Agenda Item No: 6

Changes to School Low Carbon Heating Programme Delivery

To:	Children and Young People Committee
Meeting Date:	9 September 2025
From:	Executive Director of Place and Sustainability Executive Director for Children, Education and Families
Electoral division(s):	All
Key decision:	Yes
Forward Plan ref:	2025/037

Executive Summary: The report proposes a change in process and responsibility for delivering school low carbon heating projects.

Recommendation: The Committee is recommended to:

a) approve the transfer of the delivery of future school low carbon heating projects from Economy and Climate Change to Education Capital;

b) approve the changes in project delivery process that this entails as set out in paragraphs 3.14, 3.15 and 5.3;

c) approve that the Economy and Climate Change team continue to provide specialist support for the future school low carbon programme as outlined at paragraph 5.4; and

d) delegate authority for awarding and executing Joint Contracts Tribunal (JCT) contract(s) for the provision of decarbonisation works at Clarkson Infant, Huntingdon Primary and Samuel Pepys to the Executive Director for Children, Education and Families in consultation with the Chair and Vice-Chair.

Voting arrangements: Co-opted members are eligible to vote on this report.

Officer contacts:
Name: Eithne George
Post: Head of Economy and Climate Change
Email: eithne.george@cambridgeshire.gov.uk

1. Creating a greener, fairer and more caring Cambridgeshire

1.1 This report relates to **Ambition 1:** *Net zero carbon emissions for Cambridgeshire by 2045, and our communities and natural environment are supported to adapt and thrive as the climate changes.* Decarbonisation of heat in buildings, including the county's schools, is essential to achieve this target. Emissions from maintained school energy use form part of Cambridgeshire County Council's (the Council's) Scope 3 emissions.

2. Background

2.1 In July 2021 the Environment and Green Investment Committee agreed a funding model for ***low carbon heating projects*** at maintained schools. This consisted of:

i. central Government grants from the Public Sector Decarbonisation Scheme (PSDS); and
ii. a Council capital contribution from Education Capital (equivalent to costs that would otherwise be incurred in replacing boilers on a like for like basis);
iii. a Council capital contribution from the Decarbonisation Fund equivalent to the monetised value of the carbon savings delivered by the programme; and
iv. loan funding to schools, repayable over 20 years from projected bill savings, with interest charged at the Council's Public Works Loan Board borrowing cost.

2.2 School low carbon heating projects to date have been delivered under the Greater London Authority's RE:FIT framework and the Council's Energy Performance Services (EPS) Framework Contract (the EPS Framework Contract) with Equans and SSE. The EPS Framework Contract closed for the commissioning of new projects on 16th March 2025.

2.3 Under the EPS contract, 14 school low carbon heating projects are underway or have been completed to date. Following delivery of these schools, it was intended the original agreed Decarbonisation Fund budget (for schools' low carbon heating, corporate building low carbon heating and Nearly Zero Energy new build schools) will have been fully utilised. However, several of the Phase 3b and 3c projects could not progress as planned due mainly to cost issues that the contractor could not resolve in time for the Public Sector Decarbonisation Scheme (PSDS) deadlines. This PSDS funding has since been forfeited. It is intended to review these projects and seek to deliver similar low carbon heating schemes for them, subject to further external funding being available and awarded, utilising the underspend from the Decarbonisation Fund.

2.4 For future school low carbon heating projects, business planning for 2025/26 and 2026/27 includes a new £2.3m Decarbonisation Fund budget.

2.5 This report sets out proposed changes in the way future school low carbon heating projects are delivered using the above £2.3m proposed budget. These changes are intended to simplify the project delivery process, reduce project management burden on schools and ensure budget is focussed on those schools with boilers in most urgent need of replacement.

2.6 This report also seeks to ensure that the schools that were not able to proceed in Phase 3b and 3c can still potentially have low carbon heating projects delivered, subject to further

PSDS and/or other funding being secured, before their heating systems fail. This would equally apply to any alternative school schemes that wished to proceed, if any of these schools were unable or unwilling.

3. Main Issues

3.1 Experience in developing and delivering school low carbon heating projects under the EPS Framework Contract, using PSDS funding over the past 3 years has identified a number of challenges. These are summarised below under 3 themes:

<u>Poor fit with PSDS process</u>

3.2 The PSDS administration body Salix assume project development will follow the sequence set out in the table below.

Table 1. Salix's assumed project development sequence

Step	Salix Process	Council/EPS Framework Process
1	Project approval	Pre-design
2	Pre-design	Out to tender
3	Designs complete	Tenders complete
4	Out to tender	Project approval (Investment Grade Proposal acceptance (IGP))
5	Tenders complete	Designs complete
6	Orders placed	Orders placed
7	Works in progress on site	Works in progress on site
8	Final commissioning	Final commissioning
9	Completion on site	Completion on site

3.3 The Council's process under the EPS Framework Contract differs from this, principally because the framework commissions energy projects on a Design and Build basis, rather than completing Design with one contractor prior to tendering for Build from another contractor. Project approval (based on the IGP) also comes much later in our process than expected by Salix.

3.4 The above disparity has not been a major issue, but does increase the burden of grant administration, as the process difference repeatedly needs to be explained to Salix e.g. in the context of why evidence of project approval, completed design etc cannot be provided when they expect it to be available. It also increases risk of being unable to claim the grant e.g. grant offers usually contain conditions requiring final design and energy savings to be provided to Salix prior to grant claim. This information is only available at a late stage in project development, usually when there is little time left ahead of grant claim deadlines.

3.5 In addition, the use of a framework contractor who then subcontracts installation works increases the administrative burden of grant condition discharge and grant claims. Salix expect installation contractor tendered prices to match costs in grant documentation. It has required repeated explanation that there is a framework contractor uplift applied to these costs to cover framework contractor overheads and profit in procuring works from the subcontractor. The same challenges recur at the point of grant claim, when explanations have to be repeated about framework contractor uplift, and the further complexity of a 5% retention applied to framework invoices relative to cost breakdowns provided on Applications for Payments needs to be explained. Although we have never had a grant claim declined, we have seldom had one accepted without having to provide additional explanation and revisions to the claim documentation. The fact that invoices are addressed to the schools rather than the Council has also generated questions and caused delay with grant claims.

3.6 Related to the above point is the challenge of evidencing post tender costs to Salix. They will not accept an IGP Business Case or Design and Build Contract from the framework contractor as evidence of costs. They expect to see the subcontractor tenders and a precise match between these and costs in the IGP Business Case. This often needs to be evidenced before any grant claims can be made. The EPS Framework Contract requires our contractors to operate on an open book basis so there is no issue in principle with providing subcontractor tenders. However, in practice there are frequently post tender negotiations with subcontractors on price and design details that make evidencing a precise match in costs challenging, especially if there is time pressure to move forward into works in order to achieve progress ahead of a grant deadline.

Issues for Schools

3.7 When the EPS Framework Contract was procured, typical project values for maintained primary schools were under £200k. For such projects the programme model, copied across from previous school energy efficiency programmes, where each school enters into a contract for the works and the Council transfers funding to the school, worked well.

3.8 Due to the complexity of low carbon heating projects, compared to more traditional energy efficiency works and inflation in construction costs over recent years, project costs are now over £200k for even the smallest primary school and over £900k for the largest. Entering into and managing contracts of this value is a big demand on schools.

3.9 In particular, as a proportion of project funding comes from PSDS grant which can only be claimed in arrears against invoiced expenditure, the current contracting arrangement exposes each individual school to financial risk of a funding gap if delays result in works expenditure at the grant deadline being less than the full grant value. Although we have been able to claim the full grants for all projects to date, expenditure has usually been last minute with little or no margin relative to the grant deadline. The Council would be better placed to manage this risk than individual schools as the Council can spread the risk across the full portfolio of projects.

3.10 A related risk is cashflow risk. With grant funding claimed in arrears against invoiced expenditure and around a three month lag between invoicing and grant funding being received by the schools, schools are finding themselves sitting on invoices that they are unable to pay until grant funding is received. Funding also excludes VAT and the lag between paying an invoice and reclaiming the VAT on it further contribute to cashflow challenges for the schools. Again, this risk is easier for an organisation with a much larger budget, like the Council, to manage.

Management of Project Finances

3.11 As discussed in paragraphs 2.1 and 2.3 project finances have come from 4 different budgets, (5 in cases where CPCA funding is also involved). The Council transfers funding to the schools' accounts. Education Capital, Decarbonisation Fund and Loan contributions are generally transferred as soon as schools enter into contract for the works.

3.12 PSDS and Cambridgeshire and Peterborough Combined Authority (CPCA) grant is claimed by the Council, in arrears, against invoiced expenditure. Once paid the grant is transferred to the schools. As mentioned in paragraph 3.9 the time delay between submitting a grant claim and the funding being received by the school is around 3 months, one month of which is the time between the Council receiving the grant and it being transferred to the schools. Financial system closedown at financial year end means that grants received in March would not be received by schools until late May. Bringing works contracts under Council (rather than school) control would remove the need for the transfer of funding to schools reducing finance admin, delays and risk of error in funding transfers.

3.13 Increase in project capital cost have resulted in larger Provisional Cost budgets needing to be included in project funding packages. For the three school Phase 3b projects approved by Committee on 3rd October 2024 the total Provisional Cost budget was £318,407. This creates a risk of large unspent capital contributions sitting with the schools at the end of project delivery. At Phase 3b we are managing this by only transferring Provisional Cost budget as and when Provisional Cost spend is authorised by the schools. This increases the number of funding transfers required, increasing admin burden and risk of error.

Procurement Approach

3.14 Under the proposed approach of future projects being delivered by Education Capital the ESPO Framework for Design (Property, Building and Infrastructure Advice and Management Services, 2664_22, Lot 1B), and any successor framework, would be used for design of the proposed low carbon heating installations. The design contractor will also be appointed to provide construction project management, Principal Designer duties and contract administration during the installation phase.

3.15 Completed designs will be used to tender for installation works as a mini-competition using the Council's own Minor Works Contractor Framework 2022-25(6) and any successor framework. Scope of works for the installation contractor will include both controls validation testing (to evidence that Building Energy Management Systems are controlling Air Source Heat Pumps (ASHPs) as expected) and seasonal commissioning to ensure optimisation of ASHP/controls settings.

3.16 Contract Award

Capital cost for all the three Phase 4 projects has come in above the £500k threshold for delegated approval. The projects that are the subject of this approval request are affordable within the £1.2m Decarbonisation Fund budget available for schools in 25/26. Subject to Committee and school approval, the projects at Clarkson Infants, Huntingdon Primary and Samuel Pepys are ready to proceed to design and construction. Tenders would be launched by 26th November 2025 with a deadline for return of 4th January 2026. Works orders will then be placed by 26th April 2025 with target date to be on site being 22nd July 2026.

4. Alternative Options Considered

4.1 A Multi Criteria Decision Analysis (MCDA) was conducted in July to September 2023 to assess alternative options for delivering both PSDS funded school low carbon heating projects and, non-grant funded, school energy efficiency projects (typically solar PV and LED lighting upgrades). This considered several different approaches for delivering projects and combinations of some of these approaches. The options for change to delivery of school low carbon heating projects were:

i. Continue the programme in its current form
ii. Contract for Design & Build separately
iii. Bring works contracts in house (i.e. between Council and contractor)
iv. Incorporate low carbon heating projects into Education Capital's maintenance programme (this inherently includes (ii) and (iii))

4.2 The MCDA involved colleagues from the Climate Change and Energy, Education Capital, Commercial and Finance teams assessing the options against a range of discrete criteria covering financial, resource, policy, delivery and compliance implications. Each criterion was ascribed a weighting according to its importance. Colleagues gave options a 1-5 score against each assessment criterion. A moderation panel was held to discuss their scoring and agree moderated scores. Options were then ranked according to weighted average scores. A sensitivity analysis was conducted which involved increasing the weighting of each assessment criterion by 50% and examining how this affected the rankings. More detail on the options, assessment criteria, evaluation panel, results and conclusions are provided at Appendix A.

5. Conclusion and reasons for recommendations

5.1 The highest scoring option from the MCDA was (iv) incorporating the low carbon heating programme into Education Capital's maintenance programme in combination with engaging the Community Energy sector in developing and funding energy efficiency retrofit projects (solar and lighting). The latter element is the subject of a pilot project of 12 school solar PV projects (currently at the Desktop Assessment stage). This combination of options scored highest across sensitivity analysis on all of the assessment criteria.

5.2 Incorporating the schools low carbon heating programme into Education Capital's maintenance programme addresses the issues outlined in paragraphs 3.2 to 3.13 as:

i. project delivery will have discrete Design and Build stages in line with Salix expectations;
ii. invoiced values used for grant claims will be more easily relatable to works contractor costs (no intermediary main contractor overheads and retentions);
iii. project budget management, grant risk, cashflow risk and VAT reclaims will sit with the Council rather than the schools;
iv. no grant or other funding transfers to the schools will be required.

5.3 It is proposed that this take effect for PSDS Phase 4 projects onwards.

5.4 It is further proposed that Education Capital continue to receive expert support from the new Economy and Climate Change team (which is part of the replacement of the former Climate Change and Energy Service). This support will include preparation of grant applications under the PSDS grant scheme or any subsequent scheme that may be introduced. This may involve liaison with the schools and contractors producing Heat Decarbonisation Plans (HDPs) to provide information required to populate and support the grant applications.

5.5 The Economy and Climate Change team will seek to retain expertise in relation to these low carbon installations, to assist through the development, construction and operational phases, to help ensure the successful long term implementation of these projects. This includes, as it currently does, performance monitoring responsibilities. This arrangement will be reviewed periodically with Education Capital and amended as needed, depending on the changing grant landscape and project requirements.

5.6 Responsibility for any community energy projects with schools e.g. community energy delivered solar photovoltaic installations, will remain with the Economy and Climate Change team.

5.7 For the unspent Decarbonisation Fund from 2024/25, it is proposed to support those schools from Phase 3b and Phase 3c of the PSDS grant cycle, who still wish to proceed with a low carbon heating project, to seek PSDS and/or other grant funding to do so, assuming their heating does not require replacement in the meantime. If so, the fund will prioritise other schools agreed by Education Capital colleagues.

6. Significant Implications

6.1 Finance Implications

6.1.1 Incorporating the schools' low carbon heating programme into Education Capital's maintenance programme does not increase or decrease costs of delivering the programme relative to delivery sitting with Economy and Climate Change.

6.1.2 The proposed changes will remove the need for financial transfer to schools reducing administrative burden on Finance and risk of transaction errors as discussed in paragraph 3.13. Cashflow risk will be transferred from individual schools to the Council where it can be better managed, as discussed in paragraph 3.10.

6.1.3 A £2.3m Schools Decarbonisation Fund capital budget for 25/26 and 26/27 financial years has been included in the Business Plan for delivery of projects under PSDS Phase 4 (application submitted in November 2024 for projects at 3 schools) and PSDS Phase 5 (expected to be launched in October 2025). This budget will supplement PSDS grant funding and School Condition Allowance funding to enable delivery of school low carbon heating projects. Management of this budget will sit with Education Capital.

6.2 Legal Implications

6.2.1 Project Design, Project Management, Principal Designer and Contract Administration duties during installation would be procured from the ESPO Framework for Design (Property, Building and Infrastructure Advice and Management Services, 2664_22, Lot 1B) in line with established practice on Education Capital projects. Completed designs will be used to tender for installation works under the Council's Minor Works Contractor Framework 2022-25(6).

6.2.2 Pathfinder Legal Services Ltd shall be instructed to review, draft and advise on the necessary contractual documents.

6.3 Risk Implications

6.3.1 Transferring contractual responsibility from the schools to Education Capital involves a transfer of risk from the schools to the Council. As discussed in paragraphs 3.9 and 3.10 grant and cashflow risks are easier for the Council to manage than the schools due to the relative size of the organisations' budgets.

6.3.2 As discussed in paragraphs 3.11to 3.13 risk of error in funding transfers between the Council and the schools is eliminated as is the risk of transfer of capital to schools for Provisional Cost budgets that remain unspent at the end of the projects.

6.3.3 Completing design at an earlier stage in project development will reduce grant risk described in paragraph 3.4 by finalising design and energy saving details prior to tendering for works and well ahead of entering into contract for works.

6.3.4 Separation of responsibility for the design and construction of low carbon heating installations carries a risk of both contractors seeking to deflect responsibility for any defects onto one another. This will be managed by appointing the design contractor to project manage installation and by providing a clear specification package for the construction/installation of the low carbon heating installations. The design contractor will then review installation against the specification, picking up and agreeing (if applicable) any change to specification as the works progress and ultimately 'signing off' the completed works on behalf of the Council as 'installed as expected'. Standard practice allows for a 12 month defect period after the works have been signed off, during which time any snags/defects would expect to be rectified by the installing contractor.

6.3.5 Risk of operational under-performance of equipment will continue to be monitored by the Economy and Climate Change team via submetering or equipment and remote access to meters and Building Energy Management Systems. Economy and Climate Change will also monitor electrical supply capacity in use and arrange for administrative capacity reductions to manage Distribution Use of Service charges on schools' bills.

6.4 Equality and Diversity Implications

6.4.1 There are no implications under this category.

6.5 Climate Change and Environment Implications

6.5.1 Incorporating the schools low carbon heating programme into Education Capital's maintenance programme does not change the climate change impact of the schools' low carbon heating programme relative to delivery remaining with Economy and Climate Change. The programme will continue to make a significant contribution towards achieving the Council's target of a 50.4% reduction in Scope 3 emissions (within which emissions from school energy use sit) by 2030 and to the ambition of a Net Zero county by 2045.

7. Source Documents

7.1 None