

Heat networks financial advisory

Support for successful heat network project delivery

2025



Introducing our heat network experts



Alasdair Grainger

Managing Director, Energy & Net Zero

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Overview

Alasdair leads Grant Thornton's Energy & Net Zero practice. His team works across sectors to support clients to deliver financial and commercial solutions to Net Zero.

He is currently leading several multiyear engagements in sectors as diverse as offshore wind, EV charging infrastructure and heat networks. He advises clients on their strategic approach, options appraisal and structuring of transactions. Alasdair has led Grant Thornton's heat network advisory mandates since 2022.

Prior to joining Grant Thornton, Alasdair was a Senior Civil Servant, directly advising the Secretary of State for Energy and senior officials regarding energy and business policy. Alasdair led Investor Relations on behalf of BEIS.

Alasdair was instrumental in the development of the Heat Network Investment Programme (2013-2021) and later was a member of the HNIP investment board. Alasdair's focus was on maximising the opportunity for a self-sustaining heat network market in the UK and ensuring private sector capital could be deployed into the sector.

His network extends across Whitehall and he has worked with Number 10, the Treasury, Ofgem, UKGI, NWF and the Office for Investment. Alasdair is a Chartered Management Consultant, who holds a first class degree in Electrical Engineering with Power from Edinburgh University.



Jennifer Brown

Associate Director, Energy & Net Zero

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Overview

Jennifer's focus is providing financial and commercial advice regarding energy, waste management and heat network projects. Her client base ranges from local authorities, central government, developers to energy suppliers.

Previous projects include advisory through public sector procurement processes, due diligence, alternative delivery structures, and asset acquisitions. She has spoken at events on renewable heat and business case development for heat networks (as part of a central government programme) and on PFI expiry and decarbonisation at waste management conferences.

She was a key author on central government-commissioned and published guidance in relation to heat networks, specifically 'Financing heat networks in the UK: guidebook' and Grant Thornton's contribution to 'Heat network detailed project development' guidance.

She has been with Grant Thornton since 2010. Prior to joining the Energy & Net Zero team, Jennifer qualified as a Chartered Accountant in the audit team. She worked on both public and private sector clients, acting as senior accountant on audits for high profile University and NHS clients.

She is a Chartered Management Consultant, who holds a first class degree in Mathematics with French, a PRINCE2 (project management) certification and a 'Better Business Cases' certification on the UK government's best practice approach to developing spending proposals and enabling effective business decisions.

**Emma O'Hare**

Principal Consultant, Energy & Net Zero

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Overview

Emma is a qualified Chartered Accountant and Chartered Management Consultant with over fifteen years' audit, assurance and advisory experience in both private and public sectors. Emma delivers client-facing advisory on energy-related infrastructure projects. She is an experienced project manager with extensive experience working on large projects with government bodies. Her capabilities include; policy evaluation, options and financial analysis, value for money analysis, transaction advisory, due diligence and procurement and contractual documentation development. She is also accredited at Practitioner level to develop better business cases in line with the HMT Better Business Case approach.

She has worked on multiple heat network projects and was a key author on central government-commissioned and published guidance on 'Financing heat networks in the UK: guidebook'.

Her experience of supporting local authority clients through procurements is extensive, including those reaching expiry of PFI / PPP contracts with energy generation elements.

Her understanding of the electricity market is significant, having worked with Ofgem, Low Carbon Contracts Company (LCCC) and central government departments. She was workstream lead on the evaluation of the first round of Electricity Market Reform for central government, performing a post project review of the Final Investment Decision Enabling for Renewables programme, to inform the future operation of the enduring regime.

**Stuart Smith**

Director, Financial Modelling and Analytics

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Overview

Stuart is a qualified Chartered Accountant who leads a team providing financial modelling and analytics services in respect of government, project finance and infrastructure projects. The financial models built by the team enable clients to make informed decisions on major projects and gain insights on their operations. They also provide model assurance services to support investment and lending decisions.

Stuart joined Grant Thornton in 2003 and has over 21 years' experience of working with private and public sector clients to procure, structure and finance major projects.

Stuart has significant experience leading on financial model build and financial model assurance services to clients in relation to heat networks, renewables and other regulated sectors. This has included supporting business cases for new heat networks, exploring commercial models for the expansion of existing networks (including connection to energy-from-waste facilities). The financial models developed support clients to understand the impact of the heat network from multiple-stakeholder angles, including local authority, developer, energy supplier and operator. The financial models are used to run different sensitivities/scenario analysis, understand the impact of different funding options, including grant and debt, and support investment case approval.

UK heat networks at a glance

As a major contributor to UK carbon emissions, decarbonizing heat is a vital part of the transition to net zero by 2050

A heat network is a system of highly insulated pipes which deliver heat from centralised sources to heat consumers (public buildings, shops, offices, hospitals, universities and homes), removing the need for individual boilers and heaters.

These highly efficient systems can harness heat from a wide range of heat sources, including the recovery of heat that would otherwise be wasted, such as from industry, energy-from-waste plants or geothermal.

Heat networks can adapt and grow over time as the built environment develops, offering flexibility in a changing landscape.

Heat networks are a proven technology. They are very common in many European countries, such as Denmark, Norway and Sweden, but currently only serve a fraction of UK heat demand.

37%

UK carbon emissions due to heat

300+

local authorities declared a climate emergency

£80bn

investment opportunity by 2050

15m tonnes

CO₂ savings by 2050 (ambition)

>3%

current share of heat market

20%

2050 share of heat market (ambition)

The heat network market is changing

The UK government is creating a market framework to protect consumers, encourage low-carbon development and promote investment. These changes are coming into force in 2025/26, designed to accelerate the development of heat networks:

Heat network zoning – identifies zones where heat networks will be the lowest cost solution for decarbonising heat and then requires connection for key anchor loads / waste heat generators within the zone

New regulation - Ofgem will begin regulating heat networks, focusing on customer service, reliability, transparent billing, and fair pricing

New technical assurance scheme - to ensure a minimum level of performance, reliability, and efficiency for heat networks



Government support for heat network investment

The government sees local heat and energy networks as a vital part of the transition to net zero by 2050. Government is supporting heat network market growth with significant investment from initial feasibility studies through to capital grants for major infrastructure.

Major sources of government funding available

£380m+

Green Heat Network Fund

£320m

Heat Network Investment Project (closed)

£37m+

Heat Network Delivery Unit

£77m+

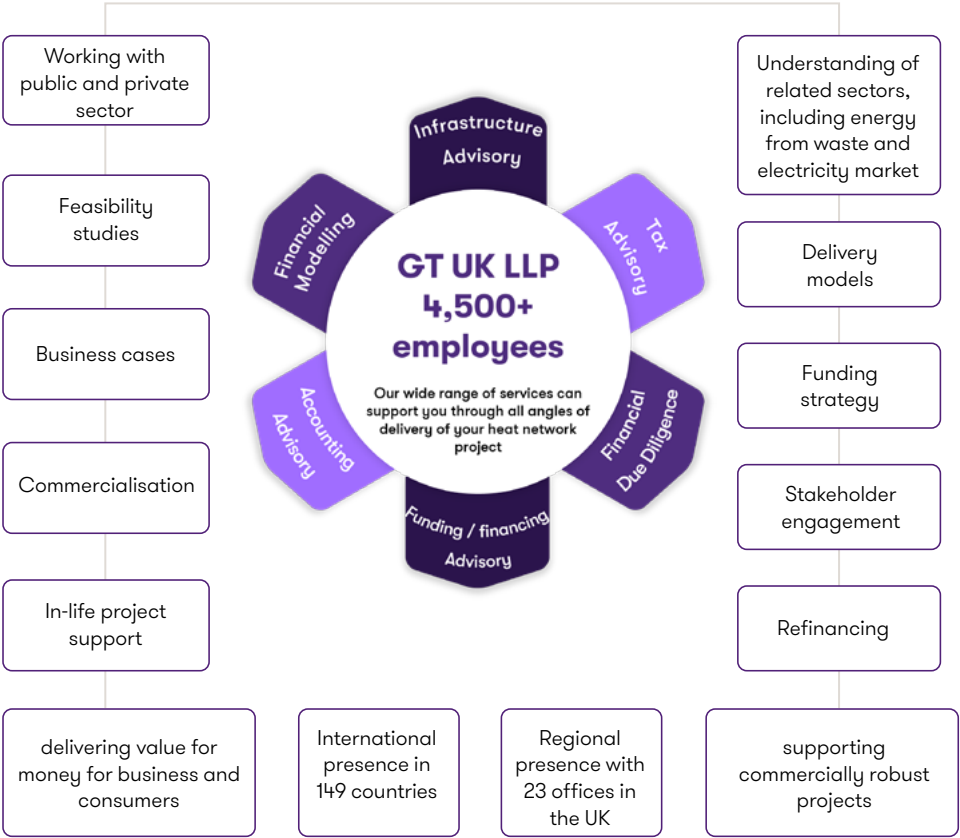
Heat Network Efficiency Scheme

£500pp

Heat Training Grant

Our heat network offering

We'll work with you to get your project ahead of the curve, ensuring it's commercially deliverable, investor-ready, and optimises available government funding.



Our proven approach to heat network advisory

Key deliverables:

- Financial modelling
- Heat pricing analysis
- Stakeholder engagement
- Business case development
- Funding applications
- Tender design and support
- Financial standing assessments (Cabinet Office compliant)

Our specialisms

Typically, a local authority will be exploring the feasibility of developing a heat network to serve a residential / commercial development (which could be a new build or retrofit). We work seamlessly with technical and legal advisors to ensure the heat network is commercially robust and maximises opportunities.

Challenges and our solutions

Financial viability: With often high upfront capital costs, the heat network must be financially viable over the long life of the network assets. We undertake financial modelling to assess the viability of the heat network under different scenarios.

Heat pricing: The heat pricing strategy must be competitive with alternative energy sources, affordable and align with developing regulations. We conduct heat pricing analysis to determine the optimal strategy.

Multiple stakeholders: Due to their nature, heat networks often involve multiple stakeholders. We support stakeholder engagement, aligning their needs as far as possible for a successful project.

Securing funding: Attracting the necessary private sector and government investment will be essential. We facilitate access to transformative funding by generating interest and demonstrating robust commercial projects.



Grant Thornton's heat network experience headlines

£30m HNIP funding into projects we advised

15+ Years advising on heat networks

25+ Unique heat network projects received our advice

360° market insights (public and private sector)

Results:

- Reduced carbon emissions: using low-carbon energy sources to reduce carbon emissions and improve air quality
- Energy security: harnessing diverse heat sources to provide long term stability
- Affordable energy: providing affordable energy to residents, helping to reduce fuel poverty
- Local growth: creating local jobs during the construction / operation phases and attracting new business to the region

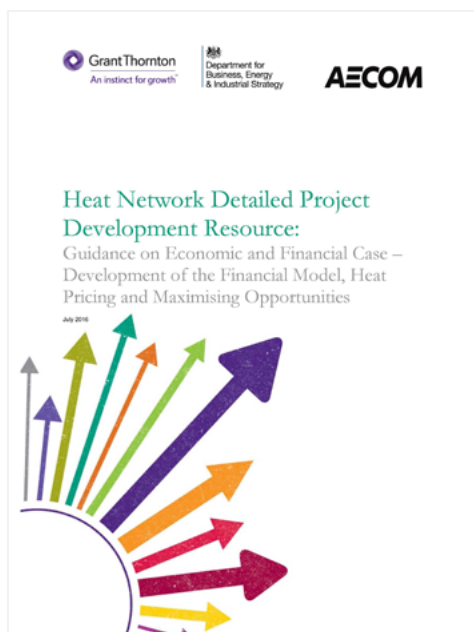
Our published guidance documents

We were commissioned by Department for Business, Energy & Industrial Strategy (now Department for Energy Security and Net Zero - DESNZ) to develop published guidance to support the heat network industry.



This guidebook has been developed to provide guidance to heat network sponsors, developers and funders to support them in understanding some of the issues, risks and opportunities around financing heat networks in the UK, to support the move to a self-sustaining heat network market. This would be where a sufficient volume of strategic, optimised and low carbon heat networks are economically attractive without direct Government subsidy.

[Financing heat networks in the UK: guidebook - GOV.UK](https://www.gov.uk/guidance/financing-heat-networks-in-the-uk)



This document provides guidance to support the development of the economic and financial elements of a Heat Network project Outline Business Case (OBC).

The guidance is from a financial perspective which aims to produce a document that enables local authorities to take a heat network project from the Feasibility Stage through to delivery of the OBC. It draws heavily from the HMT Green Book Five Case model to ensure that best practice is applied to the development of the OBC.

A significant focus of this guidance relates to the development of the Financial Model and how the commercial structures that this represents can be optimised.

[Heat network detailed project development - GOV.UK](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/544442/Heat_Network_Detailed_Project_Development_Resource.pdf)

Heat networks and wider circular economy experience

We have a vast array of experience advising on heat networks, including supporting local authorities on heat network project development and developing government-commissioned published guidance.

Viridor



Sale of WEEE sites to Shore Recycling

Confidential Developer

Financial model for heat network Energy Services Company (ESCO)

Department for Business, Energy & Industrial Strategy



Detailed Project Development Guidance for Heat Networks for HNDU

Kent City Council



Maidstone Heat Network Feasibility Study

Leicestershire County Council



Heat Network Feasibility Study

Veolia



Acquisition of Aufderhaar Kunststoff Recycling

Tees Valley Combined Authority



Middlesborough and South Tees Heat Network Feasibility Study and Business Case

London Borough of Merton



Heat Network Feasibility Study

Colchester Borough Council



Heat Network Feasibility Study and HNIP funding application

Bridgend Borough Council



Heat Network Business Case

Bristol City Council



Heat Network Special Purpose Vehicle Options Analysis

Biffa



Acquisition of Total Recycling Services

Knowsley Metropolitan Borough Council



Heat Network Business Case

London Borough of Southwark



South-East London Combined Heat and Power Plant (SELCHP) Contract Structuring

Confidential Developer

CHP Asset Acquisition Programme for a Big Six Utility Company

GRG Waste UK



Acquisition of BKP Waste & Recycling

Sheffield City Council



Gross Value Added (GVA) of District Energy Schemes

Greater London Authority



Decentralised Energy Project Delivery Unit (DEPDU) Successor Business Plan

Enfield Council



Lee Valley Heat Network Financial and Commercial Due Diligence

Department for Business, Energy & Industrial Strategy



Guidebook on Financing Heat Networks in the UK

Stockton on Tees Borough Council



Heat Network Feasibility Study and Business Case

Harrow Council



Heat Network Business Case

Calderdale Metropolitan Borough Council



Heat Network Business Case

University of the West of Scotland



Heat Network Business Case

London Borough of Haringey Council



Heat Network Business Case and Commercialisation

Confidential Developer

Financial model for heat network expansion with local authority client



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