

London Borough of Enfield

Council

9 June 2021

Subject: Expansion of Energetik's Heat Network
Cabinet Member: Cllr Mary Maguire
Executive Director: Fay Hammond – Executive Director, Resources

Key Decision: 5304

Purpose of Report

1. The purpose of this report is to consider a strategic investment in the Council's trading company, Lee Valley Heat Network Operating Company Ltd (trading as 'Energetik').
2. The investment proposed covers an extension of the company's heat network along the east and south of the borough. It will be funded by a combination of borrowing from a variety of sources, and external grant funding.

Proposal(s)

3. Recommended that Council:
4. Approve the addition of £5m to the Capital Programme, in addition to the £32m budget approved by Council in March (KD5210), for the purpose of extending the Energetik heat network as detailed within Appendix A.
5. Approve the total investment in the proposed expansion identified in Appendix A of £49m, comprising £12m grant funding and £37m borrowing as included within the Capital Programme, to fund the proposed expansions, as follows:
 - a. £12m grant funding from the Heat Networks Investment Project (HNIP), to be invested in the company as equity funding;
 - b. £12m loan from HNIP at an interest rate to the Council of 0.01%, to be on-lent to the company at a negotiated interest rate compliant with Subsidy Control regulation;
 - c. £25m loan funded from either the Mayor's Energy Efficiency Fund (MEEF or Public Works Loans Board (PWLB) or a combination of both.
6. Delegate to the Executive Director of Resources, in consultation with the Director of Law and Governance, authority to execute on-lending and subscription agreements with Energetik to transfer the funding in paragraph 5, these agreements to at minimum mirror and reflect the requirements identified within Appendices Ci and Cii. To approve that as part of these agreements Energetik will be required to present the Executive Director of Resources with

a quarterly connection statement detailing confirmed and perspective property connections compared to projections, prior to the release of required funding.

7. Approve the revisions to the company's 40-year Business Plan as outlined within the company's Business Plan second Addendum, whilst working with the company Directors to implement the financial model updates, in recognition of the observations in the Ernst & Young review.
8. To instruct the Director of Legal and Governance, in collaboration with Company Directors and council officers, to undertake an options appraisal and strategic review identifying a preferred strategy to support the company's future growth with external funding and knowledge by November 2021 and consider options to reduce the Council's interest as referenced in paragraph 56. No further funding beyond this report to be agreed until this review is complete, and a clear strategic financing direction identified and approved by Cabinet.
9. To note the ongoing discussions between Energetik and LB Haringey and LB Hackney to supply heat to residents of other north London boroughs, as included in the Energetik business plan.

Reason for Proposal(s)

12. Energetik's existing network serves isolated sections of the borough via a large Energy Centre at Meridian Water, and smaller satellite schemes in different parts of the borough. The company's recent Heat Supply Agreement from North London Heat and Power enables Energetik to have sufficient heat to serve a greater area of north London. In addition, the satellite schemes currently do not provide zero carbon heating. This is a relatively narrow critical success path for company profits and financial return to the Council as shareholder.
13. Government and local planning policy support for district heating and energy networks remains strong as part of the climate change and carbon reduction agenda.. The identified expansion takes advantage of the presence of significant development proposals at Edmonton Green and Southbury which are strongly encouraged to connect to Energetik in policy, and while also providing sufficient capacity to ensure the fundamental financial viability of the network expansion. It is difficult, but not impossible, to connect buildings after construction and so the opportunity for expansion of the network may not be available again for some time if not taken at this moment in time.
14. An expanded network significantly improves the carbon savings Enfield council and its residents can achieve through Energetik. A higher financial return can be achieved in the form of retained profits across the 40-year business plan, and spreads the company's risk profile across more developments and connections, increasing the chances of company success

15. Expanding Energetik helps tackle the climate change emergency and fuel poverty in the borough. Supporting the government's policy to reduce the use of gas boilers, the carbon footprint of heating homes connected to Energetik's heat networks is reduced by up to 80% compared to individual gas boilers. Residents of North London will benefit from the avoidance of harmful Nitrous Oxides (NOx) being released into the environment which would otherwise be emitted from individual gas boilers. The Company has fair heating charges, no penalty for using pay as you go, smart in-home technology which helps customers manage energy use, and a flexible payment option for customers in financial difficulty. The company has a positive record of customer service to date, including sensitively supporting vulnerable Council tenants to manage their bills while meeting their heating needs.
16. While the company has performed well to date on its objectives, the Council's investment in Energetik carries risks and it is prudent for the Council to consider how to sustain this performance over the medium term and return on the council's financial investment. Given the changing nature of energy policy, the growing and more operational nature of the company, and the potential for further investment in the future, a strategic review of the Council's relationship with Energetik is appropriate. It is prudent to conduct a review which considers alternative sources of investment and funding which could reduce the Council's current holdings.

Relevance to the Council Plan

16. In line with Enfield Council's Vision to make Enfield a better place to live and work, delivering fairness for all, growth, sustainability and strong communities, Energetik provides the Council with the opportunity to reach and exceed its 60% carbon reduction target as businesses and properties connect over time.
17. Energetik follows the same values and principles as the Council: working to improve Enfield for the long term. The company's activities play a key role in creating good homes in well-connected neighbourhoods: Energetik provides an essential service to residents in an innovative way, whilst supporting the borough's ambitious regeneration and housebuilding programme.
18. Its supply of environmentally friendly energy to the projected 4,750 or more homes and businesses that would be connected as a result of the proposed expansions will help to sustain strong and healthy communities by delivering real improvements to the lives and wellbeing of local people; directly as a result of living in warmer, healthier homes and through improvements in air quality.
19. Energetik's futureproofed energy infrastructure is designed to last for 80 years when constructed, guaranteeing long term environmental and economic return to the community, and forming an attractive secure low-carbon platform for energy-intensive businesses who are considering relocating to this area. With an active focus on investigating connection opportunities with existing local businesses as well as potential new entrants,

Energetik is already working with local partners to build Enfield's local economy and create a thriving place.

Background

20. Energetik was established by Enfield Council with the aim of providing a new city-scale decentralised energy network to capture affordable low carbon heat from Energy from Waste (EfW) facilities and dedicated Combined Heat and Power (CHP) plants. Energetik operates at arms' length from the Council with a board comprised of two managing directors, two external non-executive directors, and one nominated councillor director. The company has a 40-year business plan which was approved by Cabinet in 2017 (KD 4266 4035), and most recently amended in 2019 (KD 4642).
21. The Lee Valley Heat Network Operating Company was incorporated in 2017, with a business plan to deliver a heat network connected to Meridian Water developments, with an Energy Centre situated at Edmonton EcoPark. This occurred subsequent to the incorporation of Lee Valley Heat Network Ltd, a holding company through which the Council owned the Operating Company, in 2015. The holding company was dissolved in February 2021, and the Council now directly owns the Operating Company.
21. Subsequently a number of smaller satellite networks across the borough were added to plans, and the build of the Meridian Water network will allow further connection to development at Joyce and Snells, should this go ahead.
22. This required a total initial investment of £45m. The first instalment of funding, consisting of LBE on-lending facilities to the company in the amount of £15m, sourced from a combination of London Energy Efficiency Fund, European Investment Bank and Public Works Loans Board, was approved in 2017. In September 2019, a second tranche of funding to construct the network was approved. These facilities awarded the remaining funding, sourced from £5m HNIP grant funding, and £25m lending sourced from HNIP and MEEF. An additional £7.25m was proposed but not approved.
23. The Council's current 10 year Capital Programme also includes an allocation of £32m to fund expansion of the main heat network. The use of this allocation has not been approved for any specific project to date. The governance rules of the company require the approval of a project to be added to the business plan before the company can draw down or utilise this allocation of funding.
24. The company business plan is monitored for delivery, with financial accounts and performance reported annually to Cabinet. The company has delivered improved financial results against its business plan for the past three years, delivering a first gross profit in 2019-20. Pre-audit figures for 2020-21 show a profit achieved before interest and tax, a further improvement. The projected budget for 2021-22 shows a final net profit – if achieved, this would deliver the company's first net profit five years ahead of schedule against the business plan. The company's connection numbers as at 31 March 2021 – a total of 615 connections – were also one year ahead of schedule.

25. There has been positive change in the low carbon energy industry in the past 5 years, with strengthened policy support from government at both local and national levels as a way to decarbonise the UK's heat consumption, and to improve air quality. In particular, adopted London Plan policies and Enfield Council development planning policies now strongly encourage new developments to connect to low carbon heat networks, and government has consulted on regulating the industry, which is a positive step for consumers and energy companies alike.
26. In addition, planning policy for Enfield has shifted over the past few years to encourage intensification of land use for housing and industry. In particular Enfield's housing target has risen from 560 homes per year in 2014/15 to 798 in 2015/16 to 1249 homes per year starting in 20/21. However insufficient homes have been built over the past three years, so that Enfield is now failing the government's test on housing delivery which means that new developments which are compliant with policy have a strong likelihood of gaining planning permission.
27. The Council is bringing forward an updated Local Plan which identifies clear sites and areas for growth; an Issues and Options document was published in December 2018 and a further version is scheduled for 2021. To support this, a Strategic Housing Land Availability Assessment was published in December 2020 which clearly identifies future sites for development, and assesses them on deliverability, current policy and possible future new land use policies.
28. This has all contributed to the growing potential for new customers for Energetik while also supporting the development of the heat network industry more broadly.

Main Considerations for the Council

The Proposed extensions

29. There are two proposed extensions of the network, both of which would lead outward from the Meridian Water energy centre in the South East of the borough:
 - a. The 'green line' extension; this would proceed from the energy centre up the east corridor of the borough, connecting to future developments at Edmonton Green and Southbury, and existing Energetik networks at Alma Road and Electric Quarter. The extension would then lead from Southbury westward towards Enfield Town, with the potential to connect to the Civic Centre and development within Enfield Town if possible.
 - b. The 'yellow line' extension; this would lead along the South of the borough, connecting to Energetik's existing network at Ladderswood, as well as upwards to Southgate Village proposed development, which would connect to the existing network at Oakwood.

30. Appendix A charts the above extensions on a map of the borough, identifying connections to existing and proposed developments.
31. The purpose of dividing the proposal into two distinct extensions is partially geographical, but also informed by the differing profiles of the extensions. The green line encompasses two developments in Edmonton Green and Southbury (the latter with outline planning permission, the former with an outline application currently under consideration), projected to deliver a combined 3350 homes over the period 2025 to 2031. Development within the Enfield Town area is also modelled at a prospective 1200 homes, which the model assumes will be delivered between 2026 and 2028. Along with some small-scale developments on the yellow line, this is sufficient to ensure the project is economically viable and will deliver financial returns as well as environmental, in addition to providing pipe coverage of the eastern section of the borough which future developments can potentially connect to.
32. The yellow line by contrast acts primarily as strategic, future-proofing investment as well as delivering substantial environmental benefits – these are summarised in table 1 under ‘Benefits and costs’. The yellow line improves the efficiency and carbon savings from Energetik’s satellite networks at Arnos Grove and Oakwood, by connecting them to the Meridian Water energy centre, which provides lower carbon heat than these networks currently achieve. Yellow line modelled connections are 200 homes, with a number of other pipeline schemes identified.
33. Both lines have the potential to supply further homes and businesses, as identified through an assessment of the Council’s Strategic Housing Land Availability Assessment and through Energetik’ s report of ongoing discussions with potential commercial customers in the borough and residential customers outside the borough.

Benefits

34. The table below sets out the anticipated benefits and costs of the scheme, in comparison to the existing approved business plan. In broad terms, the green line provides the vast majority of economic benefit, while the yellow line provides additional environmental benefits, and helps to futureproof the network in terms of potential future capacity. In either case 121 jobs located in the borough are estimated to be created by the construction of pipework and connection of properties.

Table 1 – Benefits and Costs

Metric	Current approved business plan	Scenario 1 – Green line extension	Scenario 2 – Green line + Yellow line
No. of connections	Ca. 15,000	Ca. 19,750	Ca. 19,750

Additional Funding Requirement above current approval	N/A	£25m	£25m plus £12m HNIP loan = £37m (plus £12 million grant from HNIP)
Retained earnings in Energetik	£39 million	£89.3m	£89.3m
Full LBE loan repayment	2055	2050	2049
Net profitable	2034	2027	2027
IRR	5.32%	5.53%	4.41%
Carbon savings – trees planted equivalent	522,337	694,640	758,540
Nitrous Oxide savings – cars off road equivalent	75,491	99,281	119,934
Additional Jobs	Small number	121	

35. Currently, as indicated in table 1, the company projects to achieve consistent profit in 2034. This places restrictions on the ability of the Council as a shareholder to realise value from the company, either through a regular dividend payment, which would not be available until 2035 onwards, or through equity sale, which will be affected by the asset value of the company.
36. The expansion brings the projected consistent profit point forward to 2027, assuming 4,750 connections are achieved. This opens up earlier options for the Council to realise financial return from the company through potential revenue dividend payments from 2028. The project will also increase the asset base and value of the company, meaning that equity sale value may be increased and available earlier than the base case scenario. The Council could also utilise a split strategy of part equity sale, while retaining a stake in the company to receive dividend income.
37. The retained profits are larger indicating an increased capacity to make dividend payments after setting aside appropriate reserves for investment and maintenance. The additional arising retained profit has been reviewed by EY as part of the commissioned business case review exercise.
38. The project also contributes significantly towards the Council's environmental aims. The green extension is projected to deliver carbon emission savings of 81,151 tonnes above the baseline business case; this is equivalent to the Council operating at zero carbon footprint for approximately 4 years. The

yellow line adds a further 31,950 tonnes estimates savings, equivalent to a further 1.5 carbon zero years of Council operations.

39. The above equivalent years are calculated using the carbon footprint per year figure of 21,907 from the Council's Climate Action Plan.

External advice on business case and Capital Programme implications

40. External advice was commissioned by officers from EY, with a scope to review the business case for the expansion and advise the Council as to the following aspects:
- a. Feasibility of the project
 - b. Affordability of the project for the Council
 - c. A high-level outline of potential strategic options for the Council's future engagement with the company
41. The review concluded that the business case is feasible and is based on conservative assumptions regarding the number of connections. Scenario modelling, based on known development sites and an assessment of their likelihood, identified that there is substantial potential upside should more connections than assumed be achieved. As described above, planning and government policies require new buildings to connect to existing networks unless unviable or unfeasible. The Council monitors and influences how new buildings connect through a regular officer board. There is also potential downside risk in the event that sufficient properties are not achieved; the EY assessment is that this downside risk is unlikely to occur, given the cautious assumptions made in the EY model.
42. EY's report also notes that the construction of the financial model utilised by Energetik is not generally in accordance with best practice, although it is important to note they raise no concerns regarding the accuracy or integrity of the data in the model, or the output data the model provides. The report states, however, that the construction of the model is somewhat mechanistic and inflexible, relying on 'hard-coded' inputs and data as opposed to being formula-based, making scenario modelling in particular more difficult than is best practice. Given the reliance of this particular expansion on a pipeline of private developments, the ability to model as scenarios and circumstances change will be an important element of risk management going forward.
43. The Council's proposed additional investment is underpinned by the company's financial model; therefore, it is recommended that the Directors of Energetik are instructed to revise the build of the model to reflect financial modelling best practice, and the Council Finance team review the model.
44. On affordability, the report notes that the required funding should not breach the Council's borrowing cap, however it does push the borrowing level closer to the cap and therefore reduces the resources available for other schemes.
45. In regard to future strategic options for developing the company, the report highlights some potential options for alternative funding models (this is not an exhaustive list of potential options):

- a. Do nothing (i.e. the Council continues to fund the development of the company beyond this expansion). This would entail the Council likely needing to contribute to any further substantive network expansion within the borough, though the Council would retain full control.
 - b. Refinancing. In this circumstance the company would take on external debt, with which it would repay loans from the Council. This would remove the Council's risk exposure as a lender; however, it is reasonable to assume external debt would be on less favourable terms than the Council offers, and therefore the success of the company may be affected. The Council would retain control over governance of the company, but not over its borrowed facilities.
 - c. Identification of a joint venture partner. This may bring in external investment to the company, which could be used for a variety of objectives. It would entail the Council potentially losing some control over the governance of the company.
 - d. Partial or complete equity sale (which may involve some aspects of the partner option). This would be similar to a joint venture partner, although there are some technical mechanisms by which the Council could retain full control of governance – though to do so would likely entail secession of the Council's dividend rights to other equity holders, and would depend on market appetite for such an arrangement.
46. At this stage investigation of future options remains in the early stages; however, during the coming months the Council will conduct further work with EY to fully investigate the implications and feasibility of different options to identify a future funding and ownership model which will deliver the Council's priorities while adequately managing its risks. From the Council's perspective, the key aspects to consider in regard to any model will be:
- a. The level of capital receipt/investment in the company that is achievable – officers will look to ensure that realistically achievable receipts are modelled at different points in time and different scenarios are adequately considered.
 - b. The level of debt and measures that can accelerate the reduction of such debt
 - c. The point in time at which an acceptable receipt would likely be achievable – this will follow from point a.
 - d. The desired use of any capital receipt (e.g. further investment in company growth, repayment of Council loans etc).
 - e. The level of control the Council would wish would retain over the direction and development of the company – some models may involve loss of some control, and this would need to be both within the Council's absolute risk appetite, and proportionate to the benefit received.
 - f. Retaining expertise within the company to continue delivering against the business plan in the future, thus mitigating the risk of losing key officers.
47. The strategic review is discussed in further detail in paragraphs 67-70 full business case review report is attached as Confidential Appendix D.

Funding proposal

48. The proposal will require total additional funding in the amount of £49m. An application to HNIP has been accepted, with funding awarded in the amount of £11.859m loan at an interest rate of 0.01%, and £12m grant funding. This is paid to the Council, who would then pass the funding on to the company.
49. The Council submitted an application to HNIP for a funding round in October 2020, requesting £17m grant and £6m low cost loans, to ascertain whether HNIP funding could be obtained, thereby rendering the full expansion a possibility. This application related to funding expiring as of 31st March 2021. The October 2020 funding round represented the first application point at which both the Council and company assessed there to be sufficient comfort that developments on the proposed pipe routes of the size required to render the project viable were very likely to receive planning permission and go ahead.
50. While the Council lobbied for a rapid decision on the application, a final award decision was not received from BEIS until 17th February 2021. This award offer was for facilities of £11.859m loan and £12m grant funding.
51. The full Terms of the offer, including applicable conditions, was not received until the end of February 2021. A condition of the funding was that both the project and £25.141m match funding be approved, and the HNIP funding drawn down by the Council, both before 31st March 2021. This deadline arose due to the available HNIP fund expiring on 31st March 2021.
52. Officers advised BEIS that proper approval of the project would not be possible under this timescale given the governance requirements of the Council's Constitution and the need for the Council to undertake full due diligence, including re-modelling of finances to account for the discrepancy between the application and offer funding split. The Council could therefore not accept the offer unless an extension were granted for appropriate governance.
53. A compromise position was negotiated whereby the conditions relating to project and match funding approval would be granted an extension to 31st July 2021; however, the HNIP funding would still be required to be drawn down by the Council prior to 31st March 2021. Clauses were agreed within the Terms executed for draw down which allow the Council to repay the funding in full before 31st July 2021, should approval not be granted. This would carry some administrative costs, assessed to be minimal.
54. The drawdown of loans was approved by the Leader of the Council under rule 16 urgency process, due to the challenging timeline required by BEIS (KD 5307/U232).

HNIP Grant

55. The £12m grant funding would be invested in the company via equity purchase. This is in line with the previous decision regarding Tranche 2 of the base business plan, in which £5m of HNIP grant funding was invested via equity purchase. While the Council could provide this funding as a loan and charge interest, this would reduce the likelihood of company success; the Council's risk exposure in the event of company failure would be significantly higher than the return received from a loan at a sustainable interest rate, therefore equity purchase is assessed to be the best overall option in terms of risk management for the Council.
56. Further, the purchase of equity does not mean the Council cannot achieve a return. Equity sale at a prudent time within the development of the business could achieve a return through sale of equity for a greater sum than purchased for. Consideration of this option will be a central part of the coming Strategic Review.
57. The full grant funding terms are attached as Confidential Appendix Ci.

HNIP Loan

58. The loan amount of £11.859m is lent by HNIP to the Council at a rate of 0.01% over 28 years, with repayments biannually in June and December. Until June 2024, the scheduled repayments are interest only; from June 2024 onwards, repayments consist of interest plus capital. The final repayment occurs in June 2049 (assuming no early repayments). The Council may make repayments earlier than schedule under the offered Terms of the loan.
59. The Council will then on-lend the full amount to Energetik, at a rate compliant with Subsidy Control regulation. This will include a 'premium' amount of interest above the rate paid by the Council, meaning that the Council will receive more in interest payments from Energetik than it pays to HNIP, providing a source of revenue income over the life of the loan. The loan payback period from Energetik will match the HNIP schedule, with the final loan repayments occurring in 2049.
60. The full loan terms executed by the Council and BEIS are attached as Confidential Appendix Cii.

Match Funding

61. A condition of the HNIP Funding is that the Council approve match funding for the project in the amount of at least the total grant plus loan offered by HNIP; in this case, the remaining £25.141m required to fund the project. This £25.141m in essence pays for the 'green line' section of the extension. It is this part of the extension that delivers economic viability, and therefore would not be eligible to be funded by HNIP in any case. Match funding would be required in the years 2022/23 and 2023/24, in accordance with the Capital Programme schedule identified with the Financial Implications.

62. The remaining £25.141m will require the Council to borrow to fund; an allocation is included in the existing capital programme for the match funding element of this project.
63. There are two main sources for the funding, given the energy and decarbonisation aspect of the Energetik project. The available sources are the Mayor's Energy Efficiency Fund (MEEF) and Public Works Loans Board (PWLB).
64. MEEF offers funding at rates generally below PWLB, although the exact rate to be charged would not be known until an offer were made. There is a cap on MEEF loans of £20m per project, meaning that the option would not be available for the entire amount required.
65. For the remaining £5.141m – or more in the event MEEF did not award the project the full £20m possible – the Council would consider PWLB borrowing.
66. It should be noted that PWLB borrowing has recently been subject to changes in eligibility criteria; this has included the barring of loans to local authorities for commercial purposes. The Council has received opinion from its Treasury advisers indicating they do not believe this would apply to Energetik loans, given the projected delivery of decarbonisation benefits.

Strategic Review

67. The heat network operated by Energetik was commenced with a vision that it would grow over time to serve more of the borough and reduce the environmental impact of Enfield in general through carbon reduction and air quality improvements. This is reflected in the existing approved business plan which included assumption that the company would explore and investigate expansion opportunities; although no budget was allocated in respect of future expansions.
68. The experiences of other local authorities have underlined the need to ensure a clear strategic approach to investment in subsidiary companies, particularly companies operating in markets requiring high levels of capital investment such as Energetik does. While the Council has played a crucial role on forming the company and providing the requisite funding to set up the heat network, it is important for the Council financially to avoid a continuous cycle of investment over return.
69. To this end, the Council has developed a scope for a strategic review to be carried out, with the purpose of providing a clear forward path to removing the reliance of the company on the Council to fund growth through development of external funding options and/or partners. The review will also consider how best to achieve a return from the company, and when the best moment to realise value may be, within the context of capital receipts needed for the capital programme, and clear strategies to exit in the event of risk occurrence. Options to be considered would include external refinancing and full or part equity sale (modelled at different time points over the coming years) and could include other financing models such as leaseback or

concession. Alongside financial details, the review will also consider the amount of control the Council wishes to exert over the company's direction.

70. Council is asked within the above recommendations to endorse the strategic review and the development of a new strategic direction for the Council's involvement in the company taking into account both financial and governance aspects. The review will be complete by Autumn 2021, and the outcome of the review will be brought forward to Cabinet for consideration December 2021.

Safeguarding Implications

71. There are no safeguarding implications.

Public Health Implications

72. The expansion would result in a significant reduction in nitrous oxide emissions compared to supplying developments with traditional energy, totalling approximately 32,000kg for the presently assumed connections over 35 years, but this could be more than 150,000kg if the full potential of the network's capacity is delivered by connecting existing dwellings and businesses. At high concentrations Nitrous Oxides have an impact on respiratory conditions causing inflammation of the airways (i.e. asthma). Long term exposure can lead to decreased lung function, increased risk of respiratory conditions and increased response to allergens. Reducing these emissions improves local air quality by avoiding the need for more gas boilers and contributes to better health for residents. Given the impact that poor air quality has on respiratory health which has been well documented in recent media, and that the current Coronavirus is known to attacks the lungs, creating better local air quality should be seen as essential to improving the health of local residents.

Equalities Impact of the Proposal

73. An Equalities assessment identified one potential effect under disabilities; indirectly, customers with any disability (either physical or mental) could be at greater risk of falling below their credit threshold into debt and losing heating supply.
74. This is already an existing risk for the company's current connections, and Energetik maintains a register of vulnerable customers. There are separate debt protocols for liaising with these customers, including restrictions on withdrawing supply.

Environmental and Climate Change Considerations

75. The proposed expansion to Energetik's network, based on known and identified connections is projected to provide the following environmental benefits over the next 35 years (5 years into Energetik's overall 40 year plan):

- a. 45% increase in Carbon emission savings (equivalent to approximately 236,000 trees planted)
- b. 59% increase in Nitrous Oxide emissions saved (equivalent to 24,000 cars removed from the road)

Should the intended full capacity potential of this expansion be realised by connecting existing dwellings and businesses projected to provide the following environmental benefits over the next 35 years (5 years into Energetik's overall 40 year plan):

- c. 270% increase in Carbon emission savings (equivalent to approximately 1.4 million trees planted)
- d. 360% increase in Nitrous Oxide emissions saved (equivalent to 144,000 cars removed from the road)

76. These savings are in addition to the delivery of the existing business plan, and when based on just the known and identified connections this leads to a total reduction of 379,270 tonnes carbon emissions and 82,618kg nitrous oxide emissions compared to traditional energy provision. The baseline figures of the current approved business case are 261,169 tonnes of carbon dioxide and 52,000kg nitrous oxide.

Note that these improvements do not take into consideration future connections which would further improve the carbon and nitrous oxide savings generated by Energetik.

77. For comparison, the Council's 2020 Climate Action Plan calculates direct emissions from the Council's operations as 21,907 tonnes per year; therefore, the current business case equates to almost 12 years of carbon neutral Council operations, with the expansion considered in this report adding a further 5.5 approximate years equivalent, with the potential for this to be higher if further developments can subsequently connect to the network.

Risks that may arise if the proposed decision and related work is not taken

78. Energetik's current business plan relies substantially on development at Meridian Water, and projected development at Joyce & Snells. The business plan acknowledged this by requiring the company to investigate opportunities to expand. Approval of the proposed expansions within this report helps to mitigate the dependency of the company on these key developments, thereby decreasing the risk of company failure, and therefore the Council's risk of financial loss. This should be considered, however, within the context of paragraph 70.
79. The opportunity to expand may not arise again in the near future. The presence of sufficient very likely development at Edmonton Green to render the expansion economically viable is unusual, and if the opportunity is not funded at this time, it may not be possible to do so in the future, and may

limit the capacity of Energetik to provide social benefits for the borough and financial benefits for the Council.

80. The company and Council may suffer reputational damage in the event the expansion is not approved. The company has undertaken extensive negotiations with developers at key developments that would connect to the network, and their development planning applications have been submitted on the basis of such connections. For the company to withdraw from those developments would significantly damage the company and by extension the Council's reputation within the industry, making it harder to attract interested developers in future. In addition to reputational damage with developers, this would also include damage with the GLA as the company and council have developed very positive relationships with senior officers who are supportive of the company's goals to connect existing homes and to see the company grow.

Risks that may arise if the proposed decision is taken and actions that will be taken to manage these risks

81. The extra funding required to develop the expansion will increase the total borrowing and total risk exposure of the Council to £77m, as opposed to the existing exposure of £45m, thereby significantly increasing the impact of company failure in terms of potential financial loss to the Council. This is mitigated in part by the expansion decreasing the likelihood of company failure (see paragraph 70), and also by the strategic review of the Council's future involvement. This review will look to identify options through which the Council can realise value through its equity ownership of the company and will seek to determine the Council's exit strategy in the event that returns are not achieved.
82. Connection numbers represent a key risk for Energetik and the Council as sole shareholder, with both downside and upside elements. The business case has assumed 4750 connections, and EY have undertaken work to model both lower and higher numbers of connections. In the event of 50% projected connections achieved, the decrease resulted in a negative net present value and an IRR of 0.22%. However, the scheme would still be profitable over the life of the business case. While this scenario would clearly be undesirable due to the poor rate of return, it does offer assurance that the likelihood of non-profitability over the business plan is low. Additionally, upside modelling of 8,250 and 9,775 connections (based on pipeline developments that were not included in the 4,750 due to insufficient certainty of progression) identified significant potential upside, with IRR of 12-16% and strong positive NPV of £13m-£19.7m. A detailed review of the pipeline has been undertaken, building on the Council's evidence base for land planning. This indicates that the business case is reasonable, that substitutions are easily available and the project and planned for increase housing supply in Enfield supports the upside modelling scenarios. Confidential Appendix F provides detail on the review of connections. Therefore, overall there is considered low risk of complete failure and considerable potential for overperformance against the business case assumptions, although it should be noted that while the risk of failure may be low, there is downside risk to

the returns achieved by the Council. To mitigate this risk the Interdependency Board will continue to monitor connections and Energetik will be required to submit quarterly monitoring on the connection pipeline to inform the funding profile. In addition, the overall connections achieved are monitored against business plan projections within quarterly performance reports submitted to the Shareholder function to identify any shortfall against the planned connections assumed by the financial modelling.

83. Further, connection numbers forecast do not include Energetik's retrofit aspirations which could further increase customer numbers. Existing homes make up the majority of housing, and Energetik is currently undertaking two pilot projects, funded separately by Enfield as well as the GLA, to undertake pilot schemes to connect existing housing stock to Energetik's low-carbon heat network. If a saleable model can be determined out of the pilot scheme findings, this would potentially unlock thousands more homes along the heat network routes which could be connected.
84. There is also a risk that developments do not commence at the envisioned time to connect to the network, thus delaying connection fee and charge income. This is a risk to the company, although delays in development will also delay some expenditure by the company; the primary risk for the company is the number of connections and therefore connection fee income achieved. However, delays in connections could affect the returns achieved by the Council, as profits would likely be delayed to future years in the business plan, beyond what is currently envisioned. To mitigate this risk the Interdependency Board will continue to monitor connections and Energetik will be required to submit quarterly monitoring on the connection pipeline to inform the funding profile.
85. Both of the above risks could be catalysed by the economic effect of Covid-19 on development. Current demand for new homes remains strong, the planning of key developments for the expansion continues to progress well, and government support for new homes remains strong, However the long-term implications are to an extent unclear and, The pipeline of future development will need to be monitored for any implications for Energetik and this will be monitored through the existing Interdependency Board and the review of the business plan.
86. There is a risk that the company will continue to require capital to grow in future years, creating a cycle whereby the Council is required to continue investing ahead of achieving returns, increasing the Council's financial risk and/or diluting returns achieved. This is highlighted by the experiences of other Councils detailed within Public Interest Reports. This is mitigated by regular quarterly performance monitoring and annual reporting to Cabinet, monitoring the delivery of both financial and social returns; and by the Strategic Review, which will determine a forward strategy which manages the Council's financial risk, and makes use of external investment opportunities to fund potential future growth of the network.
87. There is a general risk in regard to Subsidy Control, that the Council's investment may not comply; this is due to the Subsidy Control framework lacking clarity at the time of reporting. Due to the late agreement of the Brexit treaty with the European Union, the Subsidy Control principles (which

replace State Aid directives) were under consultation until 31st March 2021, and the final principles were yet to be published at the time of reporting.

88. The risk has been considered that PWLB borrowing could be rejected in the event that the project is viewed as a commercial project, no longer eligible for borrowing by local authorities from PWLB. This risk has been deemed unlikely - the only category that PWLB will not lend to is “investment assets bought primarily for yield” – this Energetik investment is does not fall into this category of spend, and the Council has received advice from its Treasury advisers that confirms this. The PWLB guidance sets out that the Section 151 officer or equivalent of the authority should use their professional judgment to assess the main objective of the investment and consider which category is the best fit. Should PWLB no longer be a financing option at some time in the future, officers would work with the company to identify private financing possibilities, though these are likely to carry much larger risk than PWLB or other public borrowing sources. Further, there is a risk that PWLB interest rates could increase, this increasing the cost of the Council’s borrowing. Officers are seeking to minimise the amount of PWLB borrowing required, and focus in fixed rate loans such as HNIP and MEEF which are generally cheaper than PWLB. In addition, Energetik pays an interest rate above that paid by the Council; this creates a premium return for the Council, but also acts as a guard against the Council’s borrowing rate increasing. Further, the Council can re-negotiate loan agreements with Energetik should the need arise. There is of course also the upside risk that PWLB rates may decrease, although this is unlikely given the historically low base rate of interest at the current time.
89. There is a risk that with additional borrowing, that the Council will breach the self-imposed borrowing cap of £2bn, should adequate capital return not be achieved from the company within the ten-year period of the capital programme. This will be a central purpose of the strategic review, to identify adequate funding received in good time to the Council, to ensure the borrowing cap will remain intact.
90. There is a risk that the HNIP grant and loan amounts are not fully spent in the agreed timescales; the Terms of HNIP funding to the Council require that the monies be substantially spent or committed to spend by 31st March 2022. The company has developed a project schedule in accordance with these requirements in which the bulk of HNIP funding would be used in the first instance, to purchase and store materials, meaning £17m (primarily grant funding) would be scheduled to be spent by 31st March 2022, with the remaining funding committed in contracts for build. The Council also intends to assist in mitigating the risk by reflecting this requirement in on-lending agreements with the company.
91. There is a price risk regarding construction materials , arising from the combined impact of Covid & Brexit . These will be mitigated as far as possible by purchasing the bulk of materials in advance where possible .

Financial Implications

Budget impact

92. Although the support to Energetik will not ultimately materialise as capital expenditure in the Council's accounts, it has been budgeted as capital to correctly reflect its financing and treated as such in the report. Addition to capital programme of £17m requested, £12m of which funded from grant and remaining £5m from borrowing as set out in table below:

£m	Borrowing	Grant	Total
Approved	32	-	32
Addition requested	5	12	17
Revised	37	12	49

93. The forecast budget profiling based on Energetik's forecasts is detailed below. This will be reviewed and updated as part of the quarterly monitoring cycle.

	£'m	£'m	£'m	£'m
	2021/2	2022/23	2023/24	Total
Loan	5	10	22	37
Grant	12			12
Total	17	10	22	49

94. Appendix F provides a summary of when it is anticipated connection agreements will be signed and the number of connections . Based on this forecast, there should be certainty regarding 450 connections, prior to the 1st loan drawdown of £5m in 2021/22.A further 600 of the 4,750 base case connections are scheduled to have heat agreements signed during 2022/23. This excludes 350 additional potential connections in 2022/23 , that do not form part of the 4,750 base case. Further details are contained in the Confidential appendix F

95. Interest payable (estimated) by Council (at 3 ½%) on additional borrowing is set out in below. Energetik repays this interest to the Council plus a premium. This means that there is no impact on the Council's revenue budget of this borrowing which is on-lent to Energetik. As set out in this model, it is anticipated that this loan will be repaid more quickly than the original business case as a result of this investment.

96. Interest payable by Council on the additional borrowing estimated as:

- £175k per annum on £5m additional borrowing
- £1.295m per annum on the total £37m additional borrowing required to support this proposal which includes the £175k above
- interest costs recovered plus premium from Energetik, therefore no revenue cost to Council revenue budget for borrowing

97. No Minimum Revenue Provision(MRP) implications as asset capitalised in subsidiary company and financed through capital resources by Council.

98. As the 100% shareholder the Council may receive dividend income from Energetik although this will be subject to the company retaining sufficient reserves to ensure its working capital and investment requirements can be financed without recourse to further borrowing.

Borrowing

99. Proposed expansion requires further investment of £49m by the Council funded, £37m borrowing and £12m grant.

100. Additional borrowing of £37m will increase total amount borrowed on behalf of Energetik from £40m to £77m and the total amount claimed as grant (and to be invested as an equity stake) from £5m to £17m as shown in table below:

Provider (£m)	Already approved*	Expansion (G+Y)	Revised
PWLB	3.2	25.1	28.4
European Inv Bank	6.0		6.0
LEEF	6.0		6.0
MEEF	15.0		15.0
HNIP	9.8	11.9	21.6
Council borrowing	40.0	37.0	77.0
HNIP grant	5.0	12.0	17.0
Council funded total	45.0	49.0	94.0

101. Additional borrowing of £37m will consume debt headroom bringing Council closer to the £2bn self-imposed ceiling, thereby reducing capacity for other capital schemes. Energetik can increase dividends to accelerate redemption of the Council's loans providing adequate reserves are in place for working capital and investment requirements.

102. Council will on lend the additional borrowing together with grant to Energetik on a phased basis charging an interest premium which will be recognised as net interest income in the Council's General Fund.

103. As with Tranches 1 and 2, on-lending and interest premium, will be dealt with in a manner which complies with the Government's State Aid rules

104. Appendix E sets out the history of funding approvals with reference to the original report to Cabinet together with a comparison against the results of the EY Strategic review.

Viability

105. As stated in para 40 the Council is required to conduct a review of the proposal to satisfy Governance requirements and engaged Ernst & Young (EY) for this purpose.

106. The proposal assumes the additional investment will generate 4,750 additional connections although this number has yet to be confirmed.

107. As the number of connections has an impact on the viability of the expansion and the whole scheme it is considered prudent for any approval for additional funding is made on the following provisos:

- Receipt of verified connectivity plan clearly identifying sites, connection dates and any assumptions or risks made
- Revision of the Business Plan in conjunction with the Council Finance Team ensuring models are constructed in line with best practice and can be easily stress tested as set out in EY Strategic Review
- Evidence of compliance with grant conditions is provided to ensure compliance should a return be required to the grant provider

108. EY conducted a review of the financial modelling (appendix D) the results of which are summarised below:

- Proposal produces a low NPV and IRR due to the high initial capital outlay and the use of a conservative assumption of 4,750 connections
- Significant benefits are possible in the event of additional connections being secured which will translate into positive IRR and NPV which surpass targets
- Table below shows the proposal (assuming base case of additional 4,750 connections) produces below target IRR and NPV which pulls down the performance of the whole scheme from 13.99% to 10.03% and £29.9m to £20.9m respectively.
- Stress testing shows significant additional benefits where additional connectivity reaches 8,250; alternatively, lower connectivity of 2,375 would further diminish overall viability and expose the Council to an increased risk.

Development & Investment Financial Framework (DIFF) metrics	Council		Energetik			Stress test - no. connections**	
	Actual	Target*	Base	Proposal	Combined	Lower connections	Higher connections
IRR (conventional)	3.71%	8.00%	13.99%	5.05%	10.03%	0.22%	12.66%
NPV (£m)	-3.9	0.0	29.9	-1.1	20.9	-11.2	13.3
Additional connections	12,857	N/A	12,857	4,750	17,607	2,375	8,250

Source : EY Strategic review, appx D

*considered a minimum reasonable expectation

Assumptions

109. The EY Review, which was based on information as at 31st March 2021, does not constitute a full Due Diligence review of the model however a degree of reliance has been placed in constructing the financial implications.
110. Estimates of borrowing used in the EY review are not entirely consistent with those approved by Council for Tranches 1 and 2 or for Tranche 3. This is due to the way in which EY carried out the review which required the amalgamation of several financial models and revision of assumptions to eliminate inconsistencies.
111. These have been referenced by EY in appendix D and will require a review by the Council in its capacity as 100% shareholder and exclusive financier.
112. The inconsistencies between the EY review and Council approved budgets are set out below with further details provided in appendix E :
- EY's estimate of borrowing by the Council is £78.8m as opposed to the £77m assumed in this report, as a result of the methodology employed in updating the financial models supplied by Energetik. The difference is due to the fact that EY's assessment does not factor in income receivable from connection charges which reduces the borrowing requirement.
 - HNIP support totals £24m (£12m grant + £12m loan) and requires at least this sum is provided by the Council in the form of match funding; EY have estimated £22m again as a result of the methodology employed

Appendix E also shows changes in key metrics reported by Energetik for tranches 1 and 2 as reported to Cabinet on the 18th Jan 2017, 11th September 2019 and the latest project appraisal. Differences between versions are due to changes in timings and estimates of project costs inflation. Differences against EY reported IRR and NPV are due to inconsistencies cited above which will require resolution as set out in the recommendations above .

113. Taken in context these inconsistencies are not material enough to impact on the EY results or stress testing.

Taxation

114. Loans to Energetik are outside the scope of VAT and Stamp Duty Land Tax (SDLT) and not directly subject to income or corporation tax.
115. Loan interest receivable by the Council is subject to income tax which Energetik are responsible for deducting at source
116. Dividends are paid out of profits already taxed through corporation tax therefore not taxable in the hands of the Council

Legal Implications

114. The Council has the 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 (the 'general power of competence'). 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 legal justifications previously reported to Cabinet (June 2015 and September 2019) for establishing and implementing the business.
115. In taking the decision to approve the next stage of investment, the Council must take into account the risk factors described in this report, so that the Council takes its decisions with proper regard to its fiduciary duty to act prudently with public monies. In addition, the Council as shareholder must comply with the requirements of the Companies Act 2006 with regard to the equity subscription.
116. Providing the additional investment requires an additional loan agreement and a share subscription agreement to be put in place for the Council to deploy the necessary funding into the company. Such agreements will need to include provisions to reflect the conditions attached to the original funding sources and to help ensure compliance with Subsidy Control rules. They must also incorporate the condition precedent referred to at [paragraph 6] above. These documents remain to be developed and must be in a form approved by Legal Services on behalf of the Director of Law and Governance.
117. The Council, as lender, is exposed to the potential failure of Energetik, as borrower, and Energetik's inability to repay the money it owes to the Council. 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.
118. The above will be mitigated to a large degree by the terms of the on-lending agreements, the oversight the Council has over the running of the business as sole shareholder, and the governance measures implemented through the shareholder reserved matters.
119. The Council has obtained advice from financial and legal advisers to ensure that the proposed arrangements are lawful under the new Subsidy Control regime (which replaced the EU state aid rules in the UK as from 1 January 2021).
120. As the project continues, the Subsidy Control position will be monitored on an ongoing basis to ensure continued compliance.

Workforce Implications

121. There are no workforce implications.

Property Implications

122. This report is primarily about funding and finance matters, as such there are no direct property implications from its contents. However, the purpose of the funding is for works which will involve the installation of pipelines and infrastructure on/under/within Council property and land assets. As and when detailed proposals come forward for these works, property implications will arise as part of the implementation, and these should be addressed then. The Energetik team is encouraged to engage with the Property team early in the process in order to maximise synchronicity between the intended outcomes and the key enabler of property.

Other Implications

123. There are no other implications.

Options Considered

124. The expansion could be rejected. This would likely result in substantial reputational damage to Energetik and the Council, as Energetik would have to withdraw from potential developments that it has been negotiating with. This would negatively affect the opportunities for any growth in the future. It is also unlikely in the future that sufficient development would be available to render an expansion of this magnitude possible, meaning that any future expansions would likely be small and of lesser benefit.

Conclusions

125. The Council should approve the proposed expansion but should ensure to manage its risk effectively through a strategic review of the company's future, including both the Council's role in funding future growth, and how the Council intends to realise a financial return from the company.

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Date of report

Appendices

Appendix A – Map of planned expansions
Appendix B – Business Plan addendum
Appendix Ci – HNIP grant Terms and Conditions
Appendix Cii – HNIP loan Terms and Conditions
Appendix D – EY business case review report
Appendix E – Funding Details and History
Appendix F – Planning Pipeline and Commentary

Background Papers

The following documents have been relied on in the preparation of this report:

None