Urban waste for biomethane grid injection and transport in urban areas

Project No: IEE/10/251

Minutes of the 2nd training on biogas and biomethane production from waste

Riga, Latvia

WP 4 – Task 4.2, contribution to D.4.2

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UrbanBiogas website: www.urbanbiogas.eu

CONTENT

Introduction

2nd UrbanBiogas training on biogas and biomethane production from waste was organised by EKODOMA on 25 October 2012 in Riga. The organised training is last of the two biogas/biomethane trainings in UrbanBiogas project in Latvia. Training was organised as joint event between UrbanBiogas and IEE BIOMASTER projects involving lecturers from both projects – FRAUNHOFER (UrbanBiogas), ISIS - Istituto di Studi per l'Integrazione dei Sistemi and Biogas Syd (coordinator and partner of BIOMASTER project).

This 2nd training was focused on biogas upgrading technologies and biomethane use.

In the training the following topics were presented and discussed:

- Introduction to the training and UrbanBiogas project;
- Overview on biomethane production;
- Biogas cleaning methods for H_2S, H_2O, Siloxanes;
- Biogas Upgrading - Technology overview;
- Economic aspects of biomethane provision;
- Networking for biomethane use in transport in BIOMASTER project;
- Regional and national development of biomethane production – example from Sweden;
- Biomethane use in different types of vehicles.

The agenda of this training session is provided in Annex I of this report.

Invitations (Annex II) to the 2nd training on biogas and biomethane production from waste were sent out by email to the biogas market actors in Latvia (database of EKODOMA). Information about the training was also disseminated within the Latvian Biogas Association members' network. Registration was done electronically via the EKODOMA web-site.

Description of the training session

The 2nd training on biogas and biomethane production from waste took place in the convention hall of the Konventa Seta Hotel, Riga, on 25th October 2012. In total 25 people participated in the training. The list of participants is given in the Annex III.

The training was opened by Ilze Dzene (EKODOMA). She welcomed the participants and presented UrbanBiogas project. She presented project objectives, partnership and main activities, including an overview on already performed and future tasks of the UrbanBiogas project in Valmiera.

The first session of the training focused on biogas treatment and upgrading technologies. All presentations in this session were given by Michael Beil (FRAUNHOFER). He introduced participants to different biogas cleaning methods and gave an overview of currently available technologies for biogas upgrading to biomethane quality. Different methods and approaches were compared and their pros and cons discussed. Mr Beil also gave an indication to economical aspects for each method. In order to show the working principle of different methods, number of easy to understand videos illustrating different steps in upgrading process was demonstrated.

The second part of the training addressed biomethane use in transport. Presentations for this session were prepared by BIOMASTER project partners. 2nd training session was opened by Stefano Proietti (ISIS). He is a coordinator of BIOMASTER project and he gave a short introduction to the project, also discussing different challenges and possible solutions for biomethane use in transport at local, national and business levels.

The last two presentations of the training were dedicated to Swedish experiences of biomethane generation and use in transport. Presentations were given by Mårten Ahlm (Biogas Syd) who is representing a regional cooperation organisation of the region located in the southern part of Sweden (Biogas Syd). During his first presentation Mr Ahlm introduced training participants to Swedish biogas model. Detailed feedstock assessment analysis and benefits of using biomethane for transport were presented and discussed. The last presentation provided an insight in different type of vehicles that can use biomethane for fuel and are available in Swedish market. Technological solutions, lower emission levels and other benefits of biomethane use in vehicles were discussed.

The training was closed by discussions. Discussions addressed questions regarding incentives for biomethane use in transport in Italy and Sweden, framework conditions for biomethane use in Latvia and what should be done to start to develop an infrastructure for biomethane use in Latvian transport sector.

Conclusions

Training was well attended and captured the interest of Latvian biogas market actors. Participants of the training were coming from different fields and backgrounds – scientists and students, consulting companies, waste management companies, Latvian Biogas Association, biogas plant operators, biogas technology suppliers and local businesses working in CNG for transport sector.

Training participants appreciated the technical content of the event and found it very useful. There are plenty of proven technologies available for biogas upgrading and use, however to develop the biomethane market in Latvia, good framework conditions are essential. New regulations and support schemes regarding biomethane grid injection and infrastructure of biomethane use in transport (upgrading plants, filling stations, biomethane vehicles) should be introduced.

ANNEX I – Agenda

Urban Biogas
2nd Biogas/Biomethane training in Latvia
25 October 2012

Venue: Conference hall of hotel Konventa Sēta, 9/11 Kaleju Street, Riga, Latvia

Organised by: Ekodoma & Fraunhofer IWES

9.15	*9.30*	*Registration and Welcome*	
9.30	9.45	Introduction to the training and Urban Biogas Project	Ilze Dzene, Ekodoma
9.45-12:30		**1st session: Biogas to biomethane**	
9.45	10.00	Overview on biomethane production (movie)	Michael Beil, Fraunhofer IWES
10.00	10.30	Biogas cleaning methods for H_2S, H_2O, Siloxanes	Michael Beil, Fraunhofer IWES
10.30	11.15	Biogas Upgrading - Technology overview	Michael Beil, Fraunhofer IWES
11.15	*11.30*	*Coffee break*	
11.30	12.00	Economic aspects of biomethane provision	Michael Beil, Fraunhofer IWES
12.00	12.30	Discussions	Uwe Hoffstede, Michael Beil, Fraunhofer IWES
12.30	*13.30*	*Lunch break*	
13.30-16.00		**2nd session: Biomethane use in transport**	
13.30	14.00	Networking for biomethane use in transport. BIOMASTER project	Stefano Proietti, ISIS - Istituto di Studi per l'Integrazione dei Sistemi
14.00	14.30	Regional and national development of biogas and biomethane production in Sweden	Mårten Ahlm, Biogas Syd
14.30	*14.45*	*Coffee break*	
14.45	15.15	Experience of biomethane use in different types of vehicles	Mårten Ahlm, Biogas Syd
15.15	16.00	Discussions and summary	Ilze Dzene, Ekodoma Uwe Hoffstede, Fraunhofer IWES

ANNEX II – Invitation to the biomethane training

UrbanBiogas projekta semināri

2012.gada 22.oktobrī
„Izaicinājumi biogāzes projektu finansēšanā un praktiskajā realizēšanā"
un
2012.gada 25.oktobrī
„Biogāzes uzlabošanas tehnoloģijas un biometāna izmantošana transportā"

Semināru norises vieta:
Viesnīcas Konventa Sēta konferenču telpa, Kalēju ielā 9/11, Rīgā

SIA „Ekodoma" sadarbībā ar Fraunhofer IWES institūtu (Vācija) organizē divus biogāzes jautājumiem veltītus seminārus.

Seminārs „Izaicinājumi biogāzes projektu finansēšanā un praktiskajā realizācijā" notiks 2012.gada 22.oktobrī un apskatīs biogāzes ražošanas organizēšanas un finansēšanas aspektus, runājot par godīgas sadarbības principiem biogāzes ražošanā.

Seminārs „Biogāzes uzlabošanas tehnoloģijas un biometāna izmantošana transportā" notiks 2012.gada 25.oktobrī. Šajā seminārā dalībnieki tiks iepazīstināti ar biogāzes uzlabošanas metodēm, biometāna ražošanas ekonomiskajām prognozēm un Zviedrijas pieredzi biometāna izmantošanai transportā. Semināra otrā daļa tiek organizēta sadarbībā ar projekta BIOMASTER partneriem.

Abi semināri notiks angļu un latviešu valodās. Sinhronā tulkošana nodrošināta netiks.

Dalība semināros ir bez maksas, bet vietu skaits ir ierobežots.

Semināru organizēšanu finansiāli atbalsta *Intelligent Energy Europe* programmas projekts **UrbanBiogas**.

UrbanBiogas projekta vispārējais mērķis ir veicināt sadzīves atkritumu sastāvā esošās, līdz šim neapgūtās organiskās frakcijas atdalīšanu, savākšanu un tās izmantošanu biogāzes un vēlāk biometāna ražošanai. Biometānu paredzēts izmantot, to ievadot dabasgāzes cauruļvados vai kā degvielu transportam. **UrbanBiogas** projektā ir iesaistītas piecas Eiropas pilsētas – Zagreba (Horvātija), Abrantes (Portugāle), Grāca (Austrija), Rzeszow (Polija) un Valmiera (Latvija).

Lai pieteiktos semināriem (vienam vai abiem) līdz **2012.gada 16.oktobrim** aizpildiet pieteikuma anketas, kuras atradīsiet šeit:

http://www.ekodoma.lv/index.php?option=com_forme&fid=4
un
http://www.ekodoma.lv/index.php?option=com_forme&fid=6

Papildus informācijai zvaniet uz SIA „Ekodoma", tel.67323212 vai rakstiet ilze@ekodoma.lv, kontaktpersona: Ilze Dzene