

Deliverable 8.3 – One-page communication roadmap (KUL)

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Project: Selective Ammoniacal Extraction Process for Valorizing Zn-rich BOF Sludges (SAMEX). Project nr. 19205

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Executive Summary

This report constitutes the deliverable *D8.3 One-page communication roadmap* of the SAMEX project. SAMEX includes a dedicated work package on Communication, Dissemination and Education. A core objective is to proactively engage the relevant stakeholders, to obtain more buy-in from the general public with respect to the steelmaking sector and to tailor communication and dissemination activities of the project results. In parallel, SAMEX targets key education programmes aimed at the SAMEX partners, the EIT RawMaterials Members, policy makers and the wider S/T community.

The one-page communication and dissemination roadmap is a public document that summarises the communication and dissemination plan (D8.2), showing the deliverables and outputs, as well as the expected achievements.

Abbreviations

| Acronym | |
|---------|------------------------------------|
| KUL | KU Leuven |
| AM | ArcelorMittal |
| TEC | Tecnalia |
| BOF | Basic Oxygen Furnace |
| ESTIP | European Steel Technology Platform |

SAMESX communication roadmap

<http://eit-samex.eu>

What is SAMESX really about? Across Europe, ArcelorMittal (AM) generates 350,000 tonnes per year of fine, zinc-rich Basic Oxygen Furnace (BOF) sludge. This iron-rich steelmaking by-product contains a significant fraction of zinc, which is an element that negatively affects the safe and uninterrupted operation of the Blast Furnace. Therefore, internal recycling of the BOF sludge, without a dedicated pre-treatment, is not an option. As a result, worldwide, fine BOF sludge is either stockpiled or landfilled. In 2017-2018, AM developed, in collaboration with KU Leuven, a breakthrough pre-treatment process – on lab-scale – that is capable to selectively extract zinc, while leaving behind an iron-rich residue that can be internally recycled in the Blast Furnace. In the European SAMESX Upscaling Project, co-funded by EIT RawMaterials, AM, Tecnalia (TEC) and KU Leuven (KUL) will upscale this process. Therefore, a pilot plant will be built to validate the process (TRL7). If successful, AM shall implement it in several of its EU-plants by 2025, while other sludge producers will also be able to benefit from the SAMESX project results.

Target audience. Communication, dissemination and education activities play an essential role in order to generate impact, both during and after the project lifetime. Four distinct stakeholders groups have been identified:

1. Primary aim is to communicate and disseminate the SAMESX concept within AM, mainly to highlight the value of recovered iron oxide sources and, hereby, raising awareness and facilitate knowledge required for implementation in AM plants in Europe and beyond (S1). Patenting possibilities are permanently evaluated.
2. Secondly, it is aimed to reach out and facilitate implementation in other companies in the steelmaking sector, and companies beyond the steelmaking sector, which produce residues that could be treated with SAMESX technology (e.g. zinc/iron containing waste water treatment sludge, residues from the zinc industry). In addition, companies within the value chain of the SAMESX concept are targeted (e.g. companies that buy the zinc sulphide produced in the SAMESX flowsheet) (S2).
3. Thirdly, communication activities are offered to a broader group, comprising the scientific community (academia, research centres, consultants and R&D in industry, including the EIT RawMaterials community), policy makers and associations (e.g. European Steel Technology Platform (ESTEP)). (S3)
4. Finally, SAMESX wants to raise awareness within the general public with respect to the importance of waste reduction and circularity within the steelmaking industry. (S4)

Activities

| Type | Target audience (xx: main focus; x: secondary focus) | | | | Delivery Date/ frequency |
|---|--|----|----|----|--------------------------------|
| | S1 | S2 | S3 | S4 | |
| Website & LinkedIn page | xx | xx | xx | xx | Feb/20 |
| Newsletter | xx | xx | xx | xx | 2/year |
| Communication kit (poster, PowerPoint) | xx | xx | xx | x | Aug/20 |
| Technical factsheet | xx | xx | - | - | Dec/20 |
| Representation in EIT RawMaterials and other EU workshops | - | xx | xx | x | 2/year |
| SAMESX video | xx | xx | xx | xx | Nov/22 |
| Peer reviewed publications | x | x | xx | - | Dec/22 |
| ArcelorMittal university | xx | x | x | - | Dec/21 |
| Coaching programme for KU Leuven PhD student/research associate | xx | - | - | - | Apr/21 |
| 2-day training programme on solvometallurgy | xx | xx | x | - | Dec/22 |
| Final project report | xx | - | - | - | Dec/22 |