

PRESS RELEASE

First ever EU Horizon 2020 project on Enhanced Landfill Mining: 3,8 million euro to train 15 high-potential researchers in “NEW-MINE” project

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The European Enhanced Landfill Mining Consortium (EURELCO) has been granted the first ever Horizon 2020 research project on the topic of Enhanced Landfill Mining (ELFM). NEW-MINE, i.e. the “EU Training Network for Resource Recovery through Enhanced Landfill Mining”, received a record-breaking score of 97,6% (call MSCA-ITN-2016). The project, which will start on the 1st of September 2016, is coordinated by KU Leuven, which has joined forces with 9 other Beneficiaries, covering 6 EU Member States. The funding of this first ever ELFM project (3,8 million euro) represents a major breakthrough for achieving a circular economy in Europe, as it will lead to novel solutions to separate and upcycle the excavated waste materials from Europe’s 500,000 landfills. NEW-MINE technology will lead to the transformation of landfilled waste into high added-value products such as fuel-grade hydrogen and green cement binders.

Turning the landfill problem into an opportunity

Europe has around 500,000 landfills, with an estimated 90% of them being “non-sanitary” landfills, predating the EU Landfill Directive of 1999. Most of these landfills are filled with municipal solid waste and often lack environmental protection technology. Left unattended these landfills may lead to environmental (water and soil pollution) and health problems. Do-Nothing is not an option. Traditional remediation, where the landfill is excavated and the waste is re-landfilled in a sanitary landfill, is prohibitively expensive. As public clean-up funds are scarce, this is not an option either. This situation might appear bleak, but it does present us, as concluded during the first ever ELFM Seminar in the European Parliament (20-10-2015), with an exciting opportunity to combine remediation with resource recovery (i.e. without re-landfilling the excavated waste). This NEW-MINE strategy reclaims land and unlocks valuable resources from Europe’s 500,000 landfills, while drastically reducing future remediation costs.

Training 15 ELFM professionals

The widespread adoption of ELFM in the EU requires skilled scientists, engineers, economists and policy makers who can develop cost-effective, eco-friendly ELFM practices and regulatory frameworks. NEW-MINE therefore trains 15 young researchers in terms of both technological innovation and multi-criteria assessment. The researchers will develop, amongst others, novel sensor-based separation methods, new (solar energy and/or plasma driven) thermochemical conversion methods and green alternatives for traditional cement, going far beyond the state-of-the-art in traditional waste management.

A unique consortium with EURELCO partners

NEW-MINE has assembled a winning team of leading ELFM actors. Beneficiaries are KU Leuven, UGent and Shanks (Belgium), RWTH Aachen (Germany), Montanuniversität Leoben (Austria), Padua University and Italcementi (Italy), ETH Zürich (Switzerland), Linköping University and KTH Stockholm (Sweden). NEW-MINE also incorporates 7 Partner Organisations, incl. Group Machiels, the company developing the unique Closing the Circle project (Remo site, Belgium). As indicated by Shanks, one of Europe's "Big 5" waste management companies, the question is no longer if ELFM will take place but rather where and when exactly. NEW-MINE needs to assure Europe does not lose its leading position in this domain.

About EURELCO

EURELCO is an open network that supports the required innovation with respect to Enhanced Landfill Mining, thereby contributing to a circular, low-carbon economy. EURELCO has 59 contributing members from 13 EU Member States.

More info: www.eurelco.org