PROJECT INTERREG REGENERATIS

Lead partner organisation : Société Publique d'Aide à la Qualité de l'Environnement (SPAQUE)

Total budget ERDF: € 4.23 million

Total budget: € 7.06 million

Start of the project: 2019

End of the project: 2023

Partners of the project : Materials Processing Institute - Centre Technologique International de la Terre et de la Pierre - Bureau de Recherches Géologiques et Minières - Université de Liège - IXSANE - Openbare Vlaamse Afvalstoffenmaatschappij - TEAM2 - Technische Hochschule Köln - Bergischer Abfallwirtschaftsverband (BAV) - Cranfield University

Abstract of the project:

According to JRC (2013), metal working industry represents 13 % of the 2.5 m Potential Contaminated Sites (PCS) in the EU. Consequently, a significant amount of their produced waste was deposited in landfills (37.2% of all PCS). Assessing these figures reveals approx.100.000 sites with a recovery potential of metals.

While recent metallic waste streams are usually treated, older waste (aggregated material with high ferrous metal content, scrap, other metals, white and black slags and other streams) are considered as a source of pollution, expensive to manage/eliminate. REGENERATIS aims to transform this problem into an opportunity, as large volumes of resources (metals, materials & land) from Past Metallurgical Sites and Deposits (PMSD) can be recovered by urban-mining. In order to implement this in NWE, REGENERATIS tackles the sectoral and contextual barriers. The main challenge for stakeholders is the environmental risk & the profitability of recovery processes. Currently all PMSD are managed within a remediation strategy focused on environmental impact/risk. In NWE region PCS inventories are inadequate, as they lack relevant data on the economic potential (quantity, quality & materials value). Traditional exploration methods are not focused on raw materials recovery.

REGENERATIS delivers an evidence-based solution implemented & tested on 3 sites (including innovative characterization by geophysics, innovative recovery processes guidance, artificial intelligence algorithm), promotes an Harmonized Inventory Structure, and supports new business models for resource recovery from PMSD, by using open source 4D Smart Tool (SMARTIX). Impact is guaranteed by long-term involvement of all REGENERATIS partners/ associated partners to convince stakeholders. Beneficiaries are public & private PMSD owners, managers&operators.10 years after: 60 raw materials recovery projects launched on PMSD throughout NWE, 3 m t of valuable materials recovered & 3000 jobs created.

Project website (Lien vers site web : https://www.nweurope.eu/projects/project-search/regeneratis-regeneration-of-past-metallurgical-sites-and-deposits-through-innovative-circularity-for-raw-materials/)