

2nd meeting of the Advisory board October 4th, 2022



Hybrid meeting -

OVAM's office Mechelen, Belgium

and online

AGENDA

09h30 - 10h00	Welcoming coffee and online connection	
10h00 - 12h30	Presentations of the last results of NWE-REGENERATIS and discussions (hybrid):	
	1. Recall of NWE-REGENERATIS project – SPAQυE	
	2. REMICRRAM – a methodology for resource recovery from Past Metallurgical Sites and Deposits (PMSD) and SMART PHOENIX - quick screening software to evaluate the valorization potential of a PMSD for the recovery of materials, metals, soil and land – SPAQUE	
	3. MESIS – a harmonized inventory structure of PMSD – ATRASOL	
	4. SMARTIX - a Decision Support Tool (DST) based on artificial intelligence and algorithms to choose the best valorization options for materials and metals present on site – Technische Hochschule Köln and IXSANE	
	5. Teesside site (pilot site in UK): chemical and biological metal recovery – Cranfield University	
	6. Open Access Platform for stimulating the market for recovery of materials from PMSD – ATRASOL	
	7. The input of the geophysics for the NWE-REGENERATIS methodology and focus on Campine site – University of Liège and OVAM	
	8. Discussions with the attendees/ Conclusions	

AGENDA

12h30 – 13h15	Lunch at OVAM's office
13h15 – 14h15	Transport from OVAM office to Campine site Address: Nijverheidsstraat 2 2340 Beerse, België
14h15 - 16h00	Visit of Campine site and the recycling facilities (in-person only)
16h00 – 17h00	Transport back to the OVAM's office
17h00	End of the meeting



Presentation of the NWE-REGENERATIS project



Marta POPOVA

Project manager SPAQUE

Project idea and current challenges



Title: **NWE-REGENERATIS** "**REGENERATI**on of past metalurgical **S**ites and deposits through innovative circularity for raw materials"

- Increasing of the need of raw materials
- > 13% of 2.5 million polluted sites are Past-Metallurgical Sites and Deposits (PMSD)
- > ± 100.000 sites with a metal recovery potential
- Potentially high metal content in residues
 (e.g. aggregated material with high ferrous metal content, scraps, white and black slags)
- > European and regional policies



Project idea and current challenges



Gaps linked with current challenges

- No links between historical studies and tailings quality
- Missing information on the economic potential of PMSD: quantity, quality, value of materials and land
- Expensive traditional characterization methods
- Profitability risk associated with the cost of the extraction processes of metals and their future use



NWE-REGENERATIS solutions:

- Links between historical studies and quality of post-mining residues
- Links between post-mining residues and metal extraction processes
- Innovative cost-effective site characterization method
- New inventory structure for PMSD sites
- Open source decision support tool (based on Al) best options for the site valorisation
- Optimized business model

The project





Methodology REMICRRAM

New Geophysical Characterisation Method

Targeted sampling and Innovative characterisation

SMART - PHOENIX

Valorisation potential of a site

MESIS

Innovative inventory structure

SMARTIX

Decision Support
Tool for the best
valorisation option
for the receovery
of metals,
materials, soil, land
and eco-catalyst

Business model for a specific site

Final users: public/ private PMSD owners and managers, public agencies, raw materials' users, engineering companies

The project





Pilot sites

- La Louvière (Wallonia, Belgium)
- Pompey (France)
- Teesside (UK)

6 additional sites : La Campine, STPI, Nyrstar, Vieille Montagne, Arcelor site, Bois St Jean



Input data from Pilot sites

- Historical studies
- Prospection and investigation
- ☐ Lab tests & pilot tests
- Smart links between different expertises



WHY?



- ✓ Allow a **better management** of the past-metallurgical sites
 - ✓ Improve the management of uncertainties
- ✓ Develop a **database of residues/ deposits** and identify optimal recovery methods
 - ✓ Reduce the costs of rehabilitation of sites
- ✓ Enable the integration of optimised management in the promotion of the **circular economy**

The project partners





14 partners

- ➤ Wallonia: SPAQuE, CTP, ULiège, ATRASOL, DUFERCO
- > Flanders: OVAM
- > France: BRGM, Ixsane, Team2, JUNIA
- UK: MPI, Univesity of Cranfield
- Germany: TU Köln, BAV
- 35 Associated partners (observers)





























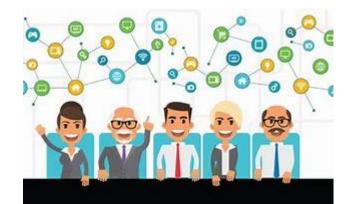


DO YOU WANT TO COME ABOARD?



HOW?

- Join the working group on knowledge exchange
- Participate at the policy task force
- Attend a workshop about knowledge exchange, policy adaptation
- Subscribe to the open access platform for global regeneration market
- Get in touch if you want to provide training courses



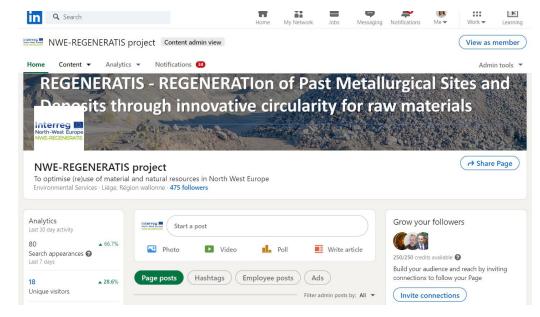
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European Regional Development Fund

Marta POPOVA
Project manager
SPAQuE

Thank you!

m.popova@spaque.be

