WORKSHOP ON HEAT STORAGE

AT VSK2008 EXHIBITION FOR THE INSTALLATION SECTOR

Date: 12 February 2008 **Time:** 1.30 – 6.00 p.m.

Place: Jaarbeurs Utrecht

Jaarbeursplein 6 3521 AL Utrecht The Netherlands

www.jaarbeursutrecht.nl

Location: Croesezaal

entrance through Hal 8

Storing heat is 'hot'. Rising energy prices and care for the environment make storage of heat more and more important in energy policy and research and in the development of products and services. That is the reason for ECN to organize a Workshop on Heat Storage at the VSK2008 Exhibition for the Installation Sector, for an overview on the state-of-the-art and exchange of thoughts.

Registration:

Attending the workshop is free of charge.
Use the separate form for registration or contact
Marjon Kuit (ECN), +31 224 564500 or kuit@ecn.nl.



Programme:

1.30 – 2.00 p.m. *Welcome*

2.00 – 2.10 p.m.

Introduction

Marco Bakker – ECN

The context of the workshop will be indicated together with lines of developments and general stage of concepts or applications in the presentations.

2.10 – 2.35 p.m.

Water: very suitable for compact and efficient heat storage Roelof Schuitema – ECN

New materials and techniques enable compact and efficient heat storage in water. These advanced hot water systems can become smaller facilitating better application in refurbishment of houses and for development of compact combisystems, and therefore, giving short term innovation opportunities to suppliers.



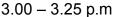
PREHEAT is a European project within the Intelligent Energy for Europe framework and aims to increase the visibility of heat storage and the funding possibilities for development and implementation of improved heat storage technologies. On the long term, PREHEAT aims at a coherent European promotion program with a collective approach by the industry, R&D institutions and other market actors. More info on: www.preheat.org.

2.35 - 3.00 p.m.

Seasonal heat storage; pilot projects and experiences in Germany

Dirk Mangold - Solites

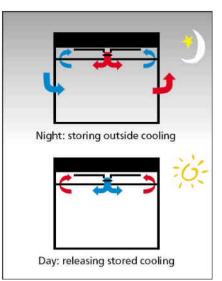
Water tanks, pits as well as borehole and aquifer techniques have been used to construct large storage volumes for solar thermal heat. Sizes reach from 1500 up to 65000 m³ of contents, matching collector areas from 500 up to over 5000 m². Techniques and finances of selected projects will be discussed.

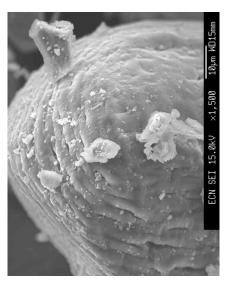


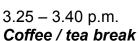
High temperature heat storage in aquifers (90°C); technology, projects, developments

Guus Willemsen – IF Technology

High temperature heat storage in aquifers is applicable to store large amounts of (waste, renewable) heat and for large thermal powers: from 5 to 50 MW. The technology will be explained and experiences with existing projects will be addressed. Based on these experiences, expected future developments will be sketched.







3.40 - 4.05 p.m.



Nick Barnard - Cooldeck

Use of phase change materials is most effective when applied in a small temperature range. The Cooldeck system combines ventilation during the night with enhancement of thermal mass of the building by application of PCM's. The concept and system design are explained and experiences with the installation in an office building are discussed.

4.05 - 4.30 p.m.

Towards compact heat storage technologies for a 100% renewable heat supply

Wim van Helden – ECN

Seasonal storage of solar heat in all segments of the built environment requires novel ways to store heat in a compact and efficient way. Other applications like district heating and (micro) cogeneration also need compact heat storage for an increased performance and system efficiency. Presently, some first steps are being made in development of new compact heat storage technologies. A view will be presented on the state of affairs in research and development of compact heat storage and on the necessary future steps both on a national and on a European scale.

4.30 - 5.15 p.m.

Discussion on questions and propositions

5.15 – 6.00 p.m. *Drink*





