Project - Newsletter

February 2011

The project background and objective

Modern district heating and cooling (DHC) systems can significantly contribute to the achievement of national and European Union energy policy objectives. Amongst many other benefits they represents an efficient use of energy and allow for a large-scale integration of renewables.

With project partners from 14 European countries, the Ecoheat4EU project was devised with the aim to support the creation of well-balanced and effective legislative mechanisms to foster the development of modern district heating and cooling throughout Europe. Moreover the objectives of the project are to:

- Achieve transformations in the legislative/ policy frameworks of the target countries so that the specific needs of the national DHC sectors are better addressed.
- Provide DHC stakeholders in Europe with relevant information and analytical tools to assist them in their interactions with national policy-makers and to provide input for drawing up company strategies to boost the development of modern DHC systems.
- Increase understanding among EU policy-makers about the particular effects on DHC of the national implementation of 3 specified EC Directives, so that this understanding will serve present and future initiatives in the field of (district) heating and cooling.

Local success stories

Two local success stories that have led to the expansion of district heating or district cooling or both were collected in each of the 14 target countries.

In the following section, two of these stories are summarized. The other stimulating examples can be found on the project's website at www.ecoheat4.eu

Local success - Example 1

Implementation of the London Plan

The Initiative

The Mayor's London Plan is an example of the successful implementation of the approach set out in PPS1. It sets out the energy policies which all new major developments in Greater London are assessed against prior to approval or rejection by the Mayor. Once planning approval is given, the commitments are often enforced through the Section 106 (s106) agreements. All major developments refered to the Mayor of London are assessed against the London Plan.

There is a clear steer in the London Plan towards promoting decentralised energy infrastructure, for example the energy hierarchy stipulates Lean (energy efficiency), Clean (CHP and district heating) and Green (renewables) in that order. The Mayor's energy strategy sets out a target of supplying 25% of London's energy requirements through decentralised supply by 2025.

The London Plan includes a heating hierarchy which should be used to select heating systems for major new build developments. This hierarchy (Policy 4A.6) prioritises the use of district heating, as can be see from the following quotation: "The Mayor will expect all major developments to demonstrate that the proposed heating and cooling systems have been selected in accordance with the following order of preference:

- connection to existing CCHP/CHP distribution networks,
- site-wide CCHP/CHP powered by renewable energy
- gas-fired CCHP/CHP or hydrogen fuel cells, both accompanied by renewables
- communal heating and cooling fuelled by renewable sources of energy
- gas fired communal heating and cooling."

The policies in the plan stemmed from the approach set out in London's Energy Strategy. The following quote from the energy strategy demonstrates the potential that district heating is seen to have: 'Combined heat and power (CHP) linked to community heating/cooling has the potential to reduce London's CO2 emissions substantially. Heating represents London's single largest energy demand and

the high heat density here lends itself well to CHP and heat distribution networks. Heat distribution networks can be connected to homes, where they can provide affordable warmth, as well as businesses and public sector buildings, such as hospitals.'

The impact

The result of the plan is that the Greater London Authority Planning team inspects all proposed major new developments, and assesses them against the requirements of all such developments to be Lean, Clean and Green.

Furthermore, the London Development Agency is spearheading the proposed development of a district heating scheme using 150MW of waste heat from Barking Power Station, to serve the London Thames Gateway, which is Europe's largest regeneration area.

Main barrier

Finance is the main challenge which must be surmounted in order to bring about large initiatives like the London Thames Gateway Heat Network.

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Local success - Example 2

Procurement and installation of heat meters and heat cost allocators in multi housing buildings – 2009/2010

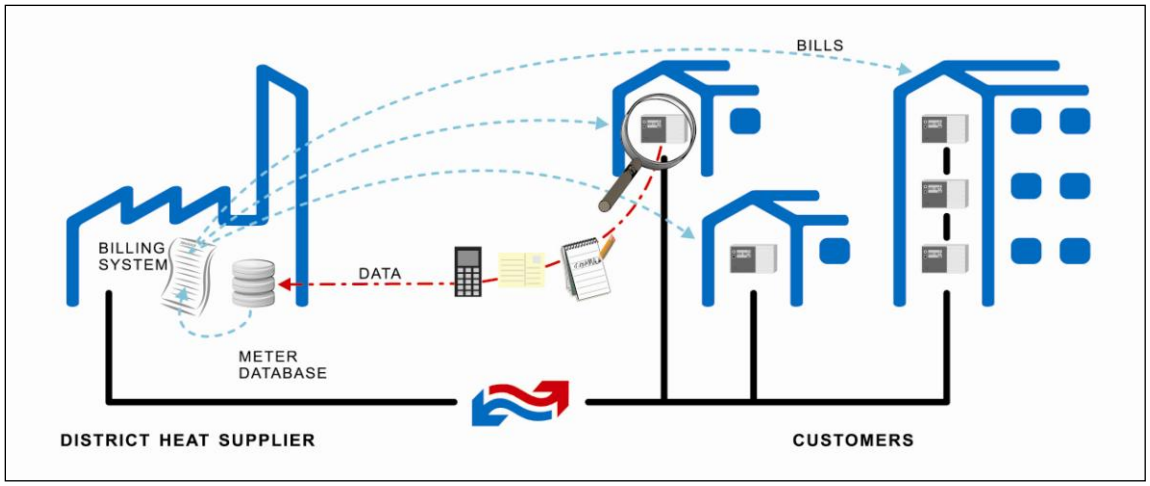
The Initiative

The initiative to launch the project came from the district heating distributor in the city of Vukovar - Croatia, the company Tehnostan d.o.o, which is owned by the City of Vukovar. It was based on the frequent individual and group demands of customers who reside in multi-housing buildings of the City of Vukovar due to their serious financial situation as consumers of district heat.

The goal of the project is to install heat meters and heat cost allocators in multi-housing buildings in the city of Vukovar, in order to stimulate apartment users to a rational consumption of heat.

The contract between the City of Vukovar and equipment supplier was only recently signed and the installation of heat meters and heat cost allocators in the apartments is expected to begin shortly.

Schematic Diagram of metering and billing procedure:



The impact

Upon completion of this demand side management project, 950 apartments will be equipped with an individual heat meter, while another 1661 apartments will have installed devices for the distribution of heat costs (heat cost allocators).

This will enable tenants' independent decisions on heat consumption and the cost of heat.

Not only will this project allow consumers to have direct impact on their own consumption and heat costs, but it will also fulfil a goal of raising awareness on the energy efficiency issues in the local community by further fulfilling its mission to educate consumers on rational and responsible behaviour.

The implementation of this project will also increase the satisfaction of the district heating customers.

The positive impact on the city of Vukovar is expected to be fuel savings and increased environmental protection through reduction of greenhouse gases.

Main Barriers

The main challenge that the City of Vukovar faced was the implementation of the competition to select the winning bidder for the delivery and installation of the equipment. Given the mandatory application of the Public Procurement Act, and it's very challenging selection process of the winning bidder as well as the complexity of the tender subject (technical specifications of the equipment), the most favourable bidder for delivery and installation of equipment was selected only in the third competition. The entire process took almost a year, which caused a lot of disappointment for district heating consumers mainly because the general public was unaware of these problems.

You can find many more motivating examples, as well as other interesting information on the Ecoheat4EU website at:

www.ecoheat4.eu