



WHAT IS CLARA?

CLARA is a Horizon 2020 project, funded by the EU, involving 13 partners from across Europe, which aims at developing an efficient technology for the production of 2nd generation liquid biofuels based on chemical looping gasification (CLG) of biogenic residues.

H2020 Research and Innovation action
Grant Agreement n° 817841

<https://clara-h2020.eu/>

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PARTICIPATE IN THE CLARA EXPERT WORKSHOP!

- The CLARA consortium cordially invites you to participate in the “*Expert Workshop on Innovative Synthesis Routes for 2nd Generation Biofuels*” held on the **22nd April 2021 from 9:45 – 12:45 CEST**.
- The expert workshop will be organized as an **online event** featuring speakers from politics, research, and industry. You will have the chance to learn more about current **endeavors towards carbon neutral and socially viable road transport fuels** synthesized from biomass residues. Join **for free** by registering here: [📧 https://clara-h2020.eu/workshop](https://clara-h2020.eu/workshop).
- Each session will feature an exclusive Q&A session, where you will have the chance to ask your questions to all speakers. A full **workshop agenda** can be found here on the project website [📧 https://clara-h2020.eu/](https://clara-h2020.eu/).

Timetable

9:30 – 9:45
Welcome & Introduction
9:45 – 11:00
Policy & Industry Session
11:15 – 12:30
CLARA Session
12:30 – 12:45
Concluding Remarks

- *R&I policy on bioenergy and biofuels: the European viewpoint*
T. Schleker – European Commission
- *The role of gasification technologies in 2nd generation biofuels value chains from an industry perspective*
C. Aichernig – Aichernig Engineering
- *Interest & potential of 2nd generation biofuels in petro-chemistry from an industry perspective*
J. Lederer – Orlen UniCRE
- *Compact gasification and synthesis process for biofuels: Outcomes from COMSYN project*
J. Kihlmann – VTT
- *Development of a concept for pre-treatment of straw*
I. Funcia – CENER
- *Oxygen carrier selection for chemical looping gasification of biomass based on the results of continuously operated units in the kW-range*
A. Soleimani – Chalmers University
- *Innovative H₂O₂-based sour gas cleaning concept - basic ideas and status*
F. Buschsieweke – RWE
- *Preparation of a 1 MW_{th} pilot plant for full-chain 2nd generation biofuel production tests based on chemical looping gasification*
F. Marx – TU Darmstadt

ABOUT THE PROJECT

The **de-carbonization of the transport sector** is a key factor for to achieve **significant reductions** in greenhouse gas emissions that are required to **prevent a surge in global average temperatures**, exceeding the 1.5 °C Paris Agreement threshold. To tackle this issue, the **large-scale deployment of biofuels**, in addition to electrification and the increased deployment of rail transport, is necessary. Therefore, **substantial advances in renewable fuel generation**, not affecting food availability and prices, are required. One route to achieve these objectives is **the synthesis of advanced biofuels through thermochemical conversion** of biomass-based residues. Within the scope of *CLARA*, an efficient technology for the **production of liquid fuels based on chemical looping gasification (CLG) of biogenic residues** is being developed. The major objective is to further investigate and test CLG up to 1 MW_{th} scale in an industrially relevant environment, elevating the process to market maturity. Furthermore, the project aims at devising and optimizing innovative, cost-efficient technologies for biomass pre-treatment and syngas cleaning. These novel process steps will be supplemented by established fuel synthesis technologies (e.g. Fischer-Tropsch process), yielding the full biomass-to-biofuel process chain.

For more information on the project visit <https://clara-h2020.eu/> or subscribe to the biannual newsletter.



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