



THE SMART CITY ALLIANCE

Eco-governance in Practice



NORDIC HEAT MASTER CLASSES

INVITATION

MINING THE FUTURE – IN PRACTICE MIJNWATER – SUSTAINABLE HEAT GENERATION, DISTRIBUTION AND STORAGE

HEERLEN

21-22 NOVEMBER 2018

YOU ARE INVITED to a Masterclass from Mijwater B.V. in partnership with Nordic Heat, addressing the significant opportunities for reducing energy costs and carbon emissions by using former mine workings to store and distribute heating and cooling. Adding to natural geothermal heat, excess heat from e.g. industrial processes and energy-from-waste plants can be stored underground. This opens up new opportunities for making district energy even more affordable, available and environmentally friendly. Mine workings also enable the balancing of the most innovative, fifth generation, city-wide heating and cooling systems. In former mining communities, heating and heat storage projects help to bring growth and jobs to areas still struggling to recover after the end of the coal era.

THE OBJECTIVES are to highlight the scope and scale of this opportunity and to learn from the experiences of Mijwater B.V. in Heerlen. Mines contain an abundance of low cost, accessible and sustainable heat that can be distributed for community benefit through district heat networks.

Mines also constitute an unexplored opportunity for storing heat, thereby balancing variations in demand and supply. At the seminar we will explore technologies enabling this, and how this may reduce the costs for installing and operating heat network systems.

FOCUS AREAS of conversation will be

- Business models and technologies for generating and storing heat in former mines
- Low temperature heat networks - 5GDHC
- Market opportunities – Highlighting new district energy projects underway in NL

REGISTRATION & QUESTIONS

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ORGANIZED BY



IN COOPERATION WITH



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AGENDA

Day 1 Wednesday 21 November:

9.30 – 10.00	Registration and Refreshments
10.00 – 12.30	Introduction <ul style="list-style-type: none">• Welcome• Introduction Mijnwater – Modelling and approach Underground Ben Laenen and Virginie Harcouet• The Technical Perspective – Development and working 5DHC Heerlen thermal smart grid René Mijnwater (René Verhoeven)
12.30 – 13.30	Lunch
13.30 – 16.45	Tour around the project <ul style="list-style-type: none">• Hot production well (by Bus)• Cluster installation (by Bus)• Energy station SSC (small) (walk 10 min)• Energy station Moonquarter (big) (walk 10 min)
16:45 – 18.30	Presentation and site visit of the Moonquarter by Michiel Huisman – Artist and Architect
18.30	Drink and Dinner – Mijnstreek (city centre)

Day 2: Thursday 22th November

9.00 – 09.30	Registration and Refreshments
09.30 – 12.30	Presentations and Q&A <ul style="list-style-type: none">• The Municipal Perspective – Yvonne Bemelmans, Economics Officer Municipality Heerlen• Founding Mijnwater – How it all began Elianne Demollin (Founder and former Energy Officer Municipality and project manager Mijnwater)
11.00 – 11.15	Refreshments <ul style="list-style-type: none">• The Strategic Perspective - Herman Eijdem's Mijnwater 5GDHC and Energy Transition• The Commercial Perspective• Q&A – Herman Eijdem's and René Verhoeven
12.30 – 13.30	Lunch and end of program



FEE

€? per organisation/ company (excl. VAT - max 2 participants per company)

VENUE

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LIST OF PARTICIPANTS

BACKGROUND

NORDIC HEAT is an independent peer-to-peer training and advisory service aiming to support the development of District Energy, Energy Efficiency, Energy from Waste (EfW), Waste Management, and other energy related Smart City infrastructure in Europe and beyond.

The activity was founded in 2014 by a group of municipality owned energy operators in Sweden, all with more than 50 years of experience in installing and operating profitable district energy schemes in a deregulated energy market.

MISSION

- The role of Nordic Heat is to assist project teams in securing the swift implementation of high performing, reliable and competitive district energy and waste management solutions while minimising investment levels, operational costs and risks. A wider objective is to optimising the commercial, social, environmental and political benefits of investments in sustainable energy.
- Also to actively facilitate the efficient exchange of competences, experiences and new innovative technologies and practices, thereby strengthening the overall competitiveness of the sector.
- Nordic Heat also aims to help energy operators secure access to the best available professional and technical staff while reducing the cost of man-power.

SERVICES

ACADEMY

TRAINING SERVICES IN COOPERATION
WITH LOCAL COLLEGES

MASTER CLASSES

STUDY VISITS/ WORKSHOPS

VOCATIONAL TRAINING

EXCHANGE PROGRAMMES

>3000 participants in 12 markets since 2014

ADVISORY

PEER-TO-PEER CRITICAL FRIEND SERVICES
AND EXCHANGE OF BEST PRACTICE

CRITICAL FRIEND REVIEWS

PROCUREMENT

SUPPORT & PLANNING

REINFORCEMENTS

Active assignments across Europe and beyond



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