High Temperature District Cooling – Possibilities and Challenges

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Euroheat and Power Congress 2019
Session: Cooling – The Other Side of a Shiny Coin
What are the temperatures today?
Why higher temperatures?

- Low Temperature District Heating
- Utilization of Natural Cold Sources
- High Temperature Cooling in Buildings
Two approaches to higher temperatures

Increased Supply

Increased Return
Gothenburg
District Cooling System

26% Free Cooling

Total: 70 MW
The Research Project

• District Cooling System

• 40 connected buildings

• What temperatures do customers need?
Higher Flow Rates & Low Delta T
Design for Lowest Temperature Required
Incentives for Existing Customers

Low Delta T Syndrome in Buildings
Incentivize High Return Temperatures
Control and Monitoring

Challenges
Supply
Return
More Free Cooling

Competitive with Alternative HTC Solutions

New Production/Expansion Areas

Possibilities

Supply

Return

Higher Efficiency

Connect More Customers
Thank you!

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