CELSIUS Talk: Seasonal and short-term storage

Welcome to one of the CELSIUS webinars!

Matching the heat supply to the demand can be quite a challenge for district energy operators. A peak in the demand can be balanced by an increased heat production, and this often leads to the use of fossil fuel boilers. On the other hand, when the heat supply exceeds the demand, the result is often that the excess heat goes to waste. Ideally, the excess heat should be saved for when there is, once again, a rise in the demand.

To ease this distribution challenge, thermal energy storage (TES) can help to balance the demand and supply during peak hours and high seasons, as well as improve capacity & maximise system efficiency. The key is finding the right storage solution according to the network and the need.

During this online meeting looked at examples of both short term storage, with the example of Rotterdam's Heat Hub, and seasonal storage with the lessons learned from the conversion of an old oil tank into seasonal storage in the Pitagoras project. Finally, we heard about the vision and perspectives of Göteborg Energi for seasonal storage.

The recording

https://www.youtube.com/watch?v=hq7S49L2QDM&feature=emb_logo

The presentations

Warmtebedrjif Rotterdam and the Heat Hub

Wouter Verhoeven, Business Development Manager for Warmtebedrijf Rotterdam Presentation (2) / Short cut to the video recording

Transforming an oil tank into seasonal thermal storage

Sabine Putz, Project Manager and Head of Reasearch and Development at S.O.L.I.D. - representing the PITAGORAS project

Presentation 4 / Short cut to the video recording

Seasonal storage visions and possibilities

Lennart Hjalmarsson, District Heating Development Engineer at Göteborg Energi Presentation (2) / Short cut to the video recording