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e-book

Zero Waste in HoReCa Curriculum



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Introduction

Introduction to the ZW Power project

ZW Power – ‘Zero Waste Power in HoReCa’ Project aims to address environmental challenges related to hotel, restaurant and catering industries in Europe. By raising the awareness of the advantages of zero waste ideology among vocational education students, the project aims to encourage the change in approach to managing a business in the HoReCa sectors. In addition to supporting new coming professionals in hotel and restaurant industries, the project aims to support existing business owners and managers in shifting their businesses into more sustainable operations, and better understanding of zero waste practices.

Zero waste is an approach focusing on waste prevention. It is an ideology intended for both communities **and businesses and should be first and foremost understood as a goal**

postulating change in their lifestyles and practices into more sustainable, rather than a hard target. Sustainability should be understood as an ability to meet present needs without compromising the ability of future generations to meet their own needs. The concept of sustainability is based on three pillars that include natural resources and environment, social resources and economic resources.



Introduction to the ZW Power project



The Zero Waste International Alliance explains that **zero waste is based on '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.'** (Zero Waste International Alliance, 2018)

Mark Sainsbury, co-director of the UK's Sustainable Restaurant Association said that this kind of approach in regard to the HoReCa sector should be understood broader. 'Being sustainable in our industry includes paying staff properly, not overcharging customers, paying suppliers on time, getting involved with the community. To have a finite goal is an impossible aim. It [zero waste] is a journey and restaurants should strive to improve year-on-year. It's not something that can be achieved overnight.'

(Green Hotelier, 2010)

Introduction to the ZW Power project

The main goal of the ZW Power project is to incorporate zero waste standards in vocational education and hotel, restaurant and catering sectors by implementation of new learning and training tools. The project is currently run in Croatia, Spain, Ireland, Slovenia and Italy by seven partners among whom there are three vocational catering schools, two adult education institutions and two private sector organisations. Through this project, partnering organisations will develop blended learning training resources that will facilitate building awareness, acquiring knowledge and skills and assessing business performance in regard to zero waste practices in the HoReCa sector.



Introduction to ZW Power Curriculum

The ZW Power Curriculum is the first of educational resources of the Zero Waste Power in HoReCa Project. It is primarily addressed at participants of vocational education catering schools and aims to provide them with knowledge and skills they need to organise professional kitchens and catering facilities to reduce waste, protect environment and raise zero waste standards. Moreover, the curriculum will offer managers and business owners in the HoReCa sectors tools and procedures, to enable them to measure their zero waste practices.

The main aim of this curriculum is to promote the awareness of a zero-waste philosophy and to contribute to the expansion of attention on zero waste subjects as well as the introduction of new, more sustainable standards in practical work. In addition, the long-term goal of the curriculum is that the knowledge that will be gained by participants, and then their associates in hotel, restaurant or catering facilities will have a positive impact on concrete actions and changes related to day-to-day procedures.



Furthermore, partners of the project hope that building such a capital of knowledge will contribute to raising standards in relation to zero-waste in the HoReCa organisations. In the designing of this curriculum, a broad desk-based research has been conducted in order to ensure that accurate and relevant information is included. A series of topics was selected, and factual and theoretical knowledge is presented on each of these topics.

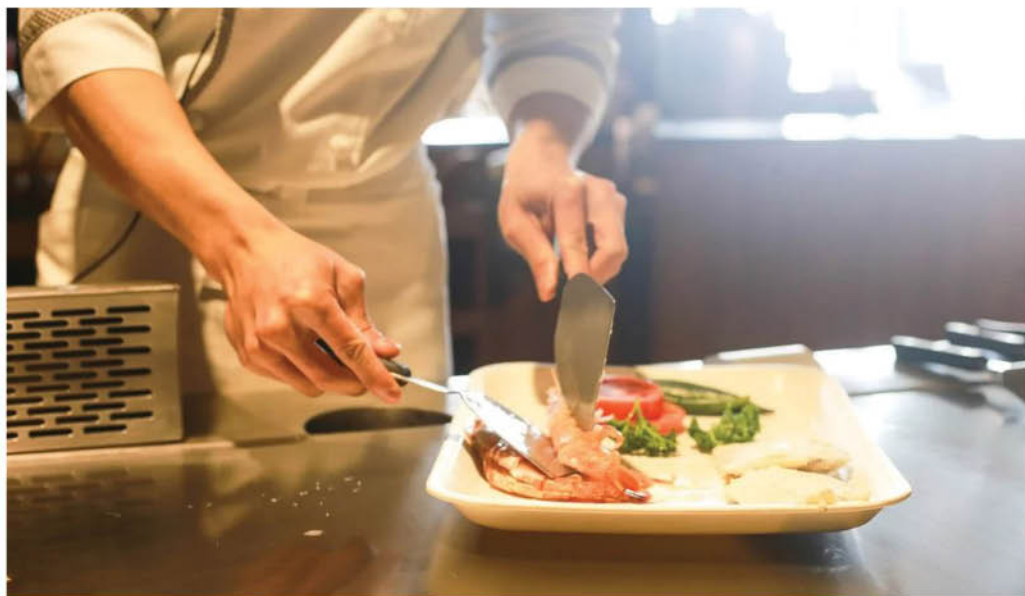
The six thematic Chapters were established, which are as follows:

- 1. Chapter 1 – Kitchen organisation in the HoReCa sector**
- 2. Chapter 2 – Menu planning – Sustainable food**
- 3. Chapter 3 – Waste reduction and recycling**
- 4. Chapter 4 – Packaging**
- 5. Chapter 5 – Energy**
- 6. Chapter 6 – Chemical and pollution reduction**

The main body of the text presents factual and theoretical information with demonstrating how zero waste practices can be implemented in business reality. Each of the chapters is supported by learning outcomes matrix at the beginning and lesson plan at the end of the chapter. These notes are intended to support tutors and adult educators who work with catering and hospitality participants. Additionally, each chapter incorporates various tools such as checklists, calculation sheets and tracking sheets to support both participants and managers in implementing zero waste approach in practice.

Introduction to zero waste concept in the HoReCa sector

The challenges and therefore the responsibilities, faced by the modern economies regarding environment protection are more serious than ever before. This is due to the disturbing and frequently reoccurring environmental data in recent years. The awareness of climate change has spread among all the branches of the world's economies. This forces businesses to understand that without some recognition of the negative impact that the industry has on the environment, no steps for improvement can be taken. The organisations representing hospitality, restaurant and catering sectors are also facing that challenge. Environmental management is no longer only a trend or marketing strategy to attract customers but has become a key aspect of day-to-day operations. Waste management, with a focus on food waste in particular is considered a core element of concern for establishments belonging to the hospitality and catering sectors.

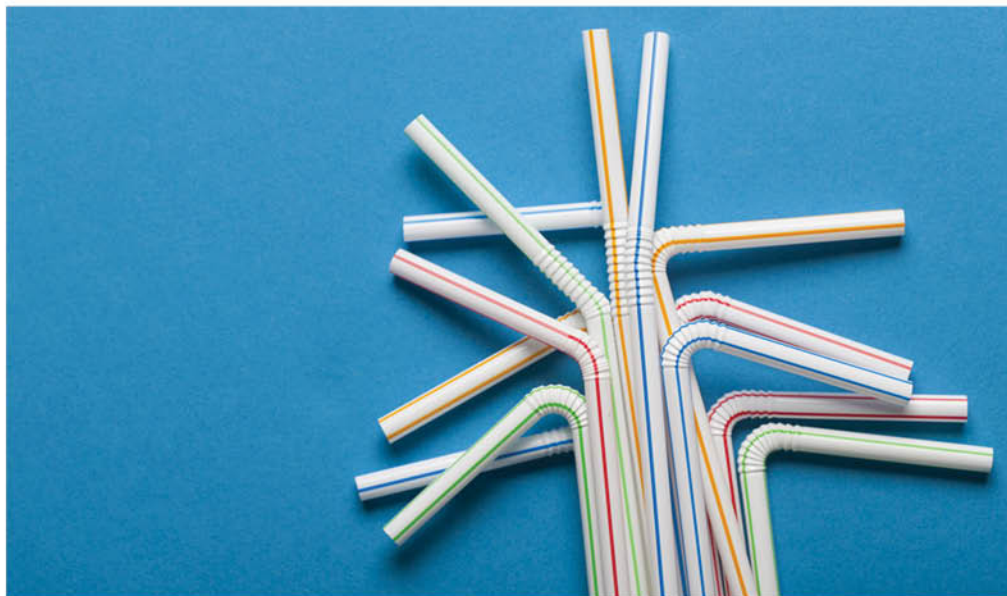


Introduction to zero waste concept in the HoReCa sector

According to the data presented by European Commission, the tourism sector (including hotel and restaurant sectors) contributes to the generation of 6.7% of waste generated around the globe. This may seem like a nonsignificant share, unless it is presented in absolute terms – 35 million tonnes of waste annually. It is considered that accommodation and food sectors are significant contributors to this waste, hence it is understood that they have a great responsibility in supporting the lead of the shift into more zero waste operations.

(Styles, Schonberger, & Galvez Martos, 2013)





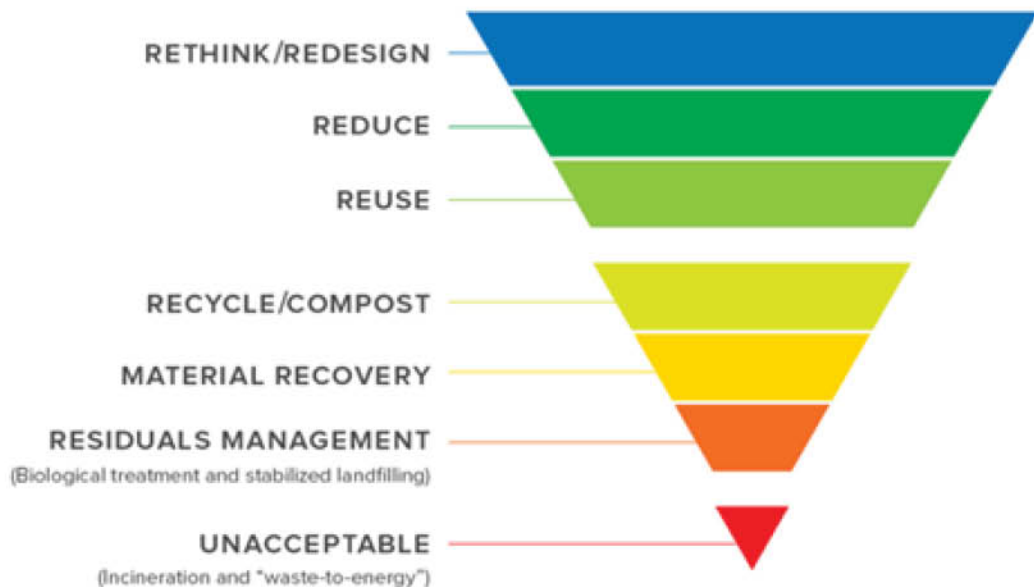
In order to minimise the negative environmental impact of businesses, including those representing the HoReCa sectors, various regulations on national and European levels have been established. **The key goals set by the European Commission that are especially relevant from the perspective of the HoReCa industries include (European Commission, 2015):**

- **Recycling 65 % of municipal waste by 2030**
- **Recycling 75 % of packaging waste by 2030**
- **Reducing landfill to maximum of 10 % of municipal waste by 2030**
- **A ban on landfilling of all recyclable and biodegradable waste by 2025**
- **A 30% reduction of waste by 2025,**
- **Reduction of food waste per person of 30 % by 2025, and 50 % by 2030.**

Introduction to zero waste concept in the HoReCa sector

To support the implementation of a zero waste approach, the European Commission has accepted the hierarchy model of core guidelines for waste reduction. The guidelines are applicable not only to businesses, but to all individuals and policy makers, and aim to lead to overall more sustainable actions. The hierarchy includes following phases (Zero Waste International Alliance, 2018):

Figure 1: The Zero Waste Hierarchy



Source 1: Zero Waste International Alliance (www.zwia.org/zwh).

Introduction to zero waste concept in the HoReCa sector

To help understanding of the model, the phases of the hierarchy are accompanied by the following description (Zero Waste International Alliance, 2018):

- 1. Rethink/Redesign** – redesigning of business models to change the production and consumption schemes in order to decline resource-use and waste
- 2. Reduce**–minimising the quantity and ecological footprint of consumption by primarily reducing the demand for resources
- 3. Reuse** – products that become waste should be able to be re-used without any other pre processing
- 4. Recycle/compost** – quality material recovery from recycling in order to reduce environmental impact of products lifecycle
- 5. Material recovery** – recovery of materials from mixed waste
- 6. Residual management** – what cannot be recovered from mixed waste is biologically stabilised prior to landfilling
- 7. Unacceptable** – options that don't allow material recovery, have high environmental impact and threaten the transition to zero waste

