Committee:	Cabinet	**Date:** Monday, 18 November 2024
Title:	Public Sector Decarbonisation Scheme Bid	
Portfolio Holder:	Councillor Neil Reeve, Portfolio Holder for the Environment and Climate Change	
Report Author:	Vicky Reed, Climate Change, Lead Officer vreed@uttlesford.gov.uk Adrian Webb, Strategic Director of Finance, Commercialisation and Corporate Services awebb@uttlesford.gov.uk	**Key decision:** Yes

Summary

1. In April 2024 Cabinet approved the updated Climate Change Action Plan which included an action to decarbonise council buildings. To meet that action officers commissioned energy and architectural consultants, D3 Associates, to produce a comprehensive Heat Decarbonisation Plan (HDP) for the Council buildings at London Road and Little Canfield.

2. As part of this commission, D3 Associates are supporting the Council in preparing a bid for funding to Phase 4 of the Public Sector Decarbonisation Scheme (PSDS) to help secure a grant to deliver heat decarbonisation and energy efficiency measures identified in the HDP for the office building at London Road. The HDP measures will include, secondary glazing, additional insulation, air source heat pump (ASHP) and a small number of solar panels.

3. Phase 4 of the PSDS opened for applications in mid-October 2024 and closes on 25th November. This report seeks Cabinet approval to submit a funding bid application in the sum of £716,980.

4. The application includes a 20% contingency sum. This is important at times of increased volatility such as this market is currently experiencing.

5. The PSDS requires the Council to commit to providing an element of match funding. The Council will need to contribute to the HDP project the greater of
    a. The cost for a like-for-like replacement of the existing London Road fossil fuel boiler which through soft market testing has been estimated at of £90,681; or
    b. 12% of the total project cost which is £86,038
6. The outcome of the bid will not be known until May 2025 and the match funding sum of £90,681 will need to be built into the 2025/26 capital programme.
7. An ASHP will be more expensive to service and maintain than a traditional fossil fuel-based heating system. The additional cost per annum will be

between £3,000 and £4,000 and will need to be built into the budget from 2026/27.

Recommendations

I. To approve the submission of the funding bid to PSDS.

II. To require officers to include the match funding sum of £90,681 into the 2025/26 capital programme.

III. To note the potential additional annual cost of moving to an ASHP as set out in paragraph 7.

Financial Implications

8. The council match funding contribution will be built into the 2025/26 capital programme.

Background Papers

1. The following papers were referred to by the author in the preparation of this report and are available for inspection from the author of the report:

   Phase 4 Public Sector Decarbonisation Scheme Guidance

   The Council Climate Action Strategy and Climate Action Plan.

Impact

9.

Communication/Consultation	The objectives of commissioning the estates HDP, including the appointment of D3 Associates, and our intention to apply to the PSDS in autumn were reported to Scrutiny, Cabinet and full Council in the Climate Change Action Plan update report in April 2024.
Community Safety	n/a
Equalities	n/a
Health and Safety	All supplier contracts relating to the works will include robust health and safety provisions, including:

	▪ Adherence to all relevant building and safety regulations ▪ Regular safety audits and inspections ▪ Comprehensive risk assessments for all areas for areas of London Rd where building works will be carried out ▪ Strict protocols for working where council staff or tenants are in occupation of office space ▪ Specific measures to address potential issues such as asbestos management The works will be overseen by the UDC Facilities Sustainability working group.
Human Rights/Legal Implications	D3 Associates have completed detailed designs for the HDP as set out in PSDS guidance. All relevant building regulations will be followed. Pre-application planning advice has been received ensuring the HDP meets all planning requirements, including for the listed building at London Road.
Sustainability	If the council are successful in their application to the PSDS the heat decarbonisation project will contribute to the UDC carbon reduction goal to be net zero by 2030.
Ward-specific impacts	The council have a responsibility to lead and influence action on climate change across the district. Delivery of a low carbon HDP at London Road will demonstrate to the district that the Council are taking action to reduce carbon emission on their own estate. It will also provide a high-profile case study and learning resource to inspire others.
Workforce/Workplace	Staff and tenants working in London Road may be impacted during the installation of HDP measures. Any disruption will be pro-actively managed through a supporting engagement and communications plan, ahead of any works on site.

Situation

10. As a corporate and strategic priority, the Council have committed to take action on climate change by reducing carbon emissions across our corporate estate, prioritising renewable energy sources and managing our services in a sustainable way.

11. D3 Associates were commissioned to prepare a heat decarbonisation plan for the London Road offices, and Little Canfield workshop and depot. The consultants carried out; an audit of annual energy consumption, costs and associated carbon emissions; and a site survey of existing building fabric (floors, walls, roofs, windows, doors), and the existing heating systems.

12. An analysis of recommended energy saving measures has been prepared for each building, including economic modelling with cost estimates for making improvements to building fabric, with calculated carbon savings. In addition to the estimated capital cost of installing an Air Source Heat Pump system to replace the gas boiler at London Road and opportunities to install solar panels for onsite renewable energy generation at both sites.

13. The Public Sector Decarbonisation Scheme (PSDS) provides grant funding to public sector organisations to install heat decarbonisation and energy efficiency measures in their buildings.

14. To apply to the current round of the PSDS existing building heating systems must be served by a fossil fuel heating plant at the end of its useful life. This is generally 10 years or older. The existing heating system at London Road meets this scheme requirement as it is over 10 years old, the one at Little Canfield does not meet the criteria.

15. Whilst the council cannot apply for decarbonisation work at Little Canfield in this funding round, future rounds may enable a bid. To that end, the decarbonisation plan prepared for the buildings also includes Little Canfield and provides valuable data and recommendations that the Council can take forward to reduce energy demand and increase renewable energy generation on site, supporting a reduction in carbon emissions.

16. D3 Associates completed detailed designs for the proposed HDP at London Road which are a requirement of the PSDS application. They have also undertaken soft market testing to build a fully costed project proposal that will deliver building fabric improvements (insulation and glazing); air source heat pump to replace the gas boiler; and the installation of solar panels.

17. The PSDS is highly competitive, and applications will be prioritised for evaluation and award based on ‘best value for grant carbon cost’. The grant carbon cost of the project is calculated by dividing the grant value requested by the direct carbon saved by the grant funded measures. Applications must have a grant carbon cost of no more than £510 per tonne of direct carbon saved over the lifetime of the measures. The London Rd HDP grant carbon cost is £322.

18. The project must be additional; this means that the project would not take place without the PSDS grant.

19. The PSDS will be looking for high quality projects, evidencing project readiness, including technical design drawings and specifications, alongside project governance. Our application includes modelling and technical design drawings to RIBA stage 4, which is above the minimum requirements expected in the PSDS application.

20. If successful with the PSDS application, this project will show case the Council taking action on climate change, in the same way that they have been encouraging community net zero infrastructure projects supported through the Zero Carbon Communities Grant Scheme.

21. The below table sets out the high-level timeline and key milestones for Phase 4 of the Public Sector Decarbonisation Scheme and project delivery if the bid is successful.

Public Sector Decarbonisation Scheme and Heat Decarbonisation Project London Road **Timeline & Milestones**	**Key Dates**
Approve HDP project costs following soft market testing	▪ 30th October 2024
Complete preparation and sign off of supporting documentation required by PSDS	▪ 18th November 2024
Submit Application to PSDS Scheme	▪ 25th November 2024
Announcement of PSDS Grant Awards	▪ May 2025
Commence project for London Road	▪ June 2025
HDP London Road project Complete	▪ End May 2026

Risk Analysis

22.

Risk	Likelihood	Impact	Mitigating actions
Risk that when Council formally go out to procurement	2	3	Project will include addition of up to 20% on-costs as

for HDP suppliers, the market costs of HDP installation measures have increased above the budgeted costs from soft market testing used in PSDS application, resulting in additional cost burden on Council to make up the difference.			contingency. The Council will procure suppliers through approved framework agreements.
Risk that there are noise emissions that are above permitted levels from the new air source heat pump installation at London Road leading to complaints from nearby residents.	2	2	Pre application planning advice has been sought from UDC planning team on all HDP measures. Air Source Heat Pump installation is a permitted development; however, an environmental noise assessment will also be undertaken. An acoustic enclosure has been included in the costing for the Air Source Heat Pump should this be required.
Risk of future increase to electricity/fuel prices leading to increase in running costs for low carbon heating system at London Rd, compared to the fossil fuel boiler system.	2	2	Energy and economic analysis and modelling have been completed for all project decarbonisation measures and based on project decarbonisation measures, including current fuel tariffs this indicates cost savings up to £17,000 per annum.

			HDP project includes: -the installation of Solar PV panels for electricity generation on site at London Road, reducing the amount of purchased electricity needed. -Current gas fuel costs will cease. -Additional insulation and secondary glazing which will reduce energy loss and conserve energy. There is further opportunity for future off-site renewable energy generation via the purchase and installation of additional Solar PV identified in the HDP recommendations for Little Canfield.
Insufficient capacity within UDC Facilities Dept to oversee delivery of the HDP at London Road, resulting in delay to the project, leading to failure to meet the requirements of the PSDS grant agreement.	2	3	Blueprint service review has embedded delivery of HDP and decarbonisation of estates into key roles and responsibilities within Facilities Dept. Project costs include project management and contingency. Estates Project Group will have role of project board overseeing delivery of HDP works plan, proactively mitigating risks and escalating any issues to the Climate Change Board for resolution as needed.

Risk that the Council will need to absorb an increased running cost, including maintenance and repair of the new low carbon heating system, compared to costs for maintenance and repair of current fossil fuel boiler system.	2	2	Objective of the project is to deliver a low carbon heating system to meet Council commitment to decarbonise estate to contribute to achieving net zero goal by 2030. As part of the PSDS application an Energy and Economic Analysis has been completed on all decarbonisation measures that will be delivered in the project to understand both carbon savings and cost savings. Modelling indicates that the anticipated increased costs of servicing/maintenance will be mitigated by on site solar PV energy generation. Any projected potential increase in running costs, maintenance and repair will need to be taken forward into the 2026/27 budget planning cycle for estates and facilities management.

1 = Little or no risk or impact
2 = Some risk or impact – action may be necessary.
3 = Significant risk or impact – action required
4 = Near certainty of risk occurring, catastrophic effect or failure of project.

Appendix 1 Public Sector Decarbonisation Fund Application – Grant Selection

*Do not paste data into cells, **always paste 'as values'**, ensuring you are not pasting source formatting. Where cells are formatted with dropdown lists, please use the dropdown. Please avoid using special characters.*

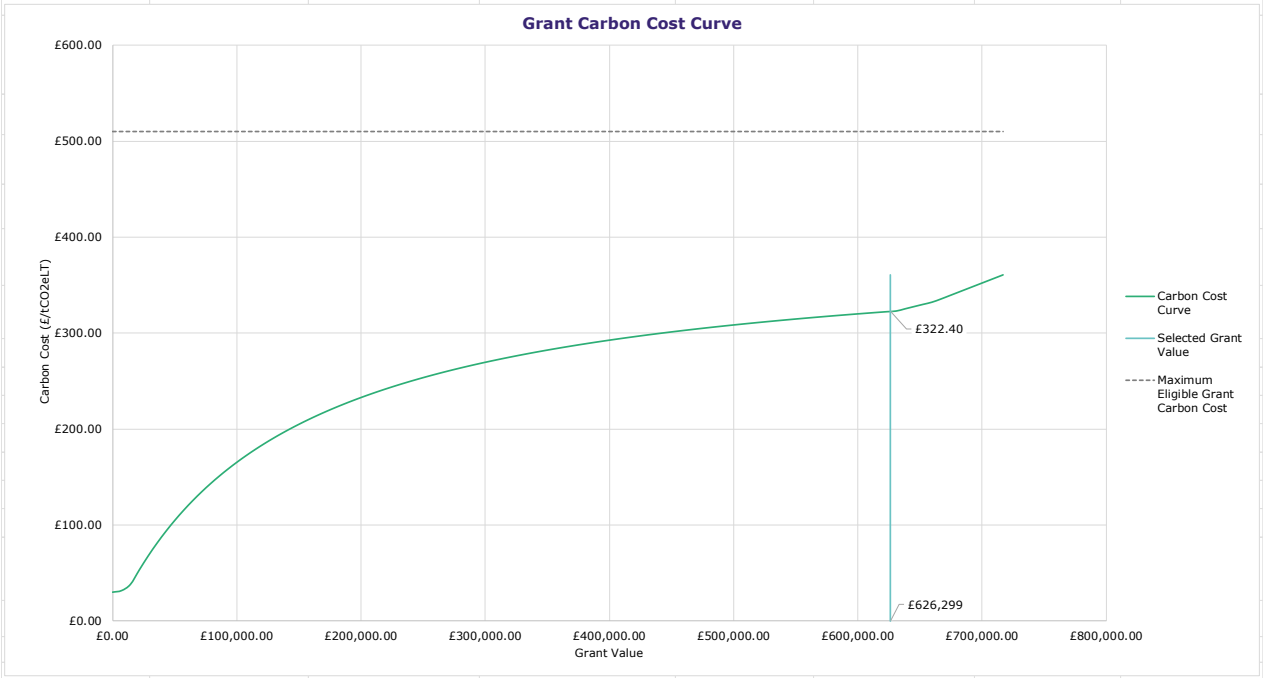
Step 4.2: Grant Selection

Section 1. Carbon Cost Curve

Please enter your selected grant value to the nearest pound in the box below, referring to the Carbon Cost graph to assist your selection. This step relies on all measures being fully inputted into Step 3 and Step 4.1.

Total Project Value (£)	Input Grant Value (£)	Recipient Contribution (£)	Recipient Contribution (%)	Grant Carbon Cost (£/tCO$_2$eLT)	Compliance
£716,980	£626,299	£90,681	13%	**£322.40**	**Compliant**

- The graph below plots the 'Grant Carbon Cost Curve' of your application according to the Carbon Saving Measures you entered in Step 4.1. It is based on ordering all measures that save direct carbon from lowest carbon cost on the left to highest on the right. The grant carbon cost (shown on the y-axis) increases while ascending the ordering of measures.
- The 'Selected Grant Value' Line plots the value you input in the box above.
- The intersection of the two lines shows the 'Grant Carbon Cost' for your selected grant value. This is also shown in the box above.
- The purpose of the graph is to give a visual perspective on how the grant carbon cost is calculated. The grant carbon cost is calculated by dividing the grant value requested by the direct carbon saved by the grant funded measures. By selecting different grant values, the grant carbon cost will change based on the associated direct carbon saved. This is a useful tool to help determine which grant value make the application more carbon cost effective. . It is important to reference the intersection point between the Gran Carbon Cost Curve and the Selected Grant Value line to see what the application's Grant Carbon Cost is. The application is not assessed on the graph, it is mearily an additional tool to help visualise and compare different eligible grant values.



Section 2. Measure Ordering Table

Please review the table below.

This table places all the LC heating systems and EE measures in your project proposal in order of carbon cost effectiveness. The order indicates which measures will be grant funded or recipient funded, based on the selected grant value inputted above. To assist any attempts to improve the overall carbon cost of your project, any measures which have both a high cost and relatively poor carbon cost effectiveness will be highlighted. Measures can be edited in Step 4.1 - Step 4.2 will update automatically. Additional empty rows at the bottom of this table have been formatted white to disappear.

Measures Ordered By Carbon Cost

Measure	Building	Technology - Work Type	Description	Measure Cost	Measure Carbon Saved (tCO$_2$eLT Direct)	Measure Carbon Cost (£/tCO$_2$eLT Direct)	Measure funding source
EE 1	London Road Offices	Insulation - draught proofing	Draughtproofing	£5,000	167.87	£30	Grant-funded
EE 2	London Road Offices	Roof insulation	Roof insulation	£7,200	200.66	£36	Grant-funded
EE 4	London Road Offices	Loft insulation	Suspended ceiling	£6,300	30.01	£210	Grant-funded
LC System 1	London Road Offices	Air source heat pump (air to water)	ASHP	£612,495	1556.00	£394	Part grant-funded, part recipient-funded
EE 3	London Road Offices	Secondary glazing	Secondary glazing	£30,370	34.18	£888.52	Recipient-funded
EE 5	London Road Offices	Solar PV	Solar PV	£55,615	0.00		Recipient-funded