

# **European Biogas** Association

## 10 years promoting renewable gas

# Annual report 2019

**European Biogas Association** Renewable Energy House Rue d'Arlon 63-65 B – 1040 Brussels Belgium

T. +32 24 00 10 89 info@europeanbiogas.eu www.europeanbiogas.eu



EBA Annual Report 2019. @EuropeanBiogasAssociation Reproduction is authorised provided the source is acknowledged.

### The EBA in a nutshell

**Biomethane and other renewable gases** are an important corner stone of a carbon-neutral economy in Europe. By 2050, biomethane and other renewable gases will enable Europe to thrive on a fully renewable energy system - both on and off grid.

Grounded in the benefits of a circular bio-economy, it will make optimal use of all our resources through integrated sustainable food production, nutrient recycling and waste treatment solutions, while also improving our security of supply and the storage of renewable energy.

### Contents

Foreword 2019 overview **Biogas for a carbon-neutral EU** Key facts and figures **Exploring biogas developments** Speaking up for the biogas industry Structure The EBA community Join us

4 6-9 10-11 12-13 14-15 16-17 18-21 22

### Foreword

Harm Grobrügge EBA President

>>



These are favourable times for biogas and biomethane, together with other renewable gases, especially in the light of Europe's determination to become climate-neutral by 2050.

2019 was a year of transition. In Europe, a new Parliament and a new Commission were appointed amid increasing awareness of the challenges presented by climate change and geopolitical shifts at a global level. It was also a period of change for the EBA, which in March saw the appointment of a new Board that I, as EBA President, will lead for the next four years. The renewed and motivated EBA team took time in 2019 to develop the association's future strategy, in which the continuing support of EBA members plays a vital role.

The European Biogas Conference held in September marked another key milestone for the association, as the EBA celebrated its 10th anniversary. It was also an opportunity to present the renewed vision and mission that will underpin the EBA's work in advocating for the recognition of biomethane and other renewable gases as sustainable, on demand and flexible energy sources that provide multiple knock-on socio-economic and environmental benefits.

These are favourable times for biogas and biomethane, together with other renewable gases, especially in the light of Europe's determination to become climate-neutral by 2050. The European Green Deal presented during the last days of 2019 puts forward different cross-sectoral policies to facilitate a reduction in greenhouse gas emissions, foster biodiversity, address air and soil pollution and promote sustainable agriculture from an inclusive circular economy perspective. These measures will be supported by a revitalised industry which can deliver new green jobs, offering a major opportunity for the biogas and biomethane sector.

Hum aff

### **2019 overview**





#### April

 Publication of 'EBA Statistical Report' and 'EBA Success Stories'

#### May

- Joint statement on sector coupling
- Joint statement on National Energy and Climate Plans (NECPs)
- EBA position on the revision of the Fertilisers Regulation

#### June

Kick-off REGATRACE project

#### October

 European Commission presents new Commissioner portfolios

#### November

- Kick-off DiBiCoo project
- Gas for Climate report 'Job creation by scalingup renewable gas in Europe'

#### December

• EBA position paper 'Renewable gases in the European Green Deal'

Page 5



### **Biogas for a carbon-neutral EU**

The political scene in Brussels was dominated in 2019 by the European Parliament elections, constant Brexit negotiations, and the selection of the European Commissioners who will guide the EU for the next five years. The current composition of the European Parliament marks the end of the historic coalition between Christian Democrats and Social Democrats. The newly formed Commission is supported by a heterogeneous majority including Christian Democrats, Social Democrats, Liberals and some independent MEPs, but did not get the vote of Green Party.

The new EU flagship initiative for climate aims to achieve the aims of the Paris Agreement by setting in motion the decarbonisation of the European economy, which is due to be completed by 2050. Executive Vice President of the Commission, Frans Timmermans, is in charge of the European Green Deal and must present the Commission proposal in the first 100 days of his mandate. It will be an overarching strategy to reduce greenhouse gas emissions, support green investments and mobilise resources to ensure a fair and just transition. The Green Deal will include a new framework for gas that will introduce specific requirements to decarbonise the sector and achieve clean energy production. Other topics and sectors included in the Green Deal will be circular economy, biodiversity, agriculture, transport, and water and air pollution. In the new Commission, Adina-Ioana Vălean, from Romania, will take care of transport; the energy portfolio was awarded to the Estonian Kadri Simson. Virginijus Sinkevičius, a 30-year-old from Lithuania, was appointed to environment and maritime affairs. Janusz Wojciechowski, from Poland, is Commissioner for agriculture and will lead the negotiations to reform the Common Agricultural Policy for the period 2021-2027.

### **Digestate recognised as bio-fertiliser**

Despite the general upheaval and the resulting delays to institutional work, some tasks were completed in 2019. The European Regulation on Fertilising Products (FPR) was approved and published in the Official Journal of the EU in June. The FPR recognises that fertilising products can be composed of organic materials such as compost and digestate and it establishes harmonised requirements to make them available on the internal market. Further discussions will continue in 2020 to establish safety and quality criteria for additional materials already used in the EU territory as organic fertilizers, including processed manure and biogas digestion residues.

The EBA was actively involved in discussion around the FPR and highlighted the economic and social benefits deriving from the production of renewable energy through anaerobic digestion (AD), including the strongly circular structure of this activity. Where digestate is used as a fertiliser, nutrients extracted from agricultural land by the harvesting of cultivated crops are recovered and reused for the next production term. Furthermore, the EBA is contributing to the study currently being conducted by the European Commission's Joint Research Centre (JRC), to design criteria allowing the safe use of manure in agriculture. The earliest results suggest that, if properly treated through AD, membrane separation, precipitation, stripping, composting or pelletising, manure does not constitute a source of pollution for ground and surface waters, staying within the limits established by the European Directive for the protection of water from pollution caused by nitrates from agricultural sources.

FPR recognizes that fertilizing products can be produced from organic materials, such as compose and digestate, and establishes harmonized requirements to make them available on the internal market





### National efforts to reach EU targets

In terms of energy policy, the focus has been on the implementation of the Clean Energy Package, including the Renewable Energy Directive ('RED II'), as well as on topics relating to future gas supply and markets. The EU Member States were required to come up with the first drafts of their National Energy and Climate plans (NECPs) by the end of 2018; these were then reviewed by the Commission in the spring of 2019. The purpose of the plans is to define pathways to reach the common 2030 targets for greenhouse gas emissions, renewable energy and energy efficiency. The main finding of the Commission's review was that the plans put forward by the EU28 at the end of 2018 were insufficient to reach the common targets. This shortfall was the smallest in the case of renewable energy where the target of a 32% share of renewable energy in total energy consumption by 2030 was missed by 0.1%- 1.6%. The Member States were therefore invited to reconsider their level of ambition and put forward additional measures to meet the targets, with the final plans due to be submitted by the end of 2019. With regards to the role of biogas in the national plans, the drafts dealt with it to very different degrees. Its most notable mention was in the Italian plan, which foresaw a high proportion of biomethane among the renewable fuels in use in 2030.

The new Renewable Energy Directive provides the biogas sector with a supportive legal framework and facilitates a common European market for biomethane. Now it is time for the Member States to make most of it in the implementation phase, tapping into the potential of renewable gases as sustainable and flexible energy sources with multiple socio-economic and environmental benefits.

#### Malcolm McDowell DG Energy, European Commission

The European Green Deal, the new flagship initiative of the European Commission, which paves the way towards the achievement of carbon-neutrality by 2050, has set the bar considerably higher: under the terms of the Green Deal, EU countries must jointly reduce emissions by at least 50-55% by 2030. The Commission has already called for all sectors, from agriculture to the various industries, to do their utmost to bring emissions down. Biogas and biomethane will certainly contribute to these efforts, enabling sector integration in the process. The EBA's working group on the Future of Gas, together with the Advisory Board members, finalised the EBA's position on the Green Deal at the end of 2019. Advocacy efforts encouraging the EU to tap into the full potential of renewable gases will begin in earnest in January 2020.

With regards to the gas sector, the Commission has been doing preparatory work for the upcoming gas legislation to regulate market design and accommodate increasing volumes of hydrogen and renewable methane on the market and in the grid. The European Commission's Directorate for Energy organised two exceptional Madrid Forum meetings in 2019 to discuss regulatory challenges and opportunities relating to the internal gas market in the EU. As renewable gases were extensively discussed, the EBA was invited to attend for the first time. During the June meeting, the EBA gave a presentation on the cost-competitiveness of renewable gases, underlining the value of the multiple positive externalities related to biomethane. The cost-competitiveness and the production potential of renewable gases have also been major topics on the wider agenda and a large number of studies have been released on the potential of biomethane and hydrogen.

### **Untapping biomethane potential**

The biomethane potential calculated by Navigant for Gas for Climate initiative, in which the EBA is actively involved, was set around 100 billion cubic meters (bcm) / 1200 TWh. These figures have been backed by other studies, including the Trinomics report commissioned by DG Energy. The terminology use has been another key topic related to the future of the entire gas market. EBA together with the New Gases Network, a group of major European associations from the natural gas and hydrogen industries, have categorised different gases according to their emissions outlining their role on the way towards net-zero emissions in the gas sector, which will feed into the future pieces of legislation. This work has also been useful to identify a number of regulatory gaps.

Transport policy is also part of EBA's political scope. EBA is represented in the Commission's expert groups ART-Fuels Forum (DG ENER) focusing on market and policy issues related to renewable liquid and gaseous fuels, as well as in the Sustainable Transport Forum (DG MOVE) following-up the implementation of the Directive on Alternative Fuels Infrastructure and giving recommendations to Member States. Both groups help EBA to raise awareness on the benefits of using biomethane as a transport fuel, discuss regulatory issues with the Commission and other stakeholders and make biomethane an integral part of Europe's alternative fuels portfolio.

The European Green Deal is expected to have a strong impact in the transport sector. Additionally, other legal revision processes will be launched in 2020 which will impact several other fields, such as agriculture, energy taxation and industrial policy.

#### EU biomethane potential per conversion technology and feedstock type by 2050

(in bcm natural gas equivalent) Source: Gas for Climate 'A path to 2050'



#### Page 9

**Biomethane has been increasingly in** the spotlight and 2018 was no exception, as the European biomethane sector continued its dynamic growth, to reach a total of 660 plants producing 2.28 bcm of biomethane.

## **Key facts and figures**

Different studies released in 2019 support the existence of a considerable untapped potential for biogas and biomethane, essential for the transition to carbon-neutrality. This solid scientific evidence shows positive trends in production figures, highlights opportunities for usage as transport fuel and confirms positive impact in terms of job creation, infrastructure savings or reduction of emissions.

The most recent data gathered by the EBA show that 2018 saw a total of 18,202 biogas installations, a Europe-wide installed electric capacity (IEC) of 11,082 MW, and 63,511 GWh of biogas produced. Biomethane, the upgraded form of biogas, has been increasingly in the spotlight and 2018 was no exception, as the European biomethane sector continued its dynamic growth, to reach a total of 660 plants producing 2.28 bcm of biomethane.



#### Number of Biogas Plants in Europe in 2018 Source: EBA

#### € 217 billion/year savings

The Gas for Climate consortium, of which the EBA is part, conducted an extended analysis of the optimal role for gas in a net zero emissions energy system, in order to assess the most cost-optimal way to fully decarbonize the EU energy system by 2050, as well as to explore the role and value of renewable and low-carbon gas. The 'optimal gas' scenario proposed by the study saves society € 217 billion annually across the energy system by 2050, in comparison with the 'minimal gas scenario'. It is possible to scale-up renewable gas sustainably, with greatly reduced production costs, making use of the existing gas grids to ensure the reliability and flexibility of the energy system.

#### 600,000 – 850,000 additional direct jobs

Another Gas for Climate study revealed that the scaling up of renewable gas production in Europe can create 600,000 – 850,000 additional direct jobs and 1.1 – 1.5 million indirect jobs by 2050. These opportunities will result from investments in biomethane (514,000 jobs), thermal gasification (242,000 jobs) and green hydrogen (967,000 jobs), and will facilitate the shift to more local and highly skilled jobs both in the energy sector and throughout the energy technology supply chain. Most of these jobs are stable European jobs that cannot be outsourced.

#### The best transportation option for the preservation of air quality

The decarbonisation of the transport sector will be key for the renewable gas industry in the coming years. The facts about bio-CNG's low GHG emissions and positive effects on climate are receiving increasing scientific support. A recent study by IFP Energies Nouvelles compared the carbon footprint of the entire life cycle of compressed natural gas and biomethane vehicles to that of diesel, gasoline and electric vehicles, and concluded that biomethane is the best transport option in terms of preserving air quality.

#### 10-13% less global GHG emissions

The World Biogas Association confirmed in a recent report that AD has the potential to reduce global GHG emissions by between 3,290 and 4,360 Mt CO2 eq., which is equivalent to 10-13% of the world's current emissions. This can be achieved through the generation of biogas from the anaerobic digestion (AD) of wastes and landfill gas, combined with the avoidance of emissions through the management of organic wastes and fossil fuel manufacture, crop burning and deforestation.

#### Number of Biomethane Plants in Europe in 2018 Source: EBA





#### Page 1

### **Exploring biogas developments**

The EBA is involved in several projects at a European level aimed at encouraging R&D relating to renewable gases and their positive environmental and socio-economic impact.

#### REGATRACE

#### Boosting the deployment of the common biomethane market

REGATRACE aims to create an efficient trade system based on the issuing and trading of biomethane/renewable gas Guarantees of Origin (GoOs). This will contribute substantially to the establishment of a common European biomethane market. A network of issuing bodies will be set up by including existing national biomethane registries and by developing issuing bodies in the 'target' countries of the project (BE, ES, IE, IT, PL, LT and RO). REGATRACE will also prepare the ground for setting-up national biomethane registries in a further 4 of the 'supporting' countries (HR, GR, CR, LV, Ukraine, SI and SE). The EBA, with the support of many national biogas associations, is mapping the current status of renewable gases in Europe. In the coming years, the EBA will support the target countries in developing strategic national visions and roadmaps for the implementation of biomethane.

#### DiBiCoo

#### Exporting sustainable biogas/biomethane technologies from Europe to developing and emerging countries

This project supports the European biogas/biomethane industry by preparing markets for the export of sustainable biogas/biomethane technologies from Europe to developing and emerging countries, notably Argentina, Ethiopia, Ghana, Indonesia and South Africa. DiBiCoo aims to mutually benefit importing and exporting countries through facilitating dialogue between European biogas industries and biogas stakeholders or developers from emerging and developing markets. This will be supported through a digital match-making platform as well as face-to-face capacity-building mechanisms aimed at improving networking, facilitating information sharing, and boosting technical/financial competences. The EBA is working on the assessment of export opportunities for European biogas technologies and services to developing and emerging countries, and will also provide support for the development of the online match-making tool and the capacity-building activities.

#### EvEmBi

#### Voluntary action for GHG emissions control in the biogas sector

EvEmBi will evaluate methane emissions from European biogas plants to develop a European voluntary system for greenhouse gas (GHG) emission mitigation. The project will determine Emission Factors (EFs), develop emission reduction strategies and prepare European and national (country specific) position papers on GHG emissions and emission mitigation strategies.

The EBA is working on the development of a European voluntary system for the self-audit of methane emissions. It will also organize workshops on emissions reduction and provide recommendations and guidelines for the biogas industry to reduce methane emissions from biogas plants.

### **Systemic**

#### **Recovery of nutrients from organic waste streams**

Systemic is working on the identification of innovative approaches to recover and recycle valuable mineral components from organic waste streams, turn them into new products and integrate them optimally into a local or regional circular economy. The project utilizes and enhances actual business cases and biogas plant logistics, together with the most advanced proven nutrient recovery technologies, with a view to realising five innovative large-scale demonstration plants, producing mineral nutrients and fertilizers for the regional market. In the framework of this project, the EBA has been involved in the dissemination of the leaflet 'Biogas plants, what impact in my local community' and is now contributing to the development of Key Performance Indicators (KPIs) for a business model development.

### Nutri2Cycle

#### Transition towards a more nutrient efficient agriculture in Europe

The Nutri2Cycle project will assess the current Nitrogen (N), Phosphorus (P) and Carbon (C) flows, looking into existing management techniques on different farms across Europe and analysing their related environmental problems. As a participant in this project, the EBA is analysing the way in which current legislation influences CNP flows and losses.

### ALG-AD

#### Waste recovery for algal biomass cultivation

ALG-AD combines algal and AD technologies to reuse the excess of nutrients produced from the anaerobic digestion of food and farm waste, in order to cultivate algal biomass for animal feed and other products. The project is building three pilot facilities at 3 distinct 'real life conditions' locations in North West Europe: Devon, Ghent and Brittany.





### Speaking up for the biogas industry

Biogas and biomethane are a renewable energy source that can be used as a transport fuel, to produce heat and power or as a raw material for further applications. They are a key ally of the circular economy, as biogas is produced mainly from organic residues, and digestate, the degraded biomass remaining after biogas production, can be used as bio-fertiliser. The EBA is constantly working to raise awareness of the multiple environmental and socio-economic benefits of biogas and biomethane. Here is an overview of our actions in 2019:

#### News and advocacy

51 policy papers, press releases, news and press articles

#### **Publications**



#### **Online presence**

+2000 visitors/month on our new website! 4276 **Twitter followers** 1617 LinkedIn followers

#### Gas for Climate campaign

#### **2** new reports

'The optimal Role of Gas in a net zero emissions energy system'

'Job creation by scaling-up renewable gas in Europe'

### **European Biogas Conference 2019**

The 5th European Biogas Conference gathered 150 policymakers, industry representatives and researchers to discuss the current role of biogas and biomethane in Europe and the challenges ahead. The conference took place in Brussels, days after the new President of the European Commission, Ursula von der Leyen, announced the details of the next European Commissioner portfolios, including the assignment of a VP, Frans Timmermans, to the European Green Deal.

The aim of the new Commission is to make Europe climate-neutral and the conference provided a great platform for the discussion of the next priorities for biogas and biomethane, given the extent to which this sector can support the reduction of European emissions and the development of a bioeconomy. Policymakers attending the conference encouraged accurate and proof-based promotion of the benefits of biogas and its full integration in circular and sustainable farming business models. They also noted the contribution of biomethane to the decarbonisation of the transport sector.

Greening gas is part of the solution and the involvement of grid operators in this process is crucial. Grid operators pointed out that biomethane can help address the challenges arising from the intermittent production of other renewable energies and can be injected into the already existing infrastructure of gas networks. Grid operators are in the process of adapting to a new reality and there is a need for an integrated gas and electricity infrastructure development plan.

The packed 1-day programme with 25 speakers also included two parallel sessions focusing on the role of biogas in agriculture and rural areas and the future of biomethane in transport. The celebration of the 10th anniversary of the EBA concluded what was an inspiring day of positive exchanges and discussions with EBA members and other stakeholders from the biogas sector.

#### Other key biogas events this year...

#### The EBA participated in other biogas events in Europe including:

- ESNI 2019 January, Belgium
- REGATEC 2019 May, Sweden
- Madrid Forum May, Spain
- Expobiogaz 2019 June, France
- EUSEW 2019 June, Belgium
- UK AD and World Biogas Expo July, UK
- Green Gas Poland October, Poland
- International Biogas Congress & Expo October, Belgium
- ECOMONDO 2019 November, Italy
- European Utility Week 2019 November, France
- Future of Biogas Europe November, The Netherlands
- Power ON Gas 2019 November, Denmark
- Biogas Convention and Trade Fair December, Germany





### **Structure**

#### **EBA Executive Board**





President Harm Grobrügge Germany

Vice-President Piero Gattoni Italy



Vice-President & CAC chairman Michael Niederbacher Italy



SAC chairman & **Executive Board** Erik Meers Belgium



**Executive Board** Philipp Lukas I IK

**Executive Board Executive Board** Anders Matthiasson Frederik Gast The Netherlands



**Executive Board** 

Sylwia Koch-Kopyszk

Poland



Executive Board PJ McCarthy Ireland

Executive Board Niels Peters The Netherlands

### **EBA Secretariat**

Sweden









Manager



Communications



### **Company Advisory Council (CAC)**

The Company Advisory Council (CAC) is an industry platform dedicated to the European industry operators dealing with biogas and biomethane production, anaerobic digestion and gasification.

The CAC provides an opportunity for companies to transmit their own views to European policy

makers and to strengthen the EBA's voice in a concerted way by:

- Exchanging information on market development and new business opportunities.
- Assessing local/national/European policy instruments from an industrial perspective. • Staying informed on R&I developments which have a positive impact on the biogas
- and biomethane industries.
- Supporting the development of quality standards as a basis for the trade and use of biogas and biomethane across borders.
- Contributing to the improvement of existing data and statistics on biogas and biomethane.

At the initiative of the CAC the EBA has the following working groups:

- Future of biogas
- Digestate and fertilisers
- CO2 pricing and certification
- Biomethane in transport
- Gasification
- Agriculture
- Biogas public image

### Scientific Advisory Council (SAC)

Scientific Advisory Council is a network of researchers, scientists and university teachers dedicated to the promotion of the biogas and biomethane sector by means of scientific evidence.

The SAC is intended to:

- Provide scientific evidence for EBA position papers and public communications
- Advise on the programme of EBA workshops and conferences
- Support the EBA Board in the evaluation of project proposals
- Exchange experiences and information relating to biogas and biomethane research.

Susanna Pflüger Secretary General

Marco Giacomazzi Policy Officer

Mieke Decorte Officer

Technical & Project Technical & Project



Gegory Reuland Angela Sainz Arnau Margherita Genua Communications Officer



# The EBA Community

### Full Members: 39 national associations from 26 countries

#### AUSTRIA

Austrian Compost & Biogas Association - ARGE Kompost & Biogas

#### BELGIUM

- Biogas-E
- EDORA Fédération des producteurs d'énergies renouvelables
- Valbiom Association de valorisation de la biomasse
- Vlaco Vlaamse Compostorganisatie

#### CROATIA

Croatian Biogas Association - Hrvatska Udruga Proizvodaca Bioplina

#### CZECH REPUBLIC

• Czech Biogas Association - Česká bioplynová asociace o. s.

#### DENMARK

- Danish Biogas Association Brancheforeningen for Biogas
- Partnership for Thermal Gasification Partnerskab for Termisk Forgasning

#### ESTONIA

Estonian Biogas Association - Eesti Biogaasi Assotsiatsioon MTÜ

#### FINLAND

• Finnish Biocycle and Biogas Association

#### FRANCE

- AAMF Association des Agriculteurs Méthaniseurs de France
- ATEE Club Biogaz
- Club Pyrogazéification

#### GERMANY

- German Biogas Association Fachverband Biogas e.V.
- GERBIO German Society for sustainable Biogas and Bioenergy Utilization

#### GREECE

- HABIO
- HEL.BI.O Hellenic Biogas Association

#### HUNGARY

Hungarian Biogas Association - Magyar Biogáz Egyesület

#### IRELAND

Renewable gas Forum (RGFI)

- IrBEA Irish Bioenergy Association
- CRE (Composting Anaerobic Digestion Association of Ireland)

#### ITALY

- Federazione Italiana di Produttori di Energia da Fonti Rinnovabili FIPER
- CIB Consorzio Italiano Biogas e Gassificazione

#### LATVIA

• Latvian Biogas Association - Latvijas bigazes asociacija

#### LITHUANIA

Lithuanian Biogas Association - Lietuvos Bioduju Asociacija

#### POLAND

- PIGEOR Polska Izba Gospodarcza Energii Odnawialnej
- UPEBI Union of producers and employers of biogas industry

#### ROMANIA

ARBIO - Romanian Association of biomass and biogas

#### SERBIA

Biogas Association of Serbia

#### **SLOVAKIA**

Slovak biogas association - Slovenská bioplynová

#### **SLOVENIA**

Slovenian Biogas Association

#### SPAIN

AEBIG - Asociación Española de Biogás Spanish Biogas Association

#### SWEDEN

Energiegas Sverige - Swedish Gas Association

#### SWITZERLAND

Biomasse Suisse - Swiss Biomass Association

#### THE NETHERLANDS

- BBO-Biogas Branche Organisatie
- VGGP Vereniging Groen Gas Producenten

#### UKRAINE

UABIO

#### UNITED KINGDOM

- Renewable Energy Association Biogas
- \* data as of December 2019





# The EBA Community

Associate Members: 75 companies, research institutes, universities, public authorities or individuals

- 3CEA
- AB Energy SPA •
- Accord Ltd.
- Agraferm Technologies AG
- Aprovis Energy Systems GmbH
- AWITE Bioenergy GmbH
- Balmoral Tanks Ltd •
- Bioenergy & Environmental Science & Technology (BEST) Lab at China Agricultural University •
- Biogas Research Center
- Biogest Energie- und Wassertechnik GmbH •
- Biorefine Cluster Europe •
- **BTA International GmbH** •
- BTS Biogas Srl/Gmbh •
- Carbotech •
- DBFZ
- DESOTEC N.V. S.A. •
- DMT Environmental Technology •
- DSM Biogas •
- Ductor
- ECN •
- Ecospray technologies •
- engie •
- ETW Energietechnik GmbH •
- Evonik Fibres GmbH •
- Fluence Italy SRL (former RWL Water Italia S.r.l) •
- Fraunhofer IWES •
- FuellCell Energy •
- Future Biogas Ltd
- FWE GmbH
- GM Green Methane •
- GrDF •
- Greener for Life
- Greenlane Biogas Europe Ltd •
- IES BIOGAS SRL
- Inagro •
- Institute for Biogas, Waste Management & Energy •
- IOGEN •
- Karlsruhe Institute of Technology (KIT), Engler Bunte Institut •
- Kemira •
- Kiefer Tek Ltd



- Landwärme GmbH
- Malmberg Water AB
- N2 Applied
- Nature Energy •
- Nederlandse GasUnie
- NEDGIA
- New Energy Coalition •
- Orsted •
- Pales Muhendislik Yatirimlari Sanayi Ticaret Limited Sirketi
- Pastoor Consult
- Pentair Haffmans
- Peters Maschinenbau AG
- POLITO Politecnico di Torino •
- Provincie Drenthe
- Qdenv
- RISE •
- Safe •
- Schaumann BioEnergy Consult GmbH
- Schmack Biogas GmbH •
- Sebigas •
- SHELL
- SHV Energy
- Streisal GmbH
- TAGUSGÁS Empresa de Gás do Vale do Tejo
- Technische Universität Wien •
- Terra X •
- TNO
- Universität für Bodenkultur Wien
- University of South Wales
- Vaisala
- VSL B.V.
- Xylem Water Solution AB
- Yara International ASA
- \* data as of December 2019





### Join us!

The EBA is committed to the sustainable production and use of renewable gas in Europe. We work for the development of European and national legislation on renewable gas, we promote the research and development of new technologies that benefit the renewable gas industry and we raise awareness of the socio-economic and environmental benefits of renewable gas.

Our members are at the forefront of renewable gas development in Europe. National associations, as well as companies and researchers active in the sector, benefit from regular dialogue and knowledge-sharing with other EBA members and stakeholders. As member of the EBA, you will:

- Join an extended European network of associations, companies, research institutes, consultancies and public authorities active in the field of biogas and biomethane.
- Get support at EU and international level through our close collaboration with European institutions and international organisations.
- Have the opportunity to join EBA internal working groups focusing on different aspects of renewable gas.
- Get involved in European projects advancing biogas and biomethane production, trade and use.
- Get fresh, in-depth analysis of the development of the biogas and biomethane sectors at European and national levels, as well as the latest updates through our website, newsletter and social media.
- Attend conferences, workshops and other events to exchange knowledge and information with your peers.
- Benefit from extended visibility through the EBA's off- and online news and publications.

# 

European Biogas Association Renewable Energy House Rue d'Arlon 63-65 B – 1040 Brussels Belgium

info@europeanbiogas.eu T. +32 24 00 10 89

www.europeanbiogas.eu

