

## CONSULTATION

To validate the results of the project and ensure their successful uptake, ADVANCEFUEL will engage and maintain dialogue with stakeholders from the entire value chains of liquid, renewable and advanced transport fuels (jointly referred to as RESFuels).

For this purpose, a dedicated **Stakeholder Platform** has been developed on the ADVANCEFUEL's website, offering subscribers the opportunity to share their opinions via personal interviews and consultations as well as by contributing to draft ADVANCEFUEL project tools and results.

Stakeholders will be consulted to identify the most relevant and important barriers to the development and commercialisation of efficient advanced biofuel supply chains. According to their role in the value chain, stakeholders will then be invited to join one or more of the ADVANCEFUEL **thematic activity groups**:

- **Biomass supply**, to assess needs and barriers, compile data on biomass availability and discuss the benefits and potential improvement measures of different cropping systems.
- **Conversion and technology upscaling**, to identify most promising technologies for biofuel production and to discuss opportunities for 'greening' existing fossil fuel infrastructure.
- **Sustainability**, performance, certification, standards and related challenges considering socio-economic and environmental aspects.
- **Market analysis**, involving key market players and policy makers, showcasing best practices and discussing market framework and policy barriers.

### Are you interested in the future market deployment of advanced, renewable fuels?

By joining the ADVANCEFUEL Stakeholder Platform, you can:

- Be informed of the project's research results and be the first to test ADVANCEFUEL project tools;
- Access consolidated data on lignocellulosic feedstock availability and RESFuel market potential;
- Take part in the review of national and European standards for RESFuels and contribute to the identification of best practices to accelerate their market uptake;
- Participate in dedicated events to shape the future of advanced renewable fuels in Europe.

To join the Stakeholder Platform, visit our website at:

[www.ADVANCEFUEL.eu](http://www.ADVANCEFUEL.eu)

## PROJECT PARTNERS



FNR – Fachagentur  
Nachwachsende Rohstoffe  
(Co-ordinator)  
Germany



ECN – Energy Research  
Centre of the Netherlands  
The Netherlands



Universiteit Utrecht  
Utrecht University  
The Netherlands



Imperial College London  
United Kingdom



CHALMERS  
UNIVERSITY OF TECHNOLOGY  
Chalmers University  
of Technology  
Sweden



Greenovate! Europe  
Belgium



ATB - Leibniz Institute  
for Agricultural Engineering  
and Bioeconomy  
Germany



Aalto University  
Finland

### CONTACT:

**Co-ordinator:** Kristin Sternberg / [k.sternberg@fnr.de](mailto:k.sternberg@fnr.de)  
**Communication:** Simon Hunkin / [simon.hunkin@greenovate.eu](mailto:simon.hunkin@greenovate.eu)  
**Media:** Vanessa Wabitsch / [vanessa@revolve.media](mailto:vanessa@revolve.media)

[www.ADVANCEFUEL.eu](http://www.ADVANCEFUEL.eu)

The ADVANCEFUEL project (Full Title: "Facilitating market roll-out of RESfuels in the transport sector to 2030 and beyond"), has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 764799.



REMOVING BARRIERS TO

# RENEWABLE TRANSPORT FUELS



ADVANCEFUEL

## OBJECTIVES



### KEY CHALLENGES ON THE ROAD TO CLEANER TRANSPORT FUELS

Production of biofuels has grown rapidly since the early 2000s as markets have matured, driven in part by political targets and incentives to reduce greenhouse gas emissions. In the last years, however, experts have questioned the overall sustainability of conventional biofuels, including their impact on land use patterns and food prices, and their carbon emissions across the production value chain.

In response, a **new generation of advanced, renewable transport fuels** is emerging, but their commercialisation is held back by numerous barriers along the entire value chain, including limited public acceptance and policy uncertainties, considered as potential risks for investors.

### REMOVING BARRIERS TO RENEWABLE TRANSPORT FUELS

The ADVANCEFUEL project aims to **facilitate the commercialisation of liquid, renewable and advanced transport fuels (RESFuels)** by providing market stakeholders with new knowledge, tools, standards and recommendations to help remove barriers to their uptake.

To support commercial development of these fuels, the project will develop a **framework to monitor the current status, and future perspectives, of RESFuels** in Europe in order to better understand how to overcome barriers to their market roll-out. Following this, it will investigate individual barriers in the fields of biomass availability, conversion technologies, sustainability as well as market framework, and advance new solutions for overcoming them.

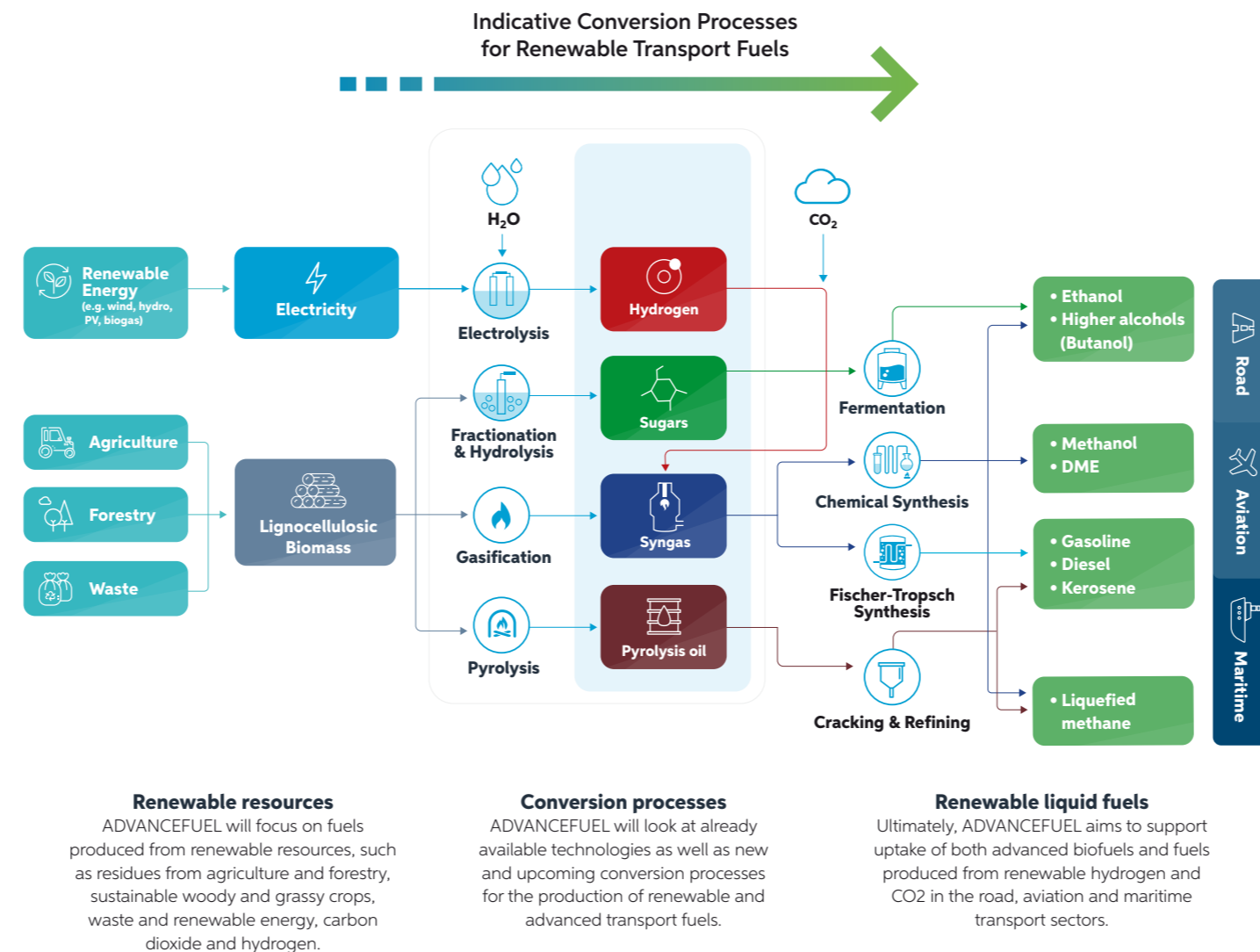
As a result, a decision support tool will be created for policy-makers to enable a **full value chain assessment of RESFuels**. Key market stakeholders will be involved throughout the whole process and will help define policy recommendations based on best practices to support the successful market uptake of renewable transport fuels.

In this way, ADVANCEFUEL will contribute to achieving the EU's renewable energy targets and **reduce carbon emissions in the transport sector to 2030 and beyond**.

## RENEWABLE TRANSPORT FUELS?

### WHAT ARE RENEWABLE TRANSPORT FUELS?

The ADVANCEFUEL project will look into **liquid advanced biofuels** – defined as liquid fuels produced from lignocellulosic feedstocks from agriculture, forestry and waste – and **liquid renewable alternative fuels**, produced from renewable hydrogen and CO<sub>2</sub> streams (summarised in the term RESFuels). Within the project, different conversion processes for the production of advanced transport fuels will be considered and reviewed.

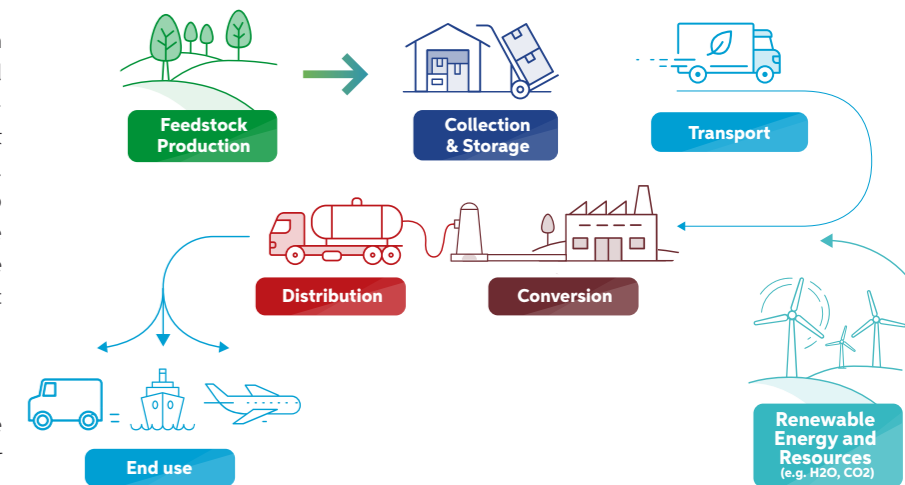


## ACTIVITIES

### PRODUCTION OF RESFUELS: ADDRESSING THE FULL VALUE CHAIN

#### BIOMASS AVAILABILITY

Advanced biofuels will mainly rely on provision of lignocellulosic biomass. ADVANCEFUEL will explore Europe's biomass potential, investigating logistics and costs to identify relevant feedstock for renewable transport fuels. Building on these results, experts will develop innovative crop rotation schemes and propose region-specific strategies to increase the sustainable availability of lignocellulosic feedstock.



#### BIOFUELS CONVERSION

Improved technologies will be needed for the conversion of selected biomass and other renewable resources into RESFuels. ADVANCEFUEL will analyse how production can be scaled-up, examining existing conversion technologies with respect to their development stage, costs, complexity, type and amount of energy sources used, and required infrastructure. Future development of these technologies will be planned through a dedicated timeline. Moreover, ADVANCEFUEL will investigate how identified technologies could be integrated in existing fossil fuel infrastructure.

#### SUSTAINABILITY

Ensuring the sustainability of RESFuels requires socio-economic and environmental impacts to be taken into account across the entire value chain. To this end, ADVANCEFUEL will develop tailor-made indicators to assess the sustainability of advanced renewable fuel supply chains at regional scale, and upgrade existing tools for the comparison of greenhouse gases emission

reduction. On this basis, project partners will review national and European standards, and provide recommendations for their harmonisation.

#### MARKET UPTAKE

ADVANCEFUEL will evaluate the market potential of advanced biofuels, including market trends, growth rates and cost competitiveness, to help investors make informed decisions. Partners will also develop a numerical tool to allow potential end-users to compare different RESFuels and to identify their advantages over their fossil equivalents. In this way, ADVANCEFUEL will provide evidence for future market uptake potential of advanced renewable fuels and communicate their benefits to the society.

**ADVANCEFUEL results will be integrated in a full-chain assessment tool, assessing environmental and socio-economic impacts of RESFuels along the whole value chain.**

Throughout their collaboration with stakeholders, experts will also identify current policy gaps as well as efficient support mechanisms and provide tailored recommendations to stimulate market uptake.