CHALLENGES AND OPPORTUNITIES IN SUSTAINABLE ASSET MANAGEMENT FOR DH SYSTEMS

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Abstract

Climate change and other boundary conditions require a rethinking of the energy supply of the future. District heating is an environmentally friendly energy source (depending on the type of heat generation, of course) and is becoming more and more important.

The existing 3rd generation networks are subject to ageing processes and increasingly require restructuring and/or expansion measures regarding the conversion to 4th or 5th generation systems, but also through the integration of decentralised feeders.

The presentation will show the use of improved aging models for DH pipe systems as part of a classical asset management approach. It will also discuss new ways of rethinking asset management for DH pipes, e.g. predictive maintenance measures and the applicability of AI methods. Another point is the combined use of AM tools and tools for hydraulic modelling to incorporate aspects of supply reliability and operational measures into asset management.