

Appendix 4: Solar Project Amendment Proposal

Project	Capital Budget (£m)	26/27	27/28	28/29	29/30	Total
Invest-to-Save Renewables Pilot	Capital Expenditure	0.200	0.400	0.400	0.000	1.000
Directorate	Capital Funding (other than corporate resources ask)	0.000	0.000	0.000	0.000	0.000
Finance and Customer Services	Net (Corporate Resources)	0.200	0.400	0.400	0.000	1.000

Project Description

It is proposed that the £1.0m capital budget, currently allocated to the Council's solar farm project, is repurposed to establish an internal renewable invest to save pilot, focused on renewable energy and carbon reduction projects across a broader range of assets. Rather than being tied to a single large-scale generation site, this model would enable the Council to invest capital across multiple buildings and services, recycling the savings from energy bills to support further investment over time. In this format, renewables will be installed at selected sites and the occupying service will be charged a lower fee for power utilised to cover any maintenance and upkeep required, reducing energy bills and reducing carbon emissions. The Council will also benefit from any overspill which can contribute to the Council's carbon reduction through offsetting. The scheme is designed to provide energy bills savings for the Council whilst also proving the concept for a wider roll out should it be successful in line with the original 'proof of concept' approach.

This project will directly reduce the carbon emissions of the properties involved, supporting the Council's ambition to deliver a net zero Borough by 2040 and the decarbonisation of its corporate estate by 2030.

Scope of the Proposal

The proposal focusses on delivery of renewable energy measures across the rooftops and potentially car park canopies of the following asset types:

- Housing Revenue Account (HRA) properties landlord supplies (staircase lighting, lifts, and shared services).
- District Heating boiler houses.
- Non-Heat Decarbonisation Plan (HDP) Council assets. E.g., properties that are already electrically heated and are therefore net zero ready.
- Council owned properties that are not used for core Council services but remain within the authority's asset base (rental units).
- Schools where not eligible for Government or other funding routes
- Leisure centres under PFI arrangements
- Community buildings, subject to further consideration and feasibility assessments.
- Car parks if feasible

The proposal explicitly excludes investment in individual homes or tenant electricity supplies and is restricted to the communal landlord-controlled systems only. These property types are excluded as the Council would be required to formally operate as an energy supplier and re-bill tenants for their usage which is not considered feasible at this time.

Outputs and Outcomes

This project will provide a blueprint for future potential schemes and roll out. It is hoped that a future business case can be brought forward for a more comprehensive solar programme following this trial, with the potential for a larger reaching scheme.

The use across different property types and ownership models will allow for the key challenges associated to be identified and worked through.

The scheme will reduce energy bills for the properties included within the pilot, provide a low-cost mechanism for accessing renewable power, improving resilience and reducing carbon emissions.

In addition to the carbon reductions and monetary savings, where the scheme is utilised to supply school-based renewables, the scheme has benefits for education with the use of an on-site visual example of sustainability that can be linked to the curriculum.

The pilot will be designed to position the projects to access any funding streams if they become available, to maximise the availability of the Council's initial investment. It is proposed that if grants become available from Great British Energy, Department for Energy Security and Net Zero, the Department for Education or from regional sources such as SYMCA, the Council will provide support to apply for these grants, and the funding reallocated to another property instead. This will reduce the financial burden on the property and the Council and still result in carbon emissions reductions within the relevant timeline.

The proposed project is spread across 3 years with the following outcomes:

Year 1: Economic model and legal SLA's collated, sites identified plus 1 initial trial site delivered: £200,000

Year 2: Delivery of phase 1 projects: £400,000

Year 3: Delivery of Phase 2 projects: £400,000

Year 4: Project Evaluation and phase 2 business case if appropriate.

Solar panels are expected to be in operation for approximately 25 years. Many remain in operation longer than this. It is estimated that this investment will result in approximately 450-550kWp depending on the sites selected, which will generate in the region of 355,000 –

435,000kWh per year, saving £75,000 - £90,000 on energy bills annually based on current contract rates following payback. This will save approximately 70-80tCO₂e per annum.

Financial Implications

Until the locations are confirmed, and the technical site assessments are carried out, it is not clear what the exact expenditure per installation will be.

It is proposed that the following costs are assigned, across the sites to be delivered:

- £690,000 for installation, including DNO and planning costs.
- £150,000 contingency (15%)
- £150,000 for project management (15%)
- £10,000 capital fee (1%)

The payback mechanism associated with this scheme will include maintenance and checks associated with electrical safety as well as an element of ongoing project management. The scheme is not intended as an income generating project but will reduce energy bills and aims to pay for the resources it uses such as staff time, cost of loan, and maintenance.

The size of the solar installations can be scaled back to account for the budget available and projects will be chosen based on value for money, return on investment, existing grant funding eligibility and feasibility.

The scheme proposed operates as a ring-fenced recycling invest to save scheme, with the repayments to be invested again on additional PV projects and any potential periodic capital upgrades which may be required such as inverter replacement after a set number of years.

The asset life span of Solar PV is +25years, so once the investment has been paid off there will still be a benefit to the site for an additional 10-15 years.

Risks

It is important that projects are selected to reduce risk, and that effective project management is undertaken, therefore this will be assessed to minimise project risk through the expression of interest stage. Previous experience managing a previous scheme focussed on savings as a result of LED lighting enhancements demonstrates the team's ability to effectively manage this type of scheme and its associated risks.

Key risks include timely procurement, on site challenges and Distribution Network Operator (DNO – e.g., Northern Powergrid) connections which can result in cost escalation and slippage, early engagement with the DNO and careful project selection will reduce this risk exposure. The complications relating to any PFI arrangements may pose added challenges resulting in slippage or non-delivery for this type of

establishment. There will also be additional costs linked to the required approvals from the PFI funders and any hand over requirements which will require further analysis before a PFI related project can continue.

The project will also need to consider site specific risks and mitigate accordingly, for example installation is likely required to be undertaken during the school holidays for school projects or around key dates for other operational buildings. Project Managers will need to be aware of conflicting priorities during this time including other construction projects being undertaken and key staff absences.

Financial risk from repayment default by the property, due to budget constraints, academisation or generation utilisation lower than expected, this will be offset by a loan agreement and repayment schedule. This will require legal input.

Technical performance of the system is a risk if they are not designed effectively for the site, which would result in lower output performance, therefore this will be covered by robust procurement evaluation, ongoing performance assessment, warranties and Operation and Maintenance agreements.

Overall project failure could result in a reputation risk for the Council, which would undermine the further roll-out and uptake of the scheme, therefore thorough project management due diligence will be undertaken, and careful monitoring and reporting of the scheme outputs are required. The pilot nature of the scheme allows this to be carefully considered and controlled prior to future larger scale programmes being brought forward.