

ABC-Salt is a new four-year project funded by Horizon 2020 that will validate a novel route to produce sustainable liquid biofuels at lab scale.

Nine European partners from academia, industry and research organisations are collaborating to create new technologies with the potential to reduce dependence on fossil fuels and support the EU towards achieving a low-carbon economy.

ABC-Salt is an acronym for *Advanced Biomass Catalytic Conversion to Middle Distillates in Molten Salts* and aims to solve a number of technical challenges in biofuels production. ABC-Salt will receive nearly four million Euros from the EU's Horizon 2020 Research and Innovation Programme, and launched in April 2018 following a meeting at the University of Groningen,

Eight inter-related work packages have been developed to tackle the challenge of liquefaction and the subsequent catalytic hydro-pyrolysis of biomass in a molten salt environment, followed by the catalytic hydro-deoxygenation of the vapour phase using suitable catalysts to obtain a hydrocarbon product suitable for use as a middle distillate biofuel. ABC-Salt will then operate an integrated lab scale reactor over 100 hours to provide lab-scale validation of the whole process, bringing this technology to readiness level 4.

The project includes technical aspects, such as substrate flexibility, biomass liquefaction and hydro-pyrolysis in molten salts, as well as socio and techno-economic viability studies to ensure the future deployment of technologies is suitable for integration, considering substrate availability, supply chains, future end users and the overall economic sustainability of the process.

This holistic approach of this project considers the full value chain and includes a promotion and dissemination element to ensure outcomes are effectively communicated. A number of ABC-Salt Summer Schools and open workshops will take place across Europe over the next four years to maximise the impact of the project and ensure the implementation of new technologies is effective.

ABC-Salt aims to have a positive effect upon the biomass, biofuel and transport industries, developing new technologies that will reduce dependence on unsustainable fossil fuels and support progress towards the EU's achievement of a low-carbon economy by 2050.

Enquiries can be directed towards the project co-ordinator Erik J Heeres (h.j.heeres@rug.nl) at the University of Groningen (RUG). A new website is coming soon to www.abc-salt.eu, which will support open access to the project's outcomes.

Partners: Rijksuniversiteit Groningen (Netherlands), BTG Biomass Technology Group BV (Netherlands), Norwegian University of Life Sciences (Norway), Gent University (Belgium), German Aerospace Center (Germany), Rise Innventia (Sweden), CIRPA The Inter-University Centre for Research in Environmental Psychology (Italy), Ayming (France), Aston University (UK)

Photograph: ABC-Salt Consortium – Groningen University - April 2018



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