



## Presentation of RAWFILL project

***Annick Vastiau***  
***on behalf of***

***Dr. ir. Claudia NECULAU***  
***Head of Commercial Department***  
***SPAQuE***

**RAWFILL = Raw** materials recovered from landfills

**Landfill mining** - a process where solid waste which has previously been landfilled, is excavated and processed.

The function of landfill mining is

- to reduce the amount of landfill mass encapsulated within the closed landfill and/ or
- temporarily remove hazardous material to allow protective measures to be taken before the landfill mass is replaced.

During the process of mining, valuable recyclable materials, combustible fractions, soil, and landfill space are recovered.

## **RAWFILL** = **Raw** materials recovered from landfills

- The last 30 years – natural resources of the planet decreased by 30%
- Circular economy
- +/- 100,000 landfills in the NW Europe
  - Negative impact on the environment
  - Future source of valuable materials for recycling/upcycling

## **RAWFILL : focus on developing new methods to reduce the economic risk of LFM projects**

### Today's **problem** :

- Lack of detailed information relating to the **economical potential of landfill sites** (quantity, quality, value of recoverable materials and of the land)
- The **costs of investigation methods** on landfill sites (which currently are high or even prohibitive)

**Our contribution** to encourage future **profitable LFM projects** :

1. A **common structure of inventories of landfill sites** by integrating the economic potential of sites - ELIF
2. An **innovative investigation method of landfill sites** by combining the traditional methods of soil sampling, trenches, boring, etc. with modern geophysical methods (that will reduce the cost and the duration of studies and will give more detailed information about the content of the landfill site)
3. A **decision support tool** that will allow the selection of the most profitable LFM projects to encourage landfill owners and other SH to recover resources and land

These methodologies are currently being tested through 7 pilot sites.

## **Pilot sites :**

- Cuves (France)
- Emerson Green (UK)
- Leppe (Germany)
- Le Marais (Wallonia, Belgium)
- Lingreville (France)
- Meerhout (Flanders, Belgium)
- Onoz (first Greendeal in Wallonia) – LFM project next year (Wallonia, Belgium)

- **An Interreg NWE project**
- **Total budget 3,8 million €**
- **EU funding rate 60%**
- **RW funding rate for Walloon partners : 30%**
- **Duration 3 years: March 2017- March 2020**
- **Beneficiaries : public and private owners of LFs, others SH**

RAWFILL project unites 8 partners from 4 EU regions with complementary expertise:





**Interreg**  
North-West Europe



## RAWFILL – Who is Who? partner's expertise

**RAWFILL**

European Regional Development Fund

**SPAQuE**  
\_be

The Lead partner, SPAQuE is a public company from the Wallonia Region, Belgium – active in the field of landfills & brownfields. key references in conception, rehabilitation, after-care works, inventories, characterization studies, etc.

SAMEN MAKEN WE  
MORGEN MOOIER

**OVAM**

Public waste management company from the region of Flanders, Belgium – in charge with Waste management plans & Operationnal programs that could integrate landfill mining projects. In charge of the development of the Decision Support Tool. They will also guide the pilot test on the Landfill of Meerhout in Flanders.



Local administrative union from the region of North-Rhine Westphalia, Germany, responsible for landfill development and waste management concept and managing the :METABOLON project. They are the LP of the Long term effects WP to ensure the roll out of the project results during and after the project's end.



## RAWFILL – Who is Who? partner's expertise



The department of geophysics at ULiège is deeply involved in environmental applications of geophysics, including LFs characterisation by innovative combination of recent methods and techniques. They will perform the geophysical prospection on several pilot landfills.



NERC (BGS) is the UK's premier provider of objective geoscientific data, information and knowledge for sustainable use of natural resources. They will enhance the geophysics methods to perform more accurate data collection regarding the resource recovery potential on the pilot landfills.



Cleantech Flanders promotes and implements cleantech in Flanders. They are the leader of the WP Communication and also play a role in the WP long term as go-in-between with the European Enhanced Landfill Mining Consortium EURELCO and the Interreg Europe project COCOON.



Atrasol is a private expert company from the Wallonia Region, Belgium specialized in waste valorization and LFs civil engineering. In RAWFILL, they are in charge of developing the Enhanced Inventories Structure of Landfills.



Les Champs Jouault is a private LF owner from the region of Normandy, France. On one of their landfills are performed several pilot tests and studies by using geophysics.

- 23 Associated partners and other stakeholders
- Mission of the Advisory Board: to support RAWFILL project to carry out the following actions:
  1. Sharing experience in LFM,
  2. Exchanging expert opinion/recommendations on the project activities and deliverables,
  3. Dissemination of the project results,
  4. Expanding the number of stakeholders and interested groups in LFM.

Interested to join us?

## RAWFILL

European Regional Development Fund

### HOW?

- Providing information/data needed to achieve RAWFILL's objectives (ELIF, DST, etc..)
- Giving advice/recommendations on RAWFILL tools
- Disseminating the information about RAWFILL

### Long term effects - Creation of 2 working groups

- a LFM knowledge sharing group with the EURELCO platform and with other interested stakeholders from the NWE region
- a LFM policy platform - dedicated group of policy promoters within the LFM platform – recommendations to foster policy change

- **Landfill ambassadors: interested, please fill in the LOI**
- **Landfill miner guide**

| Nr | Chapter  |
|----|--|
| 1  | Rationale RAWFILL and EU policy (CE, soil, spatial planning) |
| 2  | Concept interim use, LFM, ELM, ELM <sup>2</sup>              |
| 3  | Legal and policy part  |
| 4  | Waste analysis and sampling                                  |
| 5  | Geophysics: available methods, when and how to use?          |
| 6  | ELIF   |
| 7  | DST including economics                                      |
| 8  | Recommendation works   |
| 9  | Waste valorisation: SWOT analysis                            |
| 10 | Rehabilitation after mining                                  |
| 11 | Cases  |
| 12 | Stakeholders   |

**JOIN us !**

- **30th November 2018 – Conference at Pollutec – Lyon – France**
- **28-29 March 2019 – Mide term event – Cuves – France**



# Interreg



EUROPEAN UNION

# North-West Europe

# RAWFILL

European Regional Development Fund



Wallonie

# Thank you!