

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

Brussels 14/02/23 – 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**. These figures are comparable to the GDPs of Luxembourg and Finland in 2021 respectively. Values represented are likely an underestimate, as not all externalities were quantified.

The study, "[Beyond energy: monetising biomethane's whole system benefits](#)" shows that **anaerobic digestion** could deliver an additional benefit of **84-175 €/MWh** of biomethane produced, while **thermal gasification** could deliver an additional **80-162 €/MWh**. These benefits outweigh the current cost of producing biomethane through these technologies (55-100 €/MWh and 85-110 €/MWh for anaerobic digestion and thermal gasification respectively).

Currently, producers of biomethane are primarily rewarded for contributing to renewable energy targets via support or market-based mechanisms. The additional positive externalities that biomethane production delivers are currently not fully rewarded or recognised by society at large.

The study launched today, 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 (GHG) emissions, such as the recovery of biogenic CO₂ 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.

"This report sheds light on the added value of biomethane for our society, beyond renewable energy provision. The biomethane industry, policy makers and regulators need to work closely together to fully realise these benefits, prioritizing organic waste and residue feedstocks, incentivizing sustainable agricultural production and valorising biomethane co-products (digestate and biogenic CO₂)." Giulia Cancian, EBA Secretary General.

Press contact

Angela Sainz – EBA Communications Manager, +32 483071046 sainz@europeanbiogas.eu

About the European Biogas Association (EBA)

The EBA is the voice of renewable gas in Europe. Founded in February 2009, the association is committed to the active promotion of the deployment of sustainable biogas and biomethane production and use throughout the continent. The association counts today on a well-established network representing the whole biogas and biomethane value chain.

About biogas and biomethane

Biogas is produced from the decomposition of organic materials. These residues are placed in a biogas digester in the absence of oxygen. With the help of a range of bacteria, organic matter breaks down, releasing a blend of gases: 45 – 85 vol% methane (CH₄) and 25 – 50 vol% carbon dioxide (CO₂). The output is a renewable gas which can be used for multiple applications.

Biomethane – purified biogas – is a renewable alternative to natural gas. Its multiple applications include heat and power supply for our buildings and industries, and renewable fuel production for the transport sector.