COP31 - Biogas declaration

We, national governments and other stakeholders, including international organisations, financial institutions, philanthropies, private sector entities, and civil society organisations;

United in our commitments to urgently address climate change and achieve the goals of the Paris Agreement, particularly pursuing efforts to limit temperature increase to 1.5°C above pre-industrial levels;

Emphasising the need for affordable, equitable, secure and sustainable biogas and biomethane, capable of being produced locally in every global community, supporting rural economies, creating local jobs, integrating seamlessly into existing gas infrastructure, reducing carbon intensity, and driving clean transportation, mobility, heating, cooling, power generation, and product development;

Recognising that biogas and biomethane production and use play a substantial role in providing affordable and clean energy, and an important tool towards climate action. Moreover, it provides a pathway towards sustainable cities and communities contributing to a circular economy;

Recognising that the renewable energy production of biogas and biomethane from readily available waste streams and agricultural residues, while preserving the food waste hierarchy, plays a substantial role in reducing waste-sector methane emissions on a large scale and providing economic development of rural areas;

Recognising that a holistic atmospheric approach to sustainable biogas deployment maximizes the co-benefits of methane mitigation—critically slowing global temperature rise while concurrently improving air quality, safeguarding public health, and eliminating fugitive emissions across the value chain;

Recognising that renewable biogas and biomethane are vital pillars of energy security, offering a reliable, locally sourced alternative to imported fossil fuels that can be produced at a constant pace, making them an accessible and scalable solution for achieving both climate goals and long-term energy stability. By transforming organic waste into clean, renewable energy, these green gases reduce dependency on volatile energy markets and enhance resilience against supply disruptions;

Recognizing that biomethane can utilize the existing gas and LNG infrastructure without significant modifications to downstream infrastructure or end-use equipment, as its chemical composition is essentially the same as that of natural gas from fossil origin. Furthermore, utilizing the existing basic natural gas and LNG infrastructure can reduce the need for new transmission and distribution investments. However, integration may still require upgrading facilities, grid injection stations and, depending on local network conditions, additional infrastructure adjustments. Direct bio-LNG production may also require dedicated liquefaction capacity.

Recognising that, in addition to the above-mentioned advantages, biogas and biomethane value chains can contribute to greenhouse gas emission reductions and, under certain conditions, achieve net-negative emissions by avoiding methane emissions that would otherwise occur and potentially enhancing soil carbon storage through the appropriate application of digestate, while also providing organic soil amendments and fertilisers (co-benefit to soil health);

Acknowledging the unfolding ramp up of its production and its worldwide potential;[1] [2]

Emphasising that biogas and biomethane provide 3 distinct advantages by providing 1) flexible, sustainable fuel from organic waste, 2) direct financial support and potential large environmental improvement in the agriculture sector, including the production of organic fertilisers, 3) biomethane provides biogenic carbon necessary to produce sustainable synthetic fuels such as sustainable aviation and low-carbon marine fuels;

Raising the concern that despite record growth, ready availability, and a proven track record demonstrating meaningful decarbonization, energy equity and energy security, biogas and biomethane nevertheless remain far short of their full volume potential;[3] [4] [5]

Building on the outcome of the first Global Stocktake under the Paris Agreement as part of the UAE Consensus, particularly decision 1/CMA.5, paragraphs 27, 28 and 29, highlighting the need for deep, rapid and sustained reductions in greenhouse gas emissions in line with 1.5°C pathways and calling on governments to contribute to various global efforts, in a nationally determined manner, taking into account the Paris Agreement and their different national circumstances, pathways and approaches, including accelerating zero- and low-emission technologies, including, *inter alia,* renewables, nuclear, as well as abatement and removal technologies.

We, the endorsers, hereby declare our commitment to:

Work together to scale up biogases and biomethane production and its deployment as renewable gas to facilitate the energy transition for industry, transport and households, while also facilitating the agri-ecological transition by using its organic fertilisers and facilitate the use of biogenic CO_2, and as a readily available technology for reducing methane in the organic waste sector, focussing especially on the developments of biogas in rural areas taking into account national circumstances.

1 IEA, Renewables 2023: Analysis and forecast to 2028, 2023
2 IEA, Outlook for Biogas and Biomethane; A global geospatial assessment, 2025
3 IRENA, Agricultural residue-based bioenergy: Regional potential and scale-up strategies, 2023
4 CEDIGAZ, Global Biomethane Market 2024 Assessment, 2024
5 IEA, Outlook for Biogas and Biomethane; A global geospatial assessment, 2025

We highlight the need to strengthen efforts, collective and individual, to fulfil this commitment, including by way of:

Stimulating demand for locally produced biogas and biomethane as renewable and potentially cost-competitive energy sources, taking into account local market conditions and production costs, through demand-side initiatives and public-private partnerships to advance deployment particularly in end-use sectors that are difficult to decarbonize;

Supporting the need for international financial instruments and technical support to enable practical implementation in particular in developing countries, to accelerate investment in biogas and biomethane and in the use of the resulting organic fertilisers and biogenic carbon feedstocks;

Facilitating efficient and rapid connections between biogas and biomethane production plants and the natural gas and LNG infrastructure networks, enabling the swift integration of these renewable gases into the gas and transport market;

Enabling widespread reductions in emissions of methane, which is greenhouse gas emission more harmful than CO_2, through improvements in organic waste management which are an inherent part of biogas and biomethane production, especially as it pertains to regions with less developed organic waste infrastructure;

Seeking implementation of globally recognised production quality standards to maximise the environmental benefits to society;

Promoting certification systems for guarantees of origin to enable the swift integration of biogas and biomethane into gas systems and their effective tradability in gas markets;

Standardizing methodologies across jurisdictions and between programs regarding the use of lifecycle assessment and data-based inputs, and the use of market-based instruments where biogas-based power and biomethane are transported within connected electricity and gas distribution networks, respectively;

Promoting good practices and appropriate monitoring for the processing, storage, transportation and land application of digestate from biogas facilities, maximising its benefits for nutrient recycling and soil health and ensuring its safe and sustainable use;

Promoting just transition and capacity building to assist in reskilling and upskilling industry workforces, while also providing essential information to policymakers to unlock quality jobs and new economic opportunities, green industrialisation and socio-economic growth, particularly in emerging markets and developing economies, to facilitate safe, inclusive and equitable just transitions, pursuing the acceleration of biogas and biomethane and its additional benefits;

Acknowledging global security challenges, underscoring the critical role of biogas and biomethane in enhancing energy resilience, reducing dependence on imported fossil fuels, and fostering circular economy;

Investing in research, development and demonstration (RD&D) and knowledge-exchange along the biogas and biomethane value chain and working together with other governments and stakeholders to support continued innovation and sharing of best practices;

Promoting climate and environmental stewardship by advancing practical and impactful climate and environmental responsibility by actively tackling the sustainability dimensions of biogas and biomethane through initiatives like fostering alliances to support global decarbonization, sharing best practices, and engaging and empowering local communities;

Encouraging the integration of biogas and biomethane and its additional benefits such as stable organic fertilisers and a source of biogenic carbon feedstocks, into national climate and energy plans, where relevant and possible, and subject to national circumstances;

Encouraging the use of digestate from biogas facilities as organic fertiliser for its valuable source of recycled nutrients and organic matter while applying appropriate quality controls and applicable safety requirements, ensuring its safe and sustainable use in agriculture and protecting human health and the environment.

This Declaration represents our collective intent to drive forward the global agenda for sustainable biogas and biomethane and its additional products as organic fertiliser and source of biogenic CO_2, placing our climate commitments at the centre, working to ensure sustainable, just and equitable energy transitions for all.

We look forward to taking stock of progress in our collective efforts at COP32.