



AD-VISOR PROJECT



Funded by the CDTI, with the support of the Spanish Ministry of Science, Innovation and Universities



Integral valorization of animal by-products for the production of bioplastics and biomethane

Project Description

The meat industry wastes management is an important challenge that carries a high cost in certain regions. It is proposed alternatively the development of solutions environmentally and economically sustainable with the valorisation of waste. The proposal promoted by Aqualia, with the support of the City Council of Guijuelo, supposes an innovative solution to get a beneficial use of these wastes.

The technology to be implemented in the municipal wastewater treatment plant (WWTP) will allow to reach more ambitious objectives than current (wastewater treatment to return water to the environment in good conditions), adding the integral valorization of animal by-products not intended for human consumption and the production of biofuel and bioplastics.

The treatment of these fatty wastes by co-digestion in the facilities available in the wastewater treatment plant has several advantages.

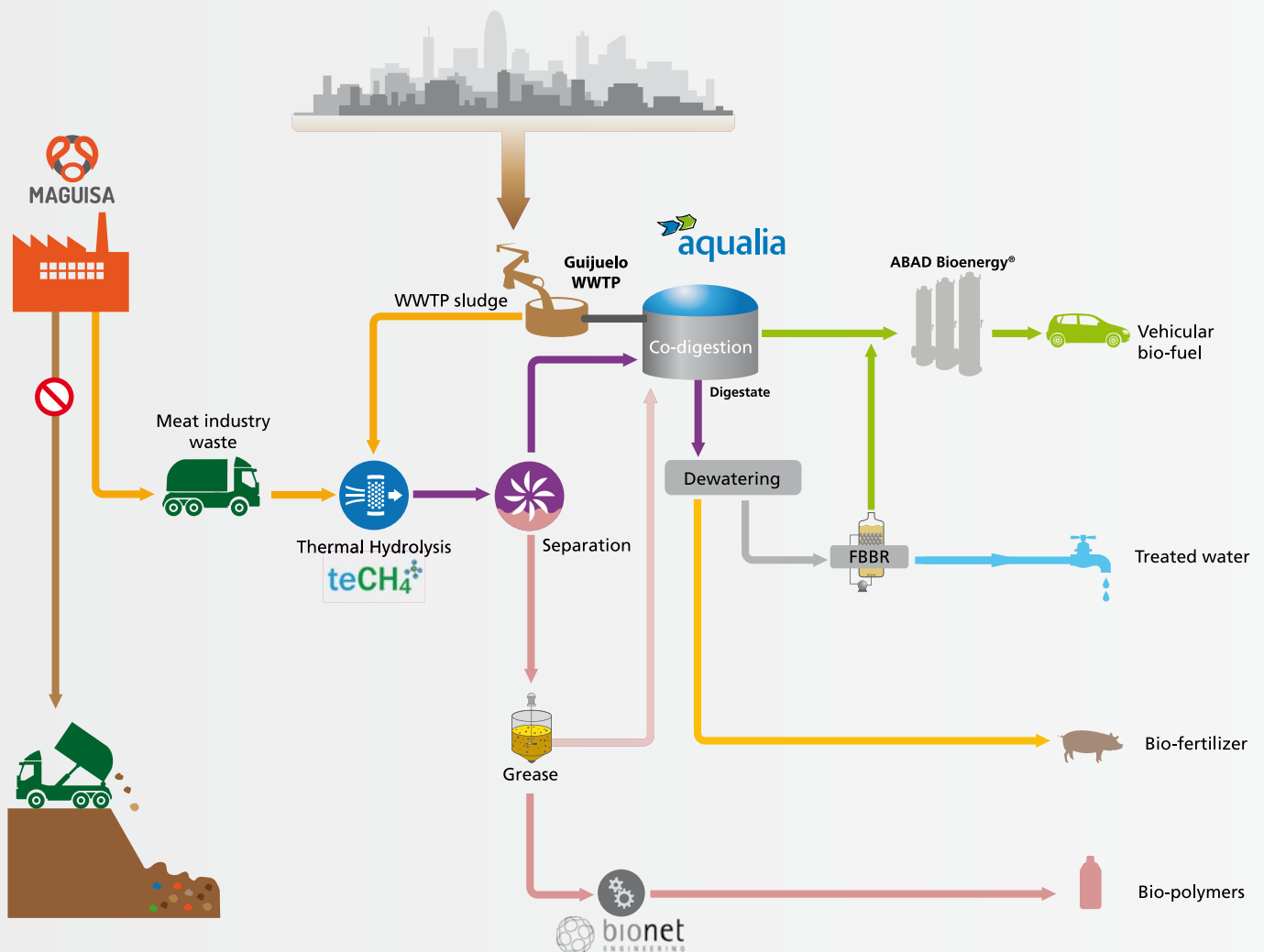
The AD-VISor project will optimize the use of the existing anaerobic digesters in the plant. For this purpose, it will be validated a thermal pre-treatment and novel control systems that will increase the treatment capacity and guarantee the efficiency of the process to obtain valuable products. In addition, new solutions will be developed to maximize the value of treated waste, such as a bioelectrogenic reactor and the biogas upgrading system ABAD Bioenergy®, developed by Aqualia, to obtain vehicular biofuel, boosting the city towards a sustainable mobility. The utilization of the fatty waste will be carried out through its transformation into bioplastics of high added value. The proposed solution will be validated using substrates from the local meat industry.



Location: Guijuelo WWTP (Salamanca)

Duration: From the 1st of October 2018 to the 31st of December 2020

Total Budget: 1,379,151.00 € **Aqualia:** 537,961.00 €



PROJECT PARTICIPANTS

- FCC Aqualia, S.A. (leader)
- Bionet Servicios Técnicos, S.L. (Bionet)
- TE Consulting House 4 Plus S.L. (teCH4+)
- Matadero de Guijuelo, S.A. (MAGUISA)



DETAILS OF FUNDING

Funding: ERDF INTERCONECTA 2018 Programme.
Organism: Centro para el Desarrollo Tecnológico Industrial (CDTI).
Project: EXP 00111839 / ITC-20181179
Grant: Subsidy 40%.

Funding received
Total: 702,487.40 €
Aqualia: 215,184.40 €