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Standardization in research and innovation projects

Success story: **green industries**

TOP-REF:

TOP-REF 'Innovative tools, methods and indicators for optimizing the resource efficiency in process industry' is a 42 month long FP7 (7th European Research Framework Programme) started in 2014 and committed to increase the competitiveness and efficiency of the European resource-intensive process industry, as well as to assure a long-term greener economy.

THE PROJECT

TOP-REF aims to develop and validate specific indicators, methodologies, and non-invasive monitoring and control system (M&CS) devoted to the improvement of resource efficiency in energy intensive industrial sectors. Results will be implemented and validated in three specific continuous energy and resource intensive processes: fertilizer, refining and chemical.

A more efficient use of resources will reduce the pressure on demand for primary raw materials, help to reuse valuable resources which would otherwise be wasted, and reduce energy consumption as well as greenhouse gasses emissions from extraction and processing.

STANDARDS: A SOLUTION FOR MARKET UPTAKE

In order to ensure TOP-REF impacts, specific Key Resources Indicators (KRI) will be developed and harmonized to foster the greening and the competitiveness of the European process industry. The indicators, based on a life cycle perspective, will help to measure the decoupling of environmental impacts and resource use from economic growth.

Furthermore, a method and procedure (e.g. in the form of a standard document) providing environmental performance information based on Key Resources Indicators (KRI) will be developed in TOP-REF.

<http://www.toprefproject.eu/>

At Dow, we consider standards as key tenets and critical success factors to test and assess our improvements in terms of resource efficiency, as well as to pave the way to the top quartile excellence.

HOW WILL THE STANDARD BE DEVELOPED?

The Danish Standards Foundation (DS) will follow the progress and the results that come forward with the purpose of ensuring that the research results regarding the Key Resource Indicators (KRI) can be used as the basis for new standards or as a supplement to existing standards

The Danish Standards Foundation, in close cooperation with the rest of the project team, will evaluate the research results and use the European standardization network to identify the necessary steps to elaborate the content of a pre-standard document or, if the necessary consensus is established, a formal standard. The pre-standard document will be a CEN Workshop Agreement or alike.

BENEFITS OF LINKING WITH STANDARDIZATION

Standardization processes ensure involvement of all relevant stakeholders and existing procedures. By linking the applied research on improving resource efficiency in specific sectors with existing standards and options for new standards, a more time efficient process is secured.

Also the standardization process will secure transparency and dissemination of results using the networks of National Standardization Bodies (NSBs) and members of relevant national mirror committees. Once the standard document has been finalized, it will be accessible for all interested parties.

Following the standardization route will help establish an European constituency around TOP-REF results, supporting the dissemination and widening the exploitation potential of project outputs. In addition, the dissemination of the project's results through the NSBs will bring higher international recognition to TOP-REF.

LONG-TERM EXPECTED IMPACT

In economic terms, standardization will contribute to improve Europe's competitiveness in world markets with a better use of raw materials and natural resources, renewable energy. The current policy framework paves the way for more environmental friendly laws and regulations, and this fact has incentivized companies to improve their environmental performance, not only in the reduction of emissions, but also in resources efficiency.

The use of standardized resource efficiency indicators coming from TOP-REF will allow companies to have a better knowledge of their environmental performance and the related financial impact. In addition, TOP-REF results will provide reliable data, which will allow a real comparison between companies and initiatives, ensuring the competitiveness of EU companies in global markets.



Comprehensible, reliable and comparable indicators are necessary to evaluate resource efficiency in industry and to set objectives of improvement - standardization plays a key role in harmonising and consolidating this work.

Shailendra Mudgal, Partner, BIO by Deloitte.

www.cencenelec.eu/research



Every project is different. The CEN-CENELEC Research Helpdesk can provide you with advice on how to include standardization in your project. Please feel free to contact us!

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