Sustainability assessment methods and tools to support decision making in the process industries (SAMT)

The aim of the SAMT project is to review and make recommendations about the most potential methods for evaluating sustainability in the process industry, focusing especially on energy and resource efficiency. SAMT will collect, evaluate and communicate the experiences of leading industrial actors from cement, oil, metal, water, waste and chemical industries, and review the latest scientific developments within the field of sustainability assessment. A central outcome of the project is a strategy for implementing best practices across different sectors of the process industry.

SAMT is an EU funded project under the SPIRE Public Private Partnership (PPP). SPIRE PPP brings together several sectors of process industry: cement, ceramics, chemicals, engineering, minerals and ores, non-ferrous metals, steel and water. All SPIRE sectors can be considered as resource and energy intensive. Improving resource and energy efficiency are urgent issues for the sustainability and competitiveness of the sectors.

Within the Horizon 2020 work programme, the specific and common goals listed for the SPIRE sectors are:

- A reduction in fossil energy intensity of up to 30% from current levels by 2030.
- A reduction of up to 20% in non-renewable, primary raw material intensity compared to current levels by 2030.
- A reduction of greenhouse gas emissions by 20% below 1999 levels by 2020, with further reductions up to 40% by 2030.

For evaluating the current state and the achievement of the goals, sustainability assessment methods, tools and indicators that are applicable for cross-sectorial assessment are required.

SAMT is a coordination and support action that promotes cross-sectorial learning and uptake of the most promising methods and tools by conducting case studies, organizing workshops and identifying needs for future R&D and standardization.

SAMT actions

- Overview of the existing sustainability assessment methods and tools
- Interview study on the industrial practices
- Open workshops bringing together representatives of several process industry sectors
- Evaluation of the applicability of the methods and tools in industrial case studies and in cross-sectorial analyses
- Defining a roadmap and an implementation strategy for further uptake of the methods and tools
- Overview of relevant standardization activities
Outcome of the project

1. Identification of best practices for evaluating resource and energy efficiency
2. A strategy for implementing best practices across different sectors of the process industry
3. A roadmap for dissemination and R&D
4. Recommendations for future research and cross-sectorial assessment
5. Input for future standardization

SAMT consortium

Partners working in the SAMT project are

- VTT Technical Research Centre of Finland Ltd (coordinator)
- Fundacion Tecnalia Research & Innovation
- Wuppertal Institut für Klima, Umwelt, Energie GmbH
- CEMEX Research Group AG
- SUEZ environnement
- Neste Corporation
- Bayer Technology Services GmbH
- BASF SE
- Hydro
- Asociación Española de Normalización y Certificación (AENOR)

The consortium is complemented by a cross-sectorial stakeholder panel in which the following organisations are represented: ACCIONA Infraestructuras, Thyssen Krupp, Spanish Chemical Industrial Association, Ihobe, WssTP, the Chemical Industry Federation of Finland and UPM.

More information about SAMT project and ways to follow its progress

- Visit our website at www.spire2030.eu/samt
- Follow SAMT group in LinkedIn
- Join the stakeholder panel
- Participate in our open workshops (1st in June 2015, 2nd in February 2016 and 3rd in October 2016)
- Contact project coordinator and ask for more information

All deliverables are published on the project website. Final results will be available in December 2016.

Contacts

Tiina Pajula
Principal Investigator at VTT, coordinator of SAMT
tiina.pajula@vtt.fi