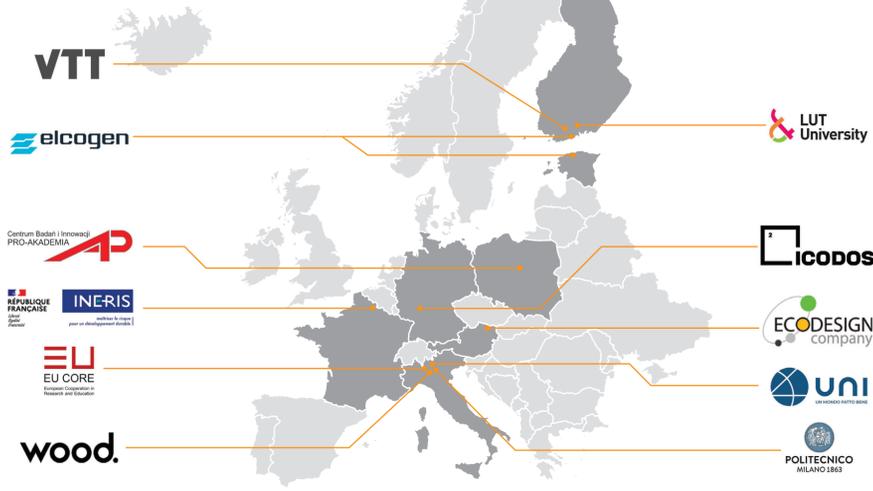


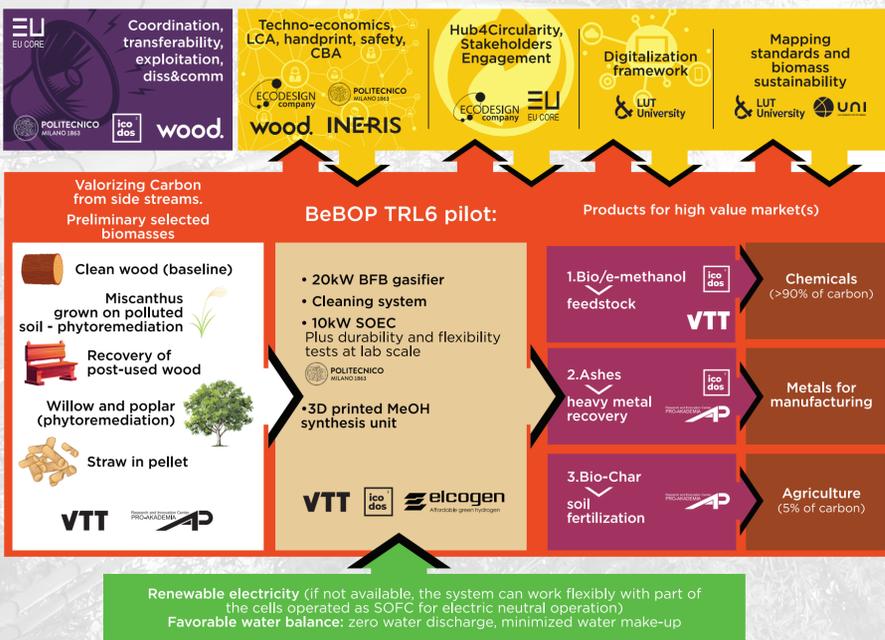


Biomass to bio/E-methanol by Breakthrough SOEC-based Process: the BeBOP innovation



BeBOP is a European project granted under Horizon Europe framework programme. It aims to industrially deploy a disruptive, digital process-intensified, ultra-high resource efficient and flexible biomass power-to-methanol plant, that can transform the chemical sector, while showcasing a first-of-its-kind complete TRL6 pilot plant, ready to be scaled-up and replicated by the European biomass-based industry.

BeBOP solution



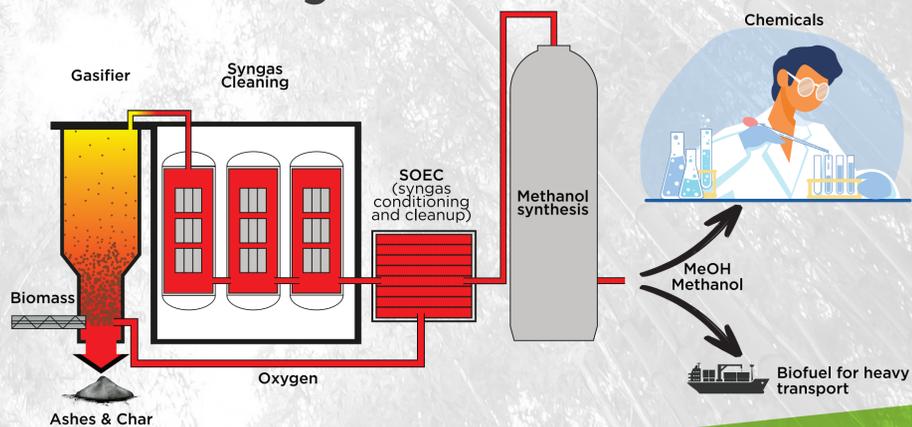
BeBOP: a disruptive Power Biomass to X (PBtX) system.

- Integrated SOEC for syngas upgrading
- Electrochemical separation of excess oxygen to enhance bio/e-methanol production
- 100% biogenic carbon usage Reduction of environmental impact & carbon footprint.
- TRL6 pilot demonstration 20 kW biomass to-methanol system at VTT (Finland)
- Biomass flexibility Adapts to various feedstocks
- Self-sustaining energy SOEC reversibility enables in-situ electricity production

BeBOP circularity

BeBOP: full waste-stream valorization

- Zero-water discharge Sustainable process design
- Biochar & heavy metals recovery Extracted from biomass gasifier ash
- Oxygen co-production used for gasification or exported



BeBOP pathway to TRL9



CONTACT EMAILS
Project's Coordinator: Martina Fantini – fantini@eucore.eu
Additional contact: Irene Liverani – liverani@eucore.eu

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EU contribution: € 11 166 415,71 (Research and Innovation Action)
Number of participants: 12
Coordinator: EU CORE Consulting S.r.l.

WEBSITE



SOCIAL MEDIA



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