FISSAC June 2018 Update

Construction products

Industrial manufacturers in the FISSAC project include cement, concrete, ceramic, and wood-plastic composite producers. Supported by research and technological centres, they have spent the past 6 months working on the final evaluation of **new products formulations at laboratory scale.** Manufacturers have a central role in the FISSAC scenario addressing the main environmental impacts matching with the project objectives: reduction of waste generation, gains in productivity for waste treatment, and energy efficiency and associated GHG emissions.

The **transition from laboratory scale to pre-industrial and real-scale production** is ongoing. Thanks to the experience of the partners and the medium-scale demonstration, the first prototypes are expected to be manufactured before the end of 2018. Cement-based products, innovative ceramic tiles and pavement, and new wood plastic composites will be produced at pre-industrial scale to set up the basis for the validation at real scale.

These recycling and manufacturing processes offer a picture of the new FISSAC model for Industrial Symbiosis. Product, services, and technologies are part of the model for cooperation involving different industrial sectors. The implementation of the model will be facilitated by the FISSAC software platform.

Software platform

The first FISSAC Software Platform Prototype Version will be ready in August 2018. The FISSAC platform integrates the existing components and FISSAC Methodology functions. The existing LCA and GEO Referencing platforms will be integrated in the following months. The FISSAC platform will be used and evaluated within the project industrial symbiosis model system concept. A knowledge repository will be developed to be used for dynamic geo-database web service and will provide climatic, socio economic, financial, energy/material, and mobility information.

Once tested, the platform will be made available to all project stakeholders via the dedicated page on the FISSAC website. For now, read on to find out more on the platform in this newsletter.

Living Labs

The Living Labs are ongoing in different countries and each one has its own section on the FISSAC website. Their main objectives are to replicate the FISSAC model by promoting stakeholder acceptance (industry, public entities, social representatives, government, etc.). Through the exchange of experiences and knowledge among the different Living Labs, the partners follow up the replication of the FISSAC model.

During the **Spanish Living Lab** that took place last January, Símbiosy and ITeC (Institut de Tecnologia de la Construcció de Catalunya) initiated the first of a series of multidisciplinary workshops on industrial symbiosis in the construction sector. The next Living Lab will be organized in autumn 2018 in Barcelona, at ITEC's facilities.

The past **Italian Living Lab** organized by RINA Consulting, in collaboration with Associazione Industriale Bresciana (AIB), in Northern Italy aimed to present the project and address issues related to the industrial symbiosis, with focus on the steel, construction aggregates, and concrete sectors. A full summary is available in both English and Italian on the project website.

The **Living Lab in Hungary** was launched with the organisation of the conference "Resource efficiency in the domestic construction industry - Best practices in circular economy and eco-innovation" on 13 April 2018. To read up on this event, organised in synergy with the Interreg Europe TRIS project, you can find a summary on our website.

The **Czech Living Lab**, managed by FENIX in collaboration with the Institute of Circular Economy (INCIEN), aims to identify barriers of eco-innovation in the construction and building sector, as well as designing an action plan to overcome them. The first workshop focused on mapping relevant stakeholders' needs and provided inputs for the second one, planned for 20 September 2018 in Prague.

New reports

When the FISSAC project writes a report, we publish it on the website, either in full if it is public, or as a summary if it is confidential. You can find them all on the Library page.

To understand the challenges and opportunities for industrial symbiosis you need to understand your value chain and where value for your sector is created. But just knowing your value chain may not be enough. Following the TIS structure of analysing your Technological Innovation System (TIS) you will be able to identify drivers and barriers for change. You will look at your actors and your value chain, but also at different networks, institutions and how a lack of knowledge and underdeveloped technology may be what is preventing change and hindering the development of industrial symbiosis.

In our **new FISSAC report** you will find an accessible introduction to the field of TIS and a case study explaining how the TIS methodology can be used in conjunction with a material journey, following a material from production to destruction and reuse.

We hope that this report and case study will help you in conducting your own analysis and developing your field of industrial symbiosis.