Biogas: flexible, renewable, enabler of decarbonization

Brussels, 08/08/2019 - In the current race against global warming, it is our duty to look at all viable solutions to guarantee a sustainable future. Measures to ensure a large-scale deployment of existing clean technologies and investments in R&D to develop disruptive innovations are a must. European citizens are calling on policymakers to find long-term solutions for one of the biggest challenges of our times. The main obstacles are still standing: in 2017, 73% of our energy consumption was based on fossil fuels, the main source of GHG emissions.

Just days ago, Ursula von der Leyen, new President of the European Commission committed to make Europe the “first climate-neutral continent.” Her mandate begins with a strong political commitment in the right direction: the coming five years will be climate’s make-or-break time. In this context, a legislative framework enabling the large-scale deployment of sustainable biogas and biomethane will be of critical importance to decarbonize industrial processes, transports and help balancing the grid.

Biogas is produced through the anaerobic digestion or gazification of agricultural wastes, energy crops, sewage sludge, biodegradable wastes or wood residues from industry, households and commercial uses. Its versatility allows its use for energy production, in power, heat and transport sectors, as well as in industrial processes.

Decentralized biogas production and use in rural areas offers the opportunity to green the agricultural sector, provides rural communities with a sustainable source of energy and diversifies farmer’s income. Biogas generation offers involved operators a revenue that can be forecasted: this is a decisive factor for the long-term prospects of a farming business.

Biogas is readily dispatchable and has proven to be highly efficient with a reduction of CO₂ and GHG emissions. In 2017, thanks to biogas use, the EU was able to cut about 61 Mt CO₂eq, a GHG emissions saving roughly the equivalent of the annual emissions of Bulgaria, representing 1,3% of the annual EU GHG emissions. This demonstrates how biogas contribution can get EU closer to cut its emissions by 40% by 2030.

The potential of biogas is confirmed by a drastic increase in its consumption: 25 times since 1990 reaching in 2017 a gross inland energy consumption of 16.826 ktoe produced in 17.783 installations.

Moreover, in recent years several EU countries started digging in the potential of biogas’s upgraded version: biomethane. Since 2011 the number of biomethane plants tripled. This upgraded version of biogas - containing 96% or more of methane - has the advantage of having the same characteristics of natural gas and can be therefore injected in the grid or used in any other sector where natural gas is used today.

While Germany historically counts the highest number of biomethane plants, France had the highest growth rate for biomethane plants in 2017 and 2018 due to favorable policy conditions and aims at reach 1.000 biomethane plants injecting its gas into the national gas grid by 2020. France example demonstrates that by introducing favorable legislative frameworks and incentives, biomethane
production can drastically increase. Equally, to untap the potential of biomethane the EU should gear up for its large-scale deployment. To achieve this, fossil fuels subsidies should be phased out in favor of measures promoting a credible carbon price able to internalize the negative externalities of local and global pollution.

“If we are to achieve climate targets and we want a real transition towards a circular economy, it is crucial to unlock the full potential of all renewable energy sources. Scaling up biogas and biomethane production means promoting renewable energy and fertilisers, but also standing by local development, efficient agriculture and sustainability.” Susanna Pflüger, Secretary General of the EBA.

“Sustainable biogas is much more than energy: it is the key for decarbonization for several industrial sectors, to improve competitiveness and sustainability of agriculture and farms through the production of renewable energy and fertiliser.” Jean-Marc Jossart, Bioenergy Europe, Secretary General.

Bioenergy Europe has today released its 2019 Report on biogas, in collaboration with the European Biogas Association (EBA), to provide policy makers and other stakeholders with the most up-to-date figures on the sector and a useful eagle-eye view on the matters at hand.

For those who don’t have time to dive into detailed figures, a short policy brief has also been made available. The two-pager includes highlights and a selection of graphs, providing an overview of the current dynamics of the biogas sector.

ANNEX

Launched in 2007, Bioenergy Europe’s Statistical Reports cover bioenergy from different angles and are all being made available online for free. Stay tuned for the next release in August, covering biogas. Visit Bioenergy Europe’s website for more information.

Download the Policy Brief
Download the Full Report

PRESS CONTACTS

Claudio Caferri
Communications Officer
Bioenergy Europe
caferr@bioenergyeurope.org
+32 2 318 40 36

Martin Colla
Market Intelligence Officer
Bioenergy Europe
colla@bioenergyeurope.org
+32 2 318 59 82