

## Webinar: The right choice of pre-insulated pipe systems

December the 6<sup>th</sup>, 13.00-14.00 CET

To make the right of pre-insulated pipe systems is a challenging task. Challenging because you have to include more important angles in your evaluation:

- Optimize the **hydraulic design** so you are sure that you cover the future needs and, at any time, can deliver the needed heat for the consumers, but at the same time you do not oversize the pipes because that will lead to too high heat loss cost.
- Already at this time think about **asset management** so that you chose products, systems and installation methods where you secure that you will have a long lifetime without any failures that will lead to higher costs and disruption of the supply.
- Secure that you will have the lowest possible **Total Cost of Ownership**, which includes parameters like investment cost, heat loss cost and other operational costs

All these parameters have to be integrated in your choice of pre-insulated pipe systems and you have to calculate different scenarios with different assumptions before you can make your final choice.

### Presentation 1

**New trend in district heating network design?** Thomas Østergaard, Market Director, COWI A/S

Designing a district heating network has evolved over time depending on country, traditions, heat sources and other partly undefined circumstances... But today we see some other general trends. Climate, CO<sub>2</sub> reduction, environment are global factors that influence our decisions. What are the trends for future district heating networks - and how should we begin to act as planners and engineers? Our choices will have an impact for many years - so why not try to take the right ones!

### Presentation 2

**Total Cost of Ownership perspective,** Product & Academy Manager Peter Jorsal, LOGSTOR

When the hydraulic design is in place, we have to optimize the solution to achieve the lowest cost over the lifetime of the system – Total Cost of Ownership. Should the choice be Twin Pipe or single pipe; which insulation thickness; different type of pipes with different heat loss properties? Define the assumptions and calculate different scenarios of the same project. At the same time, think about the future asset management when choosing products and installation methods.

### Presentation 3

**Total Cost of Installation perspective,** Product & Academy Manager Peter Jorsal, LOGSTOR

What is the consequence if you evaluate only on lowest cost of installation? Can you with focus on Total Cost on Installation still be helped in the right direction of Total Cost of Ownership?

### Presentation 4

**UK market view on Total Cost of Ownership / UK Guidelines,** Managing Director Chris Hill, LOGSTOR UK Ltd

UK is an expanding market for District Heating solutions. In the “UK code of practice” it is described that life cycle cost evaluation shall be included when choosing the system. An example of this is seen in objective 3.6 of the CP1 Heat Networks Code of Practice “to achieve a low-cost network – optimisation of routes and pipe sizing for minimum lifecycle cost”.

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## The presenters:

*Peter Jorsal, Product & Academy Manager, LOGSTOR*



*Peter Jorsal has 34 years of experience in the energy sector, the first 6 years working with district heating projects as a consulting engineer and since then in company LOGSTOR working with pre-insulated pipe systems for district Heating and district cooling projects. For the past 4 years, Peter has been Product & Academy Manager, responsible for the product strategy and training of internal employees and also training of external joints fitters, supervisors, engineers and designers. Peter Jorsal is LOGSTOR's representative in 4 DH, DBDH, Green Energy.*

*Chris Hill – UK Managing Director – LOGSTOR UK*



*Chris Hill has 6 years' experience with LOGSTOR in the UK. In this time seeing policy movement and growth in the UK district heating market. Prior to LOGSTOR Chris Hill has spent 15 years working in the UK heating and renewable market sector.*

*Thomas Østergaard, Market Director, COWI A/S*



*Thomas has more than 33 years of professional experience from all parts of the energy sector and is one of COWI's most experienced technical specialists within district heating systems. He has extensive experience from design and retrofitting of district heating networks all over Europe. He has been responsible for the organization and implementation of several seminars and training courses on district heating issues in Denmark, Poland and Italy. Thomas is the COWI market director for implementation of TERMIS systems, starting from steady state calculations to advanced real-time systems. The TERMIS temperature optimization (FTO) is implemented in more than 40 DH systems worldwide, lowering the forward temperatures and optimizing the economy of the district heating companies.*

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