



INVITATION

DESIGNING, INSTALLING & OPERATING HEAT NETWORKS – I

DISTRICT ENERGY MASTER CLASS SESSION FOCUSING ON TECHNICAL DESIGN,
INSTALLATION AND OPERATIONS OF DISTRICT HEATING NETWORKS

London – 2nd and 23rd September, 2015

You are invited to the first in a series of MASTER CLASS SESSIONS in District Heating.

The initiative is a co-operation between NORDIC HEAT, Imperial College, London School of Economics and HEATNET.

The Aim is to provide delegates with a more in-depth technical training session on the key elements in designing, installing and operating district heating and to provide access to best available technologies, practices and experiences from various markets

The Speakers will include technical consultants & network designers, technology suppliers, and operators in district energy.

The Audience is expected to include operational staff in existing district energy companies and ESCOs as well as local authority officers and other professionals related to the sector. The presentations and discussions will be technical and assume a basic level of understanding of the concept of district heating.

Topics addressed at the session, which is the first in a series Master Class activities, are

- **Designing heat networks** – priorities and concerns to optimize efficiency
- **Distribution systems** – technologies, installation and O&M to optimize life cycle costs
- **Heat interface units** – design, technologies, installation and O&M
- **Metering solutions** – technologies, design, installation and operations
- **Monitoring & Maintenance** – technologies, practices and competencies
- **Managing Information** – handling the flow of information related to DE systems

PRACTICAL INFORMATION – MASTER CLASS SESSION I

Dates

2nd September – 09.30-17.00 **and** 23rd September – 09.30-17.00

*The **MASTER CLASS II SESSIONS** will be organized in October and November.*

Location

Imperial College – London

Fee

Free of charge for participants from LAs and other public sector institutions. £250 for other attendees.

Questions & Registration

Ailsa Gibson - CLASP

Phone: +44 (0)1524 824325

Mail: ailsa@claspinfo.org

or

Peter Anderberg - HEATNET

Phone: +46 70 56 111 99

Mail: pa@springnet.se

NORDIC HEAT

INTRODUCTION

NORDIC HEAT is a peer-to-peer advisory service aiming at providing hands-on support in the entire process of bringing district energy from vision to operations – business planning, commercial strategy, design, procurement, installation, commissioning and operations and maintenance. A critical element in our proposition is that Nordic Heat is an initiative initiated by a group of large municipality owned energy companies, thus completely independent from consultants and technology suppliers.

NORDIC HEAT involves professionals with a long and proven track record from the District Energy sector. You will meet colleagues to yourselves who are eager to share their know-how and experience in order to support you in building district heating networks in a way that minimizes your costs and maximises your revenues. Just as they have done, and still do, in their regular positions back in Sweden. They have first-hand experience in managing risk and optimizing returns on investments. You can trust they will be on your side of the table throughout the process, something that is critical for the credibility, and thus the very existence of NORDIC HEAT.

NORDIC HEAT offers a range of advisory services related to the development and operations of District Energy solutions – political strategies, business modelling and commercial strategy, investment strategies and due-diligence support, design and technical solutions, procurement of consultants, hardware and contractors, project management, commissioning, operations and maintenance.

MISSION

Peer-to-peer advisory service aiming to support the development of District Energy and W2E solutions in new markets, by transferring the extensive know-how and experiences developed in Sweden during the past 50 years.

The objective being to reducing risks and increasing financial and environmental returns for new entrants in the sector.



Partners in NORDIC HEAT



Part of the Springnet Group
www.springnet.se
springnet managed support

SERVICES

- Seminars & Workshops
- Master Class sessions
- Advisory Services
- Management support in business planning
- Training & Exchange programs
- Case Studies
- Support services
- Networking platform
- Facts and News service
- O&M support
- Financial advice and DD

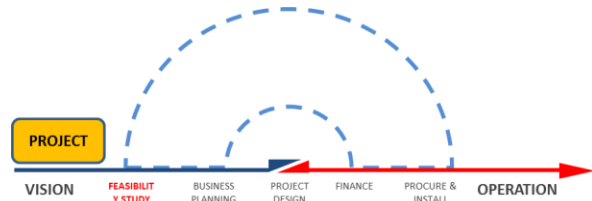
NORDIC HEAT SERVICES

NORDIC HEAT is a peer-to-peer advisory service aiming to support the development of District Energy and W2E solutions in new markets, by transferring the extensive know-how and experiences developed in Sweden during the past 50 years.

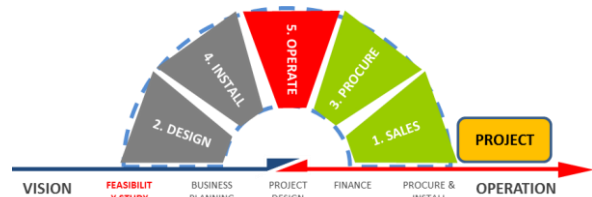
By providing a range of **SERVICES**, the aim is to assist new entrants in the district energy sector to bring projects beyond visions and feasibility studies, into business planning, design, procurement, installation and ultimately operations.

Examples on services to bridge the gap between visions and operations are

- Seminars & Workshops
- Project reviews and second opinion
- Range of Advisory Services
- Training & Exchange programs
- Operational Support services
- Networking platform



**Assisting in Bridging the Gap
Between Vision and Operations**



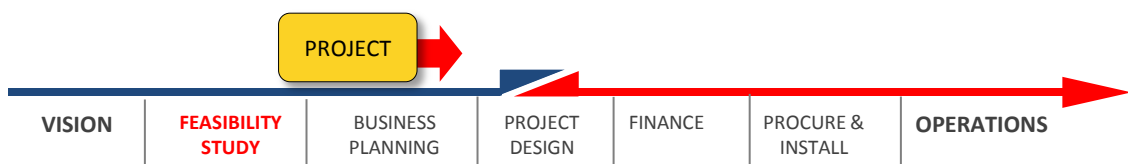
A more detailed description of services can be provided upon request

NORDIC HEAT consists of a number of large municipality owned energy operators in Sweden, all with a very long experience and proven track record in designing, installing and operating district energy. The companies involved are presented in enclosure 1.

It should be stressed that NORDIC HEAT is not a traditional technology consultancy, executing feasibility studies, calculations and design work. The role is rather that of a “critical friend” providing peer-to-peer assistance in the different stages of a district energy project. NORDIC HEAT is a non-profit activity charging a fee to cover costs only.

The overall ambition of NORDIC HEAT is to support new entrants to assist new entrants with e.g. advice, transfer of experience, reference cases, key figures, selection of technologies and suppliers, training, support in commissioning, inspiration and energy. The overall goal being to support colleagues in speeding up ongoing projects while minimising risks and optimizing the benefits.

NORDIC HEAT – BRINGING PROJECTS BEYOND FEASIBILITY STUDIES



NORDIC HEAT

EXAMPLES ON ADVISORY SERVICES OFFERED BY SWEDISH ENERGY COMPANIES



NORDIC HEAT

PARTNERS



DISTRICT ENERGY COMPANY

Ownership: 100% municipality
Experience: 61 years
Share DH: 70% of total market
Fossil: <15% (CHP)
Km Pipe: 1 000
Sales DH: 250 M€
ROCE DH: >12%
Total turnover: 750 M€



www.nordheat.eu

HEAD OFFICE

NORDIC HEAT
Stockholm Waterfront - Springnet
Klarabergsviadukten 63
101 23 STOCKHOLM
SWEDEN
☎ +46 70 56 111 99
✉ pa@springnet.se



DISTRICT ENERGY COMPANY

Ownership: 100% municipality
Experience: 60 years
Share DH: 90% of market
Fossil: <15% (CHP)
Km Pipe: 660
Sales DH: 120 M€
ROCE: >12%
Total turnover: 650 M€



DISTRICT ENERGY COMPANY

Ownership: 100% municipality
Experience: 50 years
Share: >90% of market
Fossil: <10%
Km Pipe: 600
Sales: 80 M€
ROCE: >12%
Total Turnover: 400 M€



4



HEATNET – EUROPE

INTRODUCTION

The Heat is On in the W2E and District Energy sectors world wide. Having proven their case in Scandinavia – commercially, financially and environmentally – they are now attracting the interest from a broad range of stakeholders in across Europe and beyond. W2E and District Energy are no longer theoretical concepts being studied and advocated by politicians, energy experts and environmentalists. Pipes are in the ground, and sub-stations connected. Experiences are being accumulated. And they are positive. Energy customers, politicians, operators, investors, media, environmentalists all agree. W2E and District Energy is here to stay. And to grow. Driven by end user convenience, political demands for energy efficiency and security, public concerns for the environment, and unexplored commercial opportunities.

There is No Time to Waste for those who want to establish a position in the emerging W2E and District Energy markets. Now is the time to enter the market, and to find the answers to all the key questions for anyone involved in sales

- *What* do the new markets look like in practice – volumes, driving forces, trends?
- *Where* is the market – which are the companies behind the macro statistics?
- *Who* are individuals to approach – how to access the key decision makers?
- *How* to serve – how can my products and services match these needs?
- *Whom* to establish partnerships with to build a long term market position?

HEATNET is a pan-European support company offering a range of temporary assistance services on short notice to managers and teams in the European District Energy and Waste to Energy markets. The 250 professionals who are partners in the HEATNET network spread across more than 20 countries are all highly experienced and well connected. Most have more than 25 years of operational experience in the energy sector.

Our guiding principle is that Business is never Business to Business. It is always Human to Human. The role of HEATNET is to offer a range of support services to enable those humans to do even more business. We are holding out a hand for professionals to take, when they need one.



HEATNET offers a range of services

- Market knowledge and research service
- Strategic and operational advisory service
- Access to key stakeholders in targeted markets
- Advisory and due diligence services to investors
- Networking and partnering activities
- Access to major customers in key markets
- Access to best-in-class competence and technology suppliers in energy/energy efficiency
- Access to investors and financing institutions
- Resource and competence pool
- Management support services



HEATNET EUROPE
Stockholm Waterfront Building
Peter Anderberg
pa@heatnet.se
+46 70 56 111 99
www.heatnet.se



HEATNET UK Ltd
Michael King
mk@heatnet.se
+44 7966 238 566
www.heatnet.se

Business is Always Human to Human