

Specialists in designing and implementing INDUSTRIAL SYMBIOSIS strategies

SÍMBIOSY is a consultancy firm specialized in circular economy, using industrial symbiosis (IS) to help companies, municipalities and administrations identify possible synergies between industries by using agro-industrial resources data. We specialize in designing industrial symbiosis strategies for companies to optimize their surplus resources towards a more circular economy. Working in IS projects since 2013, we have developed the tools and methodology to identify synergies among companies/organizations of a territory and make them happen, always from a territorial/ecosystem approach.



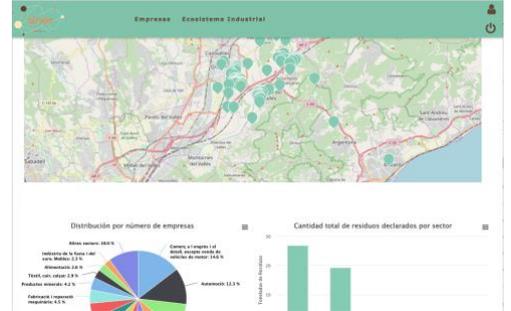
TOOLS



[SINER platform](#) is the online data management tool to implement industrial symbiosis projects towards a circular economy. Our software can effectively manage resource consumption and waste production of companies and identify potential high valued matches between companies through wasted resources.

TRAINING PROGRAMS

The FACILITATOR of IS projects is a demanded new professional profile that needs CROSS and diverse capacities. We train teams involved in the IS projects (municipal workers and IS promoters, business associations & clusters managers, public territorial technicians, etc.). Through the [INSIGHT](#) project (Erasmus+), we are currently designing and developing the training curriculum necessary for it in Europe.

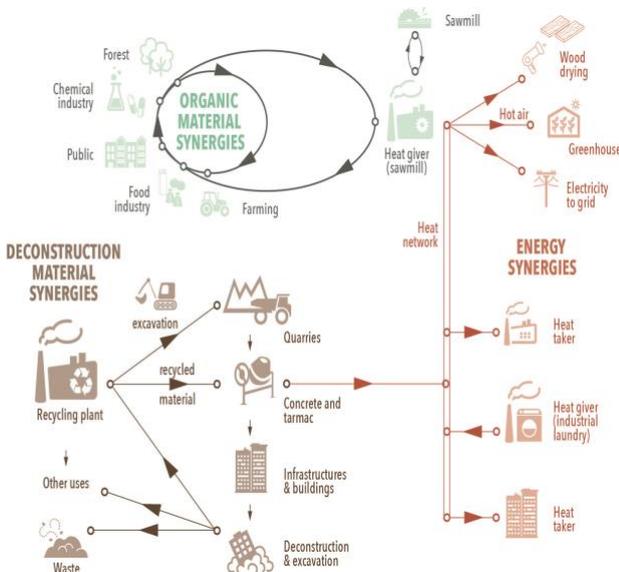


METHODOLOGY

1. Calculating the Circularity potential of a territory: materials flow maps
2. Estimating Impacts of the potentialities in the territory/companies
3. Working with companies to make opportunities happen: IS pilot project



What is Industrial symbiosis?



Industrial symbiosis is a business strategy encouraging collaboration between companies - traditionally separate - to make business opportunities happen by means of exploring innovative ways of implementing them:

- giving added value to spare resources
- finding innovative solutions to materials providing

It is all about considering the set of industries in a territory as if it was a natural ecosystem. In a natural ecosystem there is no waste, the energy flows and comes from the sun, and the more bio-divers the ecosystem is, the richer it is, and the faster it develops. Let's consider then our industries as part of an ecosystem, in this case, an industrial ecosystem where we encourage and facilitate companies to collaborate in order to maximize the use of the resources and to move towards a renewable energy transition.

The team



Joan, Ramon, Adriana, Alicia, Josep, Verónica, Noemí, Anna, Jesús, Rosa, Sergi



Mrs. Verónica Kuchinow: Specialist in industrial symbiosis and in resource efficiency as a business tool towards circular economy. Founder of ZICLA (www.zicla.com) in 2004 Verónica is since 2014 also co-founder of SÍMBIOSY and direct responsible of the international IS projects. Verónica is also President of the Energy&Waste Commission of the Catalan Agricultural Engineers Association and

active member of various national and European entities, think tanks and forums towards circular economy development via the industrial symbiosis. Verónica is Agricultural Engineer and Food Industry Engineer, with wide and divers training in resource efficiency and business management in Spain and in China; and in design and innovation as communication management strategic tools.



Mrs. Anna Lluís Gavalda: Specialist in energy-waste-water synergies for sustainable grid solutions, Anna has been 23 years involved in environmental public projects and services organic waste management. Waste to energy facilities, biomass-biogas energy grid, agro-industrial symbiosis projects, are some of the innovative solutions she has developed and implemented in behalf

of resource efficiency in waste management. Anna is co-founder of SÍMBIOSY since 2014 and direct responsible of “industrial coaching”, coordinating people and technical aspects for “making things happen”. Anna is Agricultural Engineer and Master in Energy Management, with wide training courses in Energy efficiency, Smart Grids and Business management.

Our experience

Some of our projects:

YEAR	CLIENT	PROJECT
2015-2020		FISSAC. European project H2020 Fostering industrial symbiosis for a sustainable resource intensive industry across the extended construction value chain
2015		Industrial Symbiosis pilot project in Catalonia , in the municipality of Manresa (Barcelona province) with the participation of the Catalan Waste Agency (Catalan Government)
2016		Curator of the Circular Economy European Summit by Fira de Barcelona
2016		Circular economy strategic plan for the Metropolitan Area of Barcelona. Industrial Symbiosis Metropolitan Program
2018		Circular Economy Plan for the city of Barcelona
2019-2022		EU Erasmus+ project: Fostering Industrial Symbiosis through the development of a novel and innovative training approach)
2020-2023		An industrial symbiosis incubator for maximizing waste heat/cold valorisation in industrial parks and districts. CSA. Horizon 2020



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