

Title of Report	Decarbonisation of Property Assets (Public Sector Decarbonisation Scheme Phase 3c Grant)		
Key Decision No	F S349		
For Consideration By	Cabinet		
Meeting Date	22 April 2024		
Cabinet Member	Cllr Mete Coban, Cabinet Member for Climate Change, Environment and Transport		
Classification	Open		
Ward(s) Affected	Multiple		
Key Decision & Reason	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%; text-align: center; vertical-align: middle;">Yes</td> <td>Result in the Council incurring expenditure or savings which are significant having regard to the Council's budget for the service / function</td> </tr> </table>	Yes	Result in the Council incurring expenditure or savings which are significant having regard to the Council's budget for the service / function
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Implementation Date if Not Called In	29 April 2024		
Group Director	Jackie Moylan, Interim Group Director, Finance.		

Reasons for Special Urgency

Pursuant to [Regulation 11](#) of The Local Authority (Executive Authority) (Meeting and Access to Information) (England) Regulations 2012 this report is submitted under Special Urgency in accordance with the Council's Special Urgency Procedure Rules set out at [Part 6C Paragraph 11.8 to 11.10](#) of the Council's Constitution.

The Public Sector Decarbonisation Scheme Phase 3 Grant is administered by Salix Finance Ltd (Salix) on behalf of the Department for Energy Security and Net Zero (DESNZ). In awarding the grants, Salix have set a deadline for acceptance of 29 April 2024, beyond which the grant offer is not guaranteed to be maintained. Therefore it would not be possible to delay a proposed decision to accept the grant award until the next meeting of Cabinet on 20 May 2024 and is therefore considered urgent.

1. Cabinet Member's introduction

- 1.1. As signatories to the UK100 Agreement, and in line with the commitments made nationally and internationally at the Paris Summit in 2015, Hackney Council committed to ensuring the local authority runs on 100% clean energy by 2050. In June 2019, the Council declared a Climate Emergency with the ambitious target of becoming a net-zero carbon Borough by 2040. In May 2023, Hackney Council confirmed its position as one of the greenest in the country by bringing its net-zero commitment for its non-tenanted buildings and transport fleet forward to 2030.
- 1.2. Progress towards fulfilling these ambitions will be achieved through a combination of measures, including a structured and regularly monitored approach to energy efficiency across all the Council's directorates and functions, a strategic approach to corporate generation and procurement of energy, the development of clean transport systems and fleet solutions, and the promotion of a zero carbon built environment. All of these are underpinned by specific manifesto commitments both in 2018 and 2022.
- 1.3. An integral part of meeting this obligation is the delivery of projects that will decarbonise heat for buildings operated by the Council, both as direct ways to reduce carbon emissions, but also to set an example for others to follow.
- 1.4. This background forms the basis to bring forward this proposal to implement heat pumps into multiple Corporate, Leisure and School buildings to save 1,802t CO₂e every year. The Council has secured up to £12.9m towards the cost of these projects, and this report recommends the acceptance of this grant award as well as increasing the capital programme by £10.2m to provide match funding. This significant addition largely relates to the bringing forward of heating replacement works required on school sites enabling us to part fund this from this grant opportunity. The awarding body are Salix Finance Ltd who administer decarbonisation grants on behalf of the Department for Energy Security and Net Zero (DESNZ).

2. Interim Group Director's introduction

- 2.1. This report seeks approval to accept Public Sector Decarbonisation Scheme (PSDS) grants of up to £12.9m and to invest up to £15.7m capital from the Council Capital programme to decarbonise heat across 17 buildings. The total cost of the combined projects is estimated at £28.6m over 2 years.
- 2.2. Of the £15.7m proposed from the Council Capital Programme, £5.5m will be taken from the existing capital scheme, while £10.2m will require a new additional commitment. This is largely in relation to the schools project and is subject to further due diligence in respect of the suitability of the schools proposed in the bid. There is a possibility that this could reduce, with commensurate reduction in grant, and discussions are ongoing with the awarding body, Salix, as to flexibilities around the grant award.

- 2.3. In respect of the schools' projects, the investment will be made into the schools with the oldest boiler and pipework. These sites have heating systems that will require replacement in the next few years and therefore this investment represents brought forward capital in order to both maximise available grants but also to accelerate decarbonisation.
- 2.4. The decarbonisation projects will be delivered through a delivery partner already appointed through the ReFit framework who are working to deliver the PSDS3b project on time and within budget. Should the Council proceed to accept the grant proposal detailed in this report, the details of the appointment of the delivery partner for the PSDS3c work will be presented to the Cabinet Procurement and Insourcing Committee for approval later this year.

3. **Recommendations**

Cabinet is recommended to:

- 3.1. **Authorise the Council to accept Public Sector Decarbonisation Scheme (PSDS3c) grants of up to £12.9m from Department for Energy Security and Net Zero (DESNZ) and sign the relevant and ancillary documentation for the acceptance of the grant sums.**
- 3.2. **Approve undertaking Capital projects of £28.6m to decarbonise heating systems in 17 buildings, including 10 schools, to be implemented over over 2 years.**
- 3.3. **Approve the investment of £15.7m from the Capital Programme in undertaking the projects in paragraph 2.2, of which £5.5m is repurposed from other works and £10.2m is additional Capital to be added to the Capital Programme.**

4. **Reason(s) for decision**

- 4.1. The Council has declared a [Climate Emergency](#) and is committed to achieving net-zero carbon emissions in Council operations by 2030. An important part of achieving this commitment will be to decarbonise heat in Council operated buildings.
- 4.2. The [Climate Action Plan \(CAP\)](#) adopted in 2023 included specific action on decarbonisation of heat which is partially fulfilled by the current PSDS3b project that will save 1,560t CO2e across 9 buildings including 3 leisure centres. Implementing a further PSDS project will represent a further step to implementing the CAP.
- 4.3. The proposed PSDS3c project was split into two parts to target different funding availability within the 3c round of the PSDS grant offer. Three sectors were targeted with soft funding caps within the scheme, NHS,

Schools and Other. The Council bid for £8.7m within the Corporate Sector and £4.25m within the Schools sector.

- 4.4. CO2 heat pumps have been deployed effectively around the world for 20 years in applications that require higher temperature than other heat pumps. Successive improvements in performance has meant that they are now as efficient as other systems, whilst generating higher temperatures with chilled water available from the same cycle. Using natural refrigerants also has the advantage of displacing CFCs which are recognised as more damaging to climate than CO2.
- 4.5. Within the Corporate bid are several key buildings representing major consumers of gas where key equipment is also due for replacement:
 - 4.5.1. Hackney Service Centre (HSC) and Town Hall: The current chiller has reached end of life and currently requires significant maintenance each year. It is proposed to replace the chiller with an Air Source Heat Pump (ASHP) using CO2 as a refrigerant capable of producing high temperature heating water in the same cycle as chilled water for cooling. The ASHP will therefore replace both the chiller and the boilers. The installation will be sized to also support the Town Hall, connected using pipes under the road between the buildings, decarbonising heat in both.
 - 4.5.2. Kings Hall Leisure Centre: The refurbishment of Kings Hall provides the opportunity to decarbonise the heat and improve the system which currently does not heat the building adequately. An ASHP will be used to replace all boilers using CO2 as refrigerant. As in the HSC, the system will be capable of providing heat and cooling from the same cycle.
 - 4.5.3. Median Road Resource Centre: The end of life boilers will be replaced by a high temperature CO2 heat pump operating at 70°C, directly replacing the performance of the boilers.
 - 4.5.4. Clissold House: A hybrid solution is planned using the best of the existing boilers, which are at end of life. An ASHP and Water Source Heat Pump (WSHP) cascade will be deployed to displace approximately 90% gas used on site. Space restrictions make it difficult to achieve 100% displacement. However, during detailed design performance of heat pumps will be reviewed as heat pump performance improves each year, and if 100% displacement is possible it will be deployed.
 - 4.5.5. Tomlinson Centre/Queensbridge School: Both of these sites occupy the same footprint and have complementary heating profiles, whilst the Tomlinson Centre also has a cooling requirement. Tomlinson boilers require replacement and Queensbridge are near to end of life. A CO2 ASHP will be deployed as primary plant generating heating and cooling with a WSHP used as step up plant to achieve

80°C to replicate the existing systems and facilitate the use of the existing pipework.

- 4.6. Within the Schools bid, 10 schools with obsolete boilers aged up to 30 years will be replaced by ASHP displacing 100% of the gas. In 8 schools, the pipework is more than 50 years old and requires replacement - new pipework and radiators will be matched with a CO2 ASHP operating at 70°C. In the remaining 2 schools, a cascade of ASHP and WSHP will be deployed to match the current boiler performance at 80°C.
- 4.7. Systems have been designed to achieve cost performance similar to or less than the existing boilers. Use of thermal storage will also be deployed to protect against the anticipated move of energy markets to adopt more direct time of day pricing, allowing separate management of heat demand and heat supply, thus allowing heat pumps to be turned off or slowed down at peak times when energy prices are expected to also peak. This will also facilitate targeting grid flexibility payments as a future revenue stream to offset energy costs. At current prices the operating cost impact will be neutral but as gas prices rise relative to electricity, savings compared with the business as usual position will be achieved.
- 4.8. All systems will be designed and pre-plumbed with heat network connections to facilitate using any future heat network as plant replacement.
- 4.9. Displacing 9.9GWh gas and replacing it with consumption of 2.25GWh electricity will save 1,802t CO2e each year. In terms of energy costs, this is expected to be cost neutral in the short term but that it will save money over time as gas prices rise relative to electricity costs.
- 4.10. The Council has been awarded £12.9m grants from PDSD3c to part fund this project. In assessing the project, Salix have reviewed the proposed solutions for technical and economic viability using both their own Technical Team and their supporting consultants Atkins Realis.

5. **Details of alternative options considered and rejected**

Alternative options considered included:

- 5.1. Do nothing. This is not an option as most of the buildings targeted have end of life heating/cooling systems and therefore will require investment in plant replacement. This option would also result in zero carbon savings.
- 5.2. Replace with boilers and chillers to replicate current practice. This option will cost a similar amount as the proposed low carbon solution but will result in loss of grant and loss of carbon savings.
- 5.3. Replace heating with low temperature heat pumps with upgraded fabric. The costs of this option would be very high as fabric measures are expensive while the carbon displaced would be similar. Some sites could not have

fabric improved due to listing or construction, whilst others would simply incur high costs. Electricity usage would be lowered through this option but paybacks would be excessive and could not be justified economically. This option would be the Grant providers preferred option, but by accepting the proposed solution, Salix are endorsing this economic judgement.

6. **Background**

Policy Context

- 6.1. The Council is a part of the UK100 Agreement, and in line with the commitments made nationally and internationally at the Paris Summit in 2015, is committed to ensuring the Local Authority runs on 100% clean energy by 2050, becoming a net-zero carbon Borough by 2040 and reaching net-zero for buildings and transport fleet by 2030.
- 6.2. The Government is keen to promote the use of heat pumps to replace Fossil fuel heating systems and has created the Public Sector Decarbonisation Scheme to both fund emissions reduction in public buildings and to promote the heat pump industry.
- 6.3. The Government, National Grid, and Distribution Network Operators (UKPN) are focussed on grid impacts of electrification of heat and transport and are creating mechanisms such as Market Wide Half Hourly Settlement (MWHs), time of day pricing and flexibility products to minimise costs. PSDS projects have been designed to position Council assets to protect from these changes and to exploit revenue opportunities as they arise.

Equality impact assessment

- 6.4. Hackney Council and its decision-makers must comply with the Public Sector Equality Duty set out in Section 149 of the Equality Act 2010, which requires us to have due regard to the need to:
 - 6.4.1. Eliminate unlawful discrimination, harassment and victimisation and other conduct prohibited by the Act;
 - 6.4.2. Advance equality of opportunity between people who share a protected characteristic and those who do not; and,
 - 6.4.3. Foster good relations between people who share a protected characteristic and those who do not.
- 6.5. Having due regard to the need to advance equality of opportunity involves considering the need to:
 - 6.5.1. Remove or minimise disadvantages suffered by people due to their protected characteristics;
 - 6.5.2. Meet the needs of people with protected characteristics; and

- 6.5.3. Encourage people with protected characteristics to participate in public life or in other activities where their participation is low.
- 6.6. The implementation of the recommendations from the review should therefore pay due regard to the equality considerations to ensure that the Council is compliant with its statutory obligations under the Equality Act 2010.
- 6.7. The Council will continue to consider the impact on all protected characteristics during the ongoing development and implementation of the PSDS projects. Where appropriate, it will undertake additional engagement with the community or more detailed equality analysis where negative impacts on specific protected characteristics have been identified but as this work will largely be replacement of existing heating and cooling systems, negative impacts of this type are unlikely.

Sustainability and climate change

- 6.8. These projects will support implementation of the Council's Climate Action Plan and will directly save 1,802t CO₂e per annum. As part of the work to ensure a just transition to net zero, we will use the procurement stage to further assess, quantify and capture the additional social and economic benefits that would be delivered as part of the implementation of this decarbonisation project

Consultations

- 6.9. Whilst the grant application has been led by the Energy and Carbon Management team, they have worked extensively with the Corporate and Education property teams on this proposal both to select sites and to balance decarbonisation against the Asset Management plans.

Risk assessment

- 6.10. The major risks to this proposal relate to finance, timescale, planning, equipment and labour availability, grid upgrade, and heating performance. All of these are being managed as part of the the project delivery workstream chaired by Assistant Director, Procurement and Energy Services
- 6.11. Finance: The project has been costed by producing an outline design and receiving quotes to verify costs. The ReFit programme includes a guarantee of cost from the contractor against an Investment Grade proposal and contingency has been provided within the costs to guard against inflation and minor design changes. Further, the final designs will be tested against the market by gathering multiple quotes from the Asset Plus supply chain. However, major design changes, grid upgrades etc represent a risk to the budget and therefore a further 3% contingency has been retained.
- 6.12. Timescale: This is a large project and requires careful management. For Kings Hall, coordination with the refurbishment project will be required with the heat pumps agreed to be installed early in the project both to fit with

logistics and grant availability. For schools, the project will need to be planned to minimise disruption. To balance this risk, the grant was sought and is awarded across a 2 year timeframe to be completed by March 2026.

- 6.13. Planning: Most of the sites will fall within Permitted Development or will be classed as maintenance and will therefore fall outside the planning system. Kings Hall planning will be resolved within the overall Kings Hall Planning application and Planning have already been engaged on the ASHP proposal. Following detailed design, the planning position will be confirmed.
- 6.14. Equipment and Labour Availability: Over the last few years, heat pumps have had long lead times but this problem has largely eased. Asset Plus also maintains a substantial supply chain with experience of this type of specialist work, and are able to call on at least four contractors at any one time. These contractors are already working with the Council on the PSDS3b contracts with the continuity of relationship being helpful to manage this risk.
- 6.15. Grid Upgrade: All sites have been checked with UKPN prior to the grant application and provisional sums have been included to account for any required upgrades. Final confirmation of the grid requirements will only be possible once detailed designs are complete but no grid upgrade problems are anticipated.
- 6.16. Heating Performance: The high temperature heat pumps have been designed to replicate the heat output of boilers at an efficiency that facilitates at least a breakeven in heating costs. Nevertheless, many of the schools are Victorian and 1920s solid wall brick buildings where thermal insulation is poor and difficult to upgrade. Further work will be completed to ensure confidence that the performance of the systems will be as expected before the projects are finally committed.

7. **Comments of the Interim Group Director, Finance**

- 7.1. This report requests approval to accept grants from the Public Sector Decarbonisation Scheme (PSDS) totaling up to £12.9m and to allocate £15.7m from the Council Capital Programme towards decarbonising heat across 17 buildings. The combined cost of these projects is estimated at £28.6m over a two-year period.
- 7.2. Of the £15.7m proposed from the Council Capital Programme, £5.5m will be reallocated from existing capital schemes, while up to an additional £10.2m will necessitate a new capital commitment. This additional allocation primarily focuses on advancing heating replacement works required on school sites, contingent upon conducting further due diligence to ensure the suitability of the proposed schools in the bid. Essentially, this initiative accelerates the investment needed in our future pipeline to secure the maximum available grant. It's worth noting that there's potential for this figure to decrease, potentially resulting in a corresponding reduction in grant

funding. Ongoing discussions with the awarding body, Salix, are exploring flexibilities surrounding grant awards

- 7.3. The potential £10.2m capital commitment will necessitate funding through borrowing, which will result in a Minimum Revenue Provision (MRP) charge. MRP represents the statutory minimum amount that a local authority must allocate to its income and expenditure account annually for the repayment of borrowing. On average, the MRP charge to revenue is anticipated to be £0.5m per year, coupled with a potential interest charge of £260k per annum at a 5% interest rate over a 20-year period. The annual interest charge is dependent on the availability of cash balances to 'cash flow' the programme. The £260k per annum estimate is based on the assumption that 100% of the programme is funded from external borrowing. In reality this may not occur, however, there is, of course, an opportunity cost of using internal cash balances in terms of the interest that could be earned from investing these balances.

8. **VAT implications on land and property transactions**

- 8.1. This project relates to replacement heating systems and VAT will be reclaimable in the normal way.

9. **Comments of the Acting Director of Legal, Democratic and Electoral Services**

- 9.1. The three decisions in paragraph 3 of this Report are key decisions under Regulation 8 of the Local Authorities (Executive Arrangements) (Meetings and Access to Information) (England) Regulations 2012 as each is an executive decision, which is likely (a) to result in the relevant local authority incurring expenditure which is, or the making of savings which are, significant having regard to the relevant local authority's budget for the service or function to which the decision relates; or (b) to be significant in terms of its effects on communities living or working in an area comprising two or more wards or electoral divisions in the area of the relevant local authority. Key decisions can be made by Cabinet under Article 13.6 (Part Two) of the Constitution and therefore this Report is being presented to Cabinet for approval.
- 9.2. In order to accept the funding from the Department for Energy Security and Net Zero (DESNZ) the Council will need to enter into a grant agreement with the department which will set out the terms of the grant. It is important that the Council comply with the terms of such grant in order to secure the grant funding and ensure it is not subject to clawback.
- 9.3. It will also be necessary to ensure that any of the grant sums which are applied in the provision of services or works from third parties are compliant with any clauses in the grant conditions regarding the appointment of third

parties, and compliant with both the law regarding procurement and the Council's own internal requirements as set out in Contract Standing Orders.

Appendices

None

Exempt

None

Background documents

None

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