



WASTE²FUELS

Press release – 06/03/2019

Waste2Fuels project has just achieved its final phase

Started on 1st January 2016, the Waste2Fuels project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 654623 with the aim of sustainably producing next generation biofuels from waste streams. After 36 months of scientific and technical work, complemented by extensive business and exploitation activities and supported by a powerful communication campaign for engagement with key stakeholders, the project ended on 31st December 2018.

Coordinated by IRIS Technology Solutions S.L (Spain) and backed by the scientific coordination of the Università degli Studi di Napoli Federico II (Italy), the project consortium comprised 20 partners from 7 European countries (Spain, Italy, Austria, Ireland, UK, Germany, Greece) and an associated country (Israel).

Waste2Fuels has aimed to develop next generation biofuel technologies capable of converting agrofood waste (AFW) streams into high quality biobutanol. The main results achieved are very remarkable in terms of innovation and step-forward the state-of-the art. In particular, the project partners were active in:

- i) the development of novel pre-treatment methods for converting AFWs to an appropriate feedstock for biobutanol production;
 - ii) genetic modification of microorganisms for enhancing conversion efficiencies of the biobutanol fermentation process;
 - iii) the development of integrated recovery-fermentation system coupling inline the solvent recovery and biofilm reactor systems for enhancing conversion efficiencies of Acetone-Butanol-Ethanol (ABE) fermentation;
 - iv) the development of new routes for biobutanol production via ethanol catalytic conversion;
 - v) the valorisation of the process by-products;
 - vi) the development of an integrated model to optimise the waste-to-biofuel conversion and facilitate the industrial scale-up;
 - vii) the process fingerprint analysis by environmental and techno-economic assessment;
 - viii) the biomass supply chain study and design of a waste management strategy for rural development.
- The biobutanol engine tests and ecotoxicological assessment of the produced biobutanol has also been scheduled during the second period of the project.

Although the project ended, the project website will remain central instrument for communication and dissemination of the project results. In the document section of the website, materials are available explaining background and challenges of topics covered in the project, presenting solutions and results.



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