MUNICIPAL YEAR 2016/2017 REPORT NO. 175

Agenda – Part: 1	**Item: 8**
Subject: The Council's Main Investment Decision in energetik **Wards:** Cockfosters, Southgate Green, Upper Edmonton, Edmonton Green and Ponders End **Key Decision No:** 4266 and 4035	
Cabinet Members consulted: Cllr Alan Sitkin Cllr Dino Lemonides	

MEETING TITLE AND DATE:
Cabinet 18 January 2017
Council 25 January 2017

REPORT OF:
Director – Regeneration and Environment

Contact officer and telephone number:

Jeff Laidler 0208 379 3410

E mail: jeff.laidler@enfield.gov.uk

1. EXECUTIVE SUMMARY

1.1 energetik is a limited liability company which has been set up by Enfield Council to develop, own and operate a series of community energy networks throughout Enfield and North London. This local energy company was established in September 2015 with a vision to revolutionise the local energy market and be the supplier to trust.

1.2 Community energy networks (also known as district heating systems) supply homes and businesses with heating and hot water through a network of highly insulated water pipes. The UK is committed to heat networks through national government, the Mayor of London and locally, with strong policy support to deliver heat networks as a means by which to deliver ambitious carbon reduction targets.

1.3 Enfield's Decentralised Energy Network Supplementary Planning Document was approved in December 2015 and takes national and regional policy a step further. It requires the technical specification of heat networks in new developments in Enfield to ensure a fair price for consumers. The delivery of high quality heat networks is a planning requirement for all large developments in Enfield.

1.4 Enfield's residents and businesses will benefit from energetik being able to respond to this technical specification. By the Council undertaking this project and entering the heat market, it is able to take a long-term view on its investment for local benefit, delivering a better quality system that will last longer and ensure a fair price for consumers.

1.5 energetik's customers will be charged a fair price for their heat whilst receiving higher standards of customer service than could be offered by a private-sector Energy Service Company (ESCo). Residential prices will be benchmarked annually against gas, with no premium for low carbon heat. energetik's financial model allows for this approach, whilst providing an acceptable commercial

return to the Council.

1.6 The energetik Business Plan shows how energetik intends to deliver a heat network equalling those found in continental Europe in scale, ambition and quality, with £4.37 million development costs already committed to develop this innovative project.

1.7 The Business Plan is prudently based on 15,500 connections and has the potential to provide heat to over 30,000 homes and businesses. The first 15,500 connections are planned to consist of:

- 13,500 homes served by the Lee Valley Heat Network, including 10,000 at Meridian Water; 2,000 to the west and 1,500 (or equivalent commercial demand) at Edmonton Green
- 517 homes and hotel at the Montmorency Heat Network (formerly Ladderswood)
- 992 homes at the Alma Road Heat Network, including an extension to a further 167 at Electric Quarter
- 402 homes at the New Avenue Heat Network

1.8 The Council's energy company is best placed to undertake this project and is in a position to build an exemplary, city-scale heat network, using planning policy to ensure that its technical specification is on par with the best networks in Europe. This unique opportunity enables the Council to underpin its regeneration aspirations whilst providing fairly priced, low carbon heat to homes and businesses across the borough.

1.9 The £3.5 billion Meridian Water development will provide 10,000 new homes, 6,700 new permanent jobs and a new train station over the next 20 years. The Estate Renewal schemes at Montmorency Park (formerly Ladderswood), Alma Road and New Avenue will provide a further 2,000 new homes. energetik will underpin this large-scale regeneration, providing fairly priced low carbon heat and hot water to all new homes and businesses at Meridian Water and the Estate Renewal schemes.

1.10 energetik will also deliver wider benefits to the community through improved air quality, reduced carbon emissions, smart technology providing access to consumption information for customers, and a wide range of payment options to suit all circumstances. This helps create warmer, more sustainable and comfortable places to live and work for Enfield residents and businesses. energetik's base case Business Plan is forecast to save 250,000 tonnes of carbon and 70,000 kg of NOx over 40 years.

1.11 energetik's prudent Business Plan is financially sound and affordable, with a financially viable model forecast to provide the Council with an acceptable Internal Rate of Return (IRR) for the business. In line with the principles required by The Heat Trust, energetik is also able to charge consumers across the borough a fair price for their heat whilst covering the cost of capital.

1.12 In addition to the revenue generated over the cost of capital, the Business Plan provides for the Council to receive an interest rate premium of £5.97 million Net Present Value from energetik paying back the loans and up to £800,000 per year business rates once the main network is built, using the existing standard valuation method.

1.13 PWC calculate that the energetik Business Plan is forecast to deliver significant economic, environmental and social benefits, with up to £225 million gross monetised benefit over 40 years, a Net Present Value of £94.7 million and a cost-benefit ratio of 3.4. PWC also identified a number of other non-financial benefits that were not possible to quantify in value terms. These included strategic benefits of delivering a Council-owned heat company; the ability to provide warmer homes and cleaner air; and the benefits of providing state of the art smart metering to customers.

1.14 The first customers at the Montmorency Heat Network are planned to receive heat in early 2017, closely followed by residents at Electric Quarter in 2017, Alma Road in 2018, Meridian Water in 2019 and New Avenue in 2020.

1.15 At the Estate Renewal Networks, the business aims to sell electricity generated on site by the Combined Heat and Power (CHP) engines over private wire networks to create revenue.

1.16 As has been demonstrated through the detailed financial cost modelling and Business Plan, as well as a series of rigorous audits by external consultants, the use of public funds is justified to deliver the energetik Business Plan, on the basis that the benefits achieved are commensurate with the risks involved and that the risks can be managed in the way described in this Report.

1.17 energetik demonstrates financial viability through its model and is resilient to changes in market conditions, whilst still delivering a secure heat supply to thousands of residents and businesses at a price comparable with gas.

1.18 The Business Plan and Cabinet Report have been reviewed and validated by a Gateway Review undertaken by KPMG, with a recommendation to progress to implementation, noting that:

- The Business Plan is prudent, robust and deliverable. It is based on well-informed assumptions, with the potential to create greater economic returns and social value through expansion
- Significant work has been undertaken by the business to mitigate and manage risks
- The Council has recruited a very experienced management team with knowledge to deliver and operate this type of business
- There is an appropriate governance framework, providing clear decision making and delegated authority. The processes and agreements in place give the company a solid footing on which to grow

1.19 A comprehensive risk register has been developed, categorising each identified risk. The key risks are manageable as the Council has an ability to secure the heat demand. A phased delivery approach has been developed so that the

network can grow with demand, and contracts have been structured in such a way as to ensure that risk exposure is minimised. Active risk management processes are in place to continually monitor and manage risks, and an independent Audit Committee has been created to scrutinise the financial and risk management actions of energetik.

1.20 The energetik team has worked on and delivered some of the largest district heating systems in the country in their previous roles, and have owned and managed successful private-sector businesses in the industry. With over 100 years of combined knowledge and experience in the industry, energetik has the best possible knowledge to deliver a successful business.

1.21 The contractors who have been selected to deliver the infrastructure elements are industry leading experts in the UK, again helping to ensure that the Business Plan is deliverable.

1.22 The Value for Money Statement demonstrates how the strategic, economic, commercial, financial and management elements of the Business Plan provide value for money for the Council.

1.23 The combination of energetik's team of industry experts; a thorough review of the Business Plan and Cabinet Report by Council officers; PWC's work on the both the Value for Money Statement and Security Package; and KPMG's Gateway Review of both the Business Plan and Cabinet Report, demonstrate that the Council has undertaken thorough due diligence ahead of its main investment decision in energetik.

2. RECOMMENDATIONS

To ask Cabinet:

2.1 To approve the Business Plan, prepared for and approved by the Holding Company Board of LVHN Ltd on 19 July 2016, with an update report to account for the revised two phase funding strategy scheduled to be approved on 10 January 2017.

2.2 – 2.5 See Part 2 of the report.

2.6 To delegate to the Director of Finance, Resources and Customer Services to agree an On-Lending Agreement between the Council and energetik for the outstanding balance from the £15 million Tranche 1 funding, noting that £12 million has already been successfully secured under a match funding arrangement with the European Investment Bank (EIB) (£6 million) and the London Energy Efficiency Fund (LEEF) (£6 million).

2.7 To delegate to the Council's Director of Finance, Resources and Customer Services to approve and vary the schedule of loan repayments with energetik; to approve the entering into of further loan agreements between the Council and energetik to make available the funds which are the subject of this report; to operate the lending facilities; and to agree milestones required to be met before the release of funds. All borrowing will be in accordance with the Council's Treasury Management Strategy to mitigate the risk of a negative impact on the Council's budget and MTFP.

2.8 To authorise Parent Company Guarantees to energetik to cover its financial obligations in relation to the Heat Sale Agreement, Agreement for Lease and the Lease with the North London Waste Authority (NLWA) as per section 7.2.16 below

2.9 To delegate to the Council's Director of Regeneration and Environment authority to settle final drafting matters for the Heat Supply Agreement, Lease and Agreement for Lease in conformity with the Business Plan

2.10 To approve energetik to enter into contracts to sell the locally produced, private wire electricity from Montmorency, Alma Road and New Avenue as part of the efficient operation of Combined Heat and Power generating plant.

3. BACKGROUND

Strategic Context

3.1 Decentralised Heat networks will play an essential part in decarbonising the UK energy supply market and will contribute to helping the UK meet its carbon reduction targets.

3.2 The role of community energy in the national context was outlined in "The Future of Heating: A Strategic Framework for Low Carbon Heat in the UK" published by Department of Energy and Climate Change in 2012. The subsequent implementation strategy "The Future of Heating: Meeting the Challenge" was published in 2013, prioritising the supply of low carbon heat as a key opportunity to help the UK meet its international climate change commitments and ensure security of energy supply.

3.3 The Committee on Climate Change's October 2016 report "Next Steps for UK Heat Policy" concludes that deployment of low-carbon heat cannot wait until the 2030s. Opportunities exist to install low-carbon heat networks in cities. Delivery of additional heat networks can however only be realised with strong local and national government leadership.

3.4 In response to the 2015 Which? report on heat networks highlighted cases where the historical lack of standards and consumer protection has led to poor outcomes for households connected to heat networks, the Committee on Climate Change conclude that 'Recent evidence now points to improving heat networks experiences, including the majority of London new-build networks. New business models and smart systems have successfully addressed issues of poor-performing schemes.'

3.5 At the London level, the Mayor and Greater London Authority (GLA) have policy commitments to encourage community energy networks through the London Plan. The London Heat Map is a key tool for deployment of Heat Networks in London. Supported by the Mayor, the London Heat Map led to changes in Planning Policy that incentivise planners and developers to consider community energy. The policies are intended to reduce the carbon footprint of homes and buildings, and the country's reliance on old, out of date fossil fuel power stations and imported gas. In the process, they will deliver community energy networks that provide greater energy security and stable prices to local communities.

3.6 energetik is best placed to undertake a project of such importance and is in a position to build and deliver an exemplary, city-scale heat network that is on par with the best networks in Europe. This unique opportunity enables the Council to underpin its regeneration aspirations by providing competitively priced, low carbon heat to over 30,000 homes and businesses.

3.7 In response to the policy frameworks in place and in an attempt to deliver a host of economic and wider benefits within the Borough, Enfield Council has set up its own local energy company, energetik, to capture the opportunity presented by Meridian Water and the Borough's estate renewal schemes, eventually it will provide thousands of homes and businesses with better value energy that is reliable and environmentally friendly.

3.8 Enfield Council is in a unique position to enter the heat market as it is able to take a longer term view than a private Energy Services Company (ESCo) on its investment for local benefit whilst delivering a high quality heat network. This will provide a benefit to customers through fair prices and comfortably heated homes, whilst providing an acceptable commercial return to the Council.

Timeline So Far: A Quick Reminder

3.9 The energetik Business Plan and delivery strategy has been developed over the last five years, evolving to suit updated delivery strategies at Meridian Water and the Estate Renewal sites, with each milestone unlocking the next stage of development. The key milestones are summarised below:

Milestone	**Dates**
Greater London Authority's heat map: confirmed the opportunity for heat networks across London https://www.london.gov.uk/what-we-do/environment/energy/london-heat-map	2011
Pre-Feasibility and feasibility studies: confirmed the opportunity for Enfield Council to provide the low carbon energy infrastructure for Enfield's sizeable regeneration agenda to deliver significant economic, environmental and social benefits	2011 and 2012
Cabinet agreed to establish a conventional limited company as its preferred delivery option to design, build, operate and maintain a city-scale heat network in Enfield	December 2012
First Business Plan approved by Full Council, demonstrating the original project's viability and significant economic, environmental and social benefits. This secured a further £1.285 million development funding	October 2014
First UK local authority to receive back to back funding from the European Investment Bank (EIB)	February 2015

and London Energy Efficiency Fund totalling £12 million investment in energetik, demonstrating that energetik is a financially sound low carbon business. The EIB's £6 million investment in energetik's low carbon business formed part of wider £80 million investment in Enfield's strategic infrastructure, including Meridian Water	
'Invest in Enfield' event at the top of the Gherkin for Meridian Water and energetik, with key note speech by the European Investment Bank's Vice-President for Climate Change	May 2015
Full Council agreed to release £2.143 million funding to start-up the energetik business as a conventional limited company with its own company Boards, brand and operations	June 2015
First LVHN Ltd Board meeting	September 2015
NLWA Board Members approved the authority to enter in to the HSA / Lease / Agreement for Lease	October 2016
Council's main investment decision in energetik 'Go live' for www.energetik.london	18 January 2017 (Cabinet) 25 January 2017 (Full Council)

energetik Business Plan

3.10 energetik has been set up as the operating company tasked with delivering the heat network. The business operates at arm's length from the Council, run by a team of industry experts. To ensure good governance and appropriate control measures are in place, a holding company sits above energetik (Lee Valley Heat Network Limited (LVHN Ltd), with the Council as 100% shareholder. Further details can be found in Section 4 on governance.

3.11 The Council secured an initial £12 million of funding, with £6 million provided by the European Investment Bank (EIB) and a further £6 million from the London Energy Efficiency Fund (LEEF), which will be on-lent to energetik. The GLA has also committed to provide the Council with a £3.7 million zero interest loan Housing Zone grant for the Lee Valley Heat Network, which will reduce the Council's total borrowing requirement.

3.12 The Business Plan sets out a vision and strategy for the energy business, showing how it will enable a city-scale heat network, supplying over 15,500 homes with heat and hot water across four heat networks, which will serve as a minimum:

- The Montmorency Heat Network (formerly Ladderswood) to serve the first 40 customers in early 2017, with 517 homes and a hotel to be built and served in total in later phases
- The Lee Valley Heat Network, the largest of the community energy networks that the business will own and operate, which includes:
  - 10,000 new homes at Meridian Water
  - 26,000m^2 of commercial demand
  - 2,000 homes extension to the west of Meridian Water
  - 1,500 homes (or equivalent commercial demand) at Edmonton Green
- The Alma Road Heat Network (992 homes) and extension to Electric Quarter (167 homes)
- The New Avenue Heat Network (402 homes)

3.13 The potential demand for heat identified in the Business Plan is over 30,000 homes and businesses to make full use of existing heat sources. In reality, the system can be expanded beyond this depending on requirement, by connecting additional thermal storage and heat sources.

3.14 The business will sell electricity generated by the Combined Heat and Power (CHP) engines to commercial customers over a private wire network at the Estate Renewal Heat Networks, where possible, and any surplus will be exported back to the National Grid. This will include entering Power Purchase Agreements (PPAs), which are to be drafted and agreed with the relevant customer. The PPAs will enable energetik to receive a greater financial reward for the electricity that is produced by the CHP plant, but they will also include certain guarantees and obligations with respect to the continuity of electricity supply to the customer. energetik intends to follow industry standard obligations with respect to the PPAs.

3.15 The energetik business has three distinct competitive advantages in the local market place:

I. Enfield Planning Policy actively encourages heat networks, adding further strength to the London Plan. Approved by Cabinet in December 2015, the 'Decentralised Energy Network Supplementary Planning Document' requires all new large developments in Enfield not only to connect to a heat network but to meet a suitably high technical specification to ensure a fair price for consumers. energetik has followed this specification when designing the Lee Valley, Montmorency, Alma Road and New Avenue Heat Networks

II. The Portfolio Agreement between the Council and energetik enables all new Estate Renewal Schemes in Enfield to benefit from fairly priced low carbon heating and hot water supplied by energetik

III. energetik has negotiated a Heat Supply Agreement with the NLWA to be supplied with heat from its new Energy Recovery Facility (ERF), if/when it is built, potentially adding a very low carbon heat source to the network. A private-sector ESCo would be unlikely to have reached a commercial agreement to connect to the ERF due to the cost of the connection and the terms sought by NLWA, removing the opportunity to supply customers with a very low carbon heat source

3.16 energetik has developed a strong offer for residents and businesses located in Enfield and beyond. As shown in Appendix 1, energetik:

- provides better value for money
- aims to be better for customer service; the local economy; the environment and people's health
- is better through innovation

3.17 In addition to a financially sound Business Plan that covers the cost of capital and creates an investment return for the Council, significant sustainability benefits consolidate the investment proposition. There are environmental, economic and social benefits for the Council in its capacity as both sole shareholder and investor.

3.18 The Council's Value for Money (VfM) Statement for the energetik Business Plan is detailed in Appendix 2, which is broken into strategic, economic, commercial, financial and management considerations.

3.19 Key benefits include:

- the prudent energetik Business Plan is forecast to save 250,000 tonnes of carbon and 70,000 kg of Nitrogen Oxide (NOx) emissions over forty years. Reduction in carbon emissions
- direct Gross Value Added impact of the energetik business, considered to be the revenues of the business less its costs
- potential inward investment opportunities created by the heat networks
- energy savings for end users as compared to private-sector ESCos
- future proof to enable new technologies to "plug and play" in the decades to come

3.20 As has been demonstrated through both KPMG's Gateway Review of the Business Plan and Cabinet Report, and subsequent work undertaken by PWC, the energetik Business Plan provides the Council with value for money.

3.21 PWC has monetised the strategic importance of the energetik business to the Council. The table below sets out potential monetary value of the sustainability benefits assessed by PWC:

Identified Benefit	Gross monetised benefit up to £x million over 40 years	Net Present Value (£ Million)
Reduction in carbon emissions and public health benefit	£14.1	£6
Reduction in Nitrogen Oxide and public health benefit of better air quality	£2.9	£1.2
Direct GVA impact (from energetik)	£128.6	£50.1
Potential inward investment impact	£64.6	£33.3
Reduced cost to end users	£15	£4.1
TOTAL	***£225.2***	***£94.7***

3.22 PWC forecast that up to £225 million of benefit may be delivered over a 40-year period, based on the energetik Business Plan, with a Net Present Value of £94.7 million and cost benefit ratio of 3.4.

3.23 In addition, there are a number of other non-financial benefits that PWC could not quantify in value terms. These included strategic benefits of delivering a Council-owned heat company to underpin the Council's regeneration ambitions; the ability to provide cleaner air; and the benefits of providing state of the art smart metering to customers. The low carbon energy infrastructure to be delivered by energetik also underpins the Council's ambitious regeneration agenda and housing aspirations.

3.24 In assessing the value for money of the proposed investment, PWC's assessment of the potential financial and non-financial benefits needs to be considered alongside the potential downside risks (that could impact on costs and benefits) and overall deliverability of those benefits identified. The risks are detailed in Section 8 of this Report. The deliverability of the identified benefits is detailed in the energetik Business Plan.

Heat Sources

3.25 The benefit of heat network infrastructure is that once installed, it is able to accommodate future changes in technology easily and quickly. Heat networks are often described as 'plug and play,' whereby different heat sources and heat loads are added over time to increase economies of scale, reduce peak heat demand and increase overall network efficiencies. If a more efficient and/or low carbon heat generating technology arises in the

future, this means it can be connected to improve system performance and environmental impact.

3.26 The heat sources to be used in Enfield vary dependent upon the heat network in question. For the Montmorency, Alma and New Avenue heat networks, low carbon, gas-fired Combined Heat and Power (CHP) engines provide heat and electricity generation, backed-up and topped-up by gas boilers.

3.27 In Zone 1 at Meridian Water, the first blocks to be developed will receive heat from gas fired boilers in an energy centre located in one of the blocks being developed. Once a critical mass of properties is programmed to be delivered, energetik will commence the build-out of the energy centre to be located at the NLWA EcoPark. Modular CHP will be installed to provide heat to subsequent phases until such time that connection with the NLWA's new ERF plant is feasible. The gas-fired boilers from Zone 1 and the CHP engines in the energetik energy centre will then provide backup network resilience in case of any unforeseen supply issues from the ERF.

3.28 Good quality gas-fired Combined Heat and Power has been selected due to its proven track record of reliably providing a low carbon heat supply at an economical cost. It can be installed in a modular fashion to meet the growing demand of customers, making it the ideal solution to bridge the gap until the new ERF is built and supplying heat at to the Lee Valley Heat Network. Thereafter it is able to supply backup low carbon heat should the heat supply from the new ERF be unavailable due to maintenance or breakdown.

3.29 The business has managed to successfully negotiate a Heat Supply Agreement with NLWA for them to provide heat from their new ERF. If or when it is built, this will add a very low carbon heat source to the Lee Valley Heat Network. If for any reason it is not built, the CHP plant installed in the energy centre is able to satisfy the ongoing low carbon heat demand whilst remaining profitable.

3.30– 3.73 See Part 2 of the report.

Programme

3.75 The timeline below shows key business milestones, subject to the Council's main investment decision:

Year / Quarter		Milestone
2017	Q1	Council's main investment decision
		First customers at Montmorency Park
	Q2-Q 4	First customers at Electric Quarter
2018	Q3	First customers at Alma Road
2019	Q2	First customers at Meridian Water, with all 10,000 customers forecast to be connected by 2039
2020	Q1	First customers at New Avenue

Heat Network Expansion Potential

3.76 The Business Plan is based on providing heat to an initial 15,500 homes and local businesses set to benefit from better value, reliable and environmentally friendly energy. The potential demand for heat identified in the Business Plan is over 30,000 homes and businesses to make full use of existing heat sources. In reality, the system can be expanded beyond this depending on requirement, by connecting additional thermal storage and heat sources.

3.77 This development potential places the Council in a position to deliver a true city-scale heat network, potentially the largest in the UK, and to a quality and scale comparable with European district heating schemes. energetik's ultimate development vision is to extend the network to other London Boroughs to provide low carbon, affordable heat to thousands more properties, rivalling the success seen across the continent. The technical specification, the operational experience of the team and the vision sets the business apart from others in the UK market.

3.78 It is recommended that a £4 million Business Expansion Fund is added to the indicative capital programme to enable the business to expand when opportunities arise, prior to it having built up adequate cash surplus itself. Each investment decision is subject to a separate feasibility study and is subject to HoldCo approval, so that additional connections further increase the efficiency and financial viability of the Business Plan, with positive impacts on both energetik's cash flow and Internal Rate of Return.

4 Governance and Risk Management

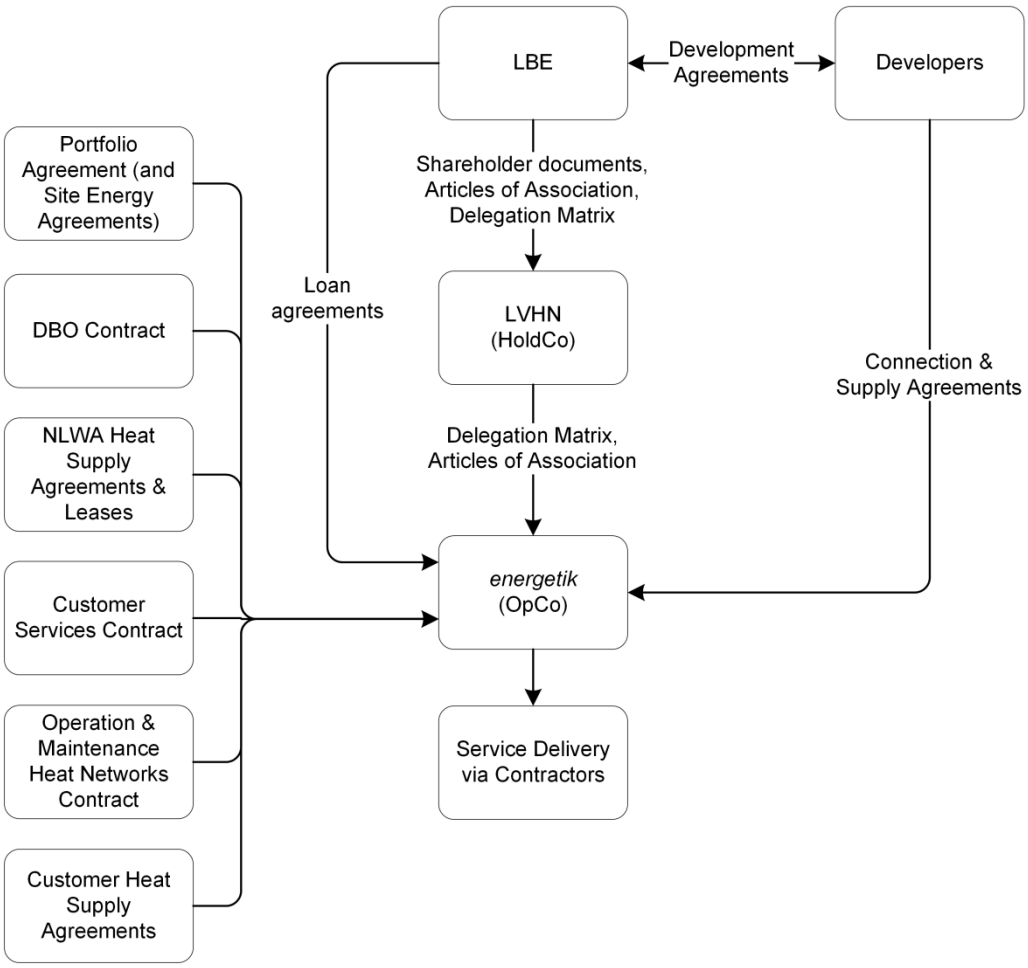
4.1 Governance

4.1.1 A complete set of governance procedures have been put in place to ensure energetik is governed in a prudent manner, aligned with the Council's ambition to ensure effective delivery throughout the life of the business whilst the Council maintains ultimate control. This includes:

- A two tier commercial structure has been adopted, with a Holding Company "HoldCo" and an Operating Company "OpCo" (energetik). The Council is 100% shareholder in the holding company, which in turn owns energetik. As sole shareholder, the Council has ability to exercise controls over the companies, and the board appointments. A two tier structure allows day to day operational decision making to happen quickly and efficiently by the management team, within approved decision making and spending thresholds, whilst the holding company provides strategic assistance and acts as an approvals board for decision making where approved thresholds are exceeded. Certain reserved matters are in place, and can only be approved at the highest level, through a Full Council decision
- Delegations Matrix to govern spending limits and decision making abilities

- The HoldCo Board includes two non-executive directors appointed from the industry to provide strategic advice and challenge decision making and the Managing Director of the OpCo
- An independent Audit Committee has been established for the energetik business that meets on a quarterly basis, chaired by the Council's Director of Finance, Resources and Customer Services. The function of the committee is to monitor financial processes; supervise auditing functions; and to assess risks and liabilities, the implications for the finances and the reputation of the Council, and to consider actions proposed or taken to mitigate them. Any actions identified as a result of this Audit Committee meeting are discussed with energetik to action accordingly

4.1.2 The diagram below explains the intended corporate structure and contract arrangements that underpin energetik's procurement transactions. The Council on-lending agreement for the LEEF and EIB loan presently resides with HoldCo but is in the process of being transferred to OpCo in accordance with the contract arrangements below. The rest of this report explains roles after completion of this process:



4.1.3 Following the main investment decision the Council will establish a Programme Board, chaired by the Director of Regeneration and Environment, to:

- Manage the risks, interdependencies and opportunities between energetik, Meridian Water and the Council's Estate Renewal schemes
- Manage the Council's Tranche 1 investment in energetik, including business development and communications opportunities, and Council side risks
- Manage and finalise the Council's overall investment in Tranche 2
- Ensure the Council optimises individual investments across its portfolio of regeneration projects
- Manage the expansion opportunity arising from the Council's future Estate Renewal schemes, as covered through the Portfolio Agreement

4.1.4 The Council's Procurement Board will ensure contracts are entered into in the right sequence and at the right time.

4.2 Risk Management

4.2.1 A full risk management strategy has been developed to manage and mitigate risks associated with the business. Mitigation strategies have been developed to ensure that all risks are reduced from high to low, or at worst moderate. energetik's risk management framework is in line with the Council's own risk management procedures. A comprehensive risk register has been developed, categorising each identified risk into eight key areas:

- Governance
- Legal
- Procurement
- Business Development
- Construction
- Commercial
- Financial
- Operational

4.2.2 Each risk is allocated a risk owner and then scored both on probability and impact to assess overall severity and exposure, as well as being given a financial value, where possible, if the risk were to materialise. These risks are then reviewed on a monthly basis, with mitigating actions, risk scores and values updated. Each month, a new version of the risk table is created, to provide an audit trail showing how risks are being managed and actions taken to reduce or remove the impact as the project progresses. The key risks are regularly reported back to both the holding company board, operating company board and once established, a Programme Board Chaired by the Director of Regeneration and Environment.

4.2.3 The security package work stream completed by PWC will be used to inform the work of the Programme Board, to specifically consider Council side risks

as described in section 8 of this report, as well as strategic oversight of key interdependencies and opportunities.

5. ALTERNATIVE OPTIONS CONSIDERED

5.1 **No decision by the Council to invest in Tranche 1:** This 'Do nothing' scenario is based on a private-sector Energy Services Company (ESCo) delivering a heat network, letting developers proceed without energetik. Not providing a heat network is not an option due to the Council's Supplementary Planning Document for Decentralised Energy Networks. Left to normal market conditions to provide the community energy schemes energetik intends to deliver, customers would not receive a heat network that provides the same benefits as that proposed by the energetik. To achieve the higher 12% investment returns that would be expected by a private-sector ESCo to reflect the higher cost of capital, the residential energy price on a 'like for like' infrastructure scheme would typically be higher and the specification of the design and on-going services would be of a lower standard.

5.1.2 A 'Do Nothing' decision would however mean that the Council avoids all the risks associated with the investment decision as identified in this report (although taking into account the write-off and other costs that would be incurred).

5.1.3 Private-sector ESCos would also be unlikely to connect to the ERF, instead going for gas CHP. This removes the opportunity to supply customers with a very low carbon heat source.

5.1.4 As has been proven elsewhere in the UK, private developers are also generally unlikely to seek to expand their community energy networks for additional local benefit beyond their initial project boundary.

5.1.5 See Part 2 report
- 5.16

5.1.7 In summary, without a decision to invest, the delivery of the necessary heat networks in Enfield would fall to the private ESCo market. If this were to happen the Council will:

- Not realise the financial benefits provided by delivering the network itself
- Write off the £4.37 million invested in the development of the business to date, which would be a charge to revenue for which there is no budget provision and would increase pressure on Council reserves and balances
- Have significantly less influence over the delivery of low carbon energy infrastructure as part of its regeneration ambitions at Meridian Water and its Estate Renewals
- Have to consider how to cover the capital and operating costs required to deliver effective customer service to its first customers at the estate renewal heat networks, including the necessary operational and capital

expenditure requirements. This is an existing commitment regardless of the Council's main investment decision in energetik

- Not achieve the economy of scale required to deliver a city-scale heat network, in which case it would need to consider selling the Montmorency Heat Network and halting asset adoption at the Alma Road and New Avenue Heat Networks. This incurs an additional reputational risk for both the Council and business
- Have to consider how to deliver heat network infrastructure as per the tender requirement already placed upon Barratt London, as the appointed Meridian Water master developer
- Halt the commencement of the detailed design of the Lee Valley Heat Network and energy centre in accordance with the Design, Build and Operate contract as part of the Tranche 1 funding, which is required to enable heat supply to the first customers at Meridian Water in 2019
- Be in breach of the LEEF funding criteria and be at risk of having to pay a £180k penalty

5.2 See Part 2 report

6. REASONS FOR RECOMMENDATIONS

6.1 Appendix 2 provides a Value for Money Statement which is broken into the strategic, economic, commercial, financial and management elements of the Business Plan. As has been demonstrated through the detailed financial cost modelling and Business Plan, as well as a series of rigorous audits by external consultants, the energetik Business Plan provides the Council with value for money.

6.2 As a result of these strategic, commercial, financial, economic and management cases, the use of public funds is justified as:

- energetik has member and officer support, as well as being supported at local, national and international policy levels
- The business will deliver significant carbon savings, in line with the Council's carbon reduction savings targets
- The Business Plan sets out a robust and deliverable business, based on well-informed assumptions with the potential to create greater economic returns and social value through continued expansion
- The governance arrangements are well structured and ensure that the Council as ultimate shareholder has appropriate control of the energetik business using a robust risk management strategy, including regular performance monitoring
- The risks are considered to be manageable, and the Business Plan is based on prudent assumptions, with critical attention being paid to key strategic risks
- The energetik management team has a wealth of industry specific knowledge and experience required to deliver and manage the business

6.3 – 6.5 See Part 2 report

7. COMMENTS OF THE DIRECTOR OF FINANCE, RESOURCES AND CUSTOMER SERVICES AND OTHER DEPARTMENTS

7.1 Financial Implications

See Part 2 of the report.

7.2 Legal Implications

Vires

7.2.1 As previously reported to Cabinet in June 2015, the Council has power under Section 1(1) of the Localism Act 2011 to do anything which individuals generally may do provided it is not prohibited by legislation and subject to public law principles. Further statutory powers exist to establish and invest in energetik, and Section 1 of the Local Government Act 2003 permits the Council to borrow and lend (subject to complying with the Prudential Code for Finance in Local Authorities). The recommendations detailed in this report are in accordance with the previous legal justifications for establishing and implementing the business, and the decisions taken.

7.2.2 Local authorities are also permitted to sell electricity under the general power of competence under the Localism Act 2011, as well as the Local Government (Miscellaneous Provisions) Act 1976 (as amended) but subject to the limitations under the 1976 Act (restricting sales to electricity generated with heat or from renewables) and under the Electricity Act 1989 (requiring distribution and supply to be under a distribution or supply licence, as applicable, or to fall within a number of exemptions under the Electricity (Class Exemptions from the Requirement for a Licence) Order 2001 (as amended)). These restrictions will apply to LVHN Ltd. The sale by energetik over private wire of electricity generated from combined heat and power can and will need to be structured so as to remain legally compliant.

7.2.3 In relation to the guarantees referred to in 7.2.16 below, the introduction of the 'general power of competence' under the Localism Act 2011 enables local authorities to explore innovative solutions to deliver more with less, generate income by charging and trading and to provide indemnities and guarantees. The legislation provides that *"a local authority has power to do anything that individuals generally may do."* This includes giving guarantees. However, other restraints of public law still apply. The most relevant of these is that local authorities have a fiduciary duty to act prudently with public monies entrusted to them and must establish (and maintain a full audit trail to support) that the underlying transaction being guaranteed by the Council is itself 'intra vires' and that it has been given due and proper consideration in accordance with the normal public law considerations.

Company Structure

7.2.4 Also as previously reported, LVHN Ltd and energetik are both set up as arm's length companies in accordance with the Companies Act 2006, and limited by shares. The company structure includes LVHN Ltd, which is wholly owned by the Council, and in turn holds all the shares in the operating company,

energetik. As such the matters addressed in this report are consistent with the structure previously authorised, subject to the further descriptions of the roles of each company detailed and recommended in this report.

7.2.5 It is intended that LVHN Ltd (and its subsidiary) will operate as a commercial entity, and the Business Plan now sets out the basis for moving forward operationally and financially. In addition, this Report sets out the investment approach being taken by the Council and makes recommendation in relation to that. None of these arrangements (at both Company and Council level) are contrary to the previous basis on which legal implications have been reported, and remain lawful. The final investment decision should take into account the risk factors described in this report, so that the Council takes its decisions with proper regard to its fiduciary duties (see section 8 below).

Procurement

7.2.6 The ongoing procurement activity in relation to the business will continue to remain compliant with EU procurement law, and appropriate legal advice taken on an ongoing basis. Ultimately, all legal agreements will be in a form approved by the Assistant Director of Legal and Governance Services.

State Aid

7.2.7 State aid legal compliance is being managed on an ongoing basis, and legal and other professional advice has been taken. This is critical given the number of ways in which the business is being supported by the Council (and other public bodies). None of the arrangements set out in this report, or the recommendations flowing from it, are intended to grant unlawful state aid. However, as the report from the Council's legal advisers confirms, the position will need to be kept under review as the various investment decisions are implemented.

7.2.8 The Council's financial advisers have confirmed that the quantum of State Aid which is required by energetik falls within the parameters of what can be provided as legal State Aid using the General Block Exemption Regulation. The Council will work closely with its legal and financial advisers to put in place the appropriate contractual mechanisms to ensure the funding and ancillary support is provided in a State Aid compliant manner. This compliance will be addressed as part of the On-Lending Agreement between the Council and energetik.

Housing Revenue Account (HRA) Considerations

7.2.9 The main consideration for HRA is the need for the scheme to operate on terms which ensure that HRA land is only disposed of for best consideration (as required by statute). Provided the financial basis for transferring land and then securing payment from energetik for assets under the Portfolio Agreement meet this requirement, the arrangements will meet legal requirements. A financial methodology has been agreed between energetik and the Council to achieve this.

Financial Exposures of the Council

7.2.10 The Council's overall risk exposure is not limited to financial risks; as mentioned it includes reputational risk. All of these risks should be weighed in the balance when making the investment decision, taking account of the risk mitigation steps identified throughout the Report. It is, however, the Council's financial exposure that links with the Council's obligation to take account of its fiduciary duties. In that regard, the PWC Report assessed direct and indirect financial exposures, and those findings are reflected in the Report (and where possible the level of risk quantified). Where a risk exposure cannot, with any degree of meaningful accuracy, be quantified, the nature of the risk is described alongside the risk mitigation factors.

7.2.11 Given that a limited company is to enter into all contracts in its own name, the Council's direct financial exposure comes from:

(a) borrowing to invest in energetik. Irrespective of the performance of the Council's on-lending to energetik, the Council will have a requirement to meet its repayment obligations to its own lenders

(b) Council on-lending to energetik. This is discussed further below in paragraph 7.2.12

(c) Acting as guarantor to energetik under two parent company guarantees that have been sought. These are discussed further below in paragraph 7.2.16

Funding Agreements

7.2.12 Funding agreements (lending between the Council and the business):

i) **Existing LEEF loan agreement:** a condition of the previously approved funding from LEEF to the Council is that the key business document (the Design, Build, Operate contract) is entered by 1st June 2016 or the Council potentially faces enforcement action for default. A request to have this timeline extended to the end of February 2017 has in principle been agreed with LEEF, who are fully aware of the reasons for the delay and have confirmed that they will not be taking action to claim the default penalty as the position currently stands. It must be noted however that further delays would introduce a higher risk of enforcement against the default for which the Council would be liable. The potential liability under the agreement is £180k (3% of the £6 million balance). The LEEF loan agreement imposes restrictions on how the money is deployed, which if the better solution being discussed with LEEF (referred to in paragraph 4.1.2 above) is not agreed and implemented, would require a service agreement between the holding company and operating company and some additional company re-organisation.

ii) **Additional loan agreements:** providing the additional funding required to deliver the Business Plan requires additional loan agreements to be put in place for the Council to deploy necessary

funding into the business. This funding will largely replicate the structure and terms of the LEEF loan agreement but with conditions reflecting conditions attached to the original funding source and/or to help ensure compliance with state aid rules. Other tailoring will be required on draw down profiles, details on eligible expenditure, interest and principal repayment profiles, cover ratios, security provisions and step-in rights. These remain to be developed. It is recommended that these terms are agreed and included in any financial modelling ahead of the Council releasing further investment to energetik (see recommendations).

iii) **Lender risk:** the Council, as lender under these agreements, is exposed to the potential failure of energetik, as borrower, and energetik's inability to repay the money it owes to the Council. This is mitigated to a large degree by the terms of the loan agreements, the oversight the Council has over the running of the business as sole shareholder, and the governance measures implemented through the Delegations Matrix.

As ultimate shareholder in the borrower, through requirements imposed on energetik to report to its Holding Company Board (which includes Council representation), and through Board and shareholder approval requirements, the Council will have substantially greater visibility of the ongoing financial and technical performance of the business. This will give the Council advanced warning of any issues arising, the ability to probe and seek guidance, and the opportunity to remedy such issues. This additional level of oversight, control and influence is significantly greater (in both a legal and practical sense) than a normal lender would have in a pure lender-borrower relationship (where security rights would be purely contractual).

Contracting at company level and contingent risks in contracts

7.2.13 There is a high degree of interdependency between the key contracts (e.g. the Design, Build, Operate contract; the Operations and Maintenance Agreement; the Customer Services Agreement; the Heat Supply Agreement; the LEEF Loan Agreement and the On-Lending Agreement; the Meridian Water Development Agreement; and development/adoption commitments in respect of the Montmorency Heat Network etc.) with the risk of stranded costs/liabilities potentially resulting under one agreement, if another fails to be delivered. These are risks facing energetik and principally flowing through (contractually) to the Council as a repayment risk under the loan agreements and/or a contractual risk under the relevant Development Agreements entered into by the Council. This has been mitigated to some extent through the ability to adjust development programmes and to reshape energetik's debt repayment profile. For example, steps are being taken to ensure that the Master Development Agreement for Meridian Water dovetails with how other agreements operate and triggering of obligations to match the split between Tranche 1 funding and any subsequent Tranche 2 funding decision.

7.2.14 In the event that the Meridian Water development agreement is not signed, none of the heat agreements other than in respect of the Estate Renewals Schemes will be signed.

7.2.15 In the event that Tranche 2 funding is not forthcoming, limited works should have been instructed to that point and each of the agreements contains either a termination right or rights that can be used to bring about termination (e.g. a longstop date in the DBO contract for the instruction of Tranche 2 works).

Parent Company Guarantees

7.2.16 **Guarantees required to support energetik entering into the Heat Supply Agreement, Agreement for Lease and Lease:** energetik intends to enter into these agreements as a means of obtaining greater certainty that North London Waste Authority will deliver items which are important to the future performance of the heat network (e.g. the Energy Recovery Facility, from which energetik will purchase heat).

7.2.17 It is proposed that the Council will enter into two separate guarantees (on the same terms), one in respect of the Heat Supply Agreement and a second covering the Lease and Agreement for Lease. Under each guarantee, the Council shall from execution guarantee the financial obligations of energetik under the relevant document. There is no obligation to carry out the role of energetik. Neither guarantee may be called upon until NLWA as claimant has issued a Warning Notice to the Council and where the notice is disputed by energetik; the dispute resolution process must be followed before a claim can be made directly against the Council. The maximum liability under the HSA guarantee is £5,000,000 unless waived by the option of energetik or uncapped in accordance with legislation. There is no liability cap in the Agreement for Lease or Lease (a market norm for property leases). However exposure to liability to both energetik and the Council is mitigated as much as possible by the inclusion of a number of market lease provisions to restrict the likelihood of there being a tenant liability, as with market norm provisions.

Project Security Package

7.2.18 PWC assessed the key security package and investment risk considerations with respect to the initial £15 million (entire Tranche 1 investment, including £4.37 million development costs). In this context they considered:

Design, Build and Operate contractor

7.2.19 Vital Energi has been selected as the preferred DBO partner but not yet appointed.

7.2.20 A contracting basis is being proposed that includes a standard basis for design and build and allows for delivery of specific works to be undertaking on a fixed price basis. As yet, a scope and fixed cost for the key works outlined in Phase 1 of Meridian Water have not been agreed with Vital Energi. This will happen once Barratt's detailed development programme has been agreed. Whilst the exact scope is not known, energetik has a detailed

schedule of rates derived through the competitive tendering process. This enables such variations to be priced, as is the norm for contracts where the complete scope cannot be determined at the time of tender.

Mitigation

7.2.21 If an acceptable fixed price for the Phase 1 works cannot be agreed with Vital Energi, then energetik retains the right to procure another contractor to deliver the works.

7.2.22 Should the work be agreed with Vital Energy, where necessary, its performance and financial obligations will be supported by its parent company, Vital Holdings Limited. The guarantee being provided by Vital Holdings Ltd is uncapped.

7.2.23 PWC's analysis highlights that Vital Holdings Limited has:

- Turnover, as at 30 June 2015, of £54m, down from £58m in 2014
- Net assets of £10.7m, an increase from £9.1m in 2014
- Dun & Bradstreet credit report rates Vital Holdings Ltd as 3A2, and indicate that c. 77% of UK businesses are higher risk than the company

The scope of the work for Tranche 1 for the DBO contractor is around £5 million of the £10.63 million, which is comfortably within the asset value and a small percentage of the annual turnover of the company.

7.2.24 The existence of this parent company support, provides additional comfort over Vital Energi's ability to meet its obligations of the DBO contract in Phase 1 of Meridian Water.

7.2.25 The contract with Vital Energi contains a longstop date and termination right at the end of the two year period in the event that Phase 2 Meridian Water works are not instructed. This can be used as a termination right in the event that energetik is unable to secure follow-on investment.

7.2.26 energetik will monitor the financial strength of the DBO partner and parent over the course of Tranche 1 and that it is subject to further, more detailed review ahead of any Tranche 2 investment being agreed**.**

Customer Services Agreement

7.2.27 energetik selected Switch 2 Energy Ltd as the preferred bidder for this contract.

Mitigation

7.2.28 energetik is protected by an annual cap on liabilities under this contract amounting to 100% of the annual fee payable to the contractor. Operation of this cap is subject to further clarification.

7.2.29 Similarly energetik would propose to novate this contract to a third party in the event that Meridian Water Phase 2 funding is not forthcoming, with a no-penalty termination right arising by 2024, giving time for sale of the Estate Renewal schemes if necessary.

Other Agreements

7.2.30 There are other agreements that either the Council has, or intends, to enter into (e.g. Development Agreements on the three Estate Renewal schemes and Meridian Water) or energetik has or intends to enter into (e.g. Connection and Supply Agreements). Each of these creates potential obligations for the Council and / or energetik.

7.2.31 With regard to the former, the Council has or will enter into these development agreements with the respective developers on each of the schemes. Under these contracts, it is proposed that the developers are obligated to develop a heat network which is capable of connection to the heat networks once available, with a no-penalty termination right arising by 2024, giving time for sale of the Estate Renewal schemes, should that be necessary.

7.2.32 In the event that energetik is unable to fulfil this role (via the Connection and Supply Agreement, for example), or it does not secure follow-on investment to allow it to continue in this role, it is intended that contract to be novated to a third party ESCo.

7.2.33 Generally, in relation to the contracts to which the Council is not a party (such as the supply/connection agreements and contracts for construction and operation), the Council carries a reputational risk if these are not performed. The possible risk of third parties seeking recourse against the Council as owner of the business (LVHN Ltd and its subsidiary, energetik) cannot be ruled out (although the Council could rely on the limited liability status of the companies).

7.2.34 Agreements between the Council and energetik (the Portfolio Agreement for example) create limited risk exposure as the Council has ultimate control of the companies.

7.2.35 Where the Council has a relationship with the companies as lender (under the loan agreements) the primary risk is of default, mitigated via the Council's oversight of the business.

7.2.36 **Leases:** with respect to the Lee Valley Heat Network and Estate Renewal heat networks, energetik will enter in to all necessary leases and easements in respect of all relevant energy centres and pipe network. In respect of the Estate Renewal heat networks, this will be delivered via the relevant development agreement between the Council and the developer.

7.2.37 **Debt vs. Equity:** since the project is being funded entirely by means of loans to energetik, without any equity participation, there are greater risks in the project. That is because any shortfalls in revenues may more immediately put energetik in breach of its loan obligations, without the buffer of equity participation.

7.3 Property Implications

7.3.1 With respect to the Lee Valley Heat Network, energetik will be responsible for obtaining planning consent, necessary property rights and statutory approvals. Working towards obtaining these approvals has commenced to mitigate risk to the business as follows:

- Planning: energetik working with their architects and engineering consultants have created an outline design for the energy centre proposed at the EcoPark and discussed its design with Enfield's planning team, urban regeneration team and the landlord NLWA. Comments received to date have been incorporated into the evolving design to mitigate potential risks to planning or landlord approval. This soft landing approach will be continued by also submitting a pre-planning application prior to the formal planning application in 2017
- Statutory Approvals: through the process of developing the present outline design by the DBO Contractor, responsibility for discharging all necessary statutory approvals, including at the operational stage has been contracted through the DBO Contractor
- Property Rights Required:
  - energetik is in the process of finalising the lease and easement agreement with NLWA for the energy centre and pipe network on their land
  - The route of the heating network from the energy centre to Meridian Water has been proven via a detailed review of utility drawings, site investigation and ground penetration radar surveys to demonstrate via 3D drawings that an unimpeded route is viable. The route follows Council adopted highways, with the exception of four small parcels of land. Two of the land owners are involved with land swap deals with the Council due to Meridian Water, one landowner has a section 106 obligation to provide a pipe easement to the business, and the other land owner is controlled by the GLA. energetik has employed specialist property lawyers who do not envisage any problems obtaining the necessary property rights required from these four land owners. Detailed discussions with the land owners will commence in 2017, well ahead of the network installation of in 2019
  - The Meridian Water developer is required to provide property rights as required for the LVHN heat network via the development agreement and is intended to be re-enforced via a section 106 obligation

7.3.2 With respect to the Estate Renewal heat networks, the developer is required via the development agreement with HRA for obtaining planning consent, necessary property rights and statutory approvals. These are then passed down to energetik via a lease and asset adoption agreement.

8. KEY RISKS

8.1.1 **Section 9 of the Business Plan considers the key strategic risks to the** business, and sets out the ways in which they have been or could be mitigated.

8.1.2 A risk management framework and detailed operational Risk Register has been developed and audited externally, which follows the Council's own risk management procedures. It is reviewed and updated on a monthly basis to record mitigating actions taken to reduce the risks and protect the Council's reputation.

8.1.3 Sensitivity Analysis has been undertaken for the three most significant business risks to determine how realisation of these risks would impact on the IRR and capital programme, as shown in the Business Plan. The three scenarios are NLWA Delivery, Slow Build-Out Rate and Potential Change in Interest Rates.

8.2 - 8.7 See Part 2 report

8.8 The Council and company agree key contracts out of sequence

8.8.1 This would create exposure for the Council. The agreed mitigation is a combination of building in the ability to terminate some contracts; the ability to adjust programme; and the ability of the Holding Company Board to manage the timing of signing of contracts and giving instructions. This will be monitored by the Council's Programme Board.

8.8.2 energetik will be entering into a number of other key contracts. The exposure of the Council under these contracts is detailed in the legal implications.

8.9 Parent Company Guarantees

8.9.1 If energetik defaults under the Heat Supply Agreement, the Lease or Agreement for Lease, the Council is exposed as guarantor of the financial obligations of energetik but will not be obliged to carry out its role.

8.9.2 The maximum liability under the HSA guarantee is £5,000,000 unless uncapped in accordance with legislation. There is no liability cap in the Agreement for Lease or Lease, however exposure to liability to both energetik and the Council is mitigated as much as possible by the inclusion of a number of standard market lease provisions.

8.10 energetik Does Not Achieve Its Forecast Return

8.10.1 Detailed governance controls have been put in place to ensure that all is done to mitigate this risk over the lifetime of the project.

8.10.2 The Council, through its role as 100% shareholder and its members and officers sitting on the Holding Company Board, will be fully informed as to the operating efficiency and financial performance of energetik through the provision of regular financial management reporting.

8.10.3 If energetik's financial performance fails to deliver and is due to external factors outside of the control of the management team, the operating costs and expenditure would be restructured in such a way that ensures that it delivers expected returns as is the norm for any successful, commercial entity.

8.10.4 If energetik defaults under its loan agreements with the Council – see section 7.2.12 above.

8.11 See Part 2 of the report

9 IMPACT ON COUNCIL PRIORITIES

9.1 Fairness for All

The heat networks will help tackle inequalities in the borough by:

9.1.1 Providing an affordable service:

- The Council is best placed to provide fair pricing across developments served by district energy networks managed by energetik, whilst ensuring each site remains economically viable in its own right. If left to the private sector, it would not be possible to deliver a fair pricing strategy across community energy developments within the borough. Prices can vary dramatically from scheme to scheme when delivered by a private ESCo, due to their pricing methodologies and the requirement of a higher return on investment
- By delivering multiple schemes under one entity owned by the Council, heat tariffs can be structured fairly and balanced across all schemes. These tariffs will be fair and benchmarked against gas on an annual basis to keep prices stable for customers, with a number of payment options available, designed to suit individual circumstances. The business has pledged to sign up to the principles detailed by the Association of Decentralised Energy (The ADE)

9.1.2 Providing a high quality, accessible service:

- Through the provision of a highly skilled customer service operator, energetik will provide a single point of contact for queries, with rapid response times in place if something goes wrong and compensation if obligations are not met. The strategic approach adopted provides all energetik developments with high quality, uniform treatment of customers that takes into account their individual needs and any vulnerability

9.2 Growth and Sustainability

energetik is a catalyst for the Council's ambitious plans for regeneration of deprived areas and sustainable economic growth. It addresses these plans in the following ways:

9.2.1 Maintaining a clean, green, sustainable environment:

- The Lee Valley, Montmorency, Alma Road and New Avenue Heat Networks will contribute to carbon reduction in the borough through its design as an inherently low carbon heating network, helping Enfield as well as businesses in the borough reach their carbon reduction targets. It will help meet Enfield 2020's 40% carbon reduction target for the Borough by 2020
- A highly insulated and efficient network is better for the environment than the equivalent high efficiency domestic gas boiler alternative. Homes connected to the estate renewal networks for example will save 194kg of CO2 per annum, a 30% reduction in carbon footprint than the same home with gas installed
- energetik is one over 50 large scale sustainability projects in the Enfield 2020 Action Plan, making Enfield a better place to live, work and visit

9.2.2 Bringing growth, jobs and opportunities to the Borough:

- The energy infrastructure that will be delivered will underpin Enfield's regeneration ambitions
- energetik will be able to provide a secure supply of low carbon heat to local businesses close to the Lee Valley Heat Network and the Estate Renewals
- It will support inward investment opportunities by providing an energy efficient, low carbon platform to attract new businesses to Enfield, helping deliver the Mayor of London's and the Council's regeneration aspirations
- A Targeted Recruitment and Training Plan (TR&T) was included within the DBO and customer services tenders, requesting tenderers to propose how they would deliver recruitment and training in the Borough. This includes apprenticeships, work placements and employment opportunities for those in long term unemployment. There are clauses within the relevant contracts requiring the contractors to work in partnership with energetik to ensure, as far as is reasonably possible, recruitment happens within the Borough

9.3 Strong Communities

9.3.1 Community engagement and enabling is a cornerstone of the business' delivery model. This in turn promotes stronger, more cohesive communities and active citizenship. The community impact of the project can be described as follows:

- An innovative approach to community engagement will ensure that the local community is involved and understands what energetik is, what it is trying to achieve and how this will benefit them
- Helping people to understand and manage their own energy use whilst assisting others to do the same encourages active citizenship

- The new homes that will be supplied will be more energy efficient, helping customers stay warm and well, and making people proud of where they live
- Public health will be improved through cleaner air and there will be no risk of carbon monoxide poisoning associated with gas boilers
- The Council-owned energy company will provide local benefits through jobs and employment opportunities as well as supporting a major boost to the local economy

10 EQUALITIES IMPACT IMPLICATIONS

10.1 An EQIA Assessment has been undertaken. It identified that the recommendations in this Cabinet Report are unlikely to have a significant impact on the protected characteristic groups or the way that individuals access information or services. An EQIA Action Plan has been created and will be regularly reviewed and updated.

11 PERFORMANCE MANAGEMENT IMPLICATIONS

11.1 Lee Valley Heat Network Ltd and its 'energetik' subsidiary have been trading since September 2015 in accordance with its Articles of Association. The performance of energetik is managed through one-to-ones; team meetings; the monthly OpCo Board meeting; and regular HoldCo Board meetings.

11.2 Regular reports are prepared on the programme, budgets, the business' Risk Register and energetik's overall performance, including Highlight Reports. An independent Audit Committee has also been established.

12 HEALTH AND SAFETY IMPLICATIONS

12.1 The corporate Pre-Qualification Questionnaire addresses issues of Health and Safety management by any provider being considered for invitation to tender for a qualifying council contract.

12.2 The contractor presents relevant information and examples of their health and safety management system, mandatory reporting and notification systems and systems for ensuring competence of staff and any sub-contractors that may be employed.

12.3 Exemption from this requirement is given to contractors who can prove accreditation with a Health and Safety Accreditation scheme or organisation which has membership of the Safety Schemes in Procurement scheme.

12.4 Pre-Qualification Questionnaire responses are checked for completeness and compliance before they are assessed to ascertain whether they attain the required "Pass" status.

12.5 energetik has made use of the web based London Tenders Procurement Portal to facilitate this process and adhere to the council's policy on the reduction of paper based documentation.

12.6 The Design, Build, Operate and Maintain contract, the O&M Agreement and the Customer Services Agreement has followed the procedure set out above.

12.7 The business shall adhere with all new and up to date CDM regulations.

12.8 energetik appointed Frankham Consultancy Group Limited as its specialist CDM Co-ordinator. However, with the introduction of CDM 2015, the CDM Co-ordinator role no longer exists. Therefore, as part of the CDM Transition, Frankham Consultancy Group Limited role as CDM Co-ordinator has ceased and has been transferred to the regulatory role of Principal Designer.

12.9 Once appointed, the Design, Build and Operate contractor shall undertake the regulatory role of Principal Designer and Frankham Consultancy Group Limited shall undertake the non-regulatory role of Advisor to Client.

13 HR IMPLICATIONS

13.1 The Council is an accredited London Living Wage (LLW) Employer. The Council will use its best endeavours to ensure that to the extent permitted by law, contractors pay the LLW.

14 PUBLIC HEALTH IMPLICATIONS

14.1 energetik will deliver significant economic, environmental and social benefits.

14.2 Climate change is a major threat to public health. energetik will help to reduce its impact. The carbon footprint of a home due to heating will be reduced at least 50% compared to conventional fuel. The business is hugely important for meeting London's carbon reduction targets.

14.3 energetik will deliver better value heat to new homes, and possibly, at a later stage of development to existing homes. Well heated homes help to promote the general health of the people who live in them, through reductions in vascular and respiratory disease and by reducing social isolation.

Background Papers

None

Appendix 1, energetik's Residential and Commercial Offer

Better value for money	
Benefits for residential customers	Benefits for commercial customers
• We don't charge a premium for low carbon heat • The cost of a traditional private ESCo providing the same residential service would typically be 40% higher on a 'like for like' infrastructure scheme, to enable them to achieve a typical target IRR of 12%. • Private-sector ESCos are unlikely to connect to the ERF, instead going for gas CHP. This removes the opportunity to supply customers with a very low carbon heat source • As has been proven elsewhere in the UK, private developers are also generally unlikely to seek to expand their community energy networks for additional local benefit beyond their initial project boundary • energetik's forecast 6.74% IRR provides a benefit to the end customer, with a better quality scheme that enables a fair price for consumers, whilst providing an acceptable return to the Council • Residential pricing will be benchmarked annually against gas • All homes will have a state-of-the-art smart meter to control consumption and review carbon savings • Fair tariffs, using common charging for all residential customers • Stable charges: only annual change to prices	• Secure and low carbon source of heat, which is competitively priced • Bespoke commercial offers depending on heat load and proximity to the network

Better for customer service	
Benefits for residential customers	Benefits for commercial customers
• Reliable and secure supply of heat • A single UK based high quality Customer Service Centre, which is also available online: for all issues and enquiries • Flexible appointment times • 24/7 x 365 Call out • Smart meters with easy to use displays, to help customers manage their energy use • Individual billing for heat supply to each customer	• Reliable and secure supply of heat: • Rapid response times to fix faults, and compensation if we fail to meet our service commitments • energetik's move towards a local supply of heat means better energy security and less reliance on the National Grid and imported fuel • No requirement for annual gas safety checks
Better for the environment	
Benefits for residential customers	Benefits for commercial customers
• Low carbon, clean energy • Homes connected to energetik's Estate Renewal heat networks will save 194 kg of CO_2 per year. This is a 30% smaller carbon footprint than residential properties equipped with high efficiency gas boilers • Significantly reduced Nitrogen Oxide (NOx) emissions	• Low carbon, clean energy • Helping businesses meet their statutory and/or voluntary carbon reduction targets e.g. Carbon Reduction Commitment / Corporate Social Responsibility • Reputational benefits of using low carbon energy • Highly insulated pipe work maximising efficiency and minimising heat loss across the networks
Better for people's health	
Benefits for residential customers	Benefits for commercial customers
• Warm homes • Cleaner air • No risk of carbon monoxide poisoning or explosion due to gas boilers in the home	• Cleaner air • Businesses contributing to improving their local environment and their community's wellbeing • No risk of carbon monoxide poisoning or explosion due to gas boilers
Better for the local economy	
Benefits for residential customers	Benefits for commercial customers
• energetik's low carbon energy infrastructure underpins Enfield's regeneration ambitions • Council-owned energy company provides local benefit • Supports local jobs and businesses • PWC forecast a direct GVA impact from energetik of up to £128.6 million gross monetised benefit over 40 years, with NPV of £50.1 million	• energetik's low carbon energy infrastructure underpins Enfield's regeneration ambitions • Secure supply of low carbon heat for local businesses • Supports local jobs and businesses • Supports inward investment opportunities, helping attract new businesses to Enfield

Better through innovation	
Benefits for residential customers	Benefits for commercial customers
• Highly insulated network ensures a fair price for consumers • Innovative approach to community engagement that starts with the customer • We are investing for network expansion • Council-owned local energy company for local benefit	• We are investing for network expansion • Council-owned local energy company for local benefit

Appendix 2, Value for Money Statement

The Strategic Context

The delivery of heat networks is aligned with national, regional and local policy on community energy networks, which is a requirement for all large developments in Enfield.

As noted in Section 3, the UK is committed to heat networks at both national, regional and local levels, with strong policy support to deliver heat networks as a means by which to deliver its carbon reduction targets. One of the key ways in which to deliver such savings is through the decarbonisation of space heating, as heating and hot water for UK buildings make up around 40% of energy consumption, and around 20% of greenhouse gas emissions. Two thirds of these emissions are from housing, with the rest from commercial, industrial and public premises.[1]

The energetik Business Plan also fully aligns with the Council's corporate priorities of Fairness for All; Growth and Sustainability; and Strong Communities as detailed in Section 9.

Enfield's Decentralised Energy Network Supplementary Planning Document was approved in December 2015 and takes national and regional policy a step further. It requires the technical specification of heat networks in new developments in Enfield to ensure a fair price for consumers.

Enfield's residents and businesses will benefit from energetik being able to respond to this technical specification. By the Council undertaking this project and entering the heat market, it is able to take a long-term view on its investment for local benefit.

energetik customers will be charged a fair price for their heat whilst receiving higher standards of customer service than could be offered by a private ESCo. Residential prices will be benchmarked annually against gas, with no premium for low carbon heat. energetik's financial model ensures this is possible, whilst providing an acceptable commercial return to the Council.

The Council has committed to cutting carbon emissions by 40% in the borough by 2020. One key way of delivering the low carbon regeneration aspirations is through the delivery of a city-scale heat network to provide heating and hot water to the Meridian Water housing development and estate renewal schemes at Montmorency Park, Electric Quarter, Alma Road and New Avenue. Specifically in relation to Meridian Water, the Council is the only entity capable of negotiating a deal with the NLWA and therefore able to provide a very low carbon heat source, crucial in achieving the overall carbon savings targets.

Council intervention has been deemed necessary due to the current standards of delivery of heat networks by the private-sector. Whilst standards are generally improving, they are not yet in a state to deliver high quality and reliable district heating at affordable prices to end users, whilst generating a reasonable return for

[1] The Committee on Climate Change's October 2016 report "Next Steps for UK Heat Policy"

the investor. Disparate systems, delivered by multiple ESCos across boroughs can result in a lack of synergy and joined up thinking, and the standards can vary widely leading to poorly designed, inefficient systems where local residential and business customers have to pay to cover the cost of a poor performing system that is not built to last.

The Council's intervention in the marketplace is justified on the basis that it can take a longer term view on its investment, whilst delivering a better quality system that will last longer and can generate real benefits for its residential and business customers. Whilst the private-sector capital costs may be cheaper, the cost to customers is generally higher due to poor standards of insulation.

The Council also has access to lower rates of borrowing, meaning that an acceptable rate of return can be achieved, whilst delivering an exemplary heating system that will continue to provide sustainable energy far longer than current market offerings, whilst not charging a premium to the end user.

The added benefits generated by the Business Plan are described in Appendix 1 and include carbon reduction, cleaner air quality, and the provision of secure and reliable heat at a fair price. energetik's base case Business Plan is forecast to save 250,000 tonnes of carbon and 70,000 kg of NOx over 40 years.

The key risks are manageable as the Council has an ability to secure the heat demand. A phased delivery approach has been developed so that the network can grow with demand, and contracts have been structured in such a way as to ensure that risk exposure is minimised. Active risk management processes are in place to continually monitor and manage risks, and an independent Audit Committee has been created to scrutinise the financial and risk management actions of the company.

The Economic Context

From an economic perspective, the Business Plan focuses on providing best value to both the Council and energetik's customers. In considering the energy strategy to deliver both carbon efficient and cost effective space heating at Meridian Water and the Estate Renewal schemes, the alternative options have been considered and were deemed unsuitable as detailed below.

For a housing development the size of Meridian Water, and in the policy context of the UK, London and indeed at local authority level, district heating is the only viable option able to deliver an energy strategy able to support the housing density planned. Supplying gas to properties is both difficult in terms of legislation and health and safety, and is not a low carbon option. Individual electrical space heating is both more expensive to customers and is not a low carbon option.

An alternative option to energetik delivering the heat supply would have been to allow the developers to deliver their own energy strategies, or to let the delivery of space heating as part of a competitive tender for the entire heat network. However, for the reasons described in section 5, this would not have provided the required levels of carbon savings, quality installation and lower pricing to customers.

There would be no joined up approach to delivering an energy strategy that would serve so many customers, and costs to end users would invariably increase due to the higher rates of returns expected by private-sector ESCos. Heat Network standards would be likely to be more like British Standard, as opposed to the higher quality standards required in Scandinavia and Germany, meaning that the systems would not last as long, would provide less comfort and be less efficient.

Whilst there are risks associated with taking on the delivery of a heat network of this scale, by allowing the market to dictate its own direction, the Council, and its residents, would not gain any of the benefits that can be delivered as a result of doing it themselves, both economically and in terms of quality.

The Commercial Context

energetik's prudent business case is financially sound and affordable, with a financially viable business case that provides the Council with an acceptable investment return.

energetik demonstrates commercially viability through its financial model and is robust enough to cope with changes in market conditions, whilst still delivering a secure heat supply to thousands of residents in the borough at a stable price comparable with gas.

There is also scope for increased revenue and returns to the Council through future expansion of the network. More connections provide more customers and increased heat revenues. The current business case is based on a prudent number of connections, which the Council has an ability to deliver by means of its role in managing developments. Should the potential of the network be realised through expansion as is expected, the rates of return will be much higher. Coupled with an intention to enter the electricity supply market, revenues are likely to increase beyond the base case, with energetik able to offer both low carbon electricity and heat to its customers.

Once the Council decided to investigate the viability of delivering a heat network itself, actions were taken to identify if a viable and well-structured deal could be procured. This was in the form of initial feasibility studies, and later by the development of cost estimates and tenders.

energetik prepared a series of tenders to procure the main contracts, namely the Design Build and Operation (DBO) of the heat network and energy centre and the provision of a quality customer services contractor. After preparation of specifications and tender documentation, these tenders and specifications were subjected to cost estimations from quantity surveyors to understand and refine the project budgets and financial models.

The Council's procurement processes were used to run two tenders through the Official Journal of the European Union (OJEU), and the tender responses that were received and subsequently scored were deemed to be of the right quality and within the budgets expected (see section 7.2.20). Furthermore, they were all within the viability criteria to allow the Council to make a return on investment and deliver the expected benefits.

Preferred bidders were selected as a result and await official contract award post the Council's main investment decision in energetik.

From a commercial perspective, the contracts to be let have all been drafted in in a way that wherever possible protect the Council from risk exposure. For example:

- The DBO contract has been broken into separate works packages so that the design and planning submission phase can be undertaken, without a requirement to continue to the build phase to protect the Council should there be any unforeseen changes to the build programme at Meridian Water. There is also a long-stop date to allow termination should the next tranche of Council funding not be approved for any reason.
- The customer services contract can be terminated seven years after entering into contract. Until that date, the contract will be required to support the estate renewal heat networks that are already in development. No compensation is payable to the customer services contractor for early termination
- Should energetik be wrapped up or sold, or is unable to continue operation for any reason, connection and supply agreements are able to be novated to incoming ESCos. All rights, benefits, obligations and liabilities are able to be transferred.
- The Agreement for Lease with the NLWA can be terminated by energetik. energetik can already terminate the Agreement for Lease if it has not requested the Lease. If Tranche 2 funding is not forthcoming, energetik will not build its energy centre at the EcoPark and thus will not have requested the Lease (which otherwise would be requested on completion of the energy centre build). Even if energetik had commenced works at the EcoPark, as long as energetik reinstate the EcoPark site to its original condition then the Agreement for Lease can still be terminated. No compensation will be payable.
- The Heat Sale Agreement with NLWA can be terminated. Upon termination of the Agreement for Lease, energetik is entitled to terminate the Heat Supply Agreement. No compensation will be payable

The Financial Context

As is demonstrated in the energetik business case, there is an adequate internal rate of return to the council of 6.74%, with a Net Present Value of £10.3 million over the 40 year business plan.

In addition to the revenue generated over the cost of capital, the Council will receive an interest rate premium of £5.97 million NPV from energetik paying back the loans and can expect up to £800,000 per year business rates once the main network is built, calculated using the existing standard valuation method for this type of business.

These figures are based on a prudent 15,500 connections that are within the Council's control. If the number of connections increase through business expansion, as is expected via the business development strategy and future estate renewals under the Portfolio Agreement, the IRR will increase.

The first tranche of £12 million required to fund the project has been provided by external lenders (LEEF and the EIB) at low interest rates and demonstrates that the project has gained investor confidence and support. Furthermore, housing zone grant funding from the GLA to the sum of £3.7 million has been secured for the project which is a zero interest loan. This investor confidence shows that the project is viable and supported externally.

The second tranche of funding to cover the main build out programme has been provisionally offered by LEEF if required, as well as a provisional offer from the Green Investment Bank, which provides further evidence that the energetik business is supported by reputable lenders.

The final decision on how to bridge the funding gap between the Tranche 1 and Tranche 2 investment phases will be for the Council to decide, depending on the interest rates and best commercial offer available at the time. This may come from external lenders such as LEEF or the EIB, or may be taken in the form of loans from the Public Works Loans Board.

PWC were commissioned to undertake economic modelling, calculating that the energetik business case is forecast to deliver significant economic, environmental and social benefits, with up to £225 million gross monetised benefit over 40 years, a Net Present Value of £94.7 million and a cost benefit ratio of 3.4.

Working with PWC, a number of other non-financial benefits were also identified that were not possible to quantify in value terms. These included strategic benefits of delivering a Council-owned heat company; the ability to provide warmer homes and cleaner air; and the benefits of providing state of the art smart metering to customers.

The Management Context

In assessing the value for money contribution to the project, a key element is to ensure that it is capable of being delivered successfully and in accordance with best practice.

Whilst investigating the possible delivery options available to the Council in the early stages, a team of experts was assembled from various parts of the district heating and utility services industry to help formulate the business case and delivery strategy.

The energetik team has worked on and delivered some of the largest district heating systems in the country in their previous roles, and have owned and managed successful private-sector businesses in the industry. The advantage this brings to the Council is the broad spectrum of stakeholders the team have experience with, having worked alongside both large-scale private sector developers and local authorities alike. As a result, they have a deep understanding of the needs of stakeholders in the value chain, from local authority managers to social housing tenants, and are best placed to ensure that each stakeholder's specific requirements are balanced with delivery of a successful business.

With over 100 years of combined knowledge and experience in the industry, the

energetik team has the required skills in commercial and financial strategy; technical design; project management; construction and commissioning; maintenance; and customer service and billing to ensure that energetik has the best possible in-house knowledge.

Some of the energetik team were also members of the founding body which is now the Heat Trust, so understand the issues and practicalities of delivering district energy to communities.

In terms of construction and project management, the energetik team has vast experience in delivering heat networks of this size, as well as other large-scale projects. The team's project manager has worked on many prestigious projects, including the Olympic Park and Athletes Village. The Millennium Dome (now the O2 Arena), Royal Ascot Racecourse and the Rugby World Cup, and is an expert in delivering large scale infrastructure projects on time and to the required standards, whilst following recognised programme and project management methodology.

Once energetik receives a positive investment decision, a full project management methodology will be developed with the businesses' contractors to ensure that the construction is managed effectively, change is managed appropriately and risks are constantly reviewed and mitigated.

The contractors who have been selected to deliver the infrastructure elements are industry leading experts in the UK, again ensuring that the Business Plan is deliverable.

The Business Plan and Cabinet Report have been reviewed and validated by a Gateway Review undertaken by KPMG, with a recommendation to progress to implementation. This demonstrates that the proposed business is robust, financially viable and well managed.

The Holding Company Board is made up of both senior officers and members, which provides the scrutiny required from the Council to ensure the project remains on track. In addition, the independent Audit and Risk Committee has been set up to regularly monitor project risks to ensure the management is performing as expected.

Regular board meetings are held, with budgets and operating plans submitted for approval to the Holding Company Board to ensure the Council maintains visibility on how the business is progressing.