FISSAC June 2019 Update

Construction products

The project has entered its **final year**, so there are plenty of ongoing activities to achieve the expected results.
As it approaches its final months, FISSAC project partners are now carrying out several activities to reach the expected goals.
Industrial partners have recently manufactured at industrial scale the following products:

- Eco-cement and concrete with secondary raw materials from the upgraded valorisation of steel, glass, aluminium and ceramic industrial waste;
- Innovative ceramic tiles manufactured with secondary raw materials from the upgraded valorisation of aluminium and natural stone industrial waste;
- Rubber Wood plastic composites manufactured with secondary raw materials from the upgraded valorisation of rubber, plastic & wood industries.

Currently the consortium is working on real scale demonstrations to test the innovative construction products developed through symbiosis processes at laboratory and pilot scale:

- Eco cement
- Green concrete pavement
- Autoclaved aerated concrete blocks
- Precast concrete pavers
- New Jersey barriers
- Innovative ceramic tiles
- Wood Plastic Composites for decking, cladding and fencing

Through five different case studies, we are showcasing how the new solutions developed can be actually implemented along the whole Industrial Symbiosis value chain: the manufacturing processes, the technical performance of the new products and their implementation at real scale in construction applications.

Software Platform

Among FISSAC main expected outcomes, there are also the **FISSAC Platform**, the **FISSAC IS methodology** and the **FISSAC model**. The platform aims to support the decision-making process on the base of through analysis, as well as a tool to facilitate the realization of new Industrial Symbiosis networks. The IT Platform will operate as a cloud-based and user-friendly service, handy and international.

On 25 & 26 February, the developing FISSAC IT platform was presented at the World Resource Forum 2019, to showcase the ongoing challenges. The Platform has a double

function: a life-cycle approach assessment of the flows of a potential symbiosis, and a GIS-based marketplace that helps users identify symbiotic industries in a given region.

Living Labs

Running in parallel, during the last 6 months several Living Labs have taken place in different countries, focusing also on non-technical barriers and social acceptance as key factors needed to implement symbiosis processes. To learn more about what is going on in the Living Lab, check the specific section on the website.

Replicability and new report

Over the last semester, an assessment of the replicability of the Industrial Symbiosis Model has been carried out adopting the following perspectives:

- The replicability of the industrial symbiosis opportunities investigated within the project;
- The replicability of the model to different fields and type of products;
- The replicability of the model in different EU target countries.

The ambition of the FISSAC model is to reach a high replicability potential also for regions not included within the project (Belgium, Czech Republic, Germany, Hungary, Italy, Spain, Sweden, Turkey and UK) as well as other value chains symbiosis scenarios. Industrial symbiosis is then interpreted as a strategy to foster the transition to circular economy, enabling tools and methodologies typical of the Circularity field but somehow adapted to fit within the construction industrial symbiosis value chain.
Check the Report on Industrial Segmentation, Criteria and correlation to the FISSAC first application to learn more about FISSAC replicability!