



European  
Regional  
Development  
Fund



LIETUVOS  
ŠILUMOS TIEKĖJŲ  
ASOCIACIJA

# Improving old legacy DH systems – benchmark Europe and China

March 2, 2022, 09:00 – 12:00 (CET). Hybrid meeting, meeting in Västerås and at Zoom-link:

<https://hh-se.zoom.us/j/61241107806?pwd=ZG9BbmR4TmFNRDgrcm1sMnRZODkrQT09>

## Program

### Background

From Europe in west to China and Japan, Korea in east, there are many old DH systems that need refurbishment and conversion of fuel supply. The systems must *transform, convert and expand* simultaneously. The EU-project BSAM – Baltic Smart Asset Management is addressing this multiple challenge. In this hybrid meeting, we discuss experience from China, Lithuania, ex Soviet systems and Sweden.

### Introduction

A short discussion with Dr Valdas Lukoševičius, CEO Lithuania DH Association, Håkan Knutsson, Chairman SweHeat and Cooling, Swedish Council for District Heating and Cooling and Bernt Andersson, Chairman SweHeat China; *10 minutes*

### Presentations

**Name of Presentation:** SweHeat & Cooling China Experience; *20 minutes*

**Presentation will be made by:** Bernt Andersson, Chairman SweHeat China Chapter

**Short summary of presentation:** The first part of the presentation will cover activities undertaken by SweHeat in China over the last 10 years, it will discuss the situation for Chinese District Heating Companies their opportunities and challenges. The second part will present the challenges with regard to conversion from 100% dependency on coal firing and how Chinese Cities need to organise their actions to transform their societies to Carbon Neutral operations.

**Name of Presentation:** FVB – experience of interesting DE-projects in Sweden; *15 min*

**Presentation will be made by:** Leif Breitholtz, CEO FVB Sweden

**Short summary of presentation:** FVB is a technical consultancy firm that started its operation in 1970 in Västerås, Sweden. FVB has part owned companies in the US and Canada and a subsidiary in Great Britain. The main focus for FVB has always been District Heating, District Cooling and Combined Heat and Power. The presentation will cover typical projects that the company has undertaken including Waste to Energy/Biomass, Thermal Energy Storage, District heating network integration, Long DH Transition pipelines and District Cooling. Examples will be shown regarding the Stockholm District heating network and the new WTE/CHP plants in Västerås as well as their thermal energy storages.

**Name of Presentation:** Challenge efficiency - Real experience in China for modern Swedish Energy Transfer Stations; *15 minutes*

**Presentation will be made by:** Henrik Rietz – Global Sales Manager at SWEP Systems

**Short summary of presentation:** Modern district energy systems can provide reliable heating and cooling services while improving energy efficiency and reducing greenhouse gas emissions, serving as a flexible and efficient medium to transform the Chinese district energy sector – Converting district heating networks from large block-stations to building-level energy transfer stations results in significant benefits for Utilities and our climate!

**Name of Presentation:** “Exigo - Optimization from producer to consumer”; *15 minutes*

**Presentation will be made by:** Luca Cancian Area Manager/Filip Håkansson, Regin Controls Sverige AB

**Short summary of presentation:** Getting control of power usage & consumption while maintaining good indoor climate.

**Name of Presentation:** Swedish solution for long lasting distribution pipes

**Presentation will be made by:** Johan Sjöström, sales/market manager, Mittel Fjärrvärme AB; *15 minutes*

**Short summary of presentation:** Short presentation of Mittel’s organisation, background, and customer references and Mittels technologies (TSC and Stateview System). Presentation of Mittels TSC technology, photos from work performed with special fittings, a short movie from our project in Skellefteå that demonstrate the technology. Mittels business model, how

we work together with local partners and help them with training and support and our experience from working in international markets (China etc).

**Name of Presentation:** Leak detection systems for life extension of District Heating Networks; *15 min*

**Presentation will be made by:** Håkan Klarin, CEO, PG Monitoring System AB

**Short summary of presentation:**

Surveillance of old piping networks and know-how for how to building new piping networks that last up to 100 years. Production sites are easy to be rebuild and maintain because everything is above ground and reachable. Distribution networks on the other hand is often forgotten until something bad happens like a huge leak.

Many times, organisations do not pay much attention to the distribution networks, but you need to ask yourself:

- ❖ What condition is the network in? How do I protect my assets and extend the lifetime?
- ❖ How could I retrofit a system? What toolbox can I use?
- ❖ How do I mix old with new and how to build my new pipelines in a way that they will be lasting for decades?

**Name of Presentation:** Efficient Biomass utilization, with Radscan equipment; *15 minutes*

**Presentation will be made by:** Jonas Bergman, Sales Director Radscan

**Short summary of presentation:** Biomass has been used widely in Sweden since the 1970-ies. As the use of biomass increased, also work on improving efficiency increased. Radscan will show how increased utilization can be done and the resulting impact on carbon emission

**Name of Presentation:** Economic Total Optimization of Energy Production, Trading and the Forward Temperature in the Heat Network; *15 minutes*

**Presentation will be made by:** Moa Dahlman Truesdale, CFO, Energy Opticon

**Short summary of presentation:** With an advanced optimization tool such as Energy Optima 3, energy companies can face the challenges on the energy market in a fast and reliable way and reduce variable production costs with 2-15 %. The economic total optimization covers the entire energy system – from the production side, to the heat network out to the consumers, and also to the energy trading side for electricity and district heating.

**Name of Presentation:** Electrical Boilers for International markets including China; *15 minutes*

**Presentation will be made by:** Christer Nyström, Sales Manager at Zander & Ingeström

**Short summary of presentation:** Presentation of E-boilers in general and how they can play an important role in the upcoming decarbonisation. Global market overview and some references.

**Panel Discussion with the audience; 25 minutes**

Discussion led by Dr Valdas Lukoševičius, CEO Lithuania DH Association, Håkan Knutsson, Chairman SweHeat and Cooling, Swedish Council for District Heating and Cooling and Bernt Andersson, Chairman SweHeat China.

A visiting expert group from Vilnius DH Company is participating.

**Helsingborg 2022-02-16**

**SweHeat & Cooling**