

# MatER & Final Sinks Meeting 2021 | 7-8-9 June

## Recovery & Final Sinks for an Effective Waste Management

Virtual Event

### Monday, June 7<sup>th</sup> 2021

MORNING | PLENARY SESSION

#### Session 1: Waste Management

Chairman: prof. Stefano Consonni

**9:15** Welcoming Addresses & Introduction

Stefano Consonni - MatER/Politecnico di Milano

**9:30** KEYNOTE LECTURE: How to measure the quality of materials management and recycling?

Helmut Rechberger - TU Wien, Austria

10:00 Waste Management in Emilia-Romagna Region

Giuseppe Bortone, ARPAE Emilia Romagna

10:20 Waste Management in Lombardia Region

Elisabetta Confalonieri, Regione Lombardia

10:40 Waste Management in Piemonte Region

Paola Molina, Regione Piemonte

**11:00** Break

11:20 The increasing amount of bioplastics rises challenges in the management of organic municipal solid wastes through biological systems

Mirko Cucina - Un. Milano

11:45 The role of bioplastics in packaging and their impact in the waste management system

Giovanni Gadaleta - Politecnico di Bari

12:10 Equivalent inhabitants: a new parameter in the waste sector

Chiara Magrini - Un. Bologna

12:35 How the environmental sustainability of WEEE plastics management can be enhanced: an LCA study

Giovanni F. Cardamone - Un. Campania

**13:00** Break

AFTERNOON | PARALLEL SESSIONS

#### Session 2.A: Biowaste & Biogas

Chairman: Prof. Mario Grosso

**14:30** KEYNOTE LECTURE - Title to be defined

David Bolzonella, Un. Verona

15:00 Biowaste mass balance analysis and future prospects in Campania region

Alberto Grosso - ARPA Campania

15:25 Bioenergy from green waste through anaerobic digestion: substrate, biogas, and digestate characterisation at lab-scale

Adele Folino - Un. Urbino Carlo Bo

15:50 Flash Presentation Poster#1 - Environmental evaluation of hydrothermal carbonization applied to the organic fraction mechanically separated from the residual MSW

Lidia Lombardi - Un. Niccolò Cusano

**16:00** Break

16:20 Evaluation of the biochemical methane potential of intermediate and final outputs from biostabilisation MBT

Fabio Tatàno - DiSPeA, Un. Urbino Carlo Bo

16:45 Dry anaerobic digestion for biopolymers recovery from organic fraction of municipal solid waste

Elena Rossi - DESTEC - Un. Pisa

17:10 Pectin green extraction from citrus waste: preparation, characterization and future applications of pectin biocomposites

Domenico Zannini - IPCB-CNR

#### Session 2.B: Innovation & Circular Economy

Chairman: Prof. Lucia Rigamonti

**14:30** KEYNOTE LECTURE - New strategies, trends and financing models for Circular Economy

Daniela Sani, Art-ER

15:00 Waste logistics optimisation in practice: bringing industry 4.0 paradigms into operations management

Matteo Pozzi - Optit srl

15:25 Environmental impact of refrigerant during maintenance and disposal through Montreal Protocol and its amendments in Taiwan

Fei Chiao Yang - National Taiwan University

15:50 Flash Presentation Poster#2 - Mapping industrial waste recyclability: a circular economy approach

Qudsia Kanwal - Tsinghua University, China

**16:00** Break

16:20 Development of innovative circular cementitious materials containing waste

Alice Sirico - Un. Parma

16:45 Social Cost Benefit Analysis of Concrete Waste Recycling in Vietnam

Ngoc Han Hoang - National Institute for Environmental Studies, Vietnam

17:10 An autonomous and integrated evaluation framework for retrofitting resource recovery facilities

Rui-An Lin - National Taiwan University

**17:35** Final Discussion & First Day Closing

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## Recovery & Final Sinks for an Effective Waste Management

Virtual Event

**Tuesday, June 8<sup>th</sup> 2021**

**MORNING | PLENARY SESSION**

### Session 3: Material Recovery

Chairman: Prof. Stefano Cernuschi

9:30	<b>KEYNOTE LECTURE: Comparing the costs and benefits of virgin and urban mining</b>	Xianlai Zeng - Tsinghua University, China
10:00	Case studies: Integrated residual municipal waste treatment combining material from waste, organic recovery and energy from waste	Christophe Cord'homme - CNIM, France
10:25	Inclusion of the quality of recovered materials in waste management LCA studies	Lucia Rigamonti - Politecnico di Milano
10:50	<b>Flash Presentation Poster#3</b> - Resilience reinforcement and circular transition of cities by role transformation of water system hotspots with EDI technology	Li-Heng Chen - National Taiwan University
11:00	<b>Break</b>	
11:20	Quality constraints for steel scrap recycling– A detailed analysis of scrap quantities and qualities arising the European Union	Johann Fellner - TU Wien, Austria
11:45	The environmental performance of enhanced metal recovery from dry municipal solid waste incineration bottom ash	Melanie Haupt - ETH Zurich, Switzerland
12:10	Salt recovery potential of calcium-based APCr from MSWI	Ekaterina Korotenko - ICPF, Czech Republic
12:35	Lions2Life: from waste batteries to sustainable distributed energy storage	Filippo Stringa - ERION COMPLIANCE ORGANIZATION S.C.A R.L.
13:00	<b>Break</b>	

**AFTERNOON | PLENARY SESSION**

### Session 4: Waste to Energy

Chairman: Prof. Federico Viganò

14:00	<b>KEYNOTE LECTURE: Waste-to-Energy roadmap towards the European Green Deal</b>	Ella Stengler - Managing Director of CEWEP
14:30	An industrial symbiosis – based solution to face integrated management of waste and wastewater in large Mediterranean cities	Giuseppe Mancini - Un. Catania
14:55	From Waste-to-Energy to Waste-to-Gas – a possible new scenario in the energy recovery from municipal solid waste	Antonio Castorini - TBF+Partner AG
15:20	Comparing alternative options for residual municipal solid waste recovery	Lidia Lombardi - Un. Niccolò Cusano
15:45	<b>Flash Presentation Poster#4</b> - Analysis of working principles of modern controllers in combustion optimisation on forward moving reciprocating grates	Damir Zibrat - Technikgruppe, Austria
15:55	<b>Break</b>	
16:15	The effect of syngas steam concentration on the tar removal by activated carbons	Carmine Boccia - Un. Campania
16:40	Incineration bottom ash potential and utilization in the Czech Republic	Michal Šyc - ICPF, Czech Republic
17:05	ESSEVA study by SVDU – Mercury behaviour, monitoring and treatment in Energy-from-Waste facilities	Hubert de Chefdebien - CNIM, France
17:30	<b>Final Discussion &amp; Second Day Closing</b>	

**Wednesday, June 9<sup>th</sup> 2021**

**VIRTUAL TECHNICAL VISIT**

09:30	Virtual room opening
	Virtual tour of industrial plants & technical presentations by sponsors
13:00	Meeting Closing

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