



CIRC-01-2016-2017

## Systemic

**Full Title:** Systemic large scale eco-innovation to advance circular economy and mineral recovery from organic waste in Europe

### Aim:

**Concept:** SYSTEMIC will reach a break-through to re-enter recovered nutrients from organic waste into the production cycle. Consequently, this will offer solutions for pressing environmental issues and to reduce the import of P as finite irreplaceable resource in mines. The SYSTEMIC project aims to shift the European Biomass treatment practice to the next level. Departing from existing business cases and a new ground-breaking large scale demonstration plant, the future of anaerobic digestion (AD) value chains will be investigated and demonstrated. The result will help existing and future AD-operators to maximise their performance: produce and sell more quality products, generate more energy and be independent on subsidies. By the market driven leadership, the SYSTEMIC-project will finally turn biomass waste into valuable products while reducing water pollution, greenhouse gas emission and creating quality jobs in rural areas. The planned demonstration plant will allow innovative combinations of modules to elaborate possible optimizations for increasing the production quantity and quality of new mineral products, and the integration of these products into a circular economy. Reflecting the experiences from the demonstration plant with a set of 4 mirror cases in different members states allow systemic innovation including end-user driven (a) specific technical development and (b) the cost efficient investigation of real world circular economy business cases and (c) operational, regulatory, institutional and contextual barriers to overcome. Using partial funding from the EC, the SYSTEMIC industry-driven consortium will validate for the first time the technical and economic viability of a fully integrated, multistep approach in an operational environment. The successful practical demonstration will put the European sector in a leading position to offer efficient mineral recovery technologies.

**Start date:** 01/06/2017

**End date:** 31/05/2021

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