

Heat-to-Fuel is a Horizon 2020 EU-funded project carried out by 14 partners from across Europe that aims to deliver the next generation of biofuel production technologies supporting the de-carbonisation of the transportation sector.

Heat-to-Fuel partners possess over 100 years of combined sectorial expertise and experience in the production of biofuels, and they'll bring into the project the leading-edge demonstration facilities based on key industry and academic partners.

Transportation corresponded to 31.6% of Europe's final energy consumption in 2013. The source of this energy depends to a large extent on fossil fuels import, being diesel and kerosene the two major fuels for heavy trucks and air transportation. Thus, decarbonised production diesel and kerosene as an alternative to fossil fuels becomes relevant for reducing carbon emissions in the sector. **Heat-to-Fuel will spearhead EU's research in grasping the opportunity to provide efficient technologies and processes for decarbonised fuels for the transportation sector**.

In numbers, Heat-to-fuel aims to:

- Deliver cost-competitive technologies achieving biofuel prices below €1 per litre. This is achieved by a 20% cost reduction in the biofuel production processes;
- Increase the quality of the biofuel resulting in 5% life-cycle green-house gases emissions reduction;
- Contribute to delivering goals of EU's energy security by increasing the share of local resources used for producing energy, and thus reducing EU's dependency of energy's imports;
- Support local economies by generating 80-100 direct and 250 indirect jobs each time a new Heat-to-Fuel biorefinery is built;
- Prove the technological feasibility and economic worthiness of the concept acting as a catalyst of future industrial units.

These overarching objectives will be achieved thanks to the integration of novel technologies in Heat-to-Fuel together with innovative activities on design, modelling, development of hardware and processes, testing and life cycle analysis of a fully integrated system.

At the end of the project, the know-how acquired will allow scalability at a demonstration level before commercialisation, representative of the next generations of sustainable biofuel technologies

The project, coordinated by the Austrian institution Güssing Energy Technologies, started in September 2017 and will last four years.

