



SPIRE-06-2015

SYMBIOPTIMA

Full Title: Human-mimetic approach to the integrated monitoring, management and optimization of a symbiotic cluster of smart production units

Aim:

SYMBIOPTIMA will improve European process industry efficiency levels by: (a) developing a crosssectorial energy & resource management platform for intra- and inter-cluster streams, characterized by a holistic model for the definition, life-cycle assessment and business management of a human-mimetic symbiotic cluster. The platform multi-layer architecture integrates process optimization and demand response strategies for the synergetic optimization of energy and resources within the sectors and across value chains. (b) Developing extensive, multi-disciplinary, modular and “plug&play” monitoring and elaboration of all relevant information flows of the symbiotic cluster. (c) Integrating all thermal energy sources, flows and sinks of the cluster into a systemic unified vision, as nodes of smart thermal energy grid. (d) Taking into account disruptive increase of cross-sectorial re-use for particularly impacting waste streams, proposing advanced WASTE2RESOURCE initiatives for PET.

Start date: 01/09/2015

End date: 31/08/2018
