Dear Colleagues and Friends,

It is a great honor and pleasure to welcome you to the Athens 2015 International Landfill Mining Conference of the LIFE+ Reclaim project, in Athens, Greece, on September 24-25, 2015.

The Scientific Committee planned an informative programme, which includes lectures and presentations. As the Landfill Mining concept is rather new, we anticipate that many lively and interesting discussions will take place, with distinguished specialists from different backgrounds addressing issues of multidisciplinary interest, such as the benefits and the drawbacks of the method, its applications and its potential for Greece and the rest of the European Union Member-Countries.

We have chosen Divani Palace Acropolis as our venue, with a direct view of Acropolis from its roof garden and we are confident that you will find your stay very enjoyable. Thank you for joining us and welcome to Athens!

### Spyridon Papagrigoriou,

Managing Director of ENVECO S.A. Coordinating Beneficiary of LIFE+ reclaim

### Organised by:









### **Organising Committee ENVECO S.A.:**

Spyridon Papagrigoriou, Civil Engineer, CEO Ioannis Katselis, Mineral Resources Engineer Zoi Gaitanarou, Mining and Environmental Engineer Ersi Makrykosta, Environmental Scientist

### **HELECTOR S.A.:**

Sotiris Stasinos, Chemical Engineer **Spyridon Sofianos**, Civil Engineer, Project Engineer - Landfill of Polygyros

Veronika Andrea, Forester-Environmental Scientist

### School of Mining and Metallurgical Engineering, National Technical University of Athens (NTUA):

**Dimitrios Kaliampakos**, Professor of Mining Engineering, Department of Mining Technology and **Environmental Mining** 

Konstantinos Tsakalakis, Professor of Metallurgy and Materials Technology, Laboratory of Mineral Processing Maria Menegaki, Assistant Professor of Mining Engineering

**Andreas Benardos**, Assistant Professor of Mining Engineering

### **Municipality of Polygyros, MoP:**

**Christos Vordos**, Deputy Mayor of Polygyros

George Diamantoulakis, Manager of the MoP's Recycling Programme

#### **Scientific Committee**

**Dimitris Damigos**, Assistant Professor in the School of Mining and Metallurgical Engineering, NTUA, Greece

Antonis Mavropoulos, CEO of D-Waste and Chair of the Scientific and Technical Committee of the International Solid Waste Association-ISWA, Greece

Eddy Wille, Responsible of the ELFM Programme of OVAM, Flanders, Belgium

Nikolaos Mousiopoulos, Professor at the Department of Mechanical Engineering, Polytechnic School of the Aristotelian University of Thessaloniki, Greece

Francesc Giró i Fontanals, Deputy Director, Waste Agency of Catalonia, Barcelona, Spain

LIFE12 ENV/GR/000427 With the contribution of the LIFE financial instrument of the European Union Total budget: €1.377.004,00





# Athens 2015 INTERNATIONAL

# LANDFILL MINING CONFERENCE

September 24-25, 2015 Athens, Greece | Divani Palace Acropolis Hotel



### Organised by:















### **PROGRAMME**

For more information and registration: Website: www.reclaim.gr E-mail: life@reclaim.gr, contact@erasmus.gr Phone: +30 210 6125027

### Athens 2015 International Landfill Mining Conference Athens, Greece - September 24-25, 2015

### Thursday, 24 September 2015

	J 1
09:30-10:00	Registration Conference Opening
	LIFE Reclaim: A Landfill Mining case study in Greece
10115 10150	Z. Gaitanarou (ENVECO S.A.)
10:30-12:15	Session 1: LANDFILL MINING: SOCIAL AND POLICY ISSUES Chair: S. Papagrigoriou (LIFE-Reclaim Coordinator) • Co-Chair: F. Giro i Fontanals
10:30	First experiences on Landfill Mining in Catalonia  F. Giró i Fontanals, M. Madorell i Arbolí (Spain)
10:45	Introducing ecosystem services into LFM impact assessment G. Tentes, D. Damigos (Greece)
11:00	What do people believe about landfill mining?  D. Damigos, G. Diamantoulakis, V. Chorinos, M. Menegaki,  D. Kaliampakos (Greece)
11:15	Development of a landfill mining policy in Flanders (Belgium)  E. Wille (Belgium)
11:30	Local community participation in technological complex enhanced landfill mining projects  M. Ballard (Belgium)
11:45	Discussion
	Coffee break
12:45-14:15	Session 2: RESTORATION OF LANDFILLS AND CONTAMINATED SITES Chair: E. Wille • Co-Chair: D. Kaliampakos
12:45	History of dump sites in Greece: Integrated tools and methods for their registration  G. Perkoulidis, A. Malamakis, T. Tsatsarelis, I. Antonopoulos,
13:00	N. Moussiopoulos (Greece)  Phytomining of heavy metals. Future perspectives  C. Tsadilas (Greece)
13:15	Reliable rehabilitation of uncontrolled dump sites  K. Hadjibiros (Greece)
13:30	Mechanisms of stabilization/immobilization of heavy metals in the geoenvironment  D. Dermatas (Greece)
13:45	Discussion
14:15-15:30	Lunch
15:30-17:00	Session 3: NEW PERSPECTIVES IN WASTE POLICY
15:30	Chair: M. Ballard • Co-Chair: M. Menegaki From Brownfield to Brightfield. Revitalizing and re-powering derelict land in Flanders E. Wille (Belgium)
15:45	Interconnectivity and the future of waste management  A. Mavropoulos (Greece)
16:00	The Zero Waste Concept towards integrated waste management M. Loizidou (Greece)
16:15	Development of a Household Waste Recycling Centre Network in Cyprus A.I. lacovides (Cyprus)
16:30	Discussion

## Athens 2015 International Landfill Mining Conference Athens, Greece - September 24-25, 2015

## Friday, 25 September 2015

09:30-11:15	Session 4: RECOVERY OF RESOURCES FROM MUNICIPAL SOLID WASTE
00.00	Chair: T. Wolfsberger • Co-Chair: G. Perkoulidis
09:30	Waste management in the Municipality of Polygyros. Current situation and
	recycling projects G. Diamantoulakis (Greece)
09:45	Treatment technologies and recovery of resources from waste in the UK
	S. Ford, K. Warren, A. Read (United Kingdom)
10:00	Technology serving waste valorisation  A. Andreadakis (Greece)
10:15	Landfill Mining in Polygyros site. Results and discussion
	V. Andrea, Z. Gaitanarou, E.N. Makrykosta, S. Sofianos, <b>S. Stasinos</b> ,
10.20	N. Tsigkas (Greece)
10:30	Recycling packaging materials  I. Razis (Greece)
10:45	Discussion
11:15-11:45	Coffee break
	Session 5: LANDFILL MINING: TECHNICAL, ECONOMIC AND ENVIRONMENTAL ISSUES
	Chair: S. Ford • Co-Chair: A. Andreadakis
11:45	Environmental monitoring of the Polygyros Landfill Mining Scheme
12.00	A. Benardos, M. Menegaki, D. Damigos, D. Kaliampakos (Greece)  Quality and recovery of specific waste fractions from Landfill Mining for
12.00	material and energy recovery
	T. Wolfsberger, R. Sarc, R. Pomberger (Austria)
12:15	Operation of the pilot demonstration landfill mining unit
12.30	<b>D. Choidas</b> (Greece)  Local community involvement in complex technological projects: Challenges
12.50	for long term planning and dealing with uncertainty
	K. Sips, M. Craps (Belgium)
12:45	Landfill mining potential in Spain and review of preliminary experiences  I. Puig-Ventosa, M. Calaf-Forn (Spain)
13:00	Discussion
13:30-14:45	Lunch
14:45-16:30	Session 6: NEW TECHNOLOGIES IN WASTE MANAGEMENT
	Chair: I. Puig-Ventosa • Co-Chair: A. Benardos
14:45	Uncontrolled industrial waste disposal in landfills: Case study in Attica Prefecture L. Chalarakis, A. Korkolis, <b>S. Kavouri</b> (Greece)
15:00	Pyrolysis and gasification of various wastes, residues and by-products in
	rotary kilns: Some experiences, examples and lessons learned from a 20-year industrial involvement
	A. Sotiriou (Greece)
15:15	Intelligent energy production from Greek industrial/municipal solid waste and
	potentially landfill mining: Computational fluid dynamics for an industrial
	unit Bubbling Fluidized Bed (BFB) – Boiler/gasifier G. Pantazis, P. Glinos, Ph. Adamopoulou, A. Rydén, <b>G. Taralas,</b> A.A. Zabaniotou (Greece)
15:30	Using ICT tools for achieving efficient and sustainable waste management,
. 3.30	enabling GHG emissions reduction – The example of Life EWAS
	A. Anthouli, I. Koukosia, <b>M. Skarvelakis</b> , M. Jofra Sora, I. Garcia Vega (Greece-Spain)
15:45	Recycling electrical and electronic equipment in Greece  A. Fafoutis (Greece)

16:00 Discussion