

## **EU Action Plan “Towards a Zero Pollution Ambition for air, water and soil – building a Healthier Planet for Healthier People”**

The European Biogas Association (EBA) is a network of national associations, private companies, universities and research centres. EBA operates in Brussels for more than 10 years and it allows politicians, public authorities, investors and other stakeholders to exchange information, ideas and statistics with the European main players of the renewable gas sector.

Our partners are experienced engineers, researchers, lawyers, business managers, agriculture practitioners and plant operators. Renewable gas is a multi-disciplinary and cross-sectoral activity that involves many different actors across the whole society. Nevertheless, the value chain of renewable gas is usually national or regional. Renewable gas is a powerful enabler of circular economy and local sustainable development. All the actors operating in renewable gas are moved by an inner desire of sustainability and we believe that renewable gas should be a cornerstone of the European Green Deal vision. We expect that production and consumption renewable gas will continue to grow in Europe in 2030 and 2050<sup>1</sup> because it is a clean source of renewable energy that is crucial in many economic sectors. Heavy duty transportation, maritime and aviation rely to a very large extent on renewable gas to decarbonise and depollute their operations and products. At the same time, renewable gas offers great opportunities for heating and cooling; energy intensive industries and the power sector.

Differently from other renewable energy sources, renewable gas can be stored more easily and more safely than electricity. It therefore provides more flexibility. As a matter of fact, renewable gas also offers opportunities for consumers that are not connected to the gas grid to meet their heating and cooking needs. For rural areas that are located off-the-gas grid, renewable gas offers a cost-effective heat decarbonisation solution for domestic and industrial uses. A significant share of rural dwellings in the EU currently rely on oil and coal for heating purposes. Switching away from more polluting fuels to renewable gas offers CO<sub>2</sub> savings and improves local air quality.

One of the main processes for renewable gas production is the anaerobic digestion, whose performance the European Commission<sup>2</sup> has deeply assessed in the Best Available Techniques (BAT) reference documents (BREFs) for waste management in 2018. Anaerobic digestion is used to transform the organic matter contained in the feedstock into biogas but also into digestate. Anaerobic digestion is also used in industry to handle wastes very high in Chemical oxygen demand, and as a treatment process for sewage sludge after an aerobic waste water treatment. Digestate which complies with national and European legislation and voluntary product specifications can be

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<sup>1</sup> European Commission (2020), *Impact assessment accompanying the document “Stepping up Europe’s 2030 climate ambition”*, SWD(2020) 176 final

<sup>2</sup> Antoine Pinasseau, Benoit Zerger, Joze Roth, Michele Canova, Serge Roudier (2018); *Best Available Techniques (BAT) Reference Document for Waste treatment*; Publications Office of the European Union, Luxembourg.

used as an organic fertiliser or soil improver in agriculture, either in a liquid form (about 5–15 % dry matter) like manure, or in a semi-solid form (10–30 %) like peat. It can be also further upgraded e.g. by composting, drying and/or pelletising, precipitation of phosphate salts, and ammonium stripping.

One major feedstock in the anaerobic digestion process are cover crops. Those crops are grown between two main crops and provide several environmental benefits. They increase the storage of carbon in soils<sup>3</sup>, avoid solid erosion, thereby limiting water pollution and they enhance nutrients absorption capacity, which prevent leakage of nutrients. They also facilitate the development of biodiversity on a land that would have been empty otherwise.

Finally, renewable gas is a driver to reduce air pollution of the mobility, thereby contributing to improve health of citizens. Renewable gas is particularly effective to reduce particle matter<sup>4</sup> and nitrogen oxides<sup>5</sup>.

Given that the main purposes of the zero pollution action plan concern the EU environmental and health law, including its strengthened monitoring, enforcement, implementation and improvement, EBA is an interested stakeholder. We are ready to be involved in all the consultative activities, workshops, audits, conferences, webinars and similia organised by the European Commission and other institutional or governmental actors.

EBA highlights that Anaerobic Digestion is the most sustainable and environmentally compatible alternative for processing, treating and recycling all organic materials, agricultural residues, waste of biological nature, animal by-products and most common sludges. Thanks to its knowhow and the recognised expertise to collect, build and share knowledge between operators in Europe, EBA is informed of main aspects and challenges of running such activities. EBA is ready to exchange with the European Commission all information that are needed to enhance environmental and health protection and remediation with the aim to build a more sustainable society.

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<sup>3</sup> Marsac et al. (2019), *Optimisation of French energy cover crop production in double cropping systems for on-farm biogas use*

<sup>4</sup> <https://www.iveco.com/France/collections/catalogues/Documents/nouveau-stralis/new-iveco-stralis-np-brochure-france.pdf>

<sup>5</sup> The reduction in NOx and CO2 that IVECO's heavy-duty natural gas trucks are capable of was recently demonstrated in the Equilibre project, a French transporters' initiative to measure truck emissions in real operating conditions. The tests, which involved 44-ton Stralis NP trucks among others, showed a NOx reduction ranging from 40 to 64% compared to Diesel, and up to 20% less CO2. With the use of biomethane generated from organic waste the reduction can be as much as 80%, and 95% with agricultural waste. Results highlight how biomethane opens the doors to a circular economy based on the sustainable waste recycling where also farmers are incentivised to adopt more sustainable practices. <https://www.iveco.com/en-us/press-room/release/Pages/IVECO-LNG-truck-strategy-backed-by-the-European-Commission-proposal-to-reduce-CO2-emissions-for-heavy-duty-vehicles.aspx>