complemented by examples and ideas for learning activities.

The structure of the content is built around the logic that one starts with zero waste basics, continues with the work on data, moves onto different waste treatment methods, followed by waste prevention and different policies associated with repair, reuse and refill. This is supplemented with a part on communication with stakeholders, going to the field to see best practices, and putting learned knowledge and skills into practice within zero waste role play. Although metacognition (thinking about how you think and learn) is also part of the training course, it is described in more detail in the Zero Waste Trainer curriculum.

The pilot training also included pre- and post-training homework and similarly two webinars (on learning, on policy). First to prime the learners and get them to know their local waste management situation better, the second to complement the on-site training and to nudge them to put their gained knowledge to a practical test. The webinars mainly serve to have extra time for learning activities: the first webinar before on-site training can serve as first networking between the participants but also to help them analyse a bit more deeply how to learn effectively. The second webinar can mostly be used to tackle topics that did not get enough time during the on-site training and where more discussion is needed.

The overall structure of the curriculum is shown in the table below, while the agenda for the pilot on-site training held in Slovenia can be found in Annex 1. While the Zero Waste Ambassador Competence Matrix gives an overview of all relevant competences that could be developed, the table shows them in basic and level up sections. This is because in the 5-day pilot training event the focus was only on gaining basic competences, which is achievable in that timeframe. The table could be however used also in a vertical direction, by focusing on one topic and building a training event around only that, with the aim to reach both basic and level up competences.

Note that the included examples of learning activities are indeed just examples and should not be used without the understanding why they are designed like that. For the basis of how learning activities should be set up and what to take into account, the authors recommend first reading the Zero Waste Trainer part of the handbook.<sup>7</sup>

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<sup>7</sup> Zero Waste Training Handbook, BEZWA, 2022



## STRUCTURE OF THE CURRICULUM, FOCUSING ON THE CORE PART OF THE TRAINING EVENT

Every day	Day 1	Day 2	
<b>Metacognition: reflection and self-assessment</b>	<b>Zero Waste Cities basics: zero waste definition, hierarchy</b>	<b>Working with data, part 1: how to read</b>	<b>Waste treatment hierarchy</b>
<b>Basic competences</b>			
<ul style="list-style-type: none"> <li>• Ability to assess one's own skill level in being a Zero Waste Ambassador</li> <li>• Ability to direct one's learning more effectively</li> </ul>	<ul style="list-style-type: none"> <li>• Understanding the philosophy behind zero waste</li> <li>• Knowing the zero waste hierarchy</li> <li>• Recognizing the importance of waste prevention and continuous improvement</li> <li>• Understanding the key framework of a zero waste city</li> <li>• Ability to identify benefits of being a Zero Waste City</li> <li>• Knowing why local authorities are key targets of zero waste work</li> <li>• Ability to cite examples of where the model has been applied effectively</li> </ul>	<ul style="list-style-type: none"> <li>• Understanding what data is important to collect</li> <li>• Knowing the purpose of having updated data</li> <li>• Understanding what is key waste data and how to collect it</li> <li>• Understanding how to interpret the data</li> <li>• Ability to assess the quality of data</li> </ul>	<ul style="list-style-type: none"> <li>• Understanding source separation and collection options for different waste types</li> <li>• Understanding methods and technologies at each level of the EU waste hierarchy</li> <li>• Ability to critically evaluate the role of recycling within the European context today and within the zero waste hierarchy</li> <li>• Understanding the current benefits and limitations of recycling and the lack of comprehensive data</li> <li>• To feel confident and comfortable with the definitions of recycling and material recovery</li> <li>• To recognise the importance of data and rooting work in reality</li> </ul>
<b>Level up</b>			
<ul style="list-style-type: none"> <li>• Ability to plan for the topics or skills one would like to improve</li> </ul>	<ul style="list-style-type: none"> <li>• Ability to identify good zero waste practices and false solutions (greenwashing)</li> <li>• Having insights into the common misconceptions about waste and zero waste</li> <li>• Understanding a city's responsibilities</li> <li>• Knowing the Zero Waste Cities programme and its European network</li> <li>• Ability to identify key local policies that have been successful in Europe</li> <li>• Understanding what are the most common barriers preventing municipalities from adopting ambitious zero waste strategies and what can be done to overcome them</li> </ul>	<ul style="list-style-type: none"> <li>• Ability to conduct a waste audit and use it for data collection</li> <li>• Knowing key data sources in Europe and for one's local community</li> <li>• Ability to calculate unit generation rates</li> <li>• Knowing how to compare your data with others (city, country, EU level)</li> <li>• Ability to calculate recovery rates and compare them with national targets</li> </ul>	<ul style="list-style-type: none"> <li>• Knowing how to optimise source separation and waste collection</li> <li>• Knowing how waste treatment facilities work (MBT, MRBT)</li> <li>• To be familiar with how a large scale composting works</li> <li>• Knowing how to select composting methods for different cities</li> <li>• Understanding the specific recycling process for key waste streams, complexities within it and trends</li> <li>• Understanding Extended Producer Responsibility (EPR) and Deposit Return Schemes (DRS) as a policy approach</li> <li>• Understanding how global waste trade works</li> <li>• Understanding the basics of material quality classes</li> <li>• Understanding of the potential of waste quality audits</li> </ul>
	<b>Section 1</b>	<b>Section 2.1</b>	<b>Section 3</b>

## STRUCTURE OF THE CURRICULUM, FOCUSING ON THE CORE PART OF THE TRAINING EVENT

Day 3		Day 4		Day 5
Site visits	Waste prevention and supporting policies	Working with data, part 2: how to use	Communication with stakeholders: three basic needs	Zero Waste City role play game
<b>Basic competences</b>				
<ul style="list-style-type: none"> <li>Understanding how zero waste works in practice and different contexts influencing it</li> <li>Knowing different zero waste best practices</li> </ul>	<ul style="list-style-type: none"> <li>Knowing what are the main tools (policies) for waste prevention and reduction</li> <li>Knowing the key principles of a local reuse strategy and how they can be applied in participants' own contexts</li> <li>Understanding why we need effective policies for the reuse of packaging</li> <li>Understanding what are the pros and cons of different prevention policies</li> <li>Understanding the meaning of circular economy and the role of waste management in it</li> </ul>	<ul style="list-style-type: none"> <li>Ability to efficiently present data</li> <li>Ability to avoid common interpretation mistakes</li> <li>Ability to make and propose decisions based on data</li> </ul>	<ul style="list-style-type: none"> <li>Understanding why effective communication is so important</li> <li>Ability to take into account the three basic psychological needs in stakeholder communication</li> <li>Ability to recognize the roles and characteristics of different local stakeholders and engage with them</li> <li>Ability to identify which stakeholders are critical to zero waste becoming a success</li> <li>Ability to set the basics for communication and the introduction of data about zero waste to different target audiences</li> <li>Ability to identify which aspects of zero waste are important to different target audiences</li> </ul>	<ul style="list-style-type: none"> <li>Ability to transfer the knowledge and skills on zero waste to local environment (community) and to support its implementation</li> </ul>
<b>Level up</b>				
<ul style="list-style-type: none"> <li>Ability to evaluate if these policies could be implemented in one's own community</li> </ul>	<ul style="list-style-type: none"> <li>What is the legislative framework for adoption of prevention policies</li> <li>To be familiar with the Circular Economy Action Plan(s) and the wider implications of a circular economy.</li> <li>Ability to outline a green public procurement policy for a city</li> <li>To be familiar with the climate implications of the current and circular economies</li> </ul>	<ul style="list-style-type: none"> <li>Understanding the limitations of working with data and modelling.</li> <li>Ability to draw scenarios of waste treatment (e.g current situation versus national target values versus zero waste).</li> </ul>	<ul style="list-style-type: none"> <li>Ability to meaningfully engage with the stakeholders, so that they themselves feel ownership of zero waste</li> <li>To be familiar with the Zero Waste Trainer's part of the handbook or have taken the training itself</li> <li>Ability to cultivate a sense of curiosity in the audience</li> <li>Ability to get a sense of how the audience engages with different alternatives to come to a decision about what action to take</li> <li>To be familiar with Zero Waste Europe's zero waste cities case studies and the key stakeholders involved</li> </ul>	<ul style="list-style-type: none"> <li>Ability to work with disruptions within one's team and community</li> <li>To get familiar with mediation techniques</li> <li>Ability to develop a longer term advocacy strategy</li> </ul>
<b>Section 6</b>	<b>Section 4</b>	<b>Section 2.2</b>	<b>Section 5</b>	<b>Section 7</b>

Additionally: online activities before the training event contribute to the competences related to metacognition (webinar) and data (homework), activities after the training event further support the competences related to waste prevention (webinar) and applying the principles in local context (homework).



# 1. ZERO WASTE BASICS

In this section learners will be introduced to the concept of zero waste as the central theme linking the whole training course together. Despite having a formal definition the concept is a delicate matter, since deliberate misinterpretation is common and often needs to be publicly addressed. A strong understanding of core zero waste principles is therefore key to a confident ambassador.

## 1.1 What is zero waste?

Zero waste is increasingly being adopted as a “toolkit” to turn the Circular Economy vision into practice at the local level. It takes into consideration the conservation of all resources through responsible production, consumption, reuse to recovery of products, packaging, and materials without burning and with no harmful discharges to the environment or human health. Zero waste is also the willingness of decision-makers to apply these policies within their communities. In this session learners will confront the often ambiguous reality of zero waste and start building a common understanding in line with official definitions and concepts.

### Objectives:

- Understanding the philosophy behind the zero waste concept (what is zero waste and what is not, why it is important).
- Knowing the zero waste hierarchy (why it is different in comparison to the EU waste hierarchy).
- Recognizing the importance of waste prevention and continuous improvement.

### Examples of learning activities:

- Ask participants to define what zero waste is and to give one example of it; try to compare it between each definition, and then compare it to the official one; this activity is a great way to illustrate that zero waste means different things to different people and can be applied to various domains (lifestyle, cities, businesses, events, products and more).
- Ask if they think some controversial items (eg. bananas or biodegradable cups) or processes (incineration) are zero waste, followed by a discussion exploring why they think so.
- Ask them to create their own waste hierarchy, priority list of dealing with products and waste, then discuss the ordering implications and differences when compared to the zero waste hierarchy.

## Level it up objectives:

- Ability to identify good zero waste practices and false solutions (greenwashing).
- Having insights into the common misconceptions about waste and zero waste.

## 1.2 The Zero Waste Cities model

The zero waste city model is one that is widely used in Europe today and is based upon local communities making continuous efforts to phase out waste – not by burning or landfilling it – but instead by creating and implementing systems that do not generate waste in the first place. During this session, learners will understand what are the key principles any zero waste city should follow, what ambitious local zero waste strategies and policies are already implemented by existing zero waste cities today, and how these have been designed.

### Objectives:

- Understanding the key framework of a zero waste city (structure, functions, measures).
- Ability to identify benefits of being a zero waste city.
- Knowing why local authorities are key targets and a focus area of zero waste work (the role of cities in zero waste).
- Ability to cite different examples of where the model has been applied effectively.

### Examples of learning activities:

- Ask participants to describe or draw what they think a zero waste city is (values, policies, as a place to live etc.) and share these back with the wider group. The outcome is to have a big list of themes, policies and values which could be grouped together to showcase what a zero waste city is.
- Group work to begin mapping what the potential benefits of becoming a zero waste city could be for local authorities, looking specifically at environmental, economic and social benefits, but also identifying zero waste policies which result in each benefit.
- Presenting on the framework of a zero waste city and where there are successful examples of these across Europe. Participants should be encouraged to identify commonalities from each zero waste city – what is required to be successful and how could a similar context be created in their own community?

### Level it up objectives:

- Understanding how a municipality works (its responsibilities).
- Knowing the Zero Waste Cities programme and its European network.
- Ability to identify key local policies that have been successful in Europe and give example implementations (cities) for each.
- Understanding what are the most common barriers preventing municipalities from adopting ambitious zero waste strategies and what can be done to overcome them.

## 2. DATA AS UNDERPINNING OF ZERO WASTE STRATEGIES

Data is essential when assessing the current state of the city and its waste management system, setting recycling and recovery targets, calculating waste treatment trends and identifying potential problem areas. Accurate waste data provides a foundation for implementing effective waste management.

It is crucial that Zero Waste Ambassadors know where to get reliable data and how to interpret it, as that allows them to better develop and advocate for sustainable solid waste management at the local level.

### 2.1 Data from a case city

Learners will better understand data from their own city while comparing it to data from others and any national target values.

#### Objectives:

- Knowing the purpose of having updated data (for policy making, for planning, design and implementation reasons).
- Understanding what is key waste data and how to collect it.
- Understanding how to interpret the data.
- Ability to assess the quality of data.

## Examples of learning activities:

- Beforehand, ask participants to find data about municipal waste (amount, composition, separation rate).
- Beforehand, ask participants to find data about source separated waste streams (packaging, paper, glass, hazardous waste, e-waste, bulky waste, construction and demolition waste).
- Ask participants to analyse that data and make conclusions. Build on their thoughts, acknowledge some of the mistakes they made in data collection and interpretation, and discuss how this could be avoided next time.
- Describe the source separation system and responsibilities for collection. Ask participants to design a source-separation system for an individual house, building of city government, residential city area. Discuss pros and cons.

## Level it up objectives:

- Ability to calculate unit generation rates (weight/person/time).
- Ability to conduct a waste audit (of mixed municipal waste, mixed packaging waste or source separated biowaste) and use it for data collection.
- Knowing key data sources in Europe and for one's local community.
- Knowing how to compare your data with others (city, country, EU level).
- Ability to calculate recovery rates and compare them with national recovery targets.

## 2.2 Data and advocacy

Acquiring waste management and related data might not be easy, but the real challenge is in its interpretation, presentation and value-added use.

### Objectives:

- Ability to make and propose decisions based on data.
- Ability to efficiently present data to target audiences.
- Ability to avoid common interpretation mistakes.

## Examples of learning activities:

- Ask participants to interpret deliberately bad data or graphs, then propose corrections and discuss the elusiveness of quality data and best data presentation practices.
- Ask participants to visualise waste generation rates and waste composition, then compare them to reality.
- Present trends in waste management in relation to European and/or national waste recycling targets and discuss their disparities.
- Ask participants to construct a data model for a given problem, for example “When does reusable nappies use make economic sense?”, then give feedback.

## Level it up objectives:

- Understanding the limitations of working with data and modelling.
- Ability to draw scenarios of waste treatment (e.g current situation versus national target values versus zero waste).



## 3. UNDERSTANDING WASTE MANAGEMENT AND THE WASTE HIERARCHY

Learners will be able to understand how waste management systems work: collection of different waste materials, pre-treatment with manual or automatic sorting and preparing them for further treatment. They will understand the way modern waste management is conducted, study the technologies which are described in the waste hierarchy, and view the actors responsible. Knowing the principles of common waste recycling technologies will allow the participants to understand the potential of different zero waste policies while applying all levels of the zero waste hierarchy.

### 3.1 Waste management methods

In this part, learners will gain knowledge about the overarching modern waste management framework and the phases that waste undergoes.

#### Objectives:

- Understanding source separation and collection options for different waste types.
- Understanding methods and technologies at each level of the EU waste hierarchy:
  - Knowledge of major waste pre-treatment methods (manual and automatic sorting, shredding and sieving).
  - Knowledge of major waste treatment technologies (material recycling).
  - Knowledge of major biowaste treatment technologies (composting and digestion).
  - Knowledge of major waste disposal technologies (landfilling, incineration).
  - Ability to analyse the pros and cons of all waste treatment and disposal methods.

#### Examples of learning activities:

- Ask participants to review their local source separation and collection system.
- Set open questions, eg. "Why are particular waste fractions collected like they are?", "How would you arrange different treatments into a waste hierarchy?".
- Ask participants to describe waste treatment technologies and equipment along levels described in the waste hierarchy.
- Ask participants to come up with pros and cons for each technology, before providing and discussing with them the expert view.
- Compare human waste management to how it is done in nature.
- Showcase or visit real examples of small scale composting or waste-to-material facilities.
- Ask participants to draft safety rules for each waste treatment and disposal method.

### Level it up objectives:

- Knowing how to optimise source separation and waste collection.
- Understanding the basics of material quality classes.
- Knowing how waste treatment facilities work (MBT – mechanical biological treatment and MRBT – material recovery, biological treatment).
- To be familiar with how a large scale composting works (visit or see a showcase).
- Knowing how to select composting methods for different cities.
- Better understanding of the potential of redesigning the products or improving separate collection in order to facilitate material recycling – by conducting a waste quality audit.

## 3.2 Recycling: the what and how

Learners will learn the benefits and challenges of recycling, also gaining an understanding of zero waste measures related to them.

### Objectives:

- Ability to critically evaluate the role of recycling within the European context today and within the zero waste hierarchy.
- Understanding the current benefits and limitations of recycling and the lack of comprehensive data.
- To feel confident and comfortable with the definitions of recycling and material recovery.
- To recognise the importance of data and rooting work in reality.

### Examples of learning activities:

Scale of views on recycling: This activity requires participants to physically stand somewhere on a scale between fully agree and fully disagree (like the mercury in a mercury thermometer), once the educator has read out each of four different statements. Participants are encouraged to explain why they are standing where they are on the scale and the educator should ask several participants to give feedback in order to foster a wider discussion about each statement.

The purpose is to engage participants in some of the key challenges Europe's current recycling system poses:

- *"Adding a deposit onto this item, that can be given back once the item is returned, will increase the amount of items that are returned"* which is designed to get participants to consider Deposit Return Schemes (DRS)<sup>8</sup> and the best methods available to increase collection for recycling.
- *"This item that is made from 100 % recycled content is safe for me to use"* which is designed to get participants to consider the health hazards of using unregulated recycled content, particularly in food contact materials.
- *"If a product is 100% recyclable then 100% of it will be recycled"* which is designed to get participants to consider claims of recyclability in contrast to the current reality.
- *"There is enough capacity within Europe today to recycle all of the recyclable materials which are collected"* which is designed to get participants to consider illegal global waste trade, infrastructural capacities and the limitations of the current system.

This exercise should be followed by a concluding discussion or presentation that covers the most important and relevant topics related to recycling (eg. concepts of output quality – downcycling and upcycling). Educators should highlight the importance of recycling as the foundation of a zero waste system, whilst also introducing its intricacies and the reasons behind its limitations and current failures. Participants should leave with a good overall understanding of how to advocate for better recycling whilst also knowing where the recycling system can and should be improved here in Europe.

### Level it up objectives:

- Understanding Deposit Return Schemes (DRS) as a policy approach.
- Understanding Extended Producer Responsibility (EPR) as a policy approach.
- Understanding the specific recycling process for key waste streams (paper, plastic, metals, e-waste etc.), complexities within it and trends.
- Understanding how global waste trade works.

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<sup>8</sup> [Deposit Return Systems \(DRS\) Manifesto](#), Zero Waste Europe, 2019





## 4. WASTE PREVENTION AND REUSE POLICIES

Learners will learn why prevention and reuse are the top priorities, even before waste management, and how policy instruments and actions can impose effective reduction measures before products became waste. They will understand the reasons for the EU's ongoing transition from a linear economy to a circular one, the ambitions involved and the role of waste management in this process.

### Objectives:

- Knowing what are the main tools (policies) for waste prevention and reduction.
- Knowing the key principles of a local reuse strategy and how they can be applied in participants' own contexts.
- Understanding why we need effective policies for the reuse of packaging.
- Understanding what are the pros and cons of different prevention policies.
- Understanding the meaning of circular economy and the role of waste management in it.

### Examples of learning activities:

- Ask participants to identify waste prevention measures from the personal, community, company and national level, and where the emphasis should be.
- Show atypical examples and policies from Europe or the wider world, focusing on community level solutions and innovations.
- Deconstruct an existing local reuse strategy.
- Ask participants to draft a transition scenario from linear to circular, based on the example of a selected industry.

### Level it up objectives:

- Knowing what is the legislative framework for adoption of prevention policies.
- To be familiar with the European Circular Economy Action Plan(s) and the wider implications and added value of a circular economy.
- Ability to outline a green public procurement policy for a municipality, focusing on waste prevention and reuse.
- To be familiar with the climate implications of the current and circular economies.

## 5. COMMUNICATION WITH STAKEHOLDERS

Appropriate infrastructure and policies are important pillars, but their effectiveness will be greatly reduced without excellent communication and community engagement. They can improve compliance and participation in separate collection, indirectly increase recycling, and boost waste prevention initiatives.

### 5.1 Three basic psychological needs – the basis of any communication

Learners will gain basic knowledge of quality motivation – they will understand the three basic psychological needs underlying it and how to support them in communication with any stakeholder. Although the topic is detailed in the Zero Waste Trainer curriculum,<sup>9</sup> the main principles are important for any communication where we want people to start sharing our views.

#### Objectives:

- Understanding the essence and importance of quality motivation.
- Ability to take into account the three basic psychological needs in stakeholder communication.

#### Examples of learning activities:

- Discussion of what is the basis for motivation for Zero Waste Ambassadors themselves and what could be the motivation for stakeholders who they communicate zero waste to, and the differences between those motivations.
- Short introduction into the self-determination theory – the leading scientific theory on motivation.
- Group exercises on trying to guess the three basic needs based on situation descriptions where these needs are suppressed.
- Introduction of the three basic needs, a discussion on how to support them in communication with any stakeholder and what activities or behaviours of ours may implicitly suppress these needs.

#### Level it up objective:

- To be familiar with the Zero Waste Trainer's part of the handbook or have taken the training itself.

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<sup>9</sup> See chapter "Learning motivation aka how to get everyone on board on environmental issues?" in Zero Waste Training Handbook, BEZWA, 2022

## 5.2 How to talk about zero waste

Learners will learn how important it is to know one's target audience. They will gain basic knowledge of how to adapt language accordingly, while keeping in mind the common cause of having empowered, connected and durable movements for zero waste.

### Objectives:

- Ability to set the basics for communication (ingredients for effective communication framing) and the introduction of data about zero waste to different target audiences.
- Ability to recognize which aspects of zero waste are important to different target audiences (for example from kids to elders).
- Ability to develop communications (key messages) that are easy to understand and even easier to act upon.
- Understanding why effective communication is so important.

### Examples of learning activities:

- A group exercise where each group needs to design a message about what zero waste is for different age groups – e.g. children, teenagers, young families, adults, elderly; followed by presentation of each message and discussion about how the age group relates to the message and what zero waste means to each group.
- A pairwise roleplay exercise where one person assumes a different age and age appropriate mentality, while the other tries to explain zero waste to them. One starts with a 5-year old and gradually increases the age with each round of the exercise. The participants take turns, so no age is repeated. More advanced learners can do a similar exercise, assuming adults, but who have different levels of knowledge: from complete ignorance to expert.

### Level it up objectives:

- Ability to recognize which aspects of zero waste are important also to non-age differentiated target audiences (eg. laymen to professionals, citizens to officials, uneducated to academic, poor to rich etc.).
- Ability to get a sense of how the audience engages with different alternatives to come to a decision about what action to take (finding a way to relate).
- Ability to cultivate a sense of curiosity in the audience (create motivation to engage so the message will stick; avoid spoon-feeding the audience the moral or meaning of the story).

## 5.3 Who are the potential stakeholders and how to approach them

Learners need to understand how stakeholders think about problems they would like to find solutions for. They need to identify, map and prioritize stakeholders to push for zero waste.

### Objectives:

- Ability to recognize the roles and characteristics of different local stakeholders (their demographics, interests, motivation etc.).
- Ability to identify which stakeholders are critical to zero waste becoming a success.
- Ability to identify and develop key messages for each stakeholder.

### Examples of learning activities:

- A group exercise where each group picks one stakeholder in their community that they think could be responsible for solving a chosen problem (among zero waste topics), does research on that stakeholder, finds connections and builds a short communication plan of how they would approach the stakeholder.

### Level it up objectives:

- To be familiar with Zero Waste Europe's zero waste cities case studies and the key stakeholders involved for their success stories.
- Ability to meaningfully engage with the stakeholders and support their three basic psychological needs (so that they themselves feel ownership of the zero waste solutions).



## 6. BEST PRACTICES AND SITE VISITS

For practical learning the authors suggest including some study visits of best practices. On one hand to get a feel for what is a good practice and what is not, but also to reflect on what others do and what is possible to be replicated in the learner's local environment. Additionally, study visits or best practice presentations are opportunities to hear and learn from zero waste frontrunners about how a city can move towards zero waste in practice. They also offer a possibility to make contacts for future site visits and networking between municipalities.

Good choices to visit or have presented include:

- Practices, policies and innovations targeting the top levels of the waste hierarchy (rethinking, reduction, reuse, preparation for reuse).
- Waste management optimizations and economic incentives.
- Communication and engagement practices.
- All at the levels of municipalities, public institutions, businesses or civil society organisations – the greater diversity, the better. Similarly it is good to have a wide array of waste streams represented, not just the umbrella municipal solid waste.

For example, the pilot on-site training included site visits of waste management facilities, reuse centers and a zero waste hotel, alongside some external guests that visited the venue. Participants discussed the struggles and successes with them, and also learned about sustainability practices in one kindergarten (e.g. washable diapers, gardening and composting, chicken husbandry, reducing hazardous waste and of course education).



## 7. PUTTING LEARNED THINGS INTO PRACTICE

This is the final step of the training where the learners are put into different situations within a hypothetical city through a game of meeting different stakeholders. The aim of the game is to propose a zero waste plan for the city (or to some element of it) and then adapt the strategy to the feedback and changing circumstances. It is one of the most important parts of the training where learners get to practice the learned competences in safe, yet close-to-real-life situations. At the same time the role play is a form of a test of the whole training event, where educators get a better sense of learners' skill level.

### Objectives:

- Ability to transfer zero waste knowledge and skills to the local environment (community) and to support its implementation of zero waste.

To assess the Zero Waste Ambassador competences, there are several scenarios for different local situations varying by:

- Size of the city/area.
- Waste management specifics with some key data available.
- Policy background.
- Other local specifics (rurality, existing prevention measures, wealth etc.).
- Disruptions.

Learners are put into groups and for each group there is one city profile, scenario, where they need to suggest zero waste solutions. Each group needs to talk to at least three different stakeholders within the game, plus one stakeholder who changes the situation after a disruption is introduced:

- Municipality ((new) mayor, head of city budget, city's waste management team...).
- Waste management ((new) waste company owner).
- Local media.

At the end participants should reflect on their experience, time management, mitigations taken, perceived success or failure, and changes in their future approach to such situations. Trainers as experts will give their feedback and advice at the end of the whole session.

The full role play game with scenarios, stakeholder profiles and expert comments on solutions can be found in the handbook chapter "Zero Waste City role play".<sup>10</sup>

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<sup>10</sup> Zero Waste Training Handbook, BEZWA, 2022

## Level it up objectives:

- Ability to work with disruptions within one's team and community.
- To get familiar with mediation techniques.
- Ability to develop a longer term advocacy strategy.

The role play game can be developed further and made longer with additional scenarios, disruptions and elements.

## Pre-training activities

The training programme also includes pre-training activities in the form of a webinar and a data gathering assignment.

The introductory webinar should be held at least a month before the on-site training and is a good opportunity for:

- the learners to get to know each other,
- first discussions around how and when learning happens, opening one's learning illusions about memory, thinking, motivation and metacognition,
- introducing the whole timeline of the training course and individual pre-work,
- helping educators to understand what pre-existing knowledge and misconceptions the learners have, and helping learners get a sense of the topics of the training course.

The purpose of the data gathering assignment is to get them to discover the waste management situation (actors, quantities) and community practices in the municipality where they will be conducting their work. Additionally, ideally this data is used for analysis, comparison and presentation in the first data session of the training course itself. Consult Annex 2 for an example set of questions.



## Post-training activities

Learners are given a task to have at least one meeting with local public stakeholders within their municipality to push for zero waste. The rationale for the activity was fourfold:

- To give them an opportunity to test their competences in a non-simulated environment.
- To have them plan and make first steps as Zero Waste Ambassadors towards implementing zero waste locally.
- To boost their confidence and have them realise that, even just as engaged citizens, they wield more power than they might have thought.
- To help them better understand their own competence level, and where they would need to and want to improve.

Afterwards the participants deserve feedback and recognition for their work, so create a process where this sharing can be done. In the pilot training course this consisted of written meeting reports and a widely scoped final interview, which is further elaborated in the next section. Templates for the reports were shared ahead of time to also help participants prepare better for the meetings.

Consider also organising a webinar to cover any topics that were overly rushed, skipped or the need for them became apparent only during the on-site training.

## Evaluation and self-evaluation

As mentioned earlier, ideally a final evaluation would be organised in the form of individual interviews, where participants reflect on their training, their local meetings, future plans, learning needs and their strong and weak points when it comes to being a Zero Waste Ambassador (see Annex 3 for an example). The questions should be defined in a way that helps them focus on the journey ahead. Another section of the interview focuses on learning evaluation more comprehensively by challenging them with finding solutions to waste related problems in two to three hypothetical scenarios.

An optional form of self-evaluation was used at the on-site training. Participants were asked to write down answers to a list of probing questions, once at the start and then at the end of the training, to be able to reflect on its impact.

Consult the metacognition chapter<sup>11</sup> in the handbook for an example self-evaluation sheet and assessment chapter<sup>12</sup> for general evaluation resources. The role play game itself is also an opportunity for evaluation.

And lastly, participants can always evaluate their learning themselves by comparing their competences with the learning objectives in this curriculum.

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<sup>11</sup> "Metacognition aka how to keep track of your own learning?", Zero Waste Training Handbook, BEZWA, 2022

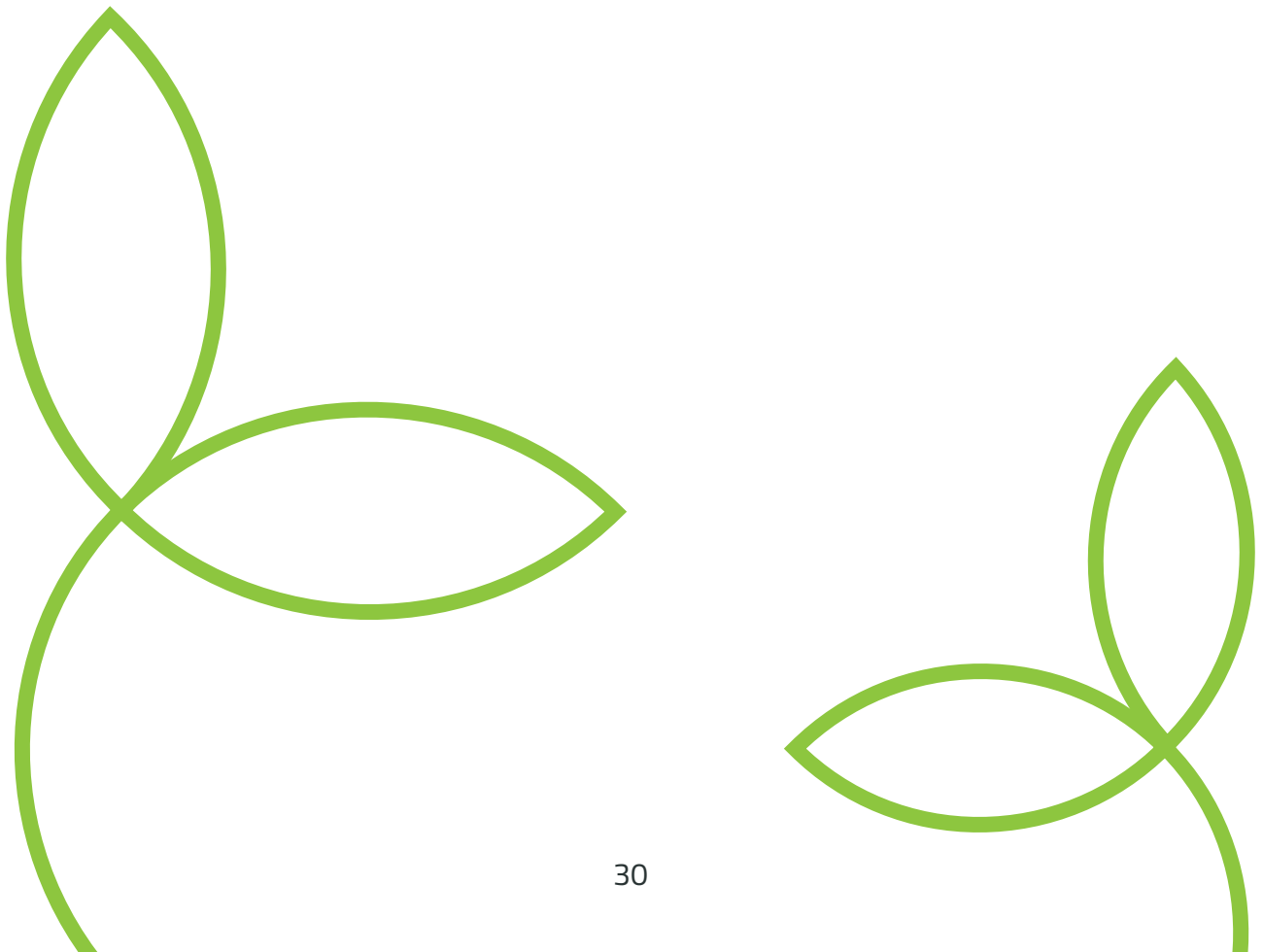
<sup>12</sup> "Assessment aka how do you know that learning happened?", Zero Waste Training Handbook, BEZWA, 2022



# CONCLUDING REMARKS

It is worth repeating that the curriculum is a malleable framework for teaching Zero Waste Ambassadors, not a strict prescription of the detailed process itself. One can shrink or expand its timeline, use additional exercises and methods of teaching, directly include topics that are relegated to “level up” competences and so on. However, for a well rounded Zero Waste Ambassador, it is important to ensure the same learning outcomes are reached, regardless of the way taken there.

The pilot training and this curriculum were intricately linked into a feedback loop. The curriculum may get further updates with new insights and feedback through additional implementations of the training course. Nonetheless, the authors hope it is already a valuable resource to would-be zero waste educators interested in spreading zero waste knowledge and values to future ambassadors.





# ANNEXES



## ANNEX 1: EXAMPLE OF THE ON-SITE TRAINING PROGRAMME FOR ZERO WASTE AMBASSADORS

The recommended training event targets 12-25 participants for at least five days. As there is a lot of content to cover, it is prudent to try to limit days to 7 hours (including breaks and lunch).

The following agenda is based on the agenda for the pilot training that was held in Slovenia, but it is further enhanced with feedback and experience from the pilot. Feel free to adapt it as needed.

<b>DAY 1: Zero Waste Cities basics</b>	
<b>Length</b>	<b>SESSION title + Activity plan</b>
<b>1 h</b>	<b>"Welcome session"</b> <ul style="list-style-type: none"> <li>• Expectations and objectives</li> <li>• Agenda</li> <li>• Setting the role as Zero Waste Ambassador</li> </ul>
<b>1 h</b>	<b>"What is zero waste?"</b> <ul style="list-style-type: none"> <li>• Guided discussion through probing questions, the definition and hierarchy</li> <li>• Difference in zero waste at different levels (city, individual/lifestyle, business...), vs circular economy (vs other similar concepts)</li> </ul>
<b>Break</b>	
<b>1.5 h</b>	<b>"Zero Waste Cities model"</b> <ul style="list-style-type: none"> <li>• Why municipalities?</li> <li>• What is a Zero Waste City?</li> <li>• The benefits of being a Zero Waste City</li> <li>• Zero Waste Cities best practices</li> <li>• Summary of key policies to focus on</li> </ul>
<b>Lunch</b>	
<b>1 h</b>	<b>Best practice presentation: "Struggle Story from Hotel Ribno"</b> <ul style="list-style-type: none"> <li>• Presenting the work on zero waste within hospitality &amp; tourism business</li> <li>• Insights of the biggest challenges and the benefits when running a zero waste hotel</li> </ul>
<b>Break</b>	
<b>1 h</b>	<b>Best practice presentation: "Tourism and zero waste in Bled"</b> <ul style="list-style-type: none"> <li>• Presenting how local authorities collaborate with the tourism sector to reduce waste and raise awareness</li> </ul>
<b>0.5 h</b>	<b>Closing &amp; reflection</b>

## DAY 2: Working with data – how to read & Waste treatment hierarchy

Length	SESSION title + Activity plan
0.5 h	Warm-up & agenda of the day
1 h	<p><b>“Data from your city”</b></p> <ul style="list-style-type: none"> <li>• Waste classification</li> <li>• Waste composition</li> <li>• Comparing and analysing collected data from learners’ cities</li> <li>• Why do we need data and what kind of data do we need?</li> </ul>
<b>Break</b>	
1.5 h	<p><b>“Waste treatment methods”</b></p> <ul style="list-style-type: none"> <li>• What are the collection and processing technologies options?</li> <li>• Foundations of local zero waste strategies: separate collection and reduction of residual waste</li> <li>• Virtual study tour of MRBT facility (explaining different WM processes)</li> <li>• Assessing the pros and cons of different WM methods</li> </ul>
<b>Lunch</b>	
1.5 h	<p><b>“Recycling - the what, how and why”</b></p> <ul style="list-style-type: none"> <li>• Focus on separate collection</li> <li>• Definition of recycling</li> <li>• Student’s view on recycling (group discussion)</li> <li>• Learn the benefits and challenges of recycling from upcycling to downcycling</li> <li>• Understanding zero waste strategies as they affect each stage of a product’s lifecycle – LCA</li> <li>• Understanding composting basics</li> </ul>
<b>Break</b>	
1.5 h	<p><b>“Reuse is underused”</b></p> <ul style="list-style-type: none"> <li>• Local reuse strategies: redesign, refill and repair with the local community</li> <li>• Discussion &amp; presentation on key definitions</li> <li>• Role of municipalities in preventing waste</li> <li>• Mapping of reuse initiatives - what, who and how (group exercise)</li> <li>• Key principles for local reuse strategies</li> </ul>
0.5 h	Closing & reflection



## DAY 3: Site visits & Waste prevention and supporting policies

Length	SESSION title + Activity plan
3 h	<b>Best practice visit (waste management facility)</b> <ul style="list-style-type: none"> <li>• Local WM presentation</li> <li>• A collection centre</li> <li>• A washable nappies presentation from a local kindergarten</li> <li>• A reuse centre</li> </ul>
<b>Lunch</b>	
2 h	<b>Best practice visit or waste audit</b>
1 h	<b>Closing &amp; reflection</b> <ul style="list-style-type: none"> <li>• <i>What did they see today that could be replicated or adapted in their community / municipality?</i></li> <li>• <i>What has worked well in the place of visit? Why do you think they have been so successful? What can still be improved?</i></li> </ul>

## DAY 4: Working with data – how to use & Communication with stakeholders

Length	SESSION title + Activity plan
0.5 h	<b>Warm-up &amp; agenda of the day</b>
1 h	<b>“Data and advocacy”</b> <ul style="list-style-type: none"> <li>• Critical thinking on how to read data, use it, what data is useful</li> <li>• Group work: modelling exercise &amp; showing the importance of rooting work in reality</li> </ul>
<b>Break</b>	
1.5 h	<b>Communication:</b> <b>“Three basic psychological needs – the basis of any communication”</b>
<b>Lunch</b>	
2 h	<b>Communication:</b> <b>“How to talk about zero waste”</b> <ul style="list-style-type: none"> <li>• How to introduce zero waste to different groups?</li> <li>• Storytelling and what to relate to?</li> <li>• Which aspect is important for each group? What is zero waste to these groups?</li> </ul> <b>“Who are potential stakeholders and how to approach them?”</b> <ul style="list-style-type: none"> <li>• Together identify key stakeholders and their potential roles connected to waste prevention</li> <li>• Group work: designing the message for each group of stakeholders</li> </ul> <b>From theory to practice</b> <ul style="list-style-type: none"> <li>• Role and intricacies of working with social media</li> <li>• Individual work: setting up a communications plan</li> </ul>
<b>Break</b>	
1 h	<b>Open discussion on applying the already learnt things practically to one’s own context</b> <ul style="list-style-type: none"> <li>• Ask learners to compare back to the pre-assignment they did</li> </ul>
0.5 h	<b>Closing &amp; reflection</b>

<b>DAY 5: Zero Waste City role play game</b>	
<b>Length</b>	<b>SESSION title + Activity plan</b>
0.5 h	<b>Warm-up &amp; agenda of the day</b>
1 h	<b>"What comes next?"</b> <ul style="list-style-type: none"> <li>• Exercise on making a plan for learner's local situation (introducing post-training task: problem mapping)</li> <li>• Time for individual reflection and planning</li> <li>• Sharing ideas in pairs or small groups for feedback</li> </ul>
<b>Break</b>	
2 h	<b>"Zero Waste City role play game"</b> <ol style="list-style-type: none"> <li>1) Forming groups (4-5 people in groups - 6 groups)</li> <li>2) Groups get a specific municipality case and have to present an intervention to different stakeholders (mayor, landfill owner, local community leader etc. - played by trainers)</li> <li>3) After first/second round there is disruption (pandemic, elections, something else), so they need to change their strategy</li> <li>4) Need to prepare a communication plan on how to talk to different stakeholders and perform</li> <li>5) Reflection round (with prepared questions)</li> </ol>
<b>Lunch</b>	
2 h	<b>"Zero Waste City role play game" - continuation</b>
<b>Break</b>	
1 h	<b>Thank you &amp; follow-ups!</b> <ul style="list-style-type: none"> <li>• Closing the circle and sharing takeaways</li> <li>• Present the post-training assessment and certification process</li> </ul>



## ANNEX 2: EXAMPLE QUESTIONS FOR THE DATA GATHERING ASSIGNMENT

1. Who is responsible for waste management (collection, treatment, recycling) in your municipality?
2. Is there publicly available data on municipal solid waste (MSW) generation, collection and/or recycling within your municipality? If so, can you include this data, with reference to the year which the data is from.
3. How do you assess this data (both national and municipal): is it easy to access? Do you think it is accurate? Is it easily understandable? What could be improved?
4. What types of waste are collected separately for recycling in your municipality? Is there data available on their volume/weight (m<sup>3</sup>, tons) and the % of this within the total MSW? If yes, please provide this information.
5. Has there ever been a waste assessment (study on composition of waste) conducted within your municipality, either by the municipality themselves or by someone else? If so, what was the composition of the waste?
6. What are the treatment methods used in your municipality for organic waste that has been separately collected (if relevant): composting, anaerobic digestion and/or other methods.
7. How does your municipality's non-recycled waste get treated? If there is information on the weight or volume of waste that is sent to landfill and/or incineration, please provide this.
8. How much does every person in your municipality have to pay for the waste collection service per month/year?
9. Do you know what the gate fee (price paid to treat the waste) for either landfilling or incinerating waste, in euros per tonne?
10. What kind of waste prevention initiatives are implemented locally, either led by the municipality or a business? Eg. repair cafes, flea markets, e-waste refurbishment, deposit return schemes.
11. On a scale of 1-5, with 1 being no knowledge and 5 being very knowledgeable, how would you rate the level of citizen knowledge on separate collection of waste (eg. how to sort waste, what is recyclable, what goes to organic waste) with your community? Please explain in more detail why you have chosen this number.

12. On a scale of 1-5, with 1 being no knowledge and 5 being very knowledgeable, how would you rate the level of citizen knowledge on waste prevention (eg. redesign, reuse, repair) with your community? Please explain in more detail why you have chosen this number.
13. Does your municipality publicise their public procurement tenders, requirements or recommendations, for example the purchasing of office materials and for public events? If so, do they mention anything related to preventing waste?
14. What do you think are the 2-3 biggest challenges your municipality is facing regarding waste management and waste reduction?
15. What waste streams do you feel are the most important to prioritise and reduce within your municipality, and why?

## ANNEX 3: EXAMPLE FINAL INTERVIEW QUESTIONS

### Catch up and meeting debriefing

*Provide introduction to the purpose, length and format of the interview*

- Q1. How have you been? How's life etc? (*warm up*)
- Q2. If and what goal(s) did you set yourself during this process of becoming a 'Zero Waste Ambassador?' Do you feel you are on track to achieve this goal? Please explain why.
- Q3. Have there been any other significant factors in your life that have either helped or hold you back in the Zero Waste Ambassador work? You can reply yes/no and only give an explanation if you wish. (*We are asking this because we are also mapping the conditions that could support our trainings*)
- Q4. Feedback to the 2 meetings evaluation the participant has submitted or hasn't, then we can ask why or specific questions based on the evaluations. First questions for everyone:
  - Why do you think we gave you this meeting evaluation task?
  - If and how was this task helpful for you?



## Scenario-based evaluation

*"These are hypothetical questions designed to test your knowledge and understanding of zero waste strategies"*

- Q5.** A municipality is looking to reduce its organic waste and comes to you seeking advice. Currently it offers a separate collection of organics but it is not mandatory - citizens can buy the bags themselves if they want, which will be collected if left out on the street ahead of the designated collection day. There is very little home-composting done because not many households or businesses have gardens. The rest of the organics are sent 100km away to an anaerobic digestion site. What process and approach would you undertake to get to a position where you could confidently suggest policies to this municipality?
- Q6.** Your local municipality has landfilled all of its non-recycled waste in the past. Yet the landfill is now almost full. The municipality is deciding which disposal option to consider - whether to extend the landfill site, build an incineration plant, or decide on a separate/alternative option. Please talk us through the process and approach you would take to get to a position where you could confidently advise them on what to do and consider?
- Q7.** Your municipality wants to reduce its carbon footprint, and it has identified the waste and resource sector as one area where GhG emissions could be much lower. It wants to reduce GhG emissions across the city by 50% within the next 10 years and wants the waste sector to play a leading role in this transition. Municipal officials come to you for policy advice and guidance - what 3-5 measures would you suggest starting with and why and what is the process and approach you would take to get to a position where you could confidently share these suggested measures.

## Local context

- Q8a.** Do you feel your municipality is doing enough on waste management currently?  
From a scale of 1-7: 1 being really disappointing and 7 exceeding all expectations.
- Q8b.** Do you feel your municipality is doing enough on waste prevention currently?  
From a scale of 1-7: 1 being really disappointing and 7 exceeding all expectations.  
Why do you think so?
- Q9.** If you were to identify the top three actions your municipality and/or waste management could take immediately that would help reduce waste, what would they be and why?
- Q10.** If you were stuck in a lift with the head of the national waste department, what would you ask them to spur their interest in zero waste?

## Concluding thoughts/questions

- Q11.** What do you hope to achieve as a Zero Waste Ambassador in 2022?
- Q12.** Nobody can be perfect in everything. What do you consider your zero waste superpower? And what is most difficult/confusing for you in zero waste?
- Q13.** Where do you want to get better and specialise more and where you are not interested in developing yourself?
- Q14.** What can the project team and/or other Zero Waste Ambassadors do to help you achieve this?
- Q15.** Do you have any questions or comments for us and/or on the rest of this specific project?