IEA Bioenergy

Technology Collaboration Programme

# Workshop Announcement

IEA Bioenergy: Task 37

# Biomethane: Timely solutions for successful implementation and use.

## A virtual workshop hosted by IEA Bioenergy Task 37 and the University of Natural Resources and Life Sciences, IFA Tulln, Austria, April 15, 2021

## INTRODUCTION

For a successful energy transition to a climate-friendly supply of primary and secondary energy vectors, biomethane must be produced in a manner which ensures a secure and sustainable process. Biomethane may be a central element of future circular economy systems producing energy on demand. It is possible to use established combustion systems and existing infrastructure, such as the natural gas grid or natural gas storage facilities. Hydrogen may be added to biomethane in existing natural gas infrastructure allowing for renewable and green gases to satisfy hard to abate sectors. Biogas also has a role in electro-fuel systems whereby hydrogen produced from electrolysis of variable renewable electricity may be converted to renewable methane and to liquid fuels such as methanol. Hydrogen may be reacted with $CO_2$ (preferable concentrated biogenic $CO_2$ streams such as in biogas) via a microbiological or catalytic process to produce renewable methane. Power to methane (or biomethanation) can be considered an advanced biogas upgrading process employing carbon capture and use; typically, the energy output as methane is increased by c. 70% as compared to the original biogas system.

The IEA Bioenergy (International Energy Agency Bioenergy) workshop "Biomethane", organised by the Austrian representatives in Task 37 of IEA Bioenergy and the University of Natural Resources and Life Sciences Vienna, IFA Tulln, will highlight different aspects of biomethane including for: certification; legislation; application examples; and financing. The workshop will also present research and new developments in the field of methanation. In addition to national contributions, there will be presentations from Germany, Switzerland, Great Britain, Sweden and the USA.

Task 37 of the IEA Bioenergy deals with the topic "Energy from Biogas". In addition to biogas production, the integration of biogas and biomethane into local and regional material and energy flows is an increasingly important topic in the Task. The workshop will take place within the framework of the international task meeting, which is now in its third online-only version and this time organised by the Austrian representatives in Task 37 of the International Energy Agency Bioenergy (IEA Bioenergy) and the University of Natural Resources and Applied Life Sciences Vienna, IFA Tulln.

## PROGRAMME

| Time | Presenter | Topic | Country | Company |
|---|---|---|---|---|
| | | | | |
| 9.00-9.07 | Dr G Bochmann | Welcome from Boku | Austria | BOKU |
| 9.07-9.15 | Prof JD Murphy | Welcome from IEA Bioenergy Task 37 | Ireland | IEA Bioenergy Task 37 Leader |
| 9.15-9.40 | Stefanie Königsberger | Biomethane Registry Austria – Challenges of the European certification system for renew | Austria | AGCS Gas Clearing and Settlement AG |
| 9.40-10.05 | Johannes Misensky | Biomethane map Austria, gas production and grid injection in Austria | Austria | AGGM |
| 10.05-10.30 | Robert Paulnsteiner | H2 injection into the gas grid | Austria | Verbund |
| 10.30-10.55 | Florian Marko | National Energy Policies and Incentives for Biomethane Production | Austria | BMK |
| Break | | | | |
| 11.10-11.35 | Jaqueline Daniel-Gromke | Retrofitting of existing biogas plants towards upgrading to biomethane | Germany | DBFZ |
| 11.35-12.00 | Urs Baier | Aspects of biomethane production and consumption in Switzerland | Switzerland | ZHAW |
| 12.00-12.25 | John Baldwin | UK Update on Biomethane as a Truck Fuel | UK | cng services |
| 12.25-12.50 | Jonas Ammenberg | Swedish Biomethane Roadmap | Sweden | Linköping University |
| Break | | | | |
| 14.00-14.25 | Stefan Bauer | Geo-Methanation: The Underground Sun Conversion project | Austria | RAG |
| 14.25-14.50 | Alexander Krajete | Methanogenesis Beyond Power to Gas, New Applications | Austria | Krajete |
| 14.50-15.15 | Simon Rittmann | Biomethane: Research and Development | Austria | Universität Wien |
| 15.15-15.40 | Veronika Dornburg | Agricultural RNG projects in the US – experiences under the LCFS and RFS | USA | Sevana Bioenergy |

## PRACTICAL INFORMATION

The workshop will take place from April 15th from 9.00 to 16.00 CEST and is free of charge.

**You can register informally at the following email address: register.biomethane@boku.ac.at**.

If you have any questions, you can contact the organiser Dr Günther Bochmann at biomethane@boku.ac.at. Dr. Günther Bochmann, University of Natural Resources and Life Sciences Vienna, Department IFA Tulln, Institute for Environmental Biotechnology