UNIVERSITÉ DE GENÈVE
INSTITUT DES SCIENCES DE L'ENVIRONNEMENT

Uni-Battelle, Bâtiment D, Route de Drize 7 | CH-1227 Carouge
Tél : 022 379 01 07 | Web : www.unige.ch/energie

CYCLE DE FORMATION ÉNERGIE – ENVIRONNEMENT

SÉMINAIRE 2012-2013

European potential of waste heat recovery via district heating

Urban PERSSON

Halmstad University

jeudi 18 avril 2013 à 17h.15

SEMINAIRE EN ANGLAIS

Auditoire D 185 - Bâtiment D - Uni Battelle

7, route de Drize, 1227 Carouge

PROGRAMME DES PROCHAINES CONFÉRENCES :

Jeudi 2 mai 2013 à 17h15	Pierre Hollmuller, Université de Genève *« Valorisation thermique des eaux profondes lacustres : le réseau genevois GLN et quelques considérations générales sur ces systèmes»*
Jeudi 16 mai 2013 à 17h15	Daniel González i Castellví, Aiguasol *« Combined district heating and cooling: case study of the Chamartin district in Madrid »*
Jeudi 30 mai 2013 à 17h15	Guillaume Planchot, IDEX SAS *« Ecoquartier de la ZAC Seguin en région parisienne : de l'aménagement urbain à la planification énergétique»*

L'orateur

Mr. Urban Persson has a mechanical engineering degree from Malmö University College in Malmö, Sweden (2005), and is currently a PhD-student at Chalmers University of Technology in Gothenburg, Sweden (since 2009). In December 2011 he received the mid-term degree Licentiate of Engineering, and his dissertation is planned for the second half of 2014.

Urban Persson is employed since 2006 at Halmstad University in Halmstad, Sweden, where he lectures in Energy Technology topics such as energy efficiency and renewable energy resources. During the period 2007 to 2011, he held the position as Director of Studies at the Energy Engineer Bachelor Program.

Urban Persson's research focuses mainly on district heating and cooling in a European perspective, where possibilities for increased excess heat recovery from European energy and power sector activities constitute a central theme. Main supervisor throughout his research education is Professor Sven Werner at Halmstad University, Sweden.

La conférence

The European heating sector providing low temperature energy services in the form of space and domestic hot water heating to residential and service sector buildings, has large potential to contribute to improved adequacy in resource utilisation and to increased general energy system efficiency in future Europe. A major reason for this is a continued high dependency in many European countries on individual and parallel conversions of primary energy resources for low temperature heating purposes – many of which instead could be met by recycling of recovered excess heat from power and industry sectors, as well as by utilisation of local renewable heat resources.

But serial utilisation of local excess heat flows, as well as large scale utilisation of local renewable heat resources, implies the existence of local heat distribution networks, i.e. district heating and cooling systems. Currently, European district heating systems represent only 12% of the total residential and service sector heat market, a heat market share that would have to increase considerably in order to realise the promising potential. Is it possible? Is it feasible? Where and to what extent is it possible and feasible?

In this presentation, these questions, along with basic parameters, critical conditions, barriers and driving forces, all influencing the cost effectiveness of heat distribution and an expanded use of district heating in Europe, are discussed from an overview perspective on the European heating sector with references to the related academic field and current studies.