Marketable sludge derivatives from sustainable processing of wastewater in a highly integrated treatment plant

PROJECT DETAILS

Funding Programme:
7th Framework Programme (FP7)
Sub-Programme:
Environment
Funding Scheme:
Small or medium-scale focused research project
Project Reference:
265269;
UE-11-ENDOSLUDG-265269
Project Duration:
36 Months (From 2011-01-01 to 2013-12-31)
Total Project Value:
€ 5.464.646
EU Grant-Aid:
€ 3.456.872
Funding to UniOvi:
€ 428.087

Website:
http://unitedutilities.co.uk/default.aspx

PROJECT DESCRIPTION

This project researches, develops and demonstrates a toolkit of novel processes together with market development for advanced sludge-derived products and integration methodologies that can be applied to a range of wastewater treatment plants based on a typical municipal scenario. Supporting economic and life cycle assessment of the resulting gains in energy efficiency and conversion of renewable carbon, together with an implementation strategy based on a product mix with optimal value, will inform step changes that contribute to achieving more secure and sustainable sludge treatment and management practices in Europe while reducing pressure on natural resources and reliance on manufactured fertilisers. Addressing key sludge management issues in the context of EU climate change mitigation and energy policies, the project concentrates on novel processes for sludge volume reduction, more efficient treatment and downstream processing for high quality sludge derivatives together with application protocols and assessment of the pathogen risk and long term soil impact for greater public confidence.

Using an integrated approach with emphasis on the whole wastewater treatment system, the project promises innovative system solutions that have the potential to achieve up 20% annual carbon savings for the water industry by 2020 and ultimately could deliver up to 15,791,131 tCO2e pa savings for Europe. Composing of 14 partners including 7 SMEs from industry, academia and Government establishments, the Consortium is a balanced mix of highly qualified and committed individuals that are well-placed to tackle the technical challenges, disseminate the results and to exploit the EUR 17.5 billion market for new environmental equipment that will be opened up by the project

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Demeter Technology Limited
Sustainable Resource Solutions Limited
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