



Dear audience,

As a Member of the European Parliament I took the initiative in October 2015 to organise the first ever Seminar in the European Parliament on the topic of Enhanced Landfill Mining. I did this together with my MEP colleague Mark Demesmaeker and the European Enhanced Landfill Mining Consortium (EURELCO).

#### [PARLIAMENTARY QUESTION]

The motivation to organise this Seminar can be brought back to the official answer of the EC (28-7-2015) to my written Parliamentary Question (E-007864/2015), in May 2015, concerning the EC's position with respect to its landfills and their future management.

In its response the Commission admitted that it does not yet have a clear strategy with respect to its landfills and their potential mining/remediation. The Commission also stated that it has not yet performed any cost estimates of the total landfill-remediation bill. This response corroborated the need for a dedicated Seminar where ELFM and landfill experts would present their views on the landfill mining concept, while initiating a fruitful dialogue with Members of the European Parliament and the different involved DG's of the European Commission (DG GROW, DG RTD, DG ENERGY, DG ENVIRONMENT).

#### [FIRST ELFM SEMINAR IN THE EP]

The ELFM Seminar was a huge success; it attracted no less than 85 participants from a multitude of EU Member States. With hindsight we now know that the Seminar has been highly instrumental in triggering a number of evolutions. I will come back to those in a minute.

As a partial answer to my formal Parliamentary Question concerning the position of the EC with respect to its landfills, EURELCO launched some key data during the ELFM Seminar. As I concluded that day, I was surprised and at the same time somewhat bewildered when I saw the results of the EURELCO assessment. A number of conclusions became clear:

1. Firstly, data on landfills in a worryingly high number of individual EU Member states are hard to come by. A concerted EU-wide inventory exercise is very timely;
2. The figure for the total amount of landfills in Europe is most likely even bigger than initially thought: Europe hosts more than 500,000 landfills!
3. 90% of those landfills are in reality non-sanitary landfills, predating the EU Landfill Directive (1999). In most cases, non-sanitary landfills lack the required environmental protection technologies and will eventually require costly remediation.
4. If classic remediation would be performed for all of these non-sanitary

landfills this would lead to a total clean-up bill of anywhere between 100 and 1,000 billion euro. A heavy burden on the EU tax payer!

One of the key outcomes of the ELFM Seminar was a number of shared conclusions.

1. There is a clear need to develop sound inventories of the landfills in the EU-28, in terms of knowing the amount, the age, the size, the type, and the environmental profile of these landfills.
2. There is also a clear need to develop a more comprehensive long-term vision for the future management and rehabilitation of Europe's 500,000+ landfills.
3. In order to reduce the future remediation bill for Europe's non-sanitary landfills, remediation should be combined with a resource recovery approach through ELFM.
4. And finally, major attention should go out to develop and demonstrate a set of innovative upcycling technologies that deliver higher added-value outputs so that the economics of ELFM projects can be vastly improved.

#### [EP SEMINAR LED TO WINNING EU PROJECTS]

The ELFM Seminar took place 16 months ago. Today I am very pleased to see that the event has had a significant effect in terms of the funding of two flagship European projects. These projects will at least partially address a number of the EP Seminar conclusions.

1. Firstly, the Interreg Europe COCOON project (a 1,4 million euro project with a duration of 5 years). COCOON is coordinated by i-Cleantech Vlaanderen and also involves OVAM as a core partner. COCOON will develop sound landfill inventories for the Netherlands, Malta, Cyprus and the regions of Flanders, Brandenburg-Germany and Andalucia-Spain. Likewise, COCOON will develop and improve relevant regional policy instruments to allow the full-scale implementation of landfill management and mining projects.

2. Secondly, the EU Horizon 2020 Marie-Curie European Training Network, NEW-MINE, which kicks-off tomorrow here in Houthalen-Helchteren, will target radical breakthroughs in terms of the technologies that are needed to make ELFM also an economic success. With a subsidy of almost 4 million euro this 4-year project will develop innovative separation, thermal valorisation and upcycling technologies, allowing to transform the excavated waste into high-added value outputs such as hydrogen and alternative, green binders for new construction materials.

It pleases me to see that the ELFM Seminar in the EP was instrumental in winning these projects, which were submitted in extremely competitive funding schemes. So far only good news.

#### [... BUT STILL WAITING FOR THE REALISATION OF THE FIRST FULL-SCALE ELFM PROJECT]

Nevertheless, an honest assessment of the ELFM situation in Europe learns us that the commercialisation & implementation of the first full-scale ELFM projects has still not been realised yet. Several hurdles remain.

I want to draw your attention to the legal and policy aspects. In reality, the EU landfill legislation is still stuck in the "dump regime". The EC Landfill Directive of 1999 (1999/31/EC), which currently still dictates how Europe deals with its landfills, considers landfills as static "end stations" of deposited waste. Landfills are perceived as a source of pollution, a problem that should be capped, contained and monitored in view of eco-protection.

The fact that Europe's landfills may harbour vast amounts of untapped resources is still not grasped yet. In reality, there is no explicit regulatory framework for ELFM in EU legislation. This causes multiple challenges and uncertainties for private actors who want to perform ELFM investments and projects. For example, there is the uncertainty with respect to the landfill tax for (non-valorisable) residual fractions after completion of ELFM, which need to be landfilled again, or the uncertainty about finding a potential market outlet for the products coming out of the ELFM flowsheets.

#### [NEW VISION REQUIRED]

It's clear we urgently need a more dynamic vision, which integrates the landfill issue in the broader circular economy context. Such a vision can be found in the NEW-MINE and COCOON projects as well as in the work of EURELCO and the Flemish Public Waste Agency (OVAM) The Flemish Government has accepted OVAM's "sustainable landfill management & mining vision" as the official framework for dealing with the 2,000 landfills in Flanders. This vision entails that landfills are considered as dynamic resource reservoirs in a circular economy-context. This implies inventorisation of the landfills, interim use of the landfill area and, at a certain moment when the time is right, the mining of the landfill. ELFM will lead to the recovery of materials, energy and desperately needed land surface. ELFM will drastically lower future remediation costs.

#### [MY COMMITMENTS]

As a Member of the European Parliament, I will continue working in order to disseminate this EURELCO vision on "sustainable landfill management & mining vision" and to allow its future integration in EU legislation. To make this promise more tangible, I want to make the following commitments:

1. In 2017 I will follow up on my formal Parliamentary Questions in the European Parliament. I will continue asking the EC about the progress to develop a formal regulatory framework for ELFM in the EU Legislation.
2. In 2017 I will also formally establish an "EU Parliamentary Working Group on Landfill Mining" under my presidency. This group will integrate MEPs from other EU Member States as well.
3. On February 7, 2018, I will organise the Second ELFM Seminar in the EP, which will be combined with the Fourth ELFM Symposium (February 5 and 6, 2018, Leuven). In this follow-up seminar the goal is to realise a significant revision of the Landfill/Waste Directives in the context of EC Circular Economy Package and to mobilise the EU Cohesion Funds for the

implementation of specific ELFM projects in EU Member States.

4. Finally, the work within the "EU Parliamentary Working Group on Landfill Mining" and the 2<sup>nd</sup> ELFM Seminar should lead to the formal establishment of a high-level multi-stakeholder initiative to be called "ELACON" (*European Landfill Mining Competency Network*) with the direct support of EC-DG GROW. I will commit myself to obtain the support to erect this network, where we can draw from the experience of the ERECON (*European rare earths competency network*) network that was set up by the European Commission in 2013 at the request of the European Parliament and which has had a huge impact in terms of EU research and innovation for tackling our rare earth dependency in Europe.

#### [ELFM = MADE IN LIMBURG/FLANDERS]

To conclude my intervention, as a Belgian Member of the European Parliament with my roots in the Province of Limburg, I am proud of the achievements that have been made with the ELFM concept, which in many ways can be considered as a "Made in Limburg/Flanders" concept. The Province of Limburg has been instrumental in the rise of ELFM, as you can see from the range of milestone moments: the formal erection of the ELFM Consortium in Hasselt in 2008, the first two ELFM Symposia in Houthalen, the establishment of the EURELCO consortium in Houthalen and Mechelen in 2014, and today's General Assembly of EURELCO. Throughout this journey the Closing the Circle ELFM project, here in Houthalen, has been the benchmark ELFM project. I sincerely hope that, when we meet again in the European Parliament, the project will be formally given the green light to officially start its ELFM activities.

I thank you for your attention.