

Urban waste for biomethane grid injection and transport in urban areas

Project No: IEE/10/251



***Report on the promotion of WtB concepts  
in the frame of the Covenant of the Mayors***

***WP 7 – Task 7.3 / D 7.3***

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ZAGREBAČKI  
HOLDING



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UrbanBiogas website: [www.urbanbiogas.eu](http://www.urbanbiogas.eu)



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## Introduction

The objective of UrbanBiogas project is to stimulate the set-up of Waste-to-Biomethane (WtB) plants in five target cities – Abrantes (Portugal), Gdynia (Poland), Graz (Austria), Valmiera (Latvia) and Zagreb (Croatia).

The objective of the Task 7.3 is to promote UrbanBiogas project objectives and activities further in the framework of the Covenant of the Mayors and to give support to the Covenant through implementation of project activities.

The Covenant of Mayors is a commitment by signatory towns and cities to go beyond the objectives of EU energy policy in terms of reduction in CO<sub>2</sub> emissions through enhanced energy efficiency and cleaner energy production and use.

Covenant of Mayors is open to all local authorities democratically constituted with/by elected representatives, whatever their size and whatever the stage of implementation of their energy/climate policies (source: <http://www.energyformayors.eu/en/covenant-of-mayors> ).

Official “Covenant cities” involved in UrbanBiogas project are The City of Zagreb (Croatia)- Covenant member since October, 2008, Abrantes (Portugal) –member since April, 2012 and Gdynia (Poland) – member since February, 2011.

The UrbanBiogas partners during project implementation supported the Covenant of the Mayors through project activities and also used this platform to get access to further cities and to promote the WtB concept among them on two events in Croatia – on June 13, 2012. Zagreb CH promoted UrbanBiogas at the Rijeka Energy Week in Rijeka and on May 16, 2013. Zagreb CH promoted UrbanBiogas at the Zagreb Energy Week in Zagreb.

### Preparation for the participation in the Covenant of the Mayors by Zagreb CH:

- Contact with Covenant of the Mayors Office in Zagreb established with the agreement that UrbanBiogas project will be presented at the events of Energy week organized in Croatia
- Educative workshop and presentation were planned that highlighted successful waste management and biomethane grid injection EU practices carried out by regions, cities and municipalities
- Attention given to support Covenant of the Mayors goals in conducting project activities

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- The advantage of the participation in the Covenant events was in opportunities to inform various stakeholders and Mayors from different cities about the project and to receive valuable information & knowledge transfer .
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This document provides the report about the actions taken to promote UrbanBiogas project goals and objectives in the events of the Covenant of the Mayors.



## Promotion of UrbanBiogas project in the frame of the Covenant of the Mayors

- On June 13, 2012. Zagreb CH promoted UrbanBiogas project at the Rijeka Energy Week.

The City of Rijeka and the Faculty of Engineering Rijeka organized the Rijeka Energy Week 2012 in cooperation with the Regional Energy Agency (REA) Kvarner and the Croatian Solar Energy Association (HSSE) from 09.- 13. June 2012. There were many lectures, presentations and workshops given that promoted energy efficiency and usage of renewable energy resources.

Bojan Ribić from ZCH presented the UrbanBiogas project as well as the Waste - to-energy concept. All the relevant information regarding the project and its actual status were presented as well as current waste management situation in the city of Zagreb.

Presentation had a positive respond from the organizer due to the fact that this project is dealing with, not only renewable energy production, but also environmental protection issues.

Audience was interested to know about applicability of such a concept in other cities/regions in the Republic of Croatia.



Figure I. Presentation of ZCH representatives at Rijeka Energy Week

**Srijeda, 13.06.2012.**

- 09:00-10:00 prof. dr. sc. Kristian Lenić  
Energetsko certificiranje zgrada
- 10:00-11:00 dr. sc. Vlado Glažar  
Lamelni izmjenjivači topline s mikrokanalima za dizalice topline
- 11:00-12:00 Bojan Ribić, dipl. ing.  
Urban BioGas
- 12:00-13:00 Ivan Vrsalović, dipl. ing.  
Vjetroparkovi
- 14:00-16:00 prof. dr. sc. Branimir Pavković  
Korištenje obnovljivih izvora energije putem dizalica topline
- 16:00-17:00 Tomislav Orlić, dipl. ing.  
Pločasti solarni kolektor SKT 100
- 17:00-18:00 prof. dr. sc. Bernard Franković  
ISES Europe EuroSun 2012

Mjesto događanja: Tehnički Fakultet, Vukovarska 58, Predavaonica P1



Figure II: The agenda of the Rijeka Energy Week



Figure III: ZCH representative presenting UrbanBiogas at the Rijeka Energy Week

- On May 16, 2013. Zagreb CH promoted UrbanBiogas project at the Zagreb Energy Week. The presentation entitled **ENERGETSKA OPORABA KOMUNALNOG BIOOTPADA** (*Energy Recovery from Municipal Waste: Project UrbanBiogas*) has been delivered to the audience interested in various aspects of energy efficiency policies, renewable energy production and similar topics. The discussion focused on the improved and more extensive biowaste collection establishment in the City as well as on the prospects of building a plant for biogas production. Zagreb CH pointed out the urgent need of the City authorities to finalize the Waste Management Plan so that all future activities may run harmoniously with official policies rather than being the project of the people and entities which promote one concept rooted in strictly professional line of reasoning often lacking the official support and backing. Since the Covenant of Mayors is the movement committed to increasing energy efficiency and use of renewable energy sources, UrbanBiogas project lays the ground for fulfilling that commitment. The presentation itself was aimed at raising public awareness on the importance of the issues exposed and discussed and we fill that the goal was achieved.



Figure IV. Presentation of ZCH representatives at Zagreb Energy Week

**ZAGREB ENERGY WEEK**  
Zagreb, May 13. – 18, 2013.

Planning), PassREg (Passive House and Renewable Energy Regions), i-SCOPE (interoperable Smart City services through Open Platform for urban Ecosystems), ...

**Location:** Old City Hall – Ćirilometodska 5, Zagreb (hall C)

**14,00 – 14,30 Presentation „Energy recovery of municipal bio-waste – Project UrbanBiogas“**

The production of biogas from waste contributes to reaching the EU targets on the decrease of waste disposal and on the production of energy from renewable energy sources. The goal of the project is the analysis of possibilities for the separate collection of the city bio-waste with the purpose of the production of biomethane and its inclusion in the city gas distribution network or use in transport as biofuel. A special task of the project concerns the promotion of activities for the use of bio-waste in the production of green energy. For this purpose, special attention is paid to familiarizing other cities with the idea and goals of the project, which is solemnized by the signing of the Partnership Charter. The project is financed through the CIP-IEE program. Aside from the Zagreb Holding – City Waste Disposal branch, 15 other partners from 5 countries of the EU are included in the project.

**Location:** City of Zagreb Tribune, Kaptol 27, Zagreb

**14,30 – 15,00 Presentation „Energy management system in the City Waste Disposal Branch“**

As part of the SGE project, the Zagreb Holding – City Waste Disposal branch has started implementing the energy management system. The purpose for implementing such a system is to identify the place where energy consumption is the greatest, the suggestion for the measures of solving the issue of unnecessary energy losses, the improvement of the system's energy efficiency as well as the proposition for the new possible sources of energy. This is achieved through constant supervision of the consumption of energy sources (gas, electric and heating energy) and water as well as analysis of the possible options for the introduction of new, more efficient and cheaper sources of energy. It is also important for raising the employees' awareness concerning the matter of efficient consumption of energy as well as for encouraging the economically cost effective, energy efficient technologies and materials. The implementation of the SGE measures in the Branch is aimed at the implementation of a systematic and continuous energy management in its objects with the goal of decreasing the water and energy consumption, as also the emission of greenhouse gases.

**Location:** City of Zagreb Tribune, Kaptol 27, Zagreb

**16,00 – 19,00 Open door day: Energy Institute Hrvoje Požar**

The Energy Institute Hrvoje Požar shall open its door to expert visits by groups of pupils, students, expert associations and citizens. The visitors shall be informed of the development and the possibilities of application of new technologies, new solutions concerning energy production through the use of renewable energy sources. They shall also be informed of the reconstruction of the existing business object which allowed for reaching high energy standards.

Figure V: The agenda of Zagreb energy week showing presentations of ZCH and Energy Institute Hrvoje Požar





Figure VI: The official poster of Zagreb energy week 2013

## Conclusion

Signatories of the Covenant benefit from a wide range of advantages such as contributing to the attempts to decrease climate changes, supporting actions of environment protection and energy efficiency, reducing energy consumption, improving the life of their citizens, creating new jobs, improving the image of their cities/regions, better chances to get funding for sustainable development projects, possibilities of networking with other signatories, gaining their knowledge and learning from good practices. One of their main obligations is to organize Energy days in their cities/regions once a year in order to raise public awareness on energy efficiency, usage of renewable and sustainable development with the emphasis on children and youth as main target audience.

UrbanBiogas was twice presented on Energy weeks, once in 2012 and once in 2013. This time scale of presentations enabled that first project activities were presented and afterwards its development and progress was shown as well as developed concepts for target cities. Also, for youth and children, educational workshops were given on separate waste collection and renewable energy sources (by Energy Institute Hrvoje Požar and Zagreb CH).

To conclude overall, UrbanBiogas project successfully presented its activities and objectives in the framework of the Covenant of the Mayors.