

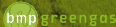
Biogas Profitability Boost Forum

27 & 28 January 2022

VIRTUAL NETWORKING EVENT



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INTRODUCTION

Various climate and energy policies and targets, and the introduction of support schemes for promoting the utilization of renewable sources are driving the renewable energy production and have encouraged the development of biogas sector in the EU.

Biogas and biomethane production in Europe has been on the constant rise in the last couple of years, with this trend picking up the pace even more recently. Presently dominated by a model based on energy crops and high feed-in tariffs and governmental support for local production of electricity, it is notable that there is shift towards the use of organic waste and industrial byproducts as primary feedstocks, and the biogas is being upgraded to biomethane and used for various applications.

However, in spite of its high existing potential, biogas and biomethane production is still low in many European countries and this potential is largely unused.

The Biogas Profitability Boost Forum will gather the industry leading experts from Europe on 27-28 January 2022, to discuss the best practices, strategic approaches, share experiences and know-how, and identify the business opportunities that lie in the European biogas and biomethane market segment.

KEY TOPICS

- Boosting profitability by scaling up production
- Operational cost optimization in biogas plants
- EU policy framework and local government support instrumental in rising biogas production
- Opportunities for biogas production in the agriculture sector
- Upgrading biogas to biomethane, which method is the best for you?
- Application of biogas in CHP systems
- Perspectives and challenges of biomethane injection into the natural gas networks
- Integrating biomethane in the transport sector
- Cross border biogas trading opportunities
- The future of biogas beyond 2030

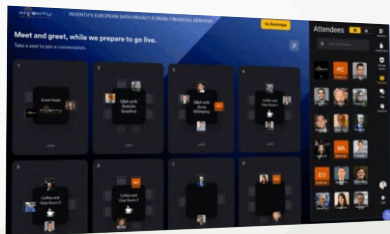
WHO WILL YOU MEET?



JOB TITLES ATTENDING



Biogas Profitability Boost Forum 27 & 28 January 2022



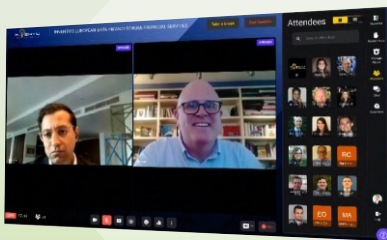
InventU's highly interactive online conference platform offers life-like experience.

During the 8 networking breaks, meet all speakers and delegates in the Social Lounge and join freely any virtual table.

You can join a table for q&a with speakers, discussions on a specific topic, invite a peer for a private talk, or even try One on One Speed Networking

An excellent presentation where you see the speaker and his slides LIVE, enriched with additional features such as:

- > Raise Hands to ask questions to the speakers;
- > Polls & surveys to gather opinions & feedback;
- > Public and private chats built with a focus on productive safe and secure messaging;
- > A dedicated window to ask questions after each presentation and upvote the ones you like.



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Extremely good and stimulating. Probably the best online platform experienced so far.

08.50 > **Chairman's Opening Remarks**

09.00 > **SESSION I: BIOGAS DEVELOPMENTS AND PERSPECTIVES IN EUROPE**

EU Regulation Driving the Growth of the Biogas Sector

- How does "Fit for 55" package reflect on biogas production in the EU?
- EU funding possibilities in the energy segment

To be confirmed:

Edith Hofer
Deputy Head of Unit Decarbonisation and Sustainability of Energy Sources
European Commission, DG for Energy, Belgium



PANEL DISCUSSION: The Role of Local Governments in Biogas Integration

- Local government support instrumental in rising biogas production
- Public private partnerships to stimulate rural development and decarbonization
- Biogas in the current energy mix producing power and heat or biomethane, which is the way to go?

Georgii Galetukha
Chairman of the board
UABio Biogas Association of Ukraine, Ukraine



Harmen Dekker
Director
European Biogas Association, Belgium



Johan Grön
Vice President, Biogas Business Unit
Gasum, Finland



10.30 > **Morning Break**

11.00 > **SESSION II: BOOSTING PROFITABILITY BY SCALING UP PRODUCTION AND OPERATIONAL COST OPTIMIZATION**

Lowering costs of production in Biogas Plants

- Designing an AD unit and optimizing the operation
- Factors affecting AD process and biogas production
- Is bigger necessarily better?

Arnaud Ménager
Head of Industrial Performance Biogas Business Unit
TotalEnergies, France



Success factors for new AD plants

- Long-term feedstock supply
- Stakeholder engagement
- Investment security



Florian Siebert
Biomethane purchaser
bmp greengas GmbH, Germany

When more gas means less money – finding the optimum of biogas production

Dr. Harald von Canstein
Head of Biotechnology
E.ON Bioerdgas,



12.30 > **Lunch Break**

13.30 > **SESSION III: SUSTAINABLE FEEDSTOCK SUPPLY FOR A SUSTAINABLE BIOGAS PRODUCTION**

Achieving Sustainable Biogas Production in an Urban Setting

- Urban Waste Biogas Plant Model – Biodegradable waste origins and Operational data
- Biogas production risks through a pandemic
- Future trends: household collection/restaurants and other big producers; electric energy/biomethane

Constanca Neiva Correia
Executive Board Adviser
Valorsul, Portugal



PANEL DISCUSSION: Opportunities for increased Biogas Profitability in the Agriculture Sector

- Securing sustainable biomass source in accordance to RED II
- Turning livestock manure into profit
- Biogas production from crop straw

Panel moderator:

Paul Beckwith
Principal
Featherstone Fuels Limited, UK



Panelists:

Thomas Siegmund
Head of Biomass Certification
Sustainable Resources Verification Scheme (SURE), Germany



Guido Bezzi
Head of Agronomy Area
CIB Consorzio Italiano Biogas, Italy



Séán Finan
CEO
IrBEA (Irish Bioenergy Association), Ireland



15.00 > **Afternoon Break**

15.30 > **SESSION IV: LATEST TECHNOLOGY ADVANCES AND INNOVATIONS IN BIOGAS UPGRADING METHODS**

Upgrading Biogas to Biomethane, Which is the Best Method for You?

- Local conditions affecting the choice
- Balancing between energy consumption, methane loss and heat input requirements
- Keeping the CH₄ emissions to a minimum. Is total recovery of CH₄ possible?

Recent advances in biogas upgrading technologies

- Membrane separation has gained a major share in the biogas upgrading market over the past 5 years
- Hydrogenotrophic biogas upgrading attracting significant attention
- Photosynthetic biogas upgrading optimized and validated at pilot scale
- Electromethanogenesis as a promising platform capable of partially removing CO₂

Dr. Raúl Muñoz
Professor of the Department of Chemical Engineering and Environmental Technology
University of Valladolid, Spain



17.00 > **Closing Remarks From the Chairman
End of Day 1**

08.50 > **Opening Remarks From the Chairman**

09.00 > **SESSION V: THE ROLE OF BIOGAS IN THE EUROPEAN ECONOMY**

Application of Biogas in Combined Heat & Power Production Systems

- CHP solutions for biogas producers
- Meeting the local heat demand with the help of CHP plants
- Utilizing the potential of the cogeneration units

Alex Marshall
Group Business Development and Marketing Director
Clarke Energy, UK



Perspectives and Challenges of Biomethane production in Europe

- Long-term demand prospects for biomethane
- Accessing the existing gas grid vs. other options
- Importance of governmental support (subsidies, feed-in tariffs, etc.) to support the development of a robust market

Nicolas Spillaert
Head of Biomethane Development
Storengy - ENGIE, France



10.30 > **Morning Break**

11.00 > **Decarbonizing freight with biomethane**

- The Volvo Trucks strategy towards net zero 2040
- Everything will not be electric – biomethane has a role to play
- How to grow biomethane in freight transport

Lars Mårtensson
Director Environment and Innovation
Volvo Trucks, Sweden



PANEL DISCUSSION: Biomethane Trading – Outlook on the European Biomethane Market

- Current supply, demand and market dynamics
- Cross border biomethane trading opportunities and challenges
- Biomethane guarantees of origin certification scheme

Panel moderator:

Olivier Macé
Principal
Broadmanor Consulting Limited, UK

Panelists:

Jean-Marie Gauthey
Head of European Affairs
GRDF, France

John Cosmo Dwellé
Head of Business Development, Sustainability and Verification
Landwärme, Germany

Charlotte Marton
Chief Executive Officer
World Biogas Association, UK



12.30 > **Lunch Break**

13.30 > **SESSION VI: ACHIEVING A FULL CIRCULAR ECONOMY IN BIOGAS PLANTS**

Digestate as Fertilizer – Application, Upgrading and Marketing

- Agricultural use of biogas digestate as a renewable fertilizer
- Developments in upgrading digestate and high quality mineral nutrients recovery

Mathias Hartel
Head of department: Waste, Fertilizer and Hygiene
German Biogas Association, Germany



Carbon Capture & Storage or Usage and Biomethane: Adding Value to Biogas Upgrading

- Negative emissions, achieved through actively removing CO₂ from the atmosphere, are necessary in order to reach climate neutrality as has been underlined by the IPCC many times.
- As carbon capture is already part of the process of upgrading biogas to biomethane, by means of Carbon Capture and Usage (CCU) or Storage (CCS), negative emissions can be achieved easily and in a cost-efficient manner.
- CCS/CCU at biomethane plants offers not only a path to achieve climate targets, but also supports the development of rural areas

Zoltan Elek
Founder & Managing Director
Landwärme, Germany



14.30 > **SESSION VII: BIOGAS BEYOND 2030**

PANEL DISCUSSION: Biogas and Its Role in the European Renewable Energy Mix Beyond 2030

- Future perspectives of the European biogas and biomethane sectors
- EU regulation to shape the biogas and biomethane market
- Moving on from energy crops to organic waste as a primary resource for biogas and biomethane production
- What is the biogas capacity of Southern and Eastern Europe?
- Is green hydrogen the future of raw biogas?

Panel moderator:

Olivier Macé
Principal
Broadmanor Consulting Limited, UK

Panelists:

Olivier Guerrini
Vice President Biogas Business Unit, Gas Renewables & Power
TotalEnergies, France

Philipp Lukas
CEO
Future Biogas, UK

Hans Korteweg
Managing Director
COGEN Europe, Belgium



15.10 > **Closing Remarks From the Chairman
End of Conference**