



WASTE2FUELS

*Sustainable production of next generation
biofuels from waste streams*

Project ID card

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Website: www.waste2fuels.eu

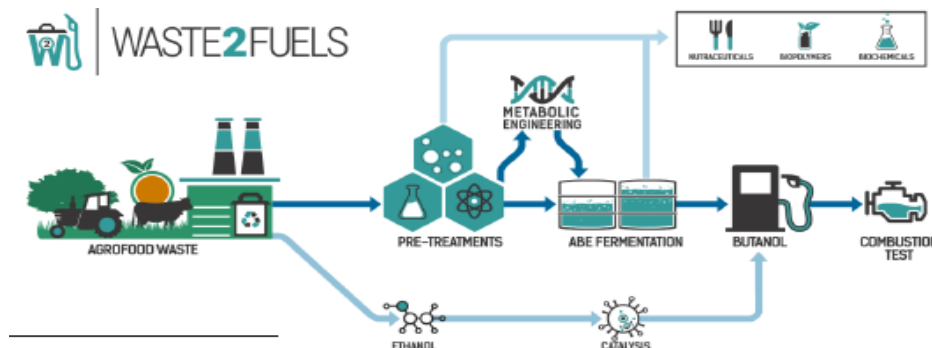


The WASTE2FUELS project in brief

It is devoted to the development of novel pretreatment methods for converting unavoidable agrofood waste to an appropriate feedstock for biobutanol production, thus dramatically enlarging current available biomass for biofuels production. In doing so, the project would make a major contribution to leading the EU into the next generation of sustainable butanol, domestic bioenergy production and advanced agrofood waste management.

RESULTS ACHIEVED

- Development of novel pre-treatment methods for converting AFWs to an appropriate feedstock for biobutanol production.
- Genetic modification of microorganisms for enhancing conversion efficiencies of the biobutanol fermentation process.
- 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.
- Development of new routes for biobutanol production via ethanol catalytic conversion.
- Valorisation of the process by-products.
- Development of an integrated model to optimise the waste-to-biofuel conversion and facilitate the industrial scale-up.
- Process fingerprint analysis by environmental and techno-economic assessment.
- Biomass supply chain study and design of a waste management strategy for rural development.
- Biobutanol engine tests and ecotoxicological assessment of the produced biobutanol.



PROJECT CONSORTIUM

