

Guidance is given in square brackets under each of the headings below. Headings which are discretionary are also in square brackets. Please delete as you go along and remove heading and sections not needed.

Divisions Affected -

CARBON REDUCTION SCRUTINY WORKING GROUP

27 April 2022

Briefing #3: Initiatives in place to support schools with carbon reduction

RECOMMENDATION

1. **The Scrutiny Working Group is RECOMMENDED to**
 - Note the council's commitment to supporting Oxfordshire's schools to reduce their carbon emissions and energy use.
 - Note the ongoing development of work programmes and initiatives to enable schools to reduce their energy use and carbon emissions.

Executive Summary

2. In October 2020 the council published the Climate Action Framework, committing to prioritising action on climate change across the Council and achieving net-zero emissions from the Council's corporate estate by 2030. The Council has also committed to reducing emissions from all of its areas of influence, including supporting maintained schools to reduce their emissions.
3. In 2019/20 maintained schools contributed 5,260 tCO₂e, representing 27.4 per cent of total reported emissions.
4. The combined annual gas and electricity spending of the 137 OCC Maintained schools is currently around £2million, representing the 2nd highest cost for many schools after staffing costs. From April 2022, significant increases in energy costs can be expected for schools of around 65% and 205-210% for electricity and gas respectively.
5. Schools are responsible for their own operations, including their energy and most of their maintenance budgets (OCC retain responsibility for boiler replacements, large-scale double-glazing replacements and roof replacements) but often lack the knowledge and capacity to reduce energy costs and carbon.
6. Schools in Oxfordshire face a range of challenges and barriers, including the availability of finance for carbon reduction measures, awareness of opportunities around carbon and energy use reduction, as well as the capacity of school staff to implement identified measures.

7. OCC is therefore supporting schools to reduce their emissions and energy use through a range of programmes, with further initiatives being developed.

Oxfordshire Action on Carbon and Energy in Schools (ACES)

8. The Environmental Information Exchange (EIE), a unit of Oxford Brookes University, have been commissioned to provide a range of support to both OCC maintained schools and academies in Oxfordshire to reduce the carbon emissions associated with their operations.
9. The contract commenced in April 2022 for an initial two-year term, with the option to extend for a further year.
10. EIE have subcontracted Low Carbon Hub (LCH) to help implement the support programme. Both EIE and LCH have extensive experience of working with schools across Oxfordshire to implement energy focussed initiatives.
11. The focus of ACES will be on reducing energy and emissions associated with school buildings. However, the programme will also support other related initiatives such as active travel and school transport by raising awareness and signposting such initiatives.

Support Highlights through ACES

12. The Oxfordshire ACES programme will provide different levels of support to schools to accommodate their varied needs and levels of progress towards carbon reduction (see table 1 below). This will range from workshops to engage governors and senior leadership on the importance and benefits of carbon reduction to an in-depth assessment of energy-saving opportunities at individual schools.
13. Available support will include a helpline for schools to receive advice on implementing carbon reduction measures, tutorials, case studies and webinars to develop the capacity of school staff to implement carbon reduction measures. There will also be resources available to engage pupils on climate and energy issues, which has been identified as a key element in developing and maintaining momentum for schools to take climate action. A standalone website will be developed to host these resources.
14. Focussed one-to-one support through thermal imaging, on-site energy assessments and bespoke action plans will enable those schools who are in a more advanced stage of taking climate action and progress carbon reduction measures. There is also a £4000 fund to provide boiler insulation to schools, which covers a minimum of 10 schools per year.

Table 1: Expected provision of support activities through ACES in the initial 2 year period.

Activity	Year 1	Year 2
Schools survey	1	-

Webinars	5	5
Workshops	2	2
Network meetings	4	4
Day events	4	4
No. of energy assessments	10	10
No. of schools for boiler room insulation	10	10
No. of schools receiving thermal imaging	5	5

15. The programme is currently in the planning and development phase with development of the website, marketing plan and a survey to circulate with schools representing some of the initial steps being undertaken.

Schools Structural Maintenance Plan and the Public Sector Decarbonisation Scheme

16. Through the Schools Strategic Maintenance Programme (SSMP), OCC has an assigned capital budget every year to carry out high priority/ structural works for OCC maintained schools, such as boiler replacements, major roof repairs and double-glazing projects. Schools receive funding from the SSMP on a priority basis.
17. The Public Sector Decarbonisation scheme (PSDS) is a government scheme, administered through a series of funding rounds and provides grant funding to the public sector for heat decarbonisation measures.
18. Where possible, OCC looks to ensure any works undertaken through the SSMP prioritise low-carbon replacements. Where this involves significant additional costs, PSDS has been successfully utilised to secure additional grant funding for heat decarbonisation measures, including heat pumps.
19. To date, OCC has secured more than £950,000 in grant funding through PSDS to enable the installation of heat decarbonisation measures at 9 schools, which were identified as priorities to receive funding through the SSMP.

Energy Efficiency Finance Scheme for Schools

20. Availability and affordability of finance to enable the implementation of energy-saving and carbon reduction measures is regularly cited as a key barrier to schools looking to reduce their energy use and carbon emissions.
21. Whilst PSDS provides the opportunity to bid for grant funding for such measures, there are challenging eligibility criteria associated with the scheme, which is also focussed primarily on heat decarbonisation and doesn't therefore offer funding for all energy saving/ renewable energy measures. The application for funding is also a resource-intensive exercise, which requires detailed assessments of the building for which the funding is sought, which is both costly and time-consuming.

22. Prior to the launch of the PSDS scheme, Salix Finance Ltd (a non-departmental public body dedicated to the provision of low-cost loans to the public sector for energy efficiency projects) offered a 0% interest energy efficiency loan (Salix Energy Efficiency Loan) to schools and other public sector organisations, which covered a wide range of energy efficiency measures and was repayable over a 10-year payback period.
23. OCC is currently developing an in-house financing scheme for OCC maintained schools, which will look to provide similar financing opportunities for energy efficiency projects as the Salix Energy Efficiency Loan (SEELS).
24. The scheme will take the form of a recycling fund, where an initial £400k is available for schools per annum, with repayments by schools being used to replenish the funding available through the scheme in subsequent years.
25. The programme will benefit from the recent launch of the Oxfordshire ACES scheme, which will both provide a pipeline of projects that require such financing and promote the scheme to other schools.

OCC Zero Carbon New Build Policy

26. A proposed zero carbon new build policy was presented to CEDR in December 2021, which would ensure that new OCC buildings would be designed to net zero emission standards. The proposed policy includes new school buildings. Development of the policy is ongoing.
27. To this end, OCC has already made progress with regard to new schools planned at Shrivenham and North East Didcot.
28. NE Didcot is being designed to achieve the Net Zero Carbon (NZC) approach for operational energy uses working in accordance with the Department for Education (DfE) construction framework net-zero specifications. To achieve this, the design has used a range of strategies such as utilising a 'fabric first' approach for thermal efficiency depicted within the energy hierarchy, Be Lean, Be Clean and Be Green. Overall, the building will not rely on any gas supplies using electrical power only and is anticipated to use approximately 59.7% less energy than a building with fabric and services complying with building regulations Part L2A recommendations.
29. The Shrivenham CofE Primary School design has been enhanced beyond the base requirements of the DfE's Output Specification for schools through the inclusion of Air Source Heat Pumps and additional Photovoltaic cells to achieve net-zero carbon on regulated energy. These changes will mean that the school will not be connected to the gas grid and will rely solely on electricity, therefore that any decarbonisation of the electrical grid will have a positive impact on the school's generation of carbon. In addition, the school will have electrical vehicle charging provision with additional ducting in place to enable future expansion of the charging facilities.

Challenges and opportunities

30. A range of challenges have been identified with regard to the implementation of carbon reduction measures at schools, which will need to be taken into account with the support provided to schools. These include:
 - (a) Constrained school staff time and capacity to pursue carbon reduction measures, as well as a lack of understanding of potential energy reduction measures.
 - (b) Competing investment priorities – decarbonising Oxfordshire’s schools will require significant investment, which will be evaluated against other investment needs.
 - (c) As a result of the ongoing pandemic, school resources have been considerably stretched with more immediate priorities, leaving little scope for perceived longer-term priorities such as climate action. In addition, schools have taken preventative measures to improve ventilation (such as leaving windows open, which has implications for energy use).
31. Providing support to schools to take climate action creates significant additional opportunities for those schools, in addition to carbon reduction:
 - (a) A key approach to reducing carbon emissions is through improving the energy efficiency characteristics of school buildings and subsequently reducing overall energy usage. Reducing the energy use of schools will have potentially significant financial benefits for schools, with energy costs typically representing a significant cost for schools.
 - (b) Upgrading the energy efficiency characteristics of schools is likely to improve the controllability of heating systems in school buildings and reduce drafts, allowing for an improved learning and teaching environment.
 - (c) Implementing carbon reduction measures at schools can be used as an important tool to engage pupils on climate change and energy efficiency.

Corporate Policies and Priorities

32. Addressing the climate emergency is the council’s top priority. Supporting schools to reduce their carbon emissions is a priority action in the Climate Action Programme, as set out in the council’s Climate Action Framework.
33. The initiatives available to schools for carbon reduction support our target to halve carbon emissions in the county by 2030.

Financial Implications

34. There is a fixed annual fee of £60,000 per annum for an initial two years to commission EIE to implement the Oxfordshire ACES programme, including developing, coordinating and running online networking, training and information awareness events available to both OCC maintained schools and academies as well as more focussed support for selected schools. This cost has been allocated from the Climate Action team budget.
35. It is proposed that the initial £400,000 required for the energy efficiency finance scheme will be allocated from the Budget Priority Reserve. Should the scheme be successful, a business case will be developed to extend the scheme.
36. Financial implications associated with the implementation of a net-zero new build policy for OCC are currently being evaluated as part of the policy development process.

Legal Implications

37. This briefing raises no legal implications.

Staff Implications

38. Staff involvement in current programme delivery is funded by agreed resource allocation and grant funding. The Climate Action Team is providing centralised support.
39. The Property team has recruited a decarbonisation manager, whose role will include the optimisation of the energy efficiency elements of our delivery programmes with schools.
40. Staff requirements of future programme developments will be put forward through the service and resource planning process.

Equality & Inclusion Implications

41. When developing and implementing its climate change and carbon reduction strategies and projects, the council must take an inclusive approach, ensuring the costs and benefits of the transition to a low-carbon economy are fairly shared.
42. While acting on climate change will bring benefits to all, it is most likely to have additional positive impacts on several of the protected and disadvantaged groups considered within the Council's equality framework

Sustainability Implications

43. The Climate Action Framework includes a commitment to support maintained schools to reduce energy costs and carbon. Supporting schools to reduce carbon emissions also contributes towards the target to halve countywide emissions by 2030.

Annex: Nil

Background papers: Nil

Contact Officer: Sarah Gilbert, Climate Action Team Leader,
07867467797, Sarah.Gilbert@Oxfordshire.gov.uk

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