Monday 5 February 2018		
08:30	Registration & welcome coffee	
09:00	Welcome and introduction	
09:15	**Opening speeches: Peter Tom Jones** (EURELCO & ETN NEW-MINE) & **Hilde Vautmans** (tbc) (Member of the European Parliament, ALDE)	
Session 1	**Geophysics, remediation and preprocessing technologies for Enhanced Landfill Mining**	
09:30	**Keynote Lecture** **Fred Nguyen** (ULG) & **Ranajit Ghose** (TU Delft) *Geophyscial methods for landfill exploration: a critical review*	
10:00	**Keynote Lecture** **Thomas Pretz** (RWTH Aachen) *The state-of-the-art in sensor based sorting technologies*	
10:30	**Break**	
11:00	**Keynote Lecture** **Patrick Laevers** & **Werner Annaert** (Go4Circle) *Waste Management in the 21st Century: challenges and opportunities*	
11:20	**Christin Bobe** (UGent) *Exploring the potential of electromagnetic surface measurements for the characterisation of industrial landfills*	
11:35	**Juan Carlos Hernandez Parrodi** (Shanks – RENEWI) *Characterisation of fine fractions from Landfill Mining: a review of previous landfill mining investigations*	
11:50	Roeland Geurts & **Anja Maul** (VITO) *But, is it all dirt!? Advanced characterisation of ELFM material by the Characterise-to-Sort technology*	
12:05	**Poster Pitches**: **Bart Nevejans** (Aertssen) *Redevelopment of Landfill site Eysels, Turnhout, Belgium;* **Frederic Coulon** (Cranfield University) *SMART GROUND: SMART data collection and inteGRation platform to enhance availability and accessibility of data and infOrmation in the EU territory on SecoNDary Raw Materials*; **Jeroen Spooren** (VITO) *In-situ recovery of Cr and Ni from landfilled neutralisation sludge*; **Ulrich Sigmund** (Stadler) *Sorting with ballistic separators*; **Nerea Rodriguez** (KU Leuven) *Towards zero-waste mining industry through novel solvometallurgical processes based on deep eutectic solvents: valorisation of fresh and old tailings*	
12:30	**Break – Lunch**	
Session 2	**Thermal valorisation technologies for Enhanced Landfill Mining**	
14:00	**Keynote Lecture** **Zoran Jovanovic** & Aldo Steinfeld (ETH Zürich) *Solar gasification of waste: a critical review*	

14:30	**Keynote Lecture** **Lieve Helsen** & Nicholas Agon (KU Leuven) *Advanced waste-to-resources by plasma gasification*
15:00	**Poster Pitches**: **Marco Gigantino** (ETH Zürich) *Thermochemical heat storage development for 24/7 solar-driven gasification of refuse-derived fuel*; **Nuran Ilman Zaini** (KTH Royal Institute of Technology) *Pyrolysis of solid recovered fuel derived from landfill waste: Gas yield composition*
15:20	**Break**
15:50	**Keynote Lecture** **Roland Pomberger**, Renato Sarc, Daniel Höllen (Montanuniversität Leoben) *Development, Challenges and Requirements of RDF in co-incineration plants*
16:20	**Keynote Lecture** **Rolf Stein**, Richard Taylor, Andy Cornell (APP) *The techno-economic viability of* upcycling *residual waste into advanced biofuels: A commercial demonstration plant case study using Gasplasma® technology to convert to bioSNG*
16:40	**Luisa Canopoli**, Stuart Wagland & Beatriz Fidalgo (Cranfield University) *Characterisation of excavated plastics for thermochemical upcycling to platform chemicals and liquid fuels*
16:55	**Poster Pitches** **Guilherme Ascensão** (Italcementi) Influence of microstructure on mechanical strength of alkali activated slags; **Patricia Rabelo Monich** (Padua University) Development and characterisation of dense waste-derived glass-ceramics
17:00	Closing remarks 1st day by **Henny de Baets** (General Administrator OVAM, Flemish Public Waste Agency)
Tuesday 6 February 2018	
09:00	Welcome and introduction; overview agenda
Session 3	**Upcycling technologies for Enhanced Landfill Mining**
09:15	**Keynote Lecture** **Nele De Belie** (UGent) *Residue valorisation in cementitious construction materials*
09:45	**Keynote Lecture** **Yiannis Pontikes** (KU Leuven) *ELFM residues and inorganic polymers: challenges and opportunities*
10:15	**Keynote Lecture** Patricia Rabelo Monich, Acacio Rincon Romero, **Enrico Bernardo** (Padua University) *Upcycling of inorganic waste in monolithic and cellular glass-ceramics*
10:35	**Break**
11:05	**Keynote Lecture** **Jonas Cautaerts** (Colruyt) *An industry perspective on syngas-to-hydrogen conversion – Building and operating fuel stations for hydrogen*

11:25	**Charlot Tanghe** (DEC-DEME), Peter Van den bossche (Witteveen+Bos), Tom Behets (OVAM) *Pilot on innovative separation and valorisation techniques in case of ELFM*	
11:40	**Hugo Lucas** (RWTH Aachen) *Recycling of bottom ashes from municipal waste incinerators: Evaluation of metal recovery and synthesis of amorphous precursor for geopolymers*	
11:55	**Poster Pitches:** **Dirk Paulus (**Tauw) Principles of ELFM introduced in the Flemish multicriteria analysis (MCA) for soil remediaton projects of landfills; **Lotta Juusti** (University of Eastern Finland) Regulatory Aspects of Enhanced Landfill Mining in EU and Finnish Environmental Law; **Andrea Di Maria** (KU Leuven) Approaching zero-waste metallurgy through plasma fuming and inorganic polymerisation of residues from zinc production: environmental evaluation based on Life Cycle Assessment; **Giovanna Sauve**(KU Leuven) To mine or not to mine: a review of the effects of waste composition, time and long term impacts of landfills in the decision making for ELFM; **John Laurence Esguerra** (Linköping University) Exploring the economic and environmental performance of a landfill mining project: A feasibility study from the viewpoint of an industrial landfill owner	
12:30	**Break – Lunch**	
Session 4	**Multi-criteria assessment for Enhanced Landfill Mining**	
13:45	**Keynote Lecture** **Joakim Krook** (Linköping University) *How to evaluate Enhanced Landfill Mining? A critical review of recent economic and environmental assessments*	
14:15	**Keynote Lecture** **Ilse Bilsen** & Patrick Berghmans (VITO) *Development of an Early Warning System for the Closing the Circle project at the Remo landfill site*	
14:45	**Keynote Lecture** **Andrea Winterstetter** (VITO), Eddy Wille (OVAM), Peter Nagels (OVAM), Johan Fellner (TU Wien) & Karl Vrancken (VITO) *Integrating Landfilled Material Stocks Into Modern Resource Classification Frameworks – The Case of Old Landfills in Flanders*	
15:15	**Keynote Lecture** **Maurice Ballard** (DE LOCALS-CleanTechPunt) A locals perspective *on the Closing-the-Circle project in Houthalen-Helchteren*	
15:35	**Break**	
15:50	**Eddy Wille** (OVAM) *Flooding risks at old landfill sites. Linear economy meets Climate change*	
16:05	**Paul Einhaupl** (Linköping University) *Enhanced landfill mining at the REMO site: Assessing stakeholders' perspectives on environmental impacts, societal consequences and institutional challenges for implementation*	
16:20	**Closing Debate: Challenges and Opportunities for Enhanced Landfill Mining**	

	Panel contributors (confirmed): • **Derek Greedy** (ISWA National Members Representative, ISWA Board) • **Claudia Neculau** (SpaQue, coordinator Interreg RAWFILL) • **Yves Tielemans** (Group Machiels) • **Mieke Quaghebeur** (VITO) Moderator: **Victor Dries** (Policy Advisor for Flemish Government, Cabinet Liesbeth Homans) **Scope:** Over the past few years Enhanced Landfill Mining (ELFM) has gained considerable momentum, as corroborated by the initiation of three EU-funded ELFM-related projects (ETN NEW-MINE, Interreg RAWFILL and COCOON), the rise of EURELCO, widespread press attention and the recent endorsement of the ELFM concept in the "waste package", which was formally approved by the European Parliament on March 14, 2017. The justification for this paradigm change is that ELFM does not only enable the recovery of valuable materials which can be brought back into the cycle, but also allows for recovering land area, taking into account that a large part of the EU's 500.000 historic landfills are situated in a (semi-) urban environment. Nevertheless, the first, full-scale industrial, resource-recovery driven ELFM project still hasn't occurred yet in Europe. Multiple barriers seem to persist, varying from social acceptance issues to delays in permits. In this closing ELFM IV debate the challenges and opportunities for the industrialisation of ELFM will be discussed by an expert panel of industrial players, research experts and EC affiliates.
17:10	**Reception**
	Poster contributions (cf. poster/break sessions): **Gael Dumont** (University of Liege) – *Managing past landfills for future site development: contribution of geophysical methods* **Alexander Muras** (FCC Environment) – *Landfill Mining of a Mixed Municipal Solid Waste and Commercial Waste Landfill: Application of Existing Processing Technology – Opportunities and Limitations* **Simon De Corte** (Ghent University), **Anja Maul** (Vlaamse Instelling voor Technologisch Onderzoek); **Kris Broos** (VITO) – *EIT Raw Materials Zero Waste Cluster Networks of Infrastructure: promoting services for zero waste recycling* **Peter Van den Bossche** (Witteveen+Bos), **Hilde Goovaerts** (Campine), Herwig Dewilde (Tauw België NV); **Tom Van Gerven** (University of Leuven), **John Joseph Jinu** (University of Leuven)**, Dirk Van Mechelen** (Orbix); **Kurt Jacobs** (Jacobs Beton) – *MIVAMIL – Mining and Valorisation of critical Metals at former Industrial Landfills* **Christian Mielke** (Stadler Anlagenbau) – *Ballistic separator in detail* **Cristina Garcia Lopez** (RWTH University) – *The potential of the ballistic separator Type STT6000 as a first step for the recovery of RDF from old landfill material: A case study at Mont Saint Guibert Landfill (Belgium)* **Ilman Nuran Zaini** (KTH) – *Pyrolysis of solid recovered fuel derived from landfill waste: Gas yield composition* **Georgia Flesoura** (KU Leuven) – *Transformation of Municipal Solid Waste Incinerator bottom ash by means of microwave heating into a reactive precursor for the synthesis of Inorganic Polymers* **Koen Sips** (POINT Consulting Group) – *Multi-level governance for ELFM: from a local technical problem to* a EU *policy domain* **Vincent Dunon** (ARCHE Consulting) – *Integrated economic and environmental assessment as driver for innovation of metallurgical systems for the* valorisation *of* low grade *input materials* **Joris Roosen** (KU Leuven) – EDTA-Functionalized Activated Carbon for the Adsorption of Rare Earths from Aqueous Solutions **Claudia Neculau** (SPAQuE), **Eddy Wille** (OVAM), **Renaud De Rijdt** (Atrasol) – *The RAWFILL concept – a multicriteria decision tool for launching ELFM projects* **Annele Ronkainen** (Aalto University) – *Technical and economic factors affecting a Finnish ELFM case study* **Yamid Gomez Rueda** (KU Leuven) – *Cold plasmas for gaseous pollutant control as a benchmark for their use in tar abatement in syngas*