



# Biogas Science 2018



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## THE SYMBIOSIS PROJECT: BRINGING ANAEROBIC DIGESTION TECHNOLOGY TO RURAL AREAS OF SPAIN AND PORTUGAL FOR WASTES VALORIZATION.

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Anaerobic digestion of wastes for renewable energy production is well developed in Europe but, the situation is very different from one country to another. Germany and Italy are by far the main producer countries. Both countries have stimulated the biogas market with high feeding tariffs, which have promoted the construction of about 3,000 new plants in a few years. The main consequences of this policy were a major increase in electricity production from biomass, job creation in the sector of biomass and the strengthening of rural areas. On the contrary, in countries like Spain and Portugal, which have significant potential, this technology has not been implemented yet. The Symbiosis Project is a European project funded by the Interreg Poctep Program. The Spain-Portugal cooperation area of the Castilla y León Region and the Central Region of Portugal is characterized, from the demographic and social point of view, by a population decline, the aging of the population and the predominance of rural municipalities. The economy of this cross-border territory is mainly based on agriculture and livestock sectors, with small productions mainly for a subsistence economy, which makes it difficult to fix the population in the area. The objective of Symbiosis Project is to promote the efficient management of agricultural holdings in the Spain-Portugal cooperation area of the Castilla y León Region and the Central Region of Portugal. In this way, the area will be provided with greater profitability and competitiveness through the increase of technological development and innovation, contributing to the fixing of rural population in this cross-border area between both countries. The project is closely linked to the promotion of a local economy with low carbon emissions and resistance to climate change, all through the management of waste and the generation of renewable energy. The main waste treatment and valorization technology to be used will be the anaerobic digestion of animal and agro-food wastes in an on-farm level plant, obtaining renewable energy in the form of methane and a digestate to be applied to land as organic fertilizer. Moreover, the project aims to demonstrate that on-farm scale biogas plant are suitable for wastes treatment in rural areas of the Spain-Portugal cooperation area, promoting job creation and strengthening these rural areas.