

Digital Seminar – PIRI, Peterborough, UK

Thursday 26 November 10.00 – 12.30 (EST)

10:00 – 10:10 Welcome / Lars Hummelose, DBDH

10:10 – 10:20 Short intro to the participating Danish companies

10:20 – 10:40 Introduction to Peterborough participants and PIRI Project Overview

- Elliot Smith, Peterborough City Council

10:40 – 11:15 Theme 1: Optimisation

- Ensuring the most efficient system, enabling additional heat sources and renewables on the network

- 1. Diversity Factors** for City Wide Non-residential DH Networks – is there an equivalent of DS 439 or any operational data for commercial/non-resi lead schemes
- 2. Plant Sizing Strategy** – overview of required level of plant resilience/redundancy and thermal store contribution to peak demand occurrences
- 3. Pipe Sizing** – allowable pipeline velocities and pressure drop for peak scenarios
 1. Intro to the topic / Lyall Archer, SSE (7 min)
 2. Claus Nielsen, DIN Forsyning (Utility) (7 min)
 3. Thomas Østergaard, COWI (7 min)
 4. Peter Jorsal, Logstor (7 min)
 - 5. Theme 1: Optimisation Q&A (7 min)**
 6. Theme 1 Q&A (4 min)

11:15 – 11:50 Theme 2: Commercial

Improving the IRR and NPV for schemes and/or reducing the cost of construction

Decarbonisation of existing and new DH networks – how are Danish operators typically achieving this? Is grant funding required?

Heat tariffs – how does DH decarbonisation impact on heat tariffs, and how do Danish operators maintain competitive rates for customers? What is the basis for the counterfactual heat price?

Linear heat density (MWh/m/yr) – what do Danish network designers look for, and are there any alternative/better metrics for assessing early-stage commercial feasibility of DH schemes?

Phasing and expansion of existing networks – insights into engagement and design strategies employed by Danish DH operators/designers

1. Intro to the topic / Sam Benjamin, Element Energy (7 min)
2. Claus Nielsen, DIN Forsyning (Utility) (7 min)
3. Thomas Østergaard, COWI (7 min)
4. Carl Tubitt and Abhijit Barve, ABB (7 min)
5. **Theme 2 Q&A (7 min.)**

11:50 – 12:35 Theme 3: Integration

- Experience of multi-vector approaches and the value of that can be leveraged
- Project examples where a thermal network is used to balance the local electricity network through reduction in (local) peak electricity demand?
- Project examples with an integrated approach to delivering local heat through e.g. heat network + building-level heat pumps with battery storage and top-up solar?

1. Intro to the topic / Tanja Groth, SWECO (7 min)
2. Claus Nielsen, DIN Forsyning (Utility) (7 min)
3. Claus Jacobsen, IESenergy (7 min)
4. Søren Hebsgaard Knudsen, Kamstrup (7 min)
5. Stephen Hart, Frese (7 min)
6. **Theme 3 Q&A (8 min)**

7. Energy and Climate Academy / Torben Kirkegaard (2 min)

12:35 – 12:45 Summary and Open discussion

Participants

Elliot Smith, Programme Lead, Peterborough City Council

Claire Evans, Project Manager, Peterborough City Council (Serco)

Richard Pearn, Waste, Recycling and Energy Manager, Peterborough City Council

Sam Benjamin, Senior Consultant, Element Energy

Fiona Hughes, Element Energy

Henrietta Cooke, Heat Networks Specialist, BEIS (HNDU Team)

Tanja Groth, SWECO

Lyll Archer, SSE

Jen Belk, SSE