





# GGG Workshop Biomethane Trade 21st of February, Brussels

#### **SUMMARY**

On the 21st of February 2012 EBA organized the first Working Package 3 Green Gas Grids workshop in Brussels. Goals of the workshop were to:

- Present national solutions of certification schemes,
- Compare the certification schemes with European experience of renewable electricity,
- Discuss barriers to overcome the introduction of an international registry organization allowing international trade of biomethane.

The workshop was attended by some 40 participants from issuing bodies, the industry sector, European institutions, NGOs and research institutes from over 13 countries.

The speakers focused on labeling and certification systems and good practice examples from Denmark, The Netherlands and Switzerland. The most important issue of Work Package 3 in general and the workshop in particular was to address the importance of setting up a common certification system for cross-border biomethane trade.

All participants agreed that only with collaboration of all parties and stakeholders it will be possible to set up a certification system, meet the corresponding sustainability criteria and to start international trade. Therefore GGG project initiates discussions among international bodies and pushes first steps towards biomethane market development.

#### **AGENDA OF THE WORKSHOP**

| Welcome   | A. Wellinger                             |
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| Short presentation of the GGG project   | A. Lermen                                |
|   |  |
| Introduction of Work Package 3 and the overall goal   | A. Wellinger                             |
| Legal situation today and in near future  • First results of GGG questionnaire  • Comparison of existing national standards  • The CEN mandate (TC 408)  Discussion | J. Krassowski<br>A. Przadka<br>J. Dubost |







| <ul> <li>Certification, labelling and registry as basic tool for trade</li> <li>Vertogas: An early experience of certification</li> <li>Energinet.dk: Setting up a certification system</li> <li>Naturemade: Europe's top label</li> <li>Dena: First experiences with registration</li> <li>aib and the cross national registration</li> <li>Discussion</li> </ul> | G. van Pijkeren<br>S. Boesgaard<br>M. Kornmann<br>S. Rostek<br>Ph. Moody |
|--|--|
| Lunch break and networking   |  |
| Sustainability Criteria  | G. Volpi<br>W. Mezullo   |
| The biomethane potential  • National goals/NREAPs and the instruments to achieve it  • The European biomethane potentials Discussion   | J. Baldwin<br>D. Thrän   |
| GGG: Conclusions and next steps Closure  | A. Kovacs A. Wellinger   |

# **WORKSHOP OUTLINE**

# I. Introduction of GGG project and the overall goal

Speakers: Alexandra Lermen (dena) and Arthur Wellinger (EBA)

The GreenGasGrids is an IEE project that promotes upgrading of biogas to biomethane for injection into the natural gas grid. The project's consortium consists of 13 European partners, including national energy agencies, scientific institutions as well as industry associations involved in biomethane, natural gas, and renewable energy. The project is divided into six Work Packages (WPs).

WP3 is working on a European level with the overall goal to help moving biomethane from a niche to a main-stream market through getting integrated with natural gas organization on European level. Therefore involved actors try to identify existing cross boarder market barriers and to deliver recommendations as well as guidance for international biomethane trade.







# II. Legal situation today and in near future

**Speakers**: Joachim Krassowski (UMSICHT), Agata Przadka (EBA) and Jacques Dubost (GDF/Suez, CEN TC/408)

One of the first activities of the GGG project was the evaluation of the state of art in biomethane production and of support schemes for gas injection already existing in partner countries. Result is that there is a broad range of different support schemes and only few systems cover upgrading technology. To make biomethane competitive there is a need to guarantee financial support for production, to assure priority access to grid connection and to define reasonable cost sharing of investment. Study on biomethane markets in partner countries will be published on GGG-website.

Currently there are 8 countries having national injection standards for biomethane and one having standards for use as vehicle fuel. Nevertheless, number of specifications as well as their values varies a lot among countries. In order to set standards for biomethane for use in transport and injection in natural gas pipelines and to contribute to its development, the European Commission launched a CEN/TC 408 Project committee: Biomethane for transport and injection Mandate M/475. The expert group discusses which parameters should be included in biomethane specifications and what values shall they reach.

### III. Certification, labelling and registry as basic tool for trade

**Speakers**: Gerard van Pijkeren (Vertogas), Knud Boesgaard (Energie.dk), Maren Kornmann, (Naturemade), Sandra Rostek (dena) and Phil Moody (AIB)

According to Article 15 of Renewables Directive 2009/28/EC "Each Member State must be able to guarantee the origin (GO) of electricity, heating and cooling produced from renewable energy sources". Aim of such certification system is to raise awareness of using RES within consumers, to improve knowledge transfer and have a better chance of detecting financial irregularities. To achieve an equivalent harmonized standardization of biomethane in Europe, size of the market and its main actors must be identified. Issuing bodies of Member States should agree on a common scheme and work out a consistent system for RES Guaranties of Origin (GoO). Few European countries possess already experience in biomethane certification.

Generally it was agreed that certification should be coupled to physical injection into the gas grid at one point in the European gas grid. This is the case in all countries having introduced a registry today. In the Netherlands, GoO can be deployed as 'downstream' gas certificate to close a national, regional or EU mass and/or utilisation balance. An independent company 'Vertogas' guarantees origin of the green gas for each certificate issued.







In Denmark GoOs for biomethane were launched in December 2011 in form of biogas certificates. The certificate scheme tracks the contractual flows of gas and records sale, transfer to another certificate account holder and transfer to end user, i.e. cancelation of the certificates. Thanks to the favorable legal framework in DK and the appropriate certification system, biogas market is expected to boom in the nearest future.

The only operational quality label for energy standards, which applies also to biogas plants (substrates used, upgrading technology, etc.) was created by the Association for Environmentally Sound Energy (VUE) in Switzerland. In line with 'naturemade!' label's requirements, an effective biomethane facility should fulfill numerous criteria, such as sources restriction, environmental management system, energy management, legal compliance etc. Thanks to that a consumer receives standardized and trustworthy energy product with ensured high ecological quality. The label is in addition to the legal registry of biomethane which has been introduced in 2009.

The biomethane registration tool 'biogasregister' was introduced in 2011 by the German Energy Agency (dena). Aim of such internet-based system was to establish documentation amount and quality criteria of biomethane fed into the gas grid. System includes plant specifications and allows auditor to certify a particular facility according to fulfilled criteria.

# IV. Sustainability Criteria

**Speakers**: Bernd Küpker (DG Energy) and William Mezzullo (Future Biogas)

According to Article 17 of the Renewable Directive 2009/28/EC, biomethane should meet sustainability criteria for biofuels: at least 35% reduction of GHG emissions compared to fossil fuel, no conversion of land with high carbon stock (e.g.: wetlands, peatlands) and no raw material from land with high biodiversity value (e.g.: primary forests). Therefore member States must keep records of biomass origin and to monitor small-scale uses. At the present day Germany, Netherlands, Switzerland and United Kingdom already apply sustainability criteria for biogas. The Biograce EU project has established a GHG comparator for liquid biofuels but not for biomethane. This calculation tool makes it easy to proof that in a good number of cases the sustainability criteria for biofuels according to the RED sustainability criteria can be maintained. The lack of an easy applicable tool for biomethane to proof its sustainability together with the fact that for electricity production no GHG emissions have to be documented might indirectly steer away biomethane installations to electricity installations. There is definitively a need for a simply applicable tool specifically for Solid & Gaseous Criteria.







# V. The biomethane potential

Speakers: John Baldwin (REA) and Daniela Thrän (DBFZ)

In order to determine the future application of biogas, evaluations distinguish between theoretical, technical and economic potential. According to the German Biomass Research Centre (DBFZ) the total biogas potential is estimated in the range of 5,477 – 8,884 PJ/a. The potential of residues is easy to define and remains rather stable. The potential of energy crops on the other hand depends on political decisions and priorities and must be determined by overall development in agriculture and crop production on the utilization of degraded lands.

One of the aims of GGG project is to produce a Tool Kit that allows each country to estimate the amount of biogas that they can produce. The Tool Kit will allocate the biogas to CHP or Biomethane, so that each country or agency will be able to develop a range for biomethane potential by 2020 and 2030. Thanks to that it should be easier for each Member State to feedback into National Renewable Action Plans and to identify the key issues that need to be overcome to move to a much higher biomethane production in 2015.

All contributions can be downloaded from <a href="http://www.greengasgrids.eu/?q=node/45">http://www.greengasgrids.eu/?q=node/45</a>