



Press Release #1: September 2024

We proudly announce the launch of the ***“Bio Methanol Production via Chemical Looping Gasification Coupled with Membrane Reactors”*** (Bio-MeGaFuel) project.

This groundbreaking research and innovation initiative is designed to develop a novel technology for producing sustainable biomethanol from biogenic residues and waste with net zero emissions.

Bio-MeGaFuel focuses on establishing a novel, efficient, and scalable process to convert low-value biogenic residues and organic waste into biomethanol at low cost. By developing chemical looping gasification coupled with membrane reactors, the project aims to achieve Technology Readiness Level 5 (TRL 5) by 2028. This innovative approach will significantly lower the cost of biomethanol production while overcoming the constraints of conventional gasification and methanol synthesis methods. The project also aims to intensify the process, reduce the need for downstream treatments, and create synergies with renewable energy sources, such as renewable hydrogen integration.

This breakthrough will pave the way for greater adoption of biomethanol in the chemical industry, and notably as a sustainable fuel alternative for hard-to-abate sectors such as aviation and marine transportation, particularly in the use of methanol in fuel cells for mobility. By reducing production costs and scaling up biomethanol output, Bio-MeGaFuel aims to offer a renewable, economically viable solution to the fuel challenges faced by sectors critical to the global economy.

Bio-MeGaFuel is a collaborative effort between 10 partners from 5 European countries, namely:

- RISE Research Institutes of Sweden (Sweden)
- GIDARA Energy (Netherlands)
- Technische Universität Darmstadt (Germany)
- Eindhoven University of Technology (Netherlands)
- Spanish National Research Council (CSIC) (Spain)
- IVL Swedish Environmental Research Institute (Sweden)
- Perpetual Next (Netherlands)
- 1CUBE (Netherlands)
- Blue World Technologies (Denmark)



The project is coordinated by Dr. Amir Soleimani Salim from RISE Research Institutes of Sweden.

The Bio-MeGaFuel project has been awarded €3.8 million in funding by the European Union through the Horizon Europe program. This support highlights the European Union's commitment to advancing sustainable energy solutions and addressing climate change.

With the expertise and dedication of our consortium, Bio-MeGaFuel is poised for success.

Stay tuned for the launch of our project website, where you will find detailed information and updates on our progress. Follow our LinkedIn page for the latest news and developments.

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“Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor CINEA can be held responsible for them.”