

# SHAREBOX - On-site validation and impact assessment of field trials with real industrial conditions

Project:

Secure Management Platform for Shared Process Resources

Resource efficiency offers a major economic opportunities for the European Process Industry, both in terms of cost savings as well as opportunities to offer greener products and services. Industrial Symbiosis (IS) is the use by one company or sector of by-products, including energy, water, logistics and materials, from another. The approach that underpins SHAREBOX centres on logical work flow that covers from the identification of new symbiotic synergies right through optimised connections among companies and organisations in established symbiotic relationships. SHAREBOX provides plant operations and production managers with the robust and reliable information that they need in real-time in order to effectively and confidently share resources (plant, energy, water, residues and recycled materials) with other companies in an optimum symbiotic ecosystem. The objective of SHAREBOX project is to develop and bring to market a secure platform for the flexible management of shared process resources with intelligent decision support tools. To provide plant operations and production managers with the robust and reliable real-time needed to optimise symbiotic connections (plant, energy, water, residues and recycled materials) with other companies in a symbiotic ecosystem. In order to overcome the limitations in current Industrial Symbiosis delivery and ICT tools for IS facilitation, a number of key innovations are being brought to the SHAREBOX development that yield a world first ICT platform technology that holds the potential to be a major catalyst for increased Industrial Symbiosis (IS) among process industries and for enabling cross-sectoral interactions.

Project website: <http://sharebox-project.eu/> This project has received funding from the European Union's Horizon 2020 research and Innovation programme under grant agreement No **680843**

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Sector:

**Cement**

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## **Ceramics**

## **Chemicals**

## **Engineering**

## **Minerals**

## **Non-ferrous metals**

## **Steel**

Summary:

This document describes the results obtained applying Life Cycle Assessment methodology to quantify benefits regarding primary energy consumption and mineral resource use in agreement with the SPIRE objectives “reduction in fossil energy intensity” and “reduction in non-renewable primary raw material input” as complementary indicator to greenhouse gas emissions.

Theme:

Energy and resource management systems - SPIRE-06-2015

Keywords:

Industrial Symbiosis, Resource efficiency, Management, ICT, Mathematical tools, Intelligent tools, Platform, User interface, Data entry, Security, Anonymity, Tracking, Material Flow, Industry, Software, Optimization, Relationships, Network, Connection, Sustainability, Environment, Compatibility

Type:

**Case study**

**Document**

Rights:

## **Open Access**

## **Resources**

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 zhaw-report-on-the-on-site-validations-and-impacts-assessment-global-may-2019.pdf

Link:

SHAREBOX website

SHAREBOX video

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