

1. Executive Summary

- 1.1 This document is a second addendum to Energetik's approved 40-year business plan (approved in January 2017) and should be read in conjunction with the full approved document and the Business Plan Addendum 2019 for background context.
- 1.2 The company has made significant progress in key areas over the past few years and is now seeking approval for value-adding network expansion that will have a huge positive impact on the decarbonisation of Enfield as well as improve the profitability of the Company and therefore returns to the shareholder.
- 1.3 Securing and connecting to new developments is an important part of building resilience in the business, diversifying customer portfolio to reduce risk, whilst supporting the low-carbon transition in Enfield. Via the company's engagement with the planning authority, three large-scale connection opportunities totalling ca. 4500 additional new homes have been identified who are favourable to a connection to Energetik's low-carbon heat networks. Connection would require an extension to the Meridian Water heat network to reach the developments.
- 1.4 In addition to extending to these 'catalyst' developments, Energetik would look to connect Enfield's Civic buildings in order to help them decarbonise as part of their Climate Action Plan, saving over 1,000 tonnes of carbon per year once connected.
- 1.5 Positive engagement has been conducted with the North Middlesex Hospital at a senior level to discuss the potential of a heat connection to assist in their future decarbonisation plans, which would offset ca. 4000 tonnes of carbon per annum.
- 1.6 In order to reach these significant connection opportunities, the company requires additional funding beyond the current approved funding envelope. Engagement with senior council officers and members continues, with a hope to secure funding in Summer 2021 to allow the company to secure the connection opportunities. A decision and a firm commitment is required from the council by end of May 2021 if heat agreements with the first development, (the Colosseum Retail Park) are to be signed and works be commenced to enable Energetik to reach the first phase of the development in time.
- 1.7 This addendum provides the following information:
 - 1.7.1 Summary of Energetik's funding to date
 - 1.7.2 An explanation of the expansion opportunity and funding requirement including the in-progress retrofit pilots.
 - 1.7.3 Future strategic direction of the Company

2. Funding to Date

- 2.1 Energetik's 40-year business plan and Tranche 1 (£15m) funding application was approved by the Council in January 2017¹. The Business Plan addendum which detailed Tranche 2 funding requirement was approved in September 2019.

¹ A copy of the approved business plan and cabinet reports can be provided on request

- 2.2 A two-tranche funding approach was adopted ahead of the investment in January 2017 following the due diligence review of Energetik's business plan and financial model. Energetik received the first £15 million to commence business operations and begin serving its first customers. The approval was sought on the basis that secondary investment would follow once sufficient clarity on the delivery programme at Meridian Water could be established, and once agreement had been reached with the NLWA for a heat offtake agreement.
- 2.2.1 Tranche 1 funding is being utilised for business setup activities; design and installation monitoring at the 'satellite' heat networks, adoption of assets and commencement of customer operations on these networks which currently serve 100 customers but will increase to over 500 by the March 2020; and the design to planning stage required to deliver the company's main energy centre and heat network at Meridian Water.
- 2.2.2 In addition to its core activities, the company has established itself as an example of best practice in the industry in relation to its stringent technical requirements and its focus on customer service and protection, it has gained positive recognition at both the local and national level.
- 2.2.3 Tranche 2 funding was approved in September 2019 and the Company supported the council to draw down the funds within the required deadlines. Alongside the funding requested, an updated on-lending agreement was signed with the council to govern the transfer of funds under tranche 2. This allows the Company to build the energy centre and heat network to serve the Meridian Water development.
- 2.3 The justification for tranche 2 funding investment from the council was set out in the 2017 business plan and the cabinet report approving the initial investment, namely:
- 2.3.1 To provide better quality heat networks to an improved technical standard, taking a long-term view on [the council's] investment for local benefit, by delivering a better-quality system that has been designed and installed to stringent requirements in order to last longer and ensure a fair price for consumers.
- 2.3.2 Energetik's customers will be charged a fair price for their heat whilst receiving higher level 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.
- 2.3.3 Energetik 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.

3. Tranche 3 - expansion

- 3.1 Extending Energetik's heat networks has been a core business development driver since the company was formed back in 2017. Additional connections strengthen its

business case, reduces reliance on the Meridian Water development, helps decarbonise north London and improves local air quality.

- 3.2 Extensions generally need catalyst developments that are large enough to make them economically viable. Developments of the size required, or multiple developments being planned at the same time are rare. This makes large extensions difficult to justify and is often the reason that most heat networks remain static and rarely expand at the rate/level required if we are to significantly increase heat network connections to help tackle the climate crisis.
- 3.3 Energetik will install much larger pipework than necessary (strategic) to future proof connections for several decades and enable 1000s of existing homes (or businesses) to be connected via retrofit, our medium to long term aspiration to decarbonise Enfield and beyond.
- 3.4 Benefits of extending the Meridian Water heat network include significant improvements to carbon savings, both from connection of Energetik's existing heat networks (the satellite schemes), removing the need to run gas fired CHP and boilers, as well as decarbonising connections along the route. This includes the North Middlesex Hospital, who as an NHS trust are aiming to be carbon neutral and have over the years been looking at CHP driven systems of their own. Energetik intend to connect the hospital if negotiations are successful.
- 3.5 Additionally, the council's plan to be a net-carbon neutral borough by 2040 means it must take steps to tackle its current emissions sooner rather than later. Energetik is working with the Council to identify its current housing stock and planned new build developments along the planned network routes, with a long term strategy to assess and take forward projects to retrofit connections to Energetik's networks over the next 20 years
- 3.6 It should be noted that Pricing strategy for Customers is to keep tariffs below the counterfactual (presently gas), this is to ensure affordable warmth and support the tackling of the Council's fuel poverty agenda. This limits profit and returns by the company but allows the Council a degree of control over the price of affordable low carbon heat to its residents, as well as the quality of customer services.
- 3.7 Tranche 3 monies would facilitate two extensions to the Meridian Water Heat Network, to the north to pick up and connect to new developments identified through the planning process, as well as to the west to connect Energetik's existing heat networks as well as the North Middlesex Hospital. Both will contribute significantly to the decarbonisation plans of Enfield, as well as significantly increasing the value of Energetik.
- 3.8 Whilst it is known that the council's capital budget is constrained, commitment to funding these extensions significantly improves Energetik's financial standing, with sustainable profit being achieved in 2023, eleven years earlier than the present business plan forecast of 2034. Further, the additional income and revenue streams would contribute to an improvement in retained earnings from £45m to £90m and an additional £4 million in interest premium receipts for the council.
- 3.9 Energetik applied to HNIP on behalf of the council in autumn 2020 to try and secure a further significant grant (£17m) plus low cost loans (£6m) which would allow the connection of the development opportunities identified, connection to the hospital, connections to the council's civic buildings and to its existing satellite networks. the council would be required to match fund the remaining £26m, potentially via a further MEEF funding agreement, as with Tranche 2.

- 3.9.1 A decision was expected from BEIS in November/December 2021, on the basis that council approvals, and subsequent drawdown of the funds is required within the 2020/21 financial year. A positive funding offer was received in February 2021, following approval by both the HNIP Investment Committee and BEIS. Following their assessment and due diligence of the project financial files submitted, the offer made was:
- 3.9.1.1 £12m grant funding
 - 3.9.1.2 £11.859m low cost loan (at 0.01% interest)
- 3.9.2 Match funding for the HNIP offer is required., totalling £25m.
- 3.10 It is envisaged that these extensions will not only provide capacity to serve the identified developments and Energetik's existing networks but will allow for additional capacity to serve thousands of additional homes/businesses as Enfield and/or developers redevelop areas or looks to connect existing housing stock.
- 3.11 The business case is considered prudent, on the basis that only known developments have been included in the modelling, and there is significant scope for improvement by connecting further homes and businesses in the future.
- 3.12 There is a requirement to substantially spend the HNIP monies of £24m in the year 2021/2022 and therefore draw down and spend will be necessary this year. The company is therefore accelerating the works programme to ensure we can achieve this.
- 3.13 An unexpected value benefit coming through via programme acceleration is as a consequence of costs presently rising within the industry very quickly. Current rates are showing at least an increase of 27% higher than in previous years. The company has managed to tie in present day market rates for works from its main contractor thereby enabling the works to be carried out for the borrowing envelope of £49m instead of ca. £62m.
- 3.14 The pipework will last up to 80 years, helping to support the next generation of regeneration in the borough.
- 3.15 Energetik will own/operate the network, and will sub-contracted the design, build and operation to industry experts.
- 3.16 Energetik will supply heat directly to end customers as the energy services company (ESCO). To do this, the company has procured a sub-contractor, Switch2 Energy, to undertake its customer service and metering and billing functions. They are already operational on Energetik's satellite schemes.
- 3.17 Energetik will contract directly with developers via connection and supply agreements which will govern the heat supply obligations for all parties.
- 3.18 To secure the funding and loan, the BEIS agreements required execution and drawdown by the council before 31st March 2021. With the support of Energetik's management team and the executive team within the council, the funds were secured and were drawn down by the council by 31st March 2021.
- 3.19 However, BEIS/HNIP accepted that it was not possible for the company to seek, nor the council grant, the relevant approvals to allow a project of such scale to proceed within this timeframe. Therefore, dispensation was applied for and a long-stop date to obtain these approvals has been granted to 31st July 2021. If approvals for the

project are not in place by this date, the secured funds will have to be paid back to HNIP/BEIS.

- 3.20 Work is currently underway with the council to prepare documentation required to take a funding request to Full Council in May 2021, following the elections in early May.
- 3.21 Part of this work is for the council to carry out due diligence to assess the proposed extensions outline business case. They have contracted Ernst & Young (EY) to support them to assess the impacts, risks and opportunities presented by the business case on the council's ongoing finances. Energetik's management team is contributing to EY's data gathering and they are expected to produce a draft report before the end of March for the Council.
- 3.22 As well as the due diligence, EY will be highlighting some strategic considerations for the council (which will require further investigation given the short timescales for the report) on the future of the council's ownership in Energetik i.e. possible future part/full sale options. However, the council have accepted that to fully explore this option will require further detailed analysis that will take time to produce.
- 3.23 At present it is believed that Enfield are supportive of the project, and senior leadership is bought in to supporting the project.

4. Active Opportunities

Energetik's major connection opportunities are listed below.

Opportunity name	No. dwellings / GWh demand
Colosseum Retail Park, Southbury Road	1600
Crosstree Development, Edmonton Green	1700
Enfield shopping centre redevelopment	1200
Haringey bulk supply	20GWh (ca. 5700 homes equivalent)
Enfield Civic Centre	3.9GWh (ca. 1100 homes equivalent)
Enfield Dugdale Centre	0.5GWh (ca. 150 homes equivalent)
North Middlesex Hospital	17GWh (ca. 4900 homes equivalent)
North Middlesex Hospital GLA housing site	250
Reardon Court	91
Honeysuckle House, care home	91

5. Expansion funding requirements summary

- 5.1 This Tranche 3 application for funding is required due to significant connection opportunities being identified driving the requirement for extensions to the network which in turn require additional funding. The £49million (HNIP loan and grant plus match funding) and will be used to:
- 5.1.1 Extend the Meridian Water heat network to the north to connect the new build development opportunities identified, the Civic buildings in Enfield Town as well as to connect the Ponders End Heat Network, removing the need for gas CHP and increasing carbon savings, and sized to allow a further 11,000 additional homes to be connected (green line in network map below)
 - 5.1.2 Extend the Meridian Water heat network to the west to connect the Meridian Water Heat Network to the Arnos Grove Heat Network, the Oakwood Heat Network as well as two care homes, and the North Middlesex Hospital, and sized to allow a further 11,000 additional homes to be connected (yellow line in map below)
- 5.2 In total, Energetik forecasts ca.£49m of additional grants and borrowing over the next 3 years in order to be able to deliver the infrastructure to connect the developments and realise the benefits of the significant opportunities. The intention will be to commence works in between January 2022, completing in April 2024.
- 5.3 The table below shows the financial highlights for Company in terms of the current business case versus the expansion opportunity.

Metric	Scenario 1 – current business case	Scenario3 – Green line + yellow line
No. of connections	Ca. 15,000	Ca. 20,000
Additional Funding Requirement	N/A	£25m plus £12m loan = £37m (plus £12 million grant from HNIP)
Retained earnings in Energetik	£39 million	£89.3 million
Interest premium payments to council	£12.2 million	£18m (+£6m)
Peak cash utilisation	£40.9 million in 2026	£76 million in 2024
Total loans	£47.25 million	£77 million
Full loan repayment	2055	2048
Cash net positive	2047	2042
Net profitable	2034	2023
Profit Before Tax in 2030	-£5.5m	£3.9m
IRR	5.32%	4.41%
NPV	£11.7m	£10.1m

6. 3rd party investment options appraisal

In response to Energetik’s request for additional extension funding, the council has advised the company that it wishes to re-investigate possible 3rd party investment options. This is in part due to constraints to the council’s capital budgets / borrowing capacity.

The company will support the council through 2021 to establish a more detailed plan regarding their intentions concerning desired outcomes i.e. level of investment, part/full disposal, timescales etc.

It should be noted that the process of obtaining an equity investor will take significant time to complete (potentially 24-36 months), and timing will be crucial in ensuring maximum value is obtained for any investment i.e. a larger and more diverse portfolio of connected properties will contribute to an increased valuation of the business, reducing perceived build-out risk associated with Meridian Water, currently Energetik's largest anchor load.

In order to secure the connection opportunities, and to ensure maximum value in any future investment/sale, Energetik needs the Council to firmly commit to funding the extensions ahead of any such deal being made.

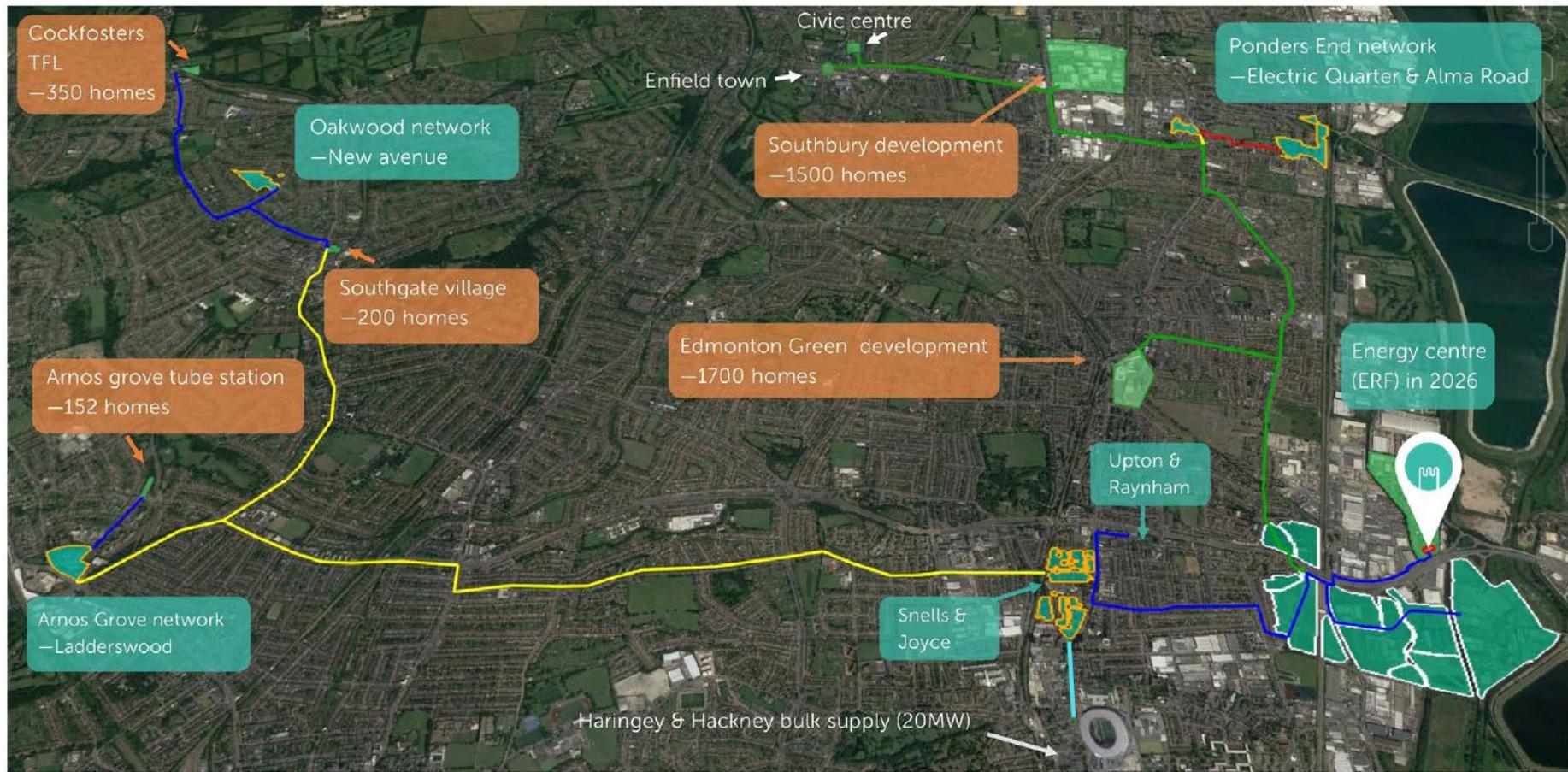
Retrofit

In addition to the current build out and expansion opportunities, the company is undertaking two pilot projects in 2021 to retrofit heat network infrastructure into existing homes near to an Energetik heat network. The aim is to understand the challenges and ways to overcome them, with a view to developing a blueprint for how retrofit to heat networks can be rolled out wider to help decarbonise Enfield and the UK. The pilots include:

- Naylor Grove – utilising carbon offset monies provisionally secured from the council to retrofit to a council owned, predominantly social tenanted block along South Street, Ponders End.
- South Street GLA retrofit – grant funding has been secured from the GLA to undertake a similar pilot project but instead attempting to connect to private homes / flats. A report and seminar is expected to be produced demonstrating the lessons learned.

In addition to the two distinct retrofit projects above, the company is engaged with the council's asset management team to establish where Energetik's heat network infrastructure is in proximity to council owned assets, to establish if retrofitting would be possible to help decarbonise existing council housing stock, in turn contributing to Enfield's Climate Action Plan goals.

Expansion Investment provides green and yellow line extensions



Complete

Under Construction

Decarbonisation plan

Planned Extension