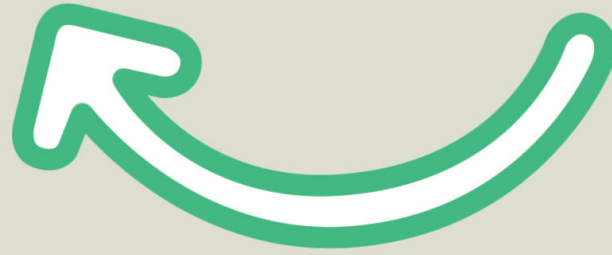




retaste



rethink food waste

Athens, 6-8 May, 2021



Hellenic Mediterranean
University

The RETASTE Conference
was co-organized by
Harokopio University



The RETASTE Conference
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RETASTE:

Rethink Food Waste

Athens, Greece, May 6-8, 2021

Editors

Thrassyvoulos Manios, Hellenic Mediterranean University

Katia Lasaridi, Harokopio University

Ioannis Daliakopoulos, Hellenic Mediterranean University

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The Mission of RETASTE

The global food chain system is the single largest source of greenhouse gasses in the world, and the largest cause of biodiversity loss, terrestrial ecosystem destruction, freshwater consumption, and waterway pollution due to the mismanagement of biocides and nutrients. On top of these deficiencies, approximately 40% of all produced food is wasted throughout the farm to fork processes, while more than 900 million people remain undernourished.

Thus the margin for improvement of the global food chain system is huge, and may unlock pathways towards the stability of the Earth system and the future of humanity. Against this background, the **RETASTE** Conference initiates the dialogue for innovative solutions and optimization schemes that exploit significant opportunities for food waste reduction, reuse, and recycling at all stages of the food life cycle, as well as their scalability and commercial translatability. In parallel, **RETASTE** aims to address the social aspects of food waste issues, as well as to highlight ways to tackle social and perception barriers against reducing our environmental footprint, thus shifting the evolving future of social, market, and global megatrends.

Through the conservation of resources, the strengthening of the social fabric, and the development of new value chains, **RETASTE** supports the implementation of Circular Economy concept.

The audience of **RETASTE** includes academia, industry, and stakeholders, and is truly transdisciplinary as the topics of the conference dictate.

Join us to Rethink Food Waste!

The presidents of the RETASTE Organizing Committee,

Katia Lasaridi

Thrassyvoulos Manios

Professor
Harokopio University

Professor
Hellenic Mediterranean University

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9. SYNANI Katerina, Harokopio University

Introducing Pay as You Throw System and Autonomous Composting Units for Biowaste Management in Municipality of Probistip

¹Marija Hadzi-Nikolova, ¹Gorgi Dimov, ¹Dejan Mirakovski, ¹Afrodita Zendelska, ¹Nikolinka Doneva, ²Vasko Zlatkovski, ³Maragkaki A.E., ³Papadaki A., ³Sabathianakis G., ³Manios T., ⁴Poda A., ⁵Naskova Ljubica, ⁶Misseris T., ⁷Zapounidis K. and ⁸Darko Lazarov

¹*Goce Delcev University, Faculty of Natural and Technical Sciences, 2000 Shtip, Republic of North Macedonia*

²*Goce Delcev University, 2000 Shtip, Republic of North Macedonia*

³*Laboratory of Solid Waste & Wastewater Management, School of Agricultural Technology, Hellenic Mediterranean University - Educational and Research Committee, Heraklion, 71401, Crete, Greece*

⁴*Municipality of Katerini, Pl. Dimarchiou, Katerini, 60133, Greece*

⁵*Municipality of Probistip, 1, Jakim Stojkovski, Probistip, Republic of North Macedonia*

⁶*Municipality of Yermasoyia, 39, Ayias Paraskevis, Yermasoyia, 4044, Cyprus*

⁷*Pieriki Anaptixiaki S.A, 17b, 16th Oktobriou, Katerini, 60100, Greece*

⁸*Goce Delcev University, Faculty of Economy, 2000 Shtip, Republic of North Macedonia*

Abstract

Municipal Solid Waste management is still one of the major environmental challenges at national level, and although with national and regional waste plans in place. Republic of North Macedonia with its eight regions has only one regional landfill active, and at least 54 non-standard municipal landfills and hundreds dump sites and old landfills. And in the light of soon expected regional establishment of an integrated and self-sustainable waste management system in the eastern and north-eastern regions, in order to increase awareness by the local population and hospitality enterprises for source separation schemes of organic waste, as largest producers of organic waste, Goce Delcev & Hellenic Mediterranean Universities together with Municipality of Katerini, Municipality of Yermasoyia and Municipality of Probishtip, launched joint Project co-founded by EU, "Utilizing Pay as You Throw Systems and Autonomous Composting Units for Biowastes Management in Touristic Areas". Annually, about 3300 t of MSW is generated in Municipality of Probishtip, with estimated 45.3% organic waste, all together disposed at a non-standard landfill just out of the city borders, and as soon as regional waste management system kick-in this should be changed, affecting current practice and costs. The Project includes transfer and application of innovative technologies Pay As You Throw - PAYT system and Autonomous Composting Units - ACUs for biowaste management in Municipalities of Katerini, Yermasoyia and Probishtip. PAYT system and ACUs as inovative technologies for biowaste management involves source separation schemes of organic waste in different bins (biowaste in 10 L bins and residual mixed waste in 80 L coded bins). Two ACUs with 60 t/year capacity have been installed and

commissioned, one for hospitality enterprises installed nearby City market and San Niko Hotel and the other one in Kalnishte urban area aimed to serves 80 households included in Project, for composting organic waste. For introducing "Pay As You Throw" system specially designed weighing equipment built into the one waste collection truck owned by PUC Nikola Karev and coded waste bins for hospitality enterprises and households have been supplied. Participants training, data collection and analytical procedure are currently ongoing and expected direct benefits including: reduction of waste quantities that are landfilled, reduction of transportation cost for PUC, reduction of charges for hospitality enterprises and households participating in separation scheme and reduction of environmental pollution caused by landfill gas emissions and leachate, as much as reaching the ambitious target of Waste Framework Directive (98/2008).

Keywords: PAYT, ACU, biowaste, source separation, environmental protection

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