DETECTION & DISTRIBUTION Organized by State of the Control of the

DE TECHNOLOGY SESSION

HEAT GENERATION & DISTRIBUTION

DESIGN, TECHNOLOGIES, INSTALLATION PRACTICES
AND OPERATIONS & MAINTENANCE

YOU ARE INVITED TO A TECHNOLOGY SESSION FOCUSING ON DESIGN, TECHNOLOGIES, INSTALLATION PRACTICES AND MAINTENANCE SOLUTIONS OPTIMIZING CAPEX AND OPEX WHILE SECURING MAXIMAL RELIABILITY AND LIFE CYCLE PERFORMANCE OF DIFFERENT HEAT GENERATION SOLUTIONS TO DISTRICT HEATING

Stoke - 9 November - 2016

DISTRICT ENERGY IS ON THE MOVE IN THE UK. DHN projects across the country have moved well beyond the initial stages of formulating visions and executing feasibility studies. The teams in charge of these investments are now entering the final stages of business plan modelling and technical design. Once completed the academic and analytical exercises will be replaced by the more hands-on and literally down-to-earth tasks of procuring, installing and eventually operating district energy in practice. Years of planning and preparation will finally materialize in the commissioning of tangible urban heating systems.

Bringing a project beyond theory and into action is in particular becoming a reality in Stoke-on-Trent. The city has spent years in planning the implementation of a district heating system. The many hours spent on meticulous and committed preparations are about to be rewarded by practical realisation of the original vision. The final business plan and detailed technical design have been refined and approved. The installation of what will over time become a city wide heat network will begin in 2017. By 2019 some 40 km of pipes will have been installed annually distributing close to 50 GWh of heat to public, commercial and residential buildings in the southern parts of Stoke-on-Trent. Risk evaluations have been completed and financing has been secured for this first 3-year phase. Preparations for further expansion is underway involving and even more extensive pipe network sourcing heat from deep geothermal sources, energy from waste incineration and industrial waste heat.

The 50 GWh of heat deliveries scheduled in the first phase of this long term city wide urban heating system will be sourced from 8 small scale gas and bio-mass fuelled combined heat and power boilers. The size of these units will be between 2-4MW. In addition they will be mobile enabling relocation of energy centres as the net expands. The energy centres will obviously include investments in other relevant technologies. In addition the city will procure services related to installation, operations and maintenance.

You are invited to a technology day in Stoke during which you will meet the team in charge of the DHN project in Stoke, and also project teams from other Local Authorities who are also about to enter the process of final design, procurement and installation. You will also meet representatives from the city and trade associations as well as potential partners in the UK market in general, and in the region of Stoke in particular. Most importantly you will be given the opportunity to present your products and services and also to engage in organized 1-2-1 meetings with the teams in charge district energy projects.

WELCOME TO HOTSPOT STOKE ON 9 NOVEMBER.











REGISTRATION & PRACTICAL INFORMATION

AUDIENCE District Heating Project teams from public and private sector

Public Institutions

Consultants and Suppliers of technologies and Services

Contractors Investors

DATES & LOCATIONS Wednesday 9 November, 2016

09.30-16.00 Smithfield Building Stoke-on-Trent

FEE Free of charge for participants from Local Authorities, Housing

Associations and other public sector institutions. Also free of charge

for companies in the region of Stoke. £300 for other attendees.

BOOKING http://heat_technology.eventbrite.co.uk

QUESTIONS Ailsa Gibson - CLASP Peter Anderberg - HEATNET

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AGENDA

09.00 Registration

09.30 **Joint session focusing**

- Presentation of projects
- Design Technologies & Experiences
- Supplier presentations Technologies & Services
- Presentations by local stakeholders and partners
- General Market trends
- Nordic Heat Peer-to-peer advisory services

Individual 1-2-1 Sessions

 Circling meetings involving project teams and technology/ service suppliers

16.00 End of Session

Coffee, lunch and beverages will be served during the day

ORGANIZERS



















SCHEDULED NORDIC HEAT MASTER CLASSES

STOKE-ON-TRENT - 2016



HEAT GENERATION & DISTRIBUTION

DESIGN, TECHNOLOGIES, INSTALLATION PRACTICES AND OPERATIONS & MAINTENANCE

TECHNOLOGY SESSION FOCUSING ON DESIGN, TECHNOLOGIES, INSTALLATION PRACTICES AND MAINTENANCE SOLUTIONS OPTIMIZING CAPEX AND OPEX WHILE SECURING MAXIMAL RELIABILITY AND LIFE TIME PERFORMANCE OF DIFFERENT HEAT GENERATION SOLUTIONS TO DISTRICT HEATING



STOKE - 16 NOVEMBER

ORGANIZED BY







N CO-OPERATION WITH







DIGITAL HEATING

EXPLORING OPPORTUNITIES AND MANAGING THREATS RELATED TO THE ONGOING DIGITAL TRANSFORMATION OF THE ENERGY SECTOR

THE DIGITAL TRANSFORMATION HAS NOW ALSO REACHED THE DISTRICT HEATING SECTOR. WE ALL MEET THE NEW BUZZ WORDS, EVERY DAY - IT INTEGRATION, INTERNET OF THINGS, MOBILE COMMUNICATION, DATA CLOUDS... - WE HAVE ALL HEARD THE NEW BUZZ WORDS. BUT WHAT DOES DIGITAL TRANSFORMATION REALLY MEAN IN PRACTICE, AND WHAT SIGNIFICANCE WILL IT HAVE FOR OUR BUSINESS? WHAT DOES IT MEAN TO OUR CUSTOMERS AND OUR VALUE PROPOSITION? HOW DO WE DEFINE A DIGITAL STRATEGY AND WHAT DOES IT TAKE FOR OUR TEAMS TO IMPLEMENT IT. IN BRIEF -

HOW DO WE BECOME READY FOR DIGITAL HEATING?



ORGANIZED BY





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THE CLIMATE BRIDGE - by Stoke

EXPLORING THE VAST POTENTIAL CLIMATE STRATEGY OPPORTUNITIES IN BRINGING HEAT UNDERGROUND WITH DISTRICT HEATING SYSTEMS

University seminar focusing on the future low carbon heating solution currently introduced in Stoke-on-Trent which will provide competitive and convenient heating while responding to the urgent need to reduce CO_2 emissions. District Energy is may look like a technology of the past, Still it is a proven and highly effective solution to address the climate challenge in a profitable way.

KEY NOTE SPEAKER - DR. SVEN WERNER - ONE OF THE LEADING AUTHORITIES ON DISTRICT ENERGY GLOBALLY











SCHEDULED NORDIC HEAT MASTER CLASSES

STOKE-ON-TRENT - 2017



STOKE - 20 JANUARY, 2017

ORGANIZED BY





IN CO-OPERATION WITH







COMFORT & CONTROL

DESIGN, TECHNOLOGIES, INSTALLATION PRACTICES AND OPERATIONS & MAINTENANCE

TECHNOLOGY SESSION FOCUSING ON SYSTEMS, SOLUTIONS AND SERVICES TO OPTIMIZE THE VALUE PROPOSITION AND PERCEIVED COMPORT OF DISTRICT HEAT WHILE SECURING EFFICIENT AND RELIABLE CONTROL OF FUNCTIONALITY AND ADMINISTRATIVE ROUTINES RELATED TO DELIVERIES OF HEAT.



ORGANIZED BY







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(discussions ongoing with other partners)

HOTSPOT STOKE - BUSINESS & INNOVATION CLUSTER IN DISTRICT ENERGY

STRATEGIC WORKSHOP AND SOCIAL ACTIVITY AIMING TO FURTHER DEVELOP THE EMERGING CO-OPERATION BETWEEN UK & SCANDINAVIA IN THE AREA OF DISTRICT ENERGY

WORKSHOP INVOLVING KEY STAKEHOLDERS FROM UK AND SWEDEN INVOLVED IN THE ONGOING PROJECT OF ESTABLISHING DISTRICT ENERGY IN STOKE-ON-TRENT. LAUNCHING JOINT INNOVATION PROJECTS FOCUSING ON THE COMMERCIAL CASE FOR DISTRICT ENERGY AND DIGITAL HEATING.

THE DAY ALSO INCLUDES SOME SOCIAL ACTIVITIES TO FORGE BONDS BETWEEN KEY DECISION MAKERS IN UK AND SWEDEN. VISITS TO SPODE CERAMICS INDUSTRY, THE PROGRAM WILL INVOLVE A SELECTION OF ACTIVITIES - VISIT TO SPODE CERAMICS INDUSTRY, THE TITANIC BREWERY AND THE FOOTBALL GAME BETWEEN STOKE AND MANCHESTER UNITED











SCHEDULED NORDIC HEAT MASTER CLASSES

OTHER REGIONS OF UK - 2016



URBAN HEATING

COMMUNICATION STRATEGIES IN DISTRICT ENERGY

MASTER CLASS SESSION FOCUSING ON HOW TO PRESENT AND SELL IN THE CONCEPT OF DISTRICT ENERGY TO THE VARIOUS STAKEHOLDER GROUPS AND DECISION MAKERS RELATED TO INVESTMENTS IN DISTRICT ENERGY. HOW CAN WE POSITION DISTRICT HEATING AS THE NATURAL CHOICE IN URBAN AREAS? CAN WE EVEN MAKE IT "CHIC" IN THE EYES OF THE YOUNGER GENERATION?



EDINBURG - 17 NOVEMBER

ORGANIZED BY





DIGITAL HEATING

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HOW DO WE BECOME READY FOR DIGITAL HEATING?



ORGANIZED BY





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INVEST IN THE UK

DEVELOPING THE SUPPLY CHAIN TO THE UK DISTRICT ENERGY SECTOR

STRATEGY WORKSHOP ADDRESSING QUESTIONS RELATED TO HOW TO REINFORCE THE SUPPLY CHAIN OF PRODUCTS AND SERVICES TO THE RAPIDLY EMERGING DISTRICT ENERGY SECTOR IN THE UK - HOW TO FACILITATE ESTABLISHMENT AND INVESTMENTS BY SUPPLIERS AIMING TO EXPAND IN THE UK MARKET. THE WORKSHOP IS JOINTLY ORGANIZED BY BEIS, DIT, SEA, NORDIC HEAT AND DEPA











THE EUROPEAN HOTSPOT INITIATIVE

BUSINESS & INNOVATION CLUSTERS IN DISTRICT ENERGY

BACKGROUND

- DISTRICT ENERGY (DE) is about to become a major new industry sector in Europe. The expansion of DE will not only offer benefits in the areas of energy supply and environmental protection, it will also open up opportunities for profitable investments and job creation. The expected growth in district energy is thus attracting not only energy operators but also politicians, investors and suppliers of technologies and competencies from Europe and beyond.
- The current overall market share within EU27 is expected to more than double from its current 8% to close to 20% in the next decade.
- Visions are defined and objectives fixed from EU level down to local city councils. However, it has proven to be a major challenge to bring projects beyond feasibility studies and into installation and operations.
- One key issue slowing down the process is the fact that district energy is a multi stakeholder activity. There is a strong need to bring together and co-ordinate the activities of all actors aiming to enter the new markets.

OBJECTIVES

- The overall aim is to establish a network of district energy clusters in key markets across Europe, and beyond.
- The Hotspot hubs are intended to serve as stepping stones into the DE sector facilitating business development, investments, innovation and training.
- The underlying ambition of the HOTSPOT hubs is to attract a critical mass of actors to one spot, thereby creating a dynamic context facilitating exchange and co-operation and generating the gravity required to attract yet further actors. The assumption is that this will increase the effect of the combined initiatives and investments in the sector thereby speeding up the development of DE in Europe.
- The Hotspot clusters focus on four key areas of activity
 - BUSINESS SUPPORT
- INNOVATION
- TRAINING
- INTERNATIONAL CO-OPERATION
- Being initially launched in 5 markets UK, Sweden, Italy, Belgium, and Poland - the aim is to multiply the number of HOTSPOTS establishing a tightly-knit network across Europe and beyond.











NORDIC HEAT

Bringing Heat Underground

PEERS IN DISTRICT ENERGY

NORDIC HEAT is an independent and not for profit peer-to-peer advisory service aiming to support to the development of District Energy and W2E solutions in new markets. This by transferring the extensive know-how and experience developed in Scandinavia over the past 50 years. The Nordic Heat network has been established by a group of publicly owned Swedish energy operators, all with a long and proven track record in installing and operating commercial district energy systems.

The overriding ambition of NORDIC HEAT is to assist new entrants to the district energy sector in the challenging process of bringing projects beyond feasibility studies and into business planning, financing, installations and operations. Based upon their long experience and extensive knowhow, the Nordic district heating operators involved in Nordic Heat will be able to assist project teams with second opinion, peer-to-peer advice, reference cases, bench marks, selection of technologies and suppliers, training, support in commissioning, inspiration and leadership.

Being founded by public energy operators NORDIC HEAT is a fully independent and unique peer-to-peer advisory service. Being not for profit there is neither ambition, nor capacity, to take a role as a traditional consultant. Fees related to the services are adjusted to cover the costs related to the mission and to further develop the content, reach and scope in the services provided. Customers and partners to Nordic Heat can also trust that the advise given is completely unbiased when it comes to selecting suppliers of technologies and services. Performance, total cost of ownership and price are always their key criteria. Nordic Heat is also a founding partner of The Climate Bridge Initiative - a not for profit activity aiming to support in the global transition into a fossil free economy.





The mission of NORDIC HEAT is to support colleagues in new district energy markets to speed up ongoing projects while reducing total cost of ownership, minimising risks and optimizing the financial, environmental and social benefits of the investments. Another key driver for the energy operators joining the network is to confront its own staff and current business models with the very latest technologies and practices in order to drive the internal business development and innovation process. In brief, the aim is to export experience and know-how, and at the same time import innovations and find inspiration to develop the value proposition offered at home.









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