



Opening ELFM IV Barriers and opportunities for ELFM

Peter Tom Jones (General Coordinator EURELCO & ETN NEW-MINE)
Mechelen, 5-2-2018



Looking back – The ELFM journey from 2008 to 2018

2008: The cradle of the ELFM Concept

- First meetings in Leuven, Flanders, setting up a Flemish ELFM Consortium
- CtC project (Remo site) as main case study – 8 MEURO research initiated

2010: First ELFM Symposium in Houthalen, Belgium

- 175 (non-paying) attendees - 90% Belgian participation

2013: Second ELFM Symposium in Houthalen, Belgium

- 215 attendees (limited fee) - 80% Belgian participation

ELFM Definition:

“the safe exploration, conditioning, excavation and integrated valorisation of (historic, present and/or future) landfilled waste streams as both materials (Waste-to-Material) and energy (Waste-to-Energy), using innovative transformation technologies and respecting the most stringent social and ecological criteria” (Jones et al, JCLEPRO, 2013)

Looking back – The ELFM journey from 2008 to 2018

2008: The cradle of the ELFM Concept

- First meetings in Leuven, Flanders, setting up a Flemish ELFM Consortium
- CtC project (Remo site) as main case study – 8 MEURO research initiated

2010: First ELFM Symposium in Houthalen, Belgium

- 175 (non-paying) attendees - 90% Belgian participation

2013: Second ELFM Symposium in Houthalen, Belgium

- 215 attendees (limited fee) - 80% Belgian participation

2014: Kick-off EURELCO (European Enhanced Landfill Mining Consortium)

2015: First Seminar about ELFM in the European Parliament



Looking back – The ELFM journey from 2008 to 2018

2008: The cradle of the ELFM Concept

- First meetings in Leuven, Flanders, setting up a Flemish ELFM Consortium
- CtC project (Remo site) as main case study – 8 MEURO research initiated

2010: First ELFM Symposium in Houthalen, Belgium

- 175 (non-paying) attendees - 90% Belgian participation

2013: Second ELFM Symposium in Houthalen, Belgium

- 215 attendees (limited fee) - 80% Belgian participation

2014: Kick-off EURELCO (European Enhanced Landfill Mining Consortium)

2015: First Seminar about ELFM in the European Parliament

2016: Third ELFM Symposium in Lisboa

- 65 paying attendees (large fee) - 50% Belgian participation

2018: Fourth ELFM Symposium in Mechelen, Belgium

- 151 attendees (large fee) - 56% Belgian participation

[illegible]



ELFM & EURELCO achievements over the last years (I)

- ELFM has evolved from a crazy idea into a concept which merits EU funding, although the concept remains disruptive
- 3 large, multi-partner projects approved by the EU:
 - EU Horizon 2020 MSCA-ETN NEW-MINE
 - EU Interreg Europe COCOON
 - EU Interreg NWE RAWFILL

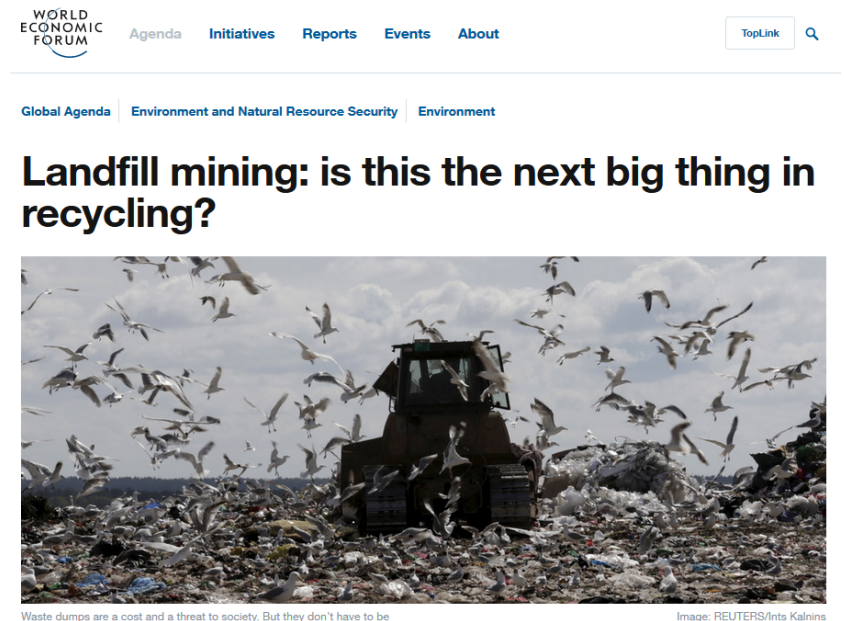


ELFM & EURELCO achievements over the last years (II)

- ELFM has enjoyed widespread press attention (feature articles, videos, documentaries in news/science fora)



Series 50 Ideas to Change the World
Financial Times (8-1-2018)



Series Annual Meeting New Champions
World Economic Forum (21-6-2017)

ELFM & EURELCO achievements over the last years (III)

- **March 14, 2017: European Parliament endorsed ELFM concept in its “Waste Package”, which concerned the adaptation of four EU Directives**
- **Article 5, Amendment to the Landfill Directive:**
 - “The Commission shall further examine the feasibility of proposing a regulatory framework for enhanced landfill mining so as to permit the retrieval of secondary raw materials that are present in existing landfills. By 31 December 2025 Member States shall map existing landfills and indicate their potential for enhanced landfill mining and share information.”



However.. we are still waiting for the first,
full-scale industrial, *resource-recovery-*
driven ELFM project to take place

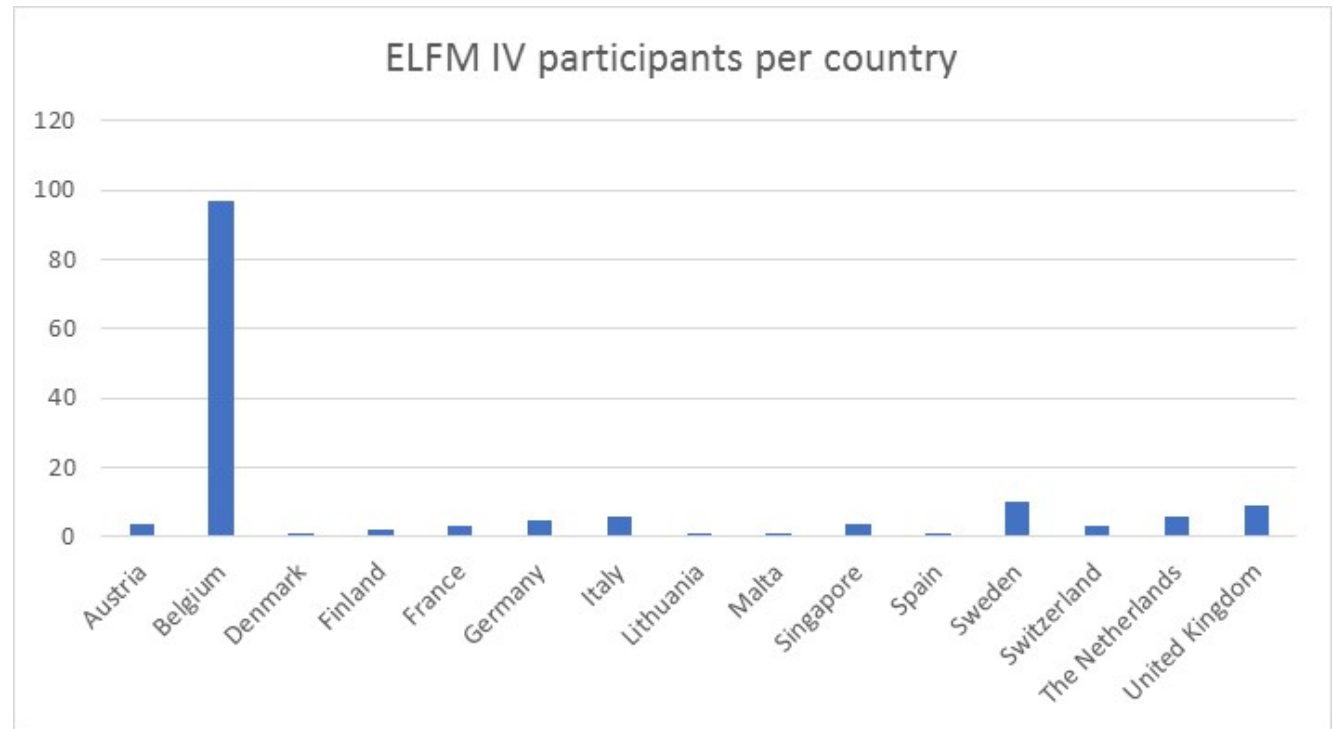
Barriers for ELFM remain

- **Legislation on EU & national level has not yet come to terms with the dynamics of the – disruptive – ELFM concept**
 - ELFM Amendment of EP blocked out in 2017 Trilateral meeting between EP, EC and European Council
- **Market barriers for ELFM remain:**
 - ELFM-derived products need to compete with primary resources
 - Several industries are still reluctant to absorb ELFM-derived materials
- **Local communities may take some convincing about ELFM projects *in their backyard* – Social License to Operate is key!**



ELFM IV in a nutshell

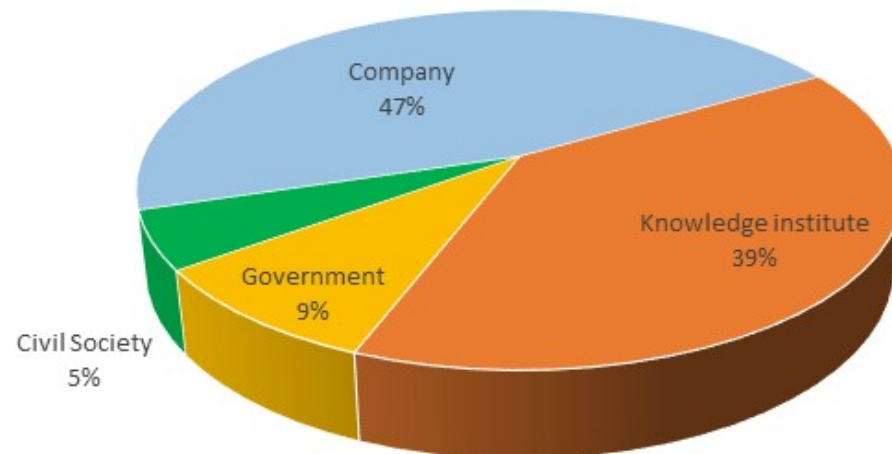
151 attendees



ELFM IV in a nutshell

151 attendees

ELFM IV participants per type of organisation



ELFM IV in a nutshell

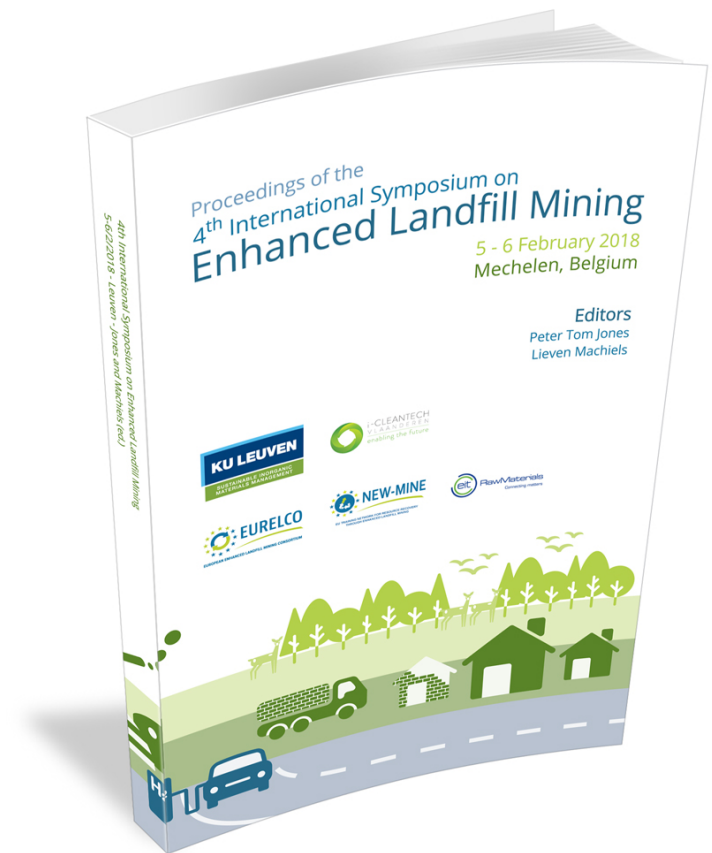
151 attendees

50 papers, 4 categories (sessions):

1. Geophysics, remediation, preprocessing and metal extraction technologies
2. Thermal valorisation technologies
3. Upcycling technologies
4. Multi-criteria assessment

15 keynote, 8 regular and 14 poster pitch presentations

Closing debate on future of ELFM in EU and beyond





Have a great Symposium!

