

International Newsletter #1 April 2023



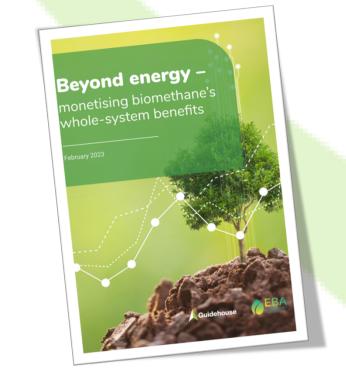
BIOMETHAVERSE (Demonstrating and Connecting Production Innovations in the Biomethane
 Universe) sets out to diversify the technology basis for biomethane production in Europe, increase its cost-effectiveness and contribute to the uptake of biomethane technologies.
 To this aim, 5 innovative biomethane production pathways will be demonstrated in five European countries: France, Greece, Italy, Sweden and Ukraine.

News from the biomethane universe

Find out what is tending in the biomethane, biogas and renewable energy sector

New study shows that monetary value of whole-system benefits of biomethane far outweighs current production costs

A new report from the European Biogas Association shows that, in 2030, the whole system benefits of biomethane production in the EU27 + UK could range from 38-78€ billion per year, rising to 133-283€ billion by 2050. Currently, producers of biomethane are primarily rewarded for contributing to renewable energy targets via support or market-based mechanisms.





European Biogas Conference at The EGG Conference Center - Rue Bara 175, 1070 Brussels
26 October 2023
Visit to a Biomethane facility: the Sustainable Fuel Plant Zeeland

Countdown to 2030: from targets to action

This year for the first time, the European Biomethane Week will take place from 24 to 26 October in Brussels. The 1st edition of the European Biomethane Week builds on the European Biogas Conference, the flagship event of the European Biogas Association. This new concept will count on the support of the Biomethane Industrial Partnership and will offer multiple opportunities to engage, get insights and explore the most relevant topics for the biogases industry. Read More

The additional positive externalities that biomethane production delivers are not currently fully rewarded or recognised by society at large. The EBA study "Beyond energy: monetising biomethane's whole system benefits", undertaken by Guidehouse, has quantified the value of these benefits for a selection of sustainable feedstocks relevant for anaerobic digestion and thermal gasification biomethane production technologies. The reduction of greenhouse gas emissions, such as the recovery of biogenic CO_2 during the production process, is a key value driver. Energy security, job creation and waste processing are also playing an increasingly significant role over the next few decades. **Read More**



Pills from the project

Discover project activities and insights coming from BIOMETHAVERSE's research team

Meet the BIOMETHAVERSE Crew

We are lucky and proud to have onboard the BIOMETHAVERSE project such a scientificallysound technology-powered and innovationoriented consortium, counting <u>22 partners</u> based in 9 different countries. Their expertise covers a wide spectrum and diverse angles of the renewable energy and biogas value chain. Read More







Clustering activities with our 'buddy' projects

We have already made friends with our 'buddy' projects, the other three biomethane-dedicated projects funded under the same call (HYFUELUP, METHAREN and SEMPRE-BIO) and have begun getting to know each other. We are exploring synergies in approaches in order to plan clustering activities such as joint events and collaboration initiatives to multiply our projects' impacts. Read More



A drop of BIOMETHAVERSE in the Biomethane Industrial Partnership

Born out of out of <u>REPowerEU</u>'s vision, the <u>Biomethane Industrial Partnership (BIP)</u> brings together EU policy makers, industry and other stakeholders (including associations, civil society and academia), active in the biomethane value chain, in supporting the upscaling of biomethane production and consumption across the European energy system. BIOMETHAVERSE's project coordinator (ISINNOVA), the scientific coordinator (European Biogas Association – EBA) and Biogas Lagada (project partner in Greece) are part of the BIP Team and will join forces with other members to fast-track biomethane production and consumption in the EU. **Read More**



Updates from our pilot demonstration sites, where innovations in the biomethane universe happen!

In-Situ and Ex-Situ Electro-methanogenesis (EMG) in France



The BIOMETHAVERSE electromethanogenesis team led by <u>ENGIE</u> gathered in March 2023 to organize the demonstration on ENGIE BIOZ plant, in Eppeville (France). As an important first step, the sub-consortium analysed the properties of the digestate feedstock that will be used for biomethane production. Coming directly from the Eppeville plant, the digestate is being analysed in the laboratory by the project partner <u>LEITAT</u>, responsible for the design and optimisation of the 1 chamber bioelectrochemically assisted anaerobic digestor system (1c AD-BES). **Read More**

Ex-Situ Biological Methanation (EBM) in Italy



The Italian demo-site has started with the preliminary but essential steps to ensure conditions for its future correct functioning. After 3 meetings among project technical partners involved (CAP, SIAD, POLIMI), efforts are being placed to solve lay-out constraints and security issues as well as starting the procurement procedure for equipment suppliers. Read More

Ex-Situ Thermochemical/catalytic Methanation (ETM) in Greece



A visit of Biomethaverse's team at Biogas Lagadas S.A. (BLAG) in Greece to discuss the design of the upcoming biomethane pilotscale unit.

On the 2nd of March 2023, <u>BLAG</u>'s plant manager introduced the biogas production process and presented the facilities to the project's team. After the introduction, the group visited the site, which will host pilot unit with the ex-situ Thermochemical/Catalytic Methanation (ETM) technology supported by <u>CERTH</u>. Read More

Ex-Situ Syngas Biological Methanation (ESB) in Sweden



Kick-off of the demo site in Sweden Ex-situ syngas biological methanation (ESB) is an innovative technology for biomethane production that is now to be demonstrated. Forest residues such as treetops and branches, sawdust and recycled wood are carbon sources that are not available for biomethane production using traditional digestion techniques. If the forest residues are first gasified into syngas, it can be further processed into biomethane through biological methanation – a kind of gas fermentation technology. ESB technology thus opens the door for usage of forest residues and other solid biomass as substrates for biomethane production. This greatly increases Sweden's and Europe's potential for biomethane production. **Read More**

In-Situ Biological Methanation (IBM) in Ukraine



Ukraine welcomes a new partnership to boost biomethane production and use while our Demo site in the Country kicks off. The importance of replacing natural gas and production of renewable gases, primarily biomethane, increased with the beginning of the aggression of the russian federation in Ukraine.

As a result, a <u>Memorandum of Understanding</u> between the European Union and Ukraine on a Strategic Partnership on Biomethane, Hydrogen and other Synthetic Gases was signed at Kyiv on February 2, 2023. This Partnership should be focused on the green transition and on decarbonising the energy sectors. In particular, it should promote the production, trade, transportation, storage and use of biomethane. Read More

Meet the BIOMETHAVERSE Team

The BIOMETHAVERSE multidisciplinary consortium includes 22 partners form 9 European Countries on a 5-year mission to test and deliver market-ready innovations in biomethane production.



Follow #Biomethaverse

(?)(in)

Copyright © 2023 BIOMETHAVERSE Project.

BIOMETHAVERSE is Co-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 CINEA. Neither the European Union nor the granting authority can be held responsible for them.

Our mailing address is: info@biomethaverse.eu

Want to change how you receive these emails? You can <u>update your preferences</u> or <u>unsubscribe from this list</u>.