District Energy Vanguards Newsletter

September 2016

Editorial

A burning desire

People developing district energy projects will know about optimism bias. This is where you want something so badly that you overlook or ignore the downside whilst overly focusing on the upside. This happens to policy makers when they discover a 'magic bullet'. The past decades are littered with them – domestic boiler sized micro-CHP units, building-mounted wind turbines to an all-electric future.

Presently there is a new one ambling over the horizon. This is the re-purposing of the gas grid to carry hydrogen. As one industry figure observed at a recent event, '*the all-electric future has been replaced by the all hydrogen future*'. This scenario was advanced in a report published in April by Imperial College. This will allow individual gas boilers to continue as the primary heating technology. Lurking behind this 'vision' are the asset owners of the gas grids who clearly have not accepted the residual role allocated to them in DECC's *The Future of Heating* (2013).

The big selling point to policy makers is that it will avoid all the disruption of digging up streets to install district heating mains. In my view concern over such disruption is overstated. The reality is that all subterranean infrastructure needs renewal over time necessitating the occasional digging up of the streets. Additionally, the roads are closed for re-surfacing every few years. In summary it happens all the time. But that does not stop it being a concern to policy makers who are keen to avoid it. Consequently, this is a very attractive 'upside' proposition.

In contrast the downsides are underplayed. What might they be? Well firstly there will need to be a massive development of large onshore electrolysis plants powered by excess wind or solar-generated electricity. Whilst the gas grid is in place these production facilities do not exist and will need to be built from scratch. Alternatively, hydrogen can be produced more cheaply from fossil fuels, primarily oil and natural gas. However these will need to be scrubbed of carbon using carbon capture and storage (CCS). This currently does not exist and would have to be built from scratch. Meanwhile the Government has cancelled its support for the development of CCS.

A report last year from the Health & Safety Executive (HSE) found that using a mix of up to 20% hydrogen in methane – more or less like the old town gas - will have no negative effects on the grid itself. However, in pipes where the gas is not moving, for example at the consumer end when there is no actual consumption, stratification will occur between the gases as hydrogen is lighter than methane. Consequently,

burner's within the boiler will receive varying mixtures of the gas which will require continual adjustment.

The HSE report also found that whilst modern gas boilers could burn such a hydrogen/methane mix, older boilers will need adjustment of the speed the gas is fed into the boiler as hydrogen travels much faster than methane. Gas cookers will need to be adjusted as the flame from hydrogen is much flatter. The implication is that to be certain on the age and type of boiler in use and to adjust gas cookers every building with a gas burning appliance in it will need to be visited, checked and potentially adjusted. This happened during the conversion from town gas to natural gas from the North Sea. But that was when British Gas Corporation was a monopoly distributer and supplier of gas. Today we have a fragmented gas distribution and supply industry and it will not be so simple. Lastly, gas with hydrogen present in it cannot be used in gas turbines at all creating challenges for industry.

But what will be the impact on the grid if it is 100% hydrogen? At least 10% of the high pressure network is still metal pipe. As hydrogen molecules are smaller than methane they are more likely to leak where weaknesses occur at welded joints. Furthermore, the lower calorific value of hydrogen relative to methane means more gas will need to be shipped to achieve the same result with a consequent reduction in grid capacity.

These downsides are not insignificant and cannot be ignored. Consequently, re-purposing of the gas grid to carry hydrogen looks less like a 'magic bullet'. Nevertheless, hydrogen could have a contributing role to play in meeting to 2050 carbon target and it is worth seeking to address these challenges. If these can be met wouldn't it be sensible to integrate it with other technologies to maximise the impact? Upstream electrolysis hydrogen production plants are only 70% efficient. The remaining 30% is rejected as heat at approximately 50o. That heat could be boosted and fed into local heat networks. That would require careful planning regarding the siting of the plants close to towns and cities. Downstream the hydrogen could supply district energy plant rooms serving heat networks in dense urban areas. The long run times needed to meet base load could address the stratification problem. And if it is used to fire CHP engines electricity would be produced close to where it is needed, reducing stress on the local power grid, as well as heat. Wouldn't that be optimising the total energy system with a consequent impact for meeting the 2050 target?

Finally, late last month Ofgem warned bidders seeking to buy shares in four regional gas grids on sale from National Grid not to make assumptions on returns that will be available on these assets in the future. The current price controls run until April 2021 and the regulator has not yet determined what will be put in place for the following eight year term. And yet Ofgem is moved to speak out because the market is placing a regulated asset value on the networks much higher than its own assessment suggesting bidders believe a much higher return will be available.

Maybe they need to understand optimism bias.

UK News

EA-DHC announces new Call for Proposals (September 2016)
The International Energy Agency Technology Collaboration Programme on District Heating and Cooling (IEA-DHC) is the only global research programme for this technology. Supported by BEIS, the UK is a member of IEA-DHC. The Call for Proposals for Annex XII of this programme has just been launched and full details can be found at
www.iea-dhc.org
The deadline for proposals is 15 February 2017. Potential bidders are encouraged to contact the UK representative Robin Wiltshire at: robin.wiltshire@bre.co.uk

Update on the Heat Network Investment Project (BEIS Email) 4 October 2016
The public consultation on the £320m Heat Networks Investment Project (HNIP) closed on 3 August. A big thank you to those who submitted a response. We appreciate both the time taken to engage with the process and the information and evidence provided. 122 responses were received and currently these are being analysed to inform scheme design and delivery of the project, both for the pilot and for the main scheme. We will publish a response to the consultation as part of the launch the HNIP pilot, which we hope to announce shortly with a focus on public sector organisations for this first phase, as we set out in the consultation document (but exact eligibility to be confirmed at scheme launch).

Heat Trust launches first customer accessible Heat Cost Calculator (Heat Trust) Friday 30th September 2016
Heat Trust has today launched its Heat Cost Calculator. Designed specifically for domestic customers served by new district heating schemes, the Heat Cost Calculator is a new online tool that will allow customers to compare their annual heating and hot water costs with a typical, alternative heating system.

The Heated Debate: Setting the tariff for the resident (Switch2) 29-Sep-2016
Community heating schemes in the UK often struggle to recover the cost of consumer heating. Considering setting the tariff earlier in the project and with the resident in mind, can help keep costs low and fair.

Understanding the cost of heating your home (Heat Trust) September 2016
This information sheet looks at the difference between district heating and individual gas boilers, and provides details on a Heat Cost Calculator. The Heat Cost Calculator aims to provide heat customers an idea of the cost of heating and hot water for a similar dwelling using an individual gas boiler. It has been designed with new build, metered properties in mind. It is for guidance only and is not intended to assess if your particular heating costs are good or bad.

is the electricity market a good model for heat? (Carbon Limited Blog) September 26, 2016 by Casey Cole

In the previous post, I suggested that creating a competitive heat market could be the best way to deliver value for customers. This would involve breaking up heat network "verticals" into their constituent parts (generation, distribution and supply) with genuine competition in each segment. Sounds lovely, but there are plenty of devils in the detail. For example, how do you match supply and demand across multiple parties in real time? What happens if a supplier requires more or less heat than they've contracted for? What if a generator puts more or less heat into the network than was planned?

Council wins cash to explore extension to green heat network (The Business Desk) 21 September 2016
Leicester is set to receive a share of £2.8m of government cash set aside to help the UK expand its green heat networks. Leicester's successful bid for £80,400 will pay for feasibility studies, which could be the first step to extending Leicester's existing district heating network into three more areas of the city.

Spot the difference: Heat networks compared to gas and electricity (Switch2 blog) 22-Sep-2016
It goes without saying that residents want a reliable heating system that will heat their home whenever they need it and for the right price. After all, 60 per cent of a household's yearly energy bills is heating. Yet what exactly is the right price? People usually think about gas when comparing energy prices, but the comparison is not always that simple and straightforward as we will discuss later.

Job: Research Associate in Community Heat and Power Networks Modelling
Loughborough University - School of Civil and Building Engineering
21st September 2016 Closes:18th October 2016

Decarbonising UK Homes And The Role Of Heat Networks (blueandgreen.com) Tuesday, September 20th, 2016
Too hot to handle? How to decarbonise the way we heat our homes' is a new report published by think tank Policy Exchange which states that heat networks are good value and crucial to decarbonising domestic heating in the UK

Vital Energi Design Department Grows By 260% (Vital Energi) 20 September 2016
Following strong, continued growth Vital Energi are delighted to announce that their Design Department has grown by 260% over the last 6 years to incorporate 65 full time members of staff.

The 21st-century village (Strutt & Parker) September 2016
Miserden Estate partnered with Strutt & Parker to install a district biomass heating system, 4G mobile communications coverage and fibre-optic broadband
To all outward appearances, the Gloucestershire village of Miserden hasn't changed in decades. But in the past year, this quiet corner of the Cotswolds – in partnership with Strutt & Parker – has undergone a series of changes that have brought it firmly into the 21st century.

linking heat networks raises tricky questions (Carbon Limited Blog) September 19, 2016 by Casey Cole
A few weeks ago, my business partner and I were walking to a meeting in Stratford when we realised we were surrounded by several heat networks (seven actually): each one standing alone, isolated from its neighbours, each dependent on its own small boilers or CHP, each its own tiny monopoly. Seven networks right next to each other, brazenly missing the opportunity to reduce cost and carbon by linking together.

Hotting up: the potential of heat networks (BrightBlue) 16 September 2016
Heating is one of the most difficult sectors of our economy to decarbonise. This is largely because gas provides 90% of our domestic heating demand, and so infrastructure to deliver gas to homes represents a big sunk cost… This blog will examine the potential of heat networks in particular, and the barriers to greater deployment.

On (not) assembling a market for sustainable energy: heat network infrastructure and British cities (Journal of Cultural Economy) 7 Sep 2016
Janette Webb & David Hawkey
Energy policies increasingly rely on market instruments to meet societal objectives for climate change mitigation. We explore the application of such instruments in low carbon heat markets. Using a conceptual framework derived from actor network theory and economic sociology, we examine the role of technical-economic models as market devices in two heat network proposals in British cities. Government intermediaries relied on the models to enact the mutual financial and carbon benefits of an area-wide heat market, and to enrol multiple public sector organisations in innovation.

HNDU Round 6 (30 August 2016) DBEIS
Round 6 of the Heat Networks Delivery Unit (HNDU) funding is now closed. Successful applicants for all the HNDU funding rounds to date are published below.

Carbon Footprint of Heat Generation (Parliamentary Office of Science & Technology (POST)) May 2016
Heat Policy takes into account the carbon footprint of different heating technologies. This POST note summarises evidence about the carbon footprints of current and emerging heating technologies in the domestic, commercial and industrial sectors. It then outlines wider considerations for heat policy and broad assessments of the 'best' way to reduce emissions from heating.

International News

Work begins on Danish solar district heating plant (DecentralizedEnergy.Com) 29/09/2016
Installation work has begun on a 1.9 MWth concentrated solar power (CSP)-based district heating plant in Denmark.

Unbowed by utilities commission's third rejection, Creative Energy plans to dig in (Vacouver Sun) September 28 2106
Developer Ian Gillespie says the B.C. Utilities Commission's latest rejection of his proposed low-carbon district energy system for downtown Vancouver is but a "minor blip" in his overall plan to dramatically rewrite how homes and businesses are heated in the city.

Croatian city to upgrade district heating network (Decentralised Energy) 27/09/2016
By Tildy Bayar
A tender has been opened for the modernization of a district heating network in the Croatian city of Rijeka. Bids are invited for a scope of work including rehabilitation of the existing network and substations, construction of a new power plant, supply and installation of gas-fired heat-only and steam boilers, supply and installation of district cooling equipment, and provision of an energy management solution.

District Heating and Cooling Market to Reach $243.4 Billion by 2024 (achrnews.com)
On the basis of consumption, district heating is the dominant segment

Government plan could raise Denmark district heating costs (DecentralizedEnergy.com) 19/09/2016
Denmark's district heating association has said the government's new energy strategy will increase residential heating costs by up to DKK4800 ($720) per year.
Dansk Fjernvarme said households which get their power and heat from smaller plants will be especially affected, and that around 1400 households could pay up to DKK10,000 in additional heating costs. The government's new energy strategy, presented last week, aims to cut home energy costs by DK2800 per year, as well as saving the government DKK5.9-7 billion by 2025 through a variety of optimization measures.

COGEN Europe welcomes the European Parliament's own initiative report as a call for improved legislative environment for highly energy efficient cogeneration (CHP) installations (13 September 2016) COGEN Europe Press Release
After half a year's work, today the European Parliament adopted in plenary its resolution on an EU Strategy on Heating and Cooling[1]. The decision makers went beyond endorsing the Commission's Heating and Cooling Strategy in calling member states and the European Commission to undertake specific actions on a wide range of issues.

City of Munich sees geothermal heat as treasure to be tapped (thinkgeoenergy.com) 14 September 2016 Alexander Richter
With big plans for large scale district heating by renewables, the city of Munich in Bavaria/ Germany is betting like no other big city on geothermal energy.

NIB funds CHP district heating in Stockholm (DecentralizedEnergy.Com) 13/09/2016
By Tildy Bayar

The Nordic Investment Bank (NIB) is to finance a new biomass combined heat and power (CHP) plant in Stockholm, Sweden. A 10-year loan of €65 million ($73 million) was agreed this week with plant owner Fortum Värme, a joint venture between Fortum and the city of Stockholm.

The introduction and expansion of biomass use in Swedish district heating systems (Biomass & Bioenergy Journal)

- Introducing and expanding biomass in the Swedish district heating systems.
- National policy instruments and local initiatives promoted this development.
- Resources, skills and structures in the forest industry were important.
- Initially, co-firing and the use of biomass in existing fossil fuel boilers.
- Current direct biomass use may be challenged in the future.

Optimisation potential and privatisation in energy supply sector (ILO) September 12 2016

In August 2016 McKinsey & Company delivered a report that analysed the optimisation potential in the energy supply sector. The report was ordered by the Ministry of Finance together with the Ministry of Energy, Utilities and Climate and is another recent contribution to the government's anticipated energy supply strategy, which will be presented this autumn.

In order to plan potential synergies, the report analyses:

- district heating;
- waste incineration;
- electricity distribution;
- gas distribution; and
- water supply.

Report and conclusions

The report concludes that there is potential for optimisation of between Dkr5.9 to 7 billion annually across the abovementioned sectors. This figure is derived from the potential optimisation of a list of parameters, including:

- liberalisation in certain parts of the sector;
- securing sufficient incentives for optimisation and consolidation through contract-based regulation for the sector's largest companies;
- the adjustment of benchmarking standards; and
- the introduction of a weighted average cost of capital regulation on newly acquired assets.

The report recommends the removal of barriers to optimisation and consolidation in the sector (eg, by making it easier and more attractive to merge energy supply companies or relaxing the strict set-off regulations, thus allowing municipal owners to take home premiums from divestments). Further, the consolidation of qualifications at a management level through the introduction of competency standards for board members is presented as a means to improve efficiency in the sector.

Critique of optimisation potential

The report's conclusions have sparked political disagreement, as some can be viewed as encouraging the partial privatisation of the energy supply sector, while others are described as being unrealistic or undocumented. The latter critique

primarily comes from the Danish District Heating Association (DDHA), as the report is particularly critical of its members. The DDHA is concerned that the report does not consider the green conversion that the sector is undergoing.
The Danish Waste Association (DWA) has also expressed concern that the report is merely an ideological attempt to optimise the waste sector, which according to the DWA is world-leading in terms of its operation. The Danish Water and Waste Water Association (DANVA) also voiced its concern, fearing that the report, together with other contributions to the anticipated energy supply strategy, will muddy the waters, as the report's conclusions do not consider environmental, climate and technological development issues.
The DANVA recently commented that the report's data regarding the energy sector's vast optimisation potential appear to have been overstated.
Ownership and privatisation
Rumours of the energy supply sector's privatisation have been circulating since the report was commissioned; however, Lars Christian Lilleholt, the minister for energy, utilities and climate, recently confirmed that the government has no plans to privatise the sector or address the ownership of energy and utility companies operated and owned by Danish municipalities. Nonetheless, the minister is committed to addressing the report's suggestions.
Although some energy sector stakeholders disagree with the report's data, its overall reception has been predominantly positive.
Local Government Denmark (LGD), the association and advocacy group of Denmark's 98 municipalities, welcomed the potential move towards privatisation, commenting that the report's conclusions would entail an increase in municipal freedom if followed.
The LGD rejected that this would inevitably result in energy companies being sold off. The Confederation of Danish Industry and the Danish Energy Association also welcomed the report's aims and outlook for the energy supply sector's development.
The report's reception among potential investors has also been largely positive. Major Danish labour market pension funds have conveyed an interest in the sector as a new investment option. Naturally, their interest is contingent on the extent to which the report's suggestions and ideas will be implemented, so as to facilitate attractive investments for the sector and investors.
Should municipalities and prospective investors display the requisite interest in a privatisation process within certain areas of the energy supply sector, it could put pressure on the government to reconsider its immediate wish not to privatise the sector or directly address the ownership of energy and utility companies.
Regulatory initiatives are needed at a government level to realise the possibilities set out in the report, and the government's impending energy supply strategy will undoubtedly highlight how transformative it could be to the energy supply sector.

Price Models of District Heating in Sweden (Energy Procedia) June 2016
Jingjing Song, , Fredrik Wallin, Hailong Li, Björn Karlsson
The current Swedish price models of district heating is based on previous experience of system operation. This strategy does not work well under the circumstances of decreasing demand and shifting consumption pattern. Therefore there is a need to

reform it. A comprehensive survey on existing price models in Sweden was carried out. Four basic price components have been identified, including a load demand component. Different companies may have various proportions for each component. The survey also shows that most of the district heating companies do not consider their customers' consumption pattern while charging the heating fee.

Solar District Heating Systems for Small Districts with Medium Scale Seasonal Thermal Energy Stores (Energy Procedia) June 2016
Dan Bauer, , Roman Marx, Harald Drück
This contribution deals with recently realized as well as planned small solar district heating systems with seasonal thermal energy stores in Europe. It focuses on systems with less than 1 000 m2 of solar collector area and less than 1 000 m3 volume of seasonal thermal energy store. Different technical characteristics of systems in Poland, Spain and Germany are shown. As high storage efficiency in small systems is difficult to achieve, particular attention is given to the design of the seasonal thermal energy stores and other components such as high temperature heat pumps that are necessary to reach an efficient operation of the plant.

Smart Heat Supply in Austria within the PITAGORAS Project (Energy Procedia)
Sabine Putz, , Patrick Reiter, Robert Söll
The European funded cooperative research and demonstration project PITAGORAS is focused on efficient integration of city districts with industrial parks through smart thermal grids. The overall objective of the project is to demonstrate a highly replicable, cost-effective and greatly energy efficient large-scale energy generation system for sustainable urban planning of low energy city districts.

Events

REHAU District Heating Workshop Glasgow
Emirates Arena and Sir Chris Hoy Velodrome, Glasgow, G40 3HG
Date: Tuesday 4th October

1st National Conference on District Heating in Ireland 4th October 2016, The Marker Hotel, 9am - 1pm
District heating is a well-established technology that has been proven to be an effective model of creating low-carbon energy systems at a local level. The new EU heating and cooling strategy identifies district heating as a key technology to lower carbon emissions in the heating sector.

Future Thermal Energy Conference 2016 10th October - 11th October 2016
at Warwick Conferences, University of Warwick
Join us for a jam packed programme covering not just the political landscape, or energy conundrums but digging into some of the established norms of modern energy but stepping forward into "how to become 2035 Ready and how to get there".

Webinar: Barriers to district heating systems - Results from 6 case studiesBy: progRESsHEAT project – Friday 14 October 2016
The webinar will provide an insight into the EU-funded progRESsHEAT project on renewable heating and cooling solutions, investigating six European case studies - Ansfelden (Austria), Litomerice (Czech Republic), Helsingor (Denmark), Herten (Germany), Matosinhos (Portugal) and Brasov (Romania).

DEPA - BRIDGING THE GAP 25 October 2016 Manchester Town Hall, Albert Square (See invitation at the end of this newsletter).
Business Seminar organized in co-operation with DEPA, BEIS and DIT focusing on the specific conditions and requirements of the UK market for district energy in order to assist suppliers of technologies and services in efficienctly accessing the rapidly growing market. This is one in a series of DPEA events being organized in the UK at British embassies abroad in the upcoming year.

WEBINAR | Renewable district heating – Small local grids and cooperative utilities
Wednesday, 26 October, 2016
District heating based on local renewable energy sources is becoming more and more an appealing solution for small communities in search of energy independence and of a stable price for their thermal energy supply. Such solutions often foresee a strong and direct involvement of the customers who could even own, at the same time, their heating grid by constituting a cooperative company to run the business.

DEPA - BRIDGING THE GAP

ACCESSING THE UK MARKET FOR DISTRICT ENERGY

BUSINESS SEMINAR ORGANIZED IN CO-OPERATION WITH DEPA, BEIS AND DIT FOCUSING ON THE SPECIFIC CONDITIONS AND REQUIREMENTS OF THE UK MARKET FOR DISTRICT ENERGY IN ORDER TO ASSIST SUPPLIERS OF TECHNOLOGIES AND SERVICES IN EFFICIENTLY ACCESSING THE RAPIDLY GROWING MARKET. THIS IS ONE IN A SERIES OF DEPA EVENTS BEING ORGANIZED IN THE UK AND AT BRITISH EMBASSIES ABROAD IN THE UP-COMING YEAR.

Manchester – 25 October

The market for District Heating in the UK is gaining momentum. The determined and focused efforts made by politicians and public institutions on national, regional and local levels are beginning to pay off. Big time. The list of projects is growing. Even more importantly, more and more projects are being brought beyond the initial feasibility studies and into the more concrete stages involving business planning, technical design and installation. Some very significant investments are scheduled for the up-coming years in cities across the UK. Stoke-on-Trent, Exeter, Bristol, Leeds, Manchester, Edinburgh, Glasgow and the Borough of Haringey in London are just some examples of this ever growing list of cities in the process of launching large investments in DHN.

Investments are good news for suppliers of technologies and services. The development of the UK district energy market has been long-awaited by suppliers of technologies and services. The Nordic countries being saturated, suppliers are looking for new markets for their goods and services. The UK market for DHN solutions has so far demanded a lot of patience for the suppliers. Finally the wait is over. Suppliers from across Europe are scrambling to establish a position in the UK market.

Only the best will stand a chance. The UK will prove to be a highly demanding market. Buyers are highly demanding and competition will be fierce, both in terms of performance, services and total cost of operations. But the price of goods and services will not be the sole determining factor. With projects largely driven by political decision makers, there will be a strong focus on social benefits, optimizing long term performance and life cycle costs. This is good news for suppliers from the Nordic countries. They are used to working with demanding customers who have the professional understanding that upfront price is only one of several key parameters when selecting suppliers. Similar demands among Nordic energy operators have forced suppliers to become best in class in each of their fields.

Entering the UK market may not be a walk in the park. In the short term the biggest challenge will be to enter and to establish a foothold in the market. There are some critical differences vs. the Nordic markets. The ability to understand and bridge these gaps will determine the long term success in the UK market.

Welcome to a DEPA event in Manchester on 25 October. In co-operation with a number of highly knowledgeable representatives from the UK district energy market we will highlight the opportunities and differences that will enable you to bridge the gap between your market and the UK market.

AGENDA – 25 OCTOBER

INTRODUCTION TO THE SESSION	09.00	REGISTRATION	**Mr. Julian Packer** *Low Carbon Investment Director* *Greater Manchester Combined Authority*
	09.30	WELCOME & INTRODUCTION	**Mr. Peter Anderberg** Moderator
OPPORTUNITIES IN THE UK DISTRICT ENERGY SECTOR	09.40	MARKET OPPORTUNITIES IN THE UK • General development and trends • Examples on current projects • Bridging gaps to access opportunities CURRENT PROJECT PIPELINE IN THE UK • Overview "HOT CASES" • Presentation of projects ready for procurement	**Mrs. Nicky Butterworth** *Heat Networks Investment Scheme Design Manager* **Mr. John Saunders** Investment Director and Head of HNDU Department for Business, Energy and Industrial Strategy **Mr. Julian Packer** *Low Carbon Investment Director* *Greater Manchester Combined Authority* **Selected Project teams**
	10.40	COFFEE	
PROCURING DISTRICT ENERGY SOLUTIONS IN THE UK *Will be run as two parallel sessions which are repeated after lunch enabling delegates to take part of both topics* *Presentations will be adjusted*	10.50	BREAK-OUT SESSION 1 PUBLIC SECTOR PROCUREMENT • The UK policy framework in DH • Public Sector Procurement in the UK - Understanding the similarities…. • …and the differences vs other markets BREAK-OUT SESSION 2 PRIVATE SECTOR PROCUREMENT • Opportunities & Challenges • Requirements & Expectations • Case 1 - Utility companies • Case 2 - Contractors	**Mr. George Dobson** Heat & Business Energy Department for Business, Energy and Industrial Strategy **Mr. Paul Barker** Energy Infrastructure Manager Bristol City Council Energy Service **Mr. Luke Thomas** Partner - Heatnet & Nordic Heat UK **NN** *(to be confirmed)* **NN** *(to be confirmed)*
	12.00	LUNCH & ORGANIZED 1-2-1 SESSIONS *Meetings will be set-up according to requests in a questionnaire being distributed prior to the seminar*	
PROCURING DISTRICT ENERGY SOLUTIONS IN THE UK *Repeating Morning sessions*	13.20	BREAK-OUT SESSION 1 - PUBLIC SECTOR PROCUREMENT BREAK-OUT SESSION 2 - PRIVATE SECTOR PROCUREMENT	
	14.30	COFFEE	
SELLING IN THE UK	14.50	DEPA - GETTING READY FOR BUSINESS • Up-date on Status & Plans EXPERIENCES FROM DELIVERING HEAT NETWORKS IN THE UK • Case stories INVESTING IN THE UK • Opportunities to get assistance from DIT GOING FORWARD • Presentation of up-coming activities	**Mr. Michael King** Project Manager - DEPA **Selected Suppliers** **NN** *Department for International Trade* **Mr. John Saunders** **Mr. Julian Packer**
	16.30	END OF SESSION	

PRACTICAL INFORMATION

TARGETED AUDIENCE	Technology suppliers, consultants, service providers, investors and other stakeholders related to the district energy industry sector and aiming to develop position and sales in the UK market.
DATE & TIME	25 October, 09.30 – 16.30
LOCATION	**Manchester** Town Hall Albert Square,
FEE	Free of charge for participants from Local Authorities, Housing Associations and other public sector institutions. £300 excl. VAT for other attendees (per company or organization - fee charged by DEPA)

QUESTIONS & REGISTRATION

QUESTIONS & REGISTRATION

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depa district energy procurement agency

IN CO-OPERATION WITH

Department for Business, Energy & Industrial Strategy

Department for International Trade

NORDIC HEAT

VÄRMEK

ORGANIZED BY

heatnet district energy partners – europe

depa
district energy procurement agency

In co-operation with

Department for Business, Energy & Industrial Strategy | Department for International Trade | VÄRMEK

DEPA

DISTRICT ENERGY PROCUREMENT AGENCY

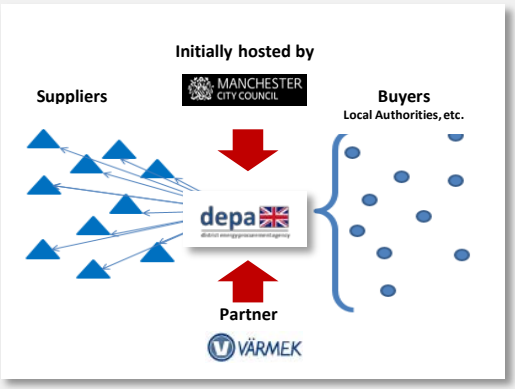
DEPA is a OJEU compliant procurement organization for products and services related to district energy. It is based on a non-profit co-operative model, jointly owned by local authorities involved in district energy in the UK. By establishing a formal co-operation in procurement, members of DEPA will benefit from significantly improved conditions in terms of procurement and life cycle costs, access to competence, standardization and risk management. This in turn will make district energy a much more appealing investment boosting growth in the sector.

Procurement is one of the most critical obstacles for district energy in the UK. The current approach of each local authority individually going through the process of selecting technologies and suppliers and negotiating prices and conditions is very time consuming, inefficient and costly.
Above all, comparative studies with other DE markets underscores that the current UK procurement model results in excessively high prices in turn undermining the business cases of DE, thereby holding back the growth in the sector.

Co-operation is the solution to the procurement challenges. By replacing the current individual *"One-by-One"* model with a combined *"One-for-All"* approach, local authorities will benefit from significantly improved conditions when procuring district energy related technologies and services. Increased peer-to-peer co-operation will also facilitate sharing of know-how and experiences, reduce risks, and provide additional boost to key areas such as standardization and development of technologies, business models and practices.

The organisation of DEPA is currently under way. To date some 40 local authorities in England have decided to support the co-operation. The aim is to reach min. 150 members throughout the UK by the end of 2020. There is also a strong Interest for the initiative on the supply side with a range of technology and service providers lining up driven by opportunities offered, e.g. stronger market growth and reduced sales costs.

Governance will be secured by the members. BEIS is financially supporting the development of DEPA up to its establishment. Manchester City Council will initially host and manage the activity. Furthermore a formal co-operation with the Swedish counterpart VÄRMEK will be established providing DEPA with access to its know-how, experience and network.



KEY BENEFITS OF DEPA

- Reducing up-front prices and LCC
- Reducing transaction costs
- Simplifying procurement processes
- Facilitating exchange of know-how
- Increasing access to suppliers
- Boosting the market growth
- Driving standardisation
- Motivating suppliers to invest in UK