

# FlexSNG

## Flexible Production of Synthetic Natural Gas and Biochar via Gasification of Biomass and Waste Feedstocks



### Key Facts



**Funding Agency**  
HORIZON 2020



**Project Call**  
LC-SC3-RES-36-2020



**Duration**  
06/2021 – 05/2024



**Coordinator**  
Technical Research Center of  
Finland (VTT)



### Partners

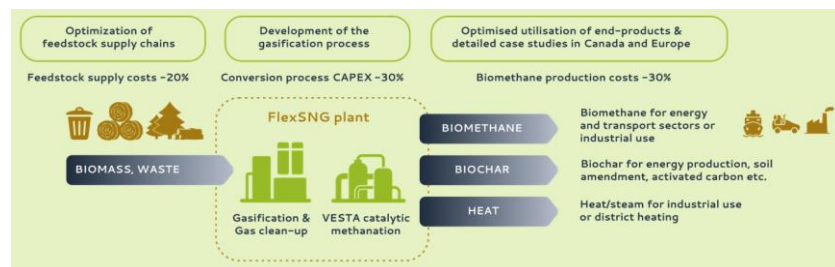
- Centre for Research and Technology Hellas (CERTH)
- Creative Optimization Sweden AB
- ETA-Florence Renewable Energies
- John WOOD Group PLC / Amec Foster Wheeler Italiana Srl
- Johnson Matthey
- Polytechnique Montréal
- Skogforsk
- Sumitomo SHI FW
- Technical University of Denmark (DTU)
- Université Laval



**Website**  
<https://www.flexsng.eu/>

### Project Objectives

The objective of the FlexSNG project is to develop and validate (to TRL5) a highly efficient, cost-effective and feedstock-flexible concept for the production of intermediate bioenergy carriers (biomethane and biochar) and heat. This concept shall be based on a variety of low-cost, non-food/feed biomass residues and biogenic waste feedstocks. The development of gasification process development and feedstock supply chain optimization will be carried out by the Canadian and the European partners of the project. This will lead to significant an expected reduction of the biomethane production costs of more than 30% compared to the state-of-the-art biomass-to-SNG technologies.



### EIFER's Contribution

EIFER will be mainly involved in the WP 6, "Investigation of the different utilization options for the two intermediate bioenergy carriers" and will lead the following tasks:

- Chemical and physical characterization of biochar
- Experimental testing of biochar utilization
- Utilization option for biomethane
- Evaluation of utilization options regarding the overall concept.

Furthermore EIFER will participate to the WP8 "Case studies, environmental analysis and business potential" and will be responsible for the case studies in Central Europe.

*This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No. 101022432 and the Government of Canada's New Frontiers in Research Fund (NFRF) and the Fonds de recherche du Québec (FRQ).*



### Contact

Karol Witkowski  
+49 721 6105 1331  
[karol.witkowski@eifer.org](mailto:karol.witkowski@eifer.org)

EIFER - Europäisches Institut für  
Energieforschung EDF-KIT EWIV  
Emmy-Noether-Straße 11  
76131 Karlsruhe, Germany  
[www.eifer.org](http://www.eifer.org)