

New paper proves potential of gasification to scale-up and support net-zero by 2050

- The EBA is today launching a new paper providing a comprehensive analysis of the strong potential of gasification technologies to accelerate the net-zero responsibilities of the European waste, energy, hydrogen, and biofuel markets.
- The market for gasification of fossil, biomass and waste resources is projected to reach \$901bn by 2028.
- European stakeholders are committed to develop gasification although public support is still pending due to lack of awareness of the benefits.

Brussels, 22 November 2021 – The new paper released today by the European Biogas Association has mapped the opportunities of the gasification's contribution of building European circular economies and reducing carbon emissions as part of the net-zero roadmap. By producing cleaner energy, biochar and biofuels from biomass and wastes, gasification is a key enabler to decarbonize EU energy consumption.

Gasification is a highly promising and already commercialised technology ready to scale-up. **The market for gasification of fossil, biomass and waste resources was valued \$479bn in 2019 and is projected to reach \$901bn by 2028.** Its success and ability to scale to become the waste-to-energy/fuel method of choice depends on the levels and type of political, policy, economic and commercial support. This support will allow for higher cost reductions and raise awareness of its strong potential to accelerate the EU's net-zero responsibilities for waste, energy, and fuel markets.

Long-term solutions are needed to reduce greenhouse gas emissions, limit global temperatures and create more circular, sustainable economies. Gasification of biomass and wastes into syngas and biochar through to its applications in forms of energy, can have a real impact on these three goals, by both **reducing the amount of waste in Europe and generating renewable energy.**

Gasification is a process capable of converting waste products (biomass, agricultural and industrial waste, and plastics) into a gas fuel called syngas, which then can be applied to generate renewable electricity and heat, advanced biofuels, and hydrogen.

Gasification can support the realisation of the circular economy. It has the potential **to turn waste, which is often lacking better disposal methods, into value and profitable revenue streams.** This is beneficial for forest wood owners and producers and for investors. It brings also a new range of opportunities for collectors and producers of other waste types, including biomass, municipal and non-hazardous industrial and commercial waste.

Gasification can also contribute to **reducing carbon emissions as part of the net-zero roadmap.** Indeed, gasification plants have the potential to produce not only renewable energy, but also carbon-rich materials

that can serve as stable carbon sinks. Gasification technologies offer the opportunity of being low carbon, neutral or even negative carbon emissions.

Bioenergy and advanced biofuels produced through gasification will end up playing a valuable role in an integrated European sustainable energy system. All over Europe, companies and communities are committed to develop the sector, which needs concrete public and political support policies to demonstrate confidence as well as further widen and scale up in its current commercial phase.

Download PAPER '[Gasification: a sustainable technology for circular economies](#)'

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About the European Biogas Association (EBA)

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. EBA counts today on a well-established network of over 200 national organisations, scientific institutes and companies from Europe and beyond.

About gasification

Gasification, or – more precisely thermochemical gasification - is capable of converting dry, organic solid substances like ligno-cellulosic biomass (including plants, crops and wood), waste or coal at elevated temperatures and with a controlled deficiency of oxygen and/or steam into a hydrogen- and carbon monoxide-containing gas (called 'syngas', 'producer gas' or 'wood gas') and - depending on technology - also char (called 'biochar' when using biogenic raw materials).