

PRESS RELEASE 14 December 2022:

## Winning Conditions for the FlexSNG project

Many recent initiatives promoted at European level demonstrate a growing interest in the **uptake of biomethane** as a sustainable, renewable, and reliable energy source. According to the RePowerEU plan, increasing the production and use of biomethane would reduce the EU's dependence on fossil fuels, while simultaneously reducing exposure to volatile natural gas prices.

The H2020 **FlexSNG project** has exactly the solution required for such a rapid and urgent upscale; a flexible and cost-effective gasification-based process to produce pipeline-quality biomethane, together with high-value biochar and renewable heat from low-quality and low-cost bio-feedstocks.

FlexSNG held its first topical workshop at EIFER, Karlsruhe, Germany on 3 November 2022, joined by nearly 200 guests, in person and online, proving to be a great success. During the workshop, **“Turning low cost bio-feedstocks into valuable products”**, a group discussion assessed the **main strengths and concerns** of the FlexSNG process, in order to identify the **“winning conditions”** for the project to reach its goals.



Stephan Seidelt, EIFER, introduces the green gas market in Europe *“Biomethane is consumed depending on incentives and historic uses in different countries, for example biogas in Germany is used mostly for electricity production, whilst in Italy it is used entirely for transport. The only green gas at the moment is biomethane, therefore SNG has a huge market potential.”*

The economic challenges of the biofuel processes are well-known and depend strongly on feedstock price and quality that meet the project scale, and that of course impacts on the project price, and above all policy has a huge role to play largely in the function of site selection.

Paul Stuart, Canadian Partner Polytechnique Montreal, stepped into explain about the idea of industrial symbiosis: looking across the whole energy production value chain to collaborate to become more cost effective. *“Industrial symbiosis identifies how a network of diverse organizations can foster eco-innovation*

*and long-term culture change, create and share mutually profitable transactions and improve business and technical processes.”*

The most positive output of becoming more efficient is the positive environmental impact: by increasing process output the waste is reduced. The flexibility of the FlexSNG process, thanks to digitalisation improving the overall efficiency of the process, means the facilities can run at almost 100% under both modes of operation, meaning that there is no wasted capital in its operation.

Ilkka Hiltunen, representing the project coordinator VTT, highlights the winning conditions: *“the strength of this project is to use a wide variety of biomass quantities”*. The use of local biomass residues, also according to seasonal availability, and so avoiding heavy transport logistics. The variety and flexibility allow reasonably priced feedstock to be utilised. Since the end product price, SNG or Biochar, is determined by the capital investment and raw material cost by *“focusing on lowering these two costs the end product cost is also reduced.”*

Given the latest policy developments at the EU level that are expected to facilitate new investments into the biogas and biomethane sector the FlexSNG project is hoping to benefit from this. Maria Georgiadou, DG ENER commented during the topical workshop *“Unlike the heat and power generation, which is highly contested in the debate around the use of biomass for energy purposes, biomethane has a wide political support”*.

In line with the RePowerEU plan, the *Biomethane Action Plan* states that biomethane production must be based on biomass feedstock coming from sustainable sources, which again favours the flexibility of the feedstock that can be used in FlexSNG process.

The main and most important conclusion of the topical workshop is that **flexibility is key** to the success of the FlexSNG process deployment.

**About:** FlexSNG is a Research and Innovation Action (RIA) that started on 1 June 2021 and will run for 36 months until 31 May 2024.

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