

DECISION-MAKER:	CABINET
SUBJECT:	CORPORATE ASSETS DECARBONISATION SCHEME PHASE 2 (CADS 2)
DATE OF DECISION:	18TH April 2023
REPORT OF:	COUNCILLOR BOGLE CABINET MEMBER FOR ECONOMIC DEVELOPMENT

<u>CONTACT DETAILS</u>			
Executive Director	Title	Executive Director of Place	
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STATEMENT OF CONFIDENTIALITY	
N/A	
BRIEF SUMMARY	
To achieve its ambition to reduce its impact on the ongoing climate emergency, Southampton City Council (Council) has committed to be net zero carbon by 2030.	
This includes significantly reducing carbon dioxide emissions (CO ₂ e) associated with energy use within its non-domestic (corporate) buildings and assets. This energy use predominately comes from electricity and gas consumption.	
To address these carbon emissions, the Council has set up the Corporate Assets Decarbonisation Scheme (CADS). This scheme delivers energy efficiency and renewable energy measures that have a positive return on investment, as well as delivering CO ₂ e savings required to meet the Council's net zero ambitions.	
A full business case for the next round of decarbonisation works (CADS 2) has been developed. This paper provides a summary of the business case and requests the approval to spend against the existing budget allocated to CADS.	
RECOMMENDATIONS:	
(i)	Cabinet approves spend on Phase 2 of CADS of £0.95M, currently budgeted within the existing Place capital programme for financial year 2023/2024.
(ii)	Cabinet approves a revenue saving of £0.13M from the corporate energy budget, from 2024/25 onwards, which will more than cover the additional costs identified below.
(iii)	Cabinet approves the additional budget of £0.03M in 2023/24 and £0.067M from 2024/25 onwards for financing costs, to be added to the existing Capital Asset Management (CAM) budget. Capital

		financing was previously removed from the MTFs - pending the business case and confirmation the costs would be covered.
	(iv)	Cabinet approves the budget of £0.004M from 2029/30 onwards for the additional maintenance cost of the Solar PV units.
	(v)	Cabinet delegates authority to the Head of Corporate Estate and Assets following consultation with the Head of Supplier Management, to finalise any specific terms of the proposed contracts outlined within this paper, then award and enter the call off contract under the relevant framework agreement, and carryout all necessary actions to facilitate the execution, implementation and operation of the contracts.

REASONS FOR REPORT RECOMMENDATIONS

1.	CADS 2 will largely include Solar PV panels and LED lighting upgrades, along with ancillary works, and these technologies provide a proven return on investment and carbon reduction within the Council's corporate assets. This aligns with the Council's 2030 Net Zero Carbon ambitions.
2.	The Council's existing CADS 1 building works are being undertaken under contract with our external project management resource (Faithful & Gould consultancy) and delivery partner (Npower Commercial Gas Limited). These contracts will end once the CADS 1 buildings works are completed early financial year 2023/24. Therefore, new contracts will need to be procured for CADS 2.
3.	The recommended option outlined within this report and project assessment documentation provides a business case based on energy cost savings, a compliant route to procurement, along with the full range of services, cost effectiveness and quality sought by the Council.
4.	The CADS Programme aims to support the ambitions of the Council's Green City Plan and support the ambition of a Net Zero carbon footprint for the corporate buildings and operations by 2030, along with reducing the costs and risk associated with the rising price of energy.

ALTERNATIVE OPTIONS CONSIDERED AND REJECTED

5.	Option 1 – Do Nothing: The Council opts to not attempt to honour its Net Zero ambition by 2030 for its corporate assets. The sole benefit of this approach is the avoidance of capital expenditure. This option offers a short-term reduction in financial pressures by avoiding capital expenditure but does not begin to address the continued vulnerability of the Council to future energy price volatility and increases. Additionally, the Council will likely face public scrutiny for not attempting to meet its Net Zero commitments under the Green City Charter.
6.	Option 2 – Offset: Instead of a capital investment programme as a means of meeting its Net Zero ambitions, the Council opts to purchase carbon offsets as a means of obtaining Net Zero status by 2030. Current projections and estimates suggest that by 2030 the Council is projected to emit 7,900 tCO _{2e} in 2030 under a business as usual scenario (a 21% reduction from its current emissions due to the projected decarbonisation of the national grid). This is projected to cost the Council approximately an additional £0.4M in carbon offsets to obtain Net Zero certification per annum from 2030 onwards. This approach provides no tangible benefit to the Council or Southampton as a city

	outside of the net zero certification and continues to leave the Council vulnerable to increased energy prices.
DETAIL (Including consultation carried out)	
7.	This report proposes the option that involves the CADS 2 capital investment programme, which delivers energy efficiency and renewable energy projects that pay for themselves from energy cost savings within a 10 year period.
8.	CADS 2 will save carbon emissions and energy costs, which will repay borrowing and provide an additional net cost saving per year.
9.	This proposed CADS 2 project only applies to the Council's corporate assets funded under the General Fund (i.e. it excludes schools and leisure centres, currently operated by Active Nation). This is because the Council's General Fund Budget does not pay for the energy consumed in Leisure Centres (currently operated by Active Nation), Housing Revenue Account and Schools. Therefore, any expenditure in those assets would require an investment recovery mechanism. It is proposed a separate business case will be brought forward for decision (if considered appropriate) for investment in schools and leisure centre sites in 2023/24. The HRA capital programme already includes an energy efficiency programme separate from CADS. There are currently no plans to combine these programmes.
10.	All CADS 2 energy saving measures will be subject to a projected 10-year payback on investment. This qualification criteria ensures a healthy return on investment prior to the expected lifetime of the measure.
11.	The reasonable expected lifetime (as published by the Department for Business, Energy and Industrial Strategy) of the energy saving measures are as follows. <ol style="list-style-type: none"> 1. LED Upgrade: Approximately 25 years 2. Solar PV (Photovoltaic) Panels: Approximately 22.5 years
12.	This leaves a minimum additional 12.5 years of savings beyond the initial payback term.
13.	Total costs for CADS 2 are estimated at £0.95M, which includes technology delivery, project management and related services, including the Senior Energy Officer post within the Energy Team, who will deliver the day-to-day client role.
14.	Additional external resources are required to provide professional services support to ensure the successful delivery of this programme of works. These resources will be procured through the existing approved Council Procurement Frameworks for consultancy services.
15.	Once the additional resources are in place the following work will be completed. <ol style="list-style-type: none"> a. Scope Reassessment – Current proposed programme will be subject to a detailed review. This will be refined on an individual project/asset basis and subject to design team input and scrutiny. Any structural or detailed technical assessments required will be conducted at this stage. b. Scope Confirmation – The final site suitability will be confirmed, and further cost assurances will be provided together with savings

estimates, including but not limited to, cost, energy and CO₂e emissions.

- c. Scope Approval – Once the above is completed confirmation will be provided under delegated powers for the full design specification and final costs associated with works.
- d. Delivery Procurement – The contractor to deliver the works will then be procured through the pre-approved frameworks based on design.
- e. Project Management and Project Delivery – the project will then be delivered by the contractor to time, within budget and meeting the required quality parameters and savings targets.

16. The Energy Team intends to procure contractors for Solar PV through the Central Southern England Multi Contractor Framework and LED Lighting upgrade works through the Hampshire's Mechanical and Electrical Minor Works Framework. Both of which have been approved by the Council's procurement partners.

RESOURCE IMPLICATIONS

Capital/Revenue

17. The proposal supports the Council's 'invest to save', by investing in energy saving measures the Council can directly reduce its annual expenditure on energy.

18. The table below shows the cost of the programme, the estimated annual cost saving, the payback period and the tonnes of CO₂e estimated to be saved per annum.

Table 1 – Overall Cost and Benefits of CADS 2

Measure	Capital Costs	Estimated Annual Gross Saving	Payback (Years)	Tonnes CO ₂ e saved per annum
CADS Phase 2	£0.95M	£0.13M	7.3	95

19. This paper requests approval to spend of £0.95M from the existing £2M CADS budget in the capital programme in 2023/2024.

20. The capital expenditure profile and proposed funding is shown in Table 2 below. All capital expenditure is expected to be incurred in 2023/24 and be funded by council resources as per the approved budget in the capital programme.

Table 2 – Expenditure Breakdown and Funding Profile

CADS 2	2023/24	2024/25	Source of funding
Solar PV (Photovoltaics)	£0.45M		
LED Lighting Upgrades	£0.29M		
Project Fees	£0.21M		
Total Capital expenditure	£0.95M	-	-
Funded by:			
Council Resources	£0.95M	-	Borrowing

21. The revenue impact of the measures over the life of the assets is detailed in Table 3 below. Full savings are forecast to be generated from the start of 2024/25 and projected over the useful asset life of the measures. The financing costs are based on forecast interest rate of 5% for 25 years and incorporates the annual Minimum Revenue Provision charge to the general fund associated with the borrowing. This shows that the net saving of the measures over the life of the assets is estimated to be around £1.27M after financing costs and repairs & maintenance have been considered, which is greater than the initial outlay.

Table 3 –Lifetime Revenue Impact

	2023/24 £000	2024/25 £000	2025/26 £000	2026/27 £000	2027/28 £000	5 year total £000	25 year total £000
Gross Saving	0	-130	-130	-130	-130	-520	-3,012
Financing costs	34	67	67	67	67	268	1,674
Repairs & Maint.	0	0	0	0	0	0	74*
Net Cost/ (Saving)	34	-63	-63	-63	-63	-252	-1,264

*Maintenance costs will apply from year 5 onwards

22. Combined net annual cost savings from the end of the first full year post delivery of CADS 2 would be £0.063M per annum until the first assets reach the end of their useful life. This savings figure does not include energy price inflation.

23. The current gross savings that will be delivered by the installation of the CADS 2 measures is £0.13M per annum.

24. Following the initial 5-year warranty on Solar PV installations, it is projected that the Council will be required to spend £4,000 per annum on Solar Panel maintenance, for a total of £0.07M over the lifetime of 22.5 years for the installed panels. The costs of maintenance from year 5 will be recovered from the energy savings delivered by the Solar PV installations.

25. The cost of replacement or retrofit LED Lighting upgrades will be met from the Corporate Repairs and Maintenance budgets.

26. There are already budgets for Asset Management Repairs and Maintenance contracts covering these technologies on Council assets. The existing contracts will be able to accommodate LED lighting technology. It is confirmed the new technology will reduce both planned and reactive maintenance due to warranty periods and newer technology replacing old. In addition, the lighting will be covered by a minimum refund or replacement 5-year warranty, further reducing potential associated costs.

Property/Other

27. All works conducted under CADS 2 will be conducted on Council corporate owned and operated buildings.

28. There are wider property issues that need to be considered as part of this programme of work:

	<ul style="list-style-type: none"> a. Roof replacement framework contract – CADS 2 will align with existing proposed roofing works planned for Council buildings with potential Solar PV opportunities. Sites flagged for inclusions in CADS 2 delivery will include any required enablement works to be covered in specification. b. Repairs and Maintenance programme – align with and understand historical, ongoing, and future planned works to minimise potential revenue expenditure or waste. Ensure ongoing maintenance liability is minimised where feasible. c. Property rationalisation programme – ongoing consultation, engagement covering the disposal of council assets will continue to be undertaken. This will ensure lifetime of measures, business case and possible change of ownership of the asset is considered when delivering CADS. d. Green City Plan – align with key charters goals including the principal decarbonisation scheme and align with the aspiration to be Net Zero carbon by 2030.
LEGAL IMPLICATIONS	
<u>Statutory power to undertake proposals in the report:</u>	
29.	S1. Localism Act 2011 permits the Council to enter into the arrangements set out in the report, subject to complying with all relevant financial procedure rules.
30.	The implementation of CADS 2 schemes will be subject to all necessary regulatory consents and EISA completion to meet the requirements of the Equalities Act 2010 and s.149 Public Sector Equality Duty as each proposal moves forward.
<u>Other Legal Implications:</u>	
31.	N/A
RISK MANAGEMENT IMPLICATIONS	
32.	Although contingency has been included in the business case to account for inflation. There is continued risk that projected estimated costs are subject to further inflation during the tender process. If costs continue to become inflated through the delivery phase, the programme scope will be revised to accommodate the increased costs. Provided that the programme continues to meet the minimum 10-year payback on investment criterion. Relevant approval will be sought where required.
33.	Issues associated with the supply of materials such as solar panels or other components will have to be considered in the final project plan. The supply of materials has improved over the past 12 months; however, contingency has been included in the current project forecasts to accommodate delays up to 12 weeks.
34.	Any property related risks will also be managed and continued assessment of the assets' operation, life or ownership will be undertaken throughout the project. Any sites where the proposed payback on investment does not provide a positive business case will be removed from the programme.
35.	Volatility in the energy markets provides a significant risk with CADS. To attempt to provide the most up to date projections of prices going forward, the

	Energy Team has undertaken sensitivity analysis and engaged with our current energy suppliers to establish projected energy prices to 2030.																				
36.	<p>Projected electrical energy costs have been made to 2030 using projections made by energy market analysts, Cornwall Insights, and discussions with LASER (the Councils current energy purchasing organisation) around energy costs going forward. Table 5 outlines the current electricity price projections to 2030.</p> <p>Table 5 – Current electricity price projections to 2030.</p> <table border="1"> <thead> <tr> <th>Scheme</th> <th>2023</th> <th>2024</th> <th>2025</th> <th>2026</th> <th>2027</th> <th>2028</th> <th>2029</th> <th>2030</th> <th>Average</th> </tr> </thead> <tbody> <tr> <td>Unit Rate (p/kWh)</td> <td>38</td> <td>32</td> <td>28</td> <td>26.5</td> <td>25.5</td> <td>26.5</td> <td>26.5</td> <td>27.5</td> <td>29</td> </tr> </tbody> </table>	Scheme	2023	2024	2025	2026	2027	2028	2029	2030	Average	Unit Rate (p/kWh)	38	32	28	26.5	25.5	26.5	26.5	27.5	29
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Unit Rate (p/kWh)	38	32	28	26.5	25.5	26.5	26.5	27.5	29												
37.	Prior to the war in Ukraine, the Council purchased electricity at around 15p/kWh across corporate assets. The Council currently pays around 29p/kWh which includes the Government's energy price support and will likely see further increase in October 2023 when energy prices are fixed for the year ahead.																				
38.	Current industry projections suggest that energy prices are likely to have continued volatility for the foreseeable future and are unlikely to ever return to their pre-Ukraine war levels.																				
39.	29p/kWh has been utilised as the representative electrical unit rate for payback calculations under this business case as it is the projected average unit rate to 2030.																				
40.	Should energy prices deviate considerably from the projected unit rates, the business case will be re-evaluated to ensure CADS 2 meets the 10-year minimum payback on investment criteria. Based on average costs across the whole project the energy price point per unit for solar would have to drop to below 14.5p/kWh and 21.5p/kWh for LED lighting for the technology payback of 10 years not to be met. Although this is unlikely in the current forecasts to 2030, continuing checks will be made to ensure ongoing paybacks are met.																				
41.	The key project risks have and will continue to be identified as part of developing the CADS 2 business case through to delivery. Risks are being managed under the Council's project management process and will be presented at the monthly Decarbonisation Board as part of the governance.																				
POLICY FRAMEWORK IMPLICATIONS																					
42.	<p>CADS 2 contributes to the strategic objectives that will support and deliver council outcomes in the following policies:</p> <ul style="list-style-type: none"> • Southampton City Strategy (2015-2025): delivering whole place thinking and innovation. • Southampton City Council Corporate Plan (2022-2030): Green City and Wellbeing • Green City Plan 2030: to ensure the council corporate assets and streetlighting become zero carbon by 2030. The corporate assets cover all non-domestic buildings including SCC schools and streetlighting. 																				

	CADS will reduce the Councils associated CO ₂ e emissions and improve the Council as an organisation by helping to reduce the Council's energy costs, directly reduce its impact on the environment and support the delivery of the Net Zero agenda with the city.
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KEY DECISION?	Yes
WARDS/COMMUNITIES AFFECTED:	City Wide
<u>SUPPORTING DOCUMENTATION</u>	
Appendices	
1.	Equality and Safety Impact Assessment (ESIA)
2.	

Documents In Members' Rooms

1.	CADS 2 FULL BUSINESS CASE
2.	

Equality Impact Assessment

Do the implications/subject of the report require an Equality and Safety Impact Assessment (ESIA) to be carried out.	Yes
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Data Protection Impact Assessment

Do the implications/subject of the report require a Data Protection Impact Assessment (DPIA) to be carried out.	No
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Other Background Documents

Other Background documents available for inspection at:

Title of Background Paper(s)	Relevant Paragraph of the Access to Information Procedure Rules / Schedule 12A allowing document to be Exempt/Confidential (if applicable)
1.	
2.	

APPENDIX 1 – EQUALITY AND SAFETY IMPACT ASSESSMENT



Equality and Safety Impact Assessment

The Public Sector Equality Duty (Section 149 of the Equality Act) requires public bodies to have due regard to the need to eliminate discrimination, advance equality of opportunity, and foster good relations between different people carrying out their activities.

The Equality Duty supports good decision making – it encourages public bodies to be more efficient and effective by understanding how different people will be affected by their activities, so that their policies and services are appropriate and accessible to all and meet different people's needs. The Council's Equality and Safety Impact Assessment (ESIA) includes an assessment of the community safety impact assessment to comply with Section 17 of the Crime and Disorder Act and will enable the Council to better understand the potential impact of proposals and consider mitigating action.

Name or Brief Description of Proposal	CADS Phase 2
Brief Service Profile (including number of customers)	
Energy Efficiency and solar PV works across a wide number of corporate (non-schools) buildings. No direct impact on staff or council customers.	
Summary of Impact and Issues	
Possible temporary impact whilst works being undertaken on site. Noise, disturbance, and slight change in environmental conditions, which would be expected when replacing lighting and controls. These will be minimal with out of hours working in locations as required.	
Potential Positive Impacts	
Carbon & costs savings Improved light levels. Improve environmental conditions and controllability of workspaces.	
Responsible Service Manager	Jason Taylor
Date	15-03-23
Approved by Senior Manager	Ola Onabajo
Date	15-03-23

Potential Impact

Impact Assessment	Details of Impact	Possible Solutions & Mitigating Actions
Age	Potential disturbance and/or modifications to the appearance of facilities utilised by the elderly such as assisted living facilities etc.	The Energy Team will work closely with site operators to ensure that any modifications have minimal aesthetic impact wherever possible to ensure consistency.
Disability	Potential disturbance and/or modifications to the appearance of facilities used by people with disabilities such as day centres etc.	The Energy Team will work closely with site operators to ensure that any modifications have minimal aesthetic impact wherever possible to ensure consistency. Works will be carried out outside of hours of use wherever possible to ensure minimal disturbance through noise etc.
Gender Reassignment	None Identified	
Marriage and Civil Partnership	None Identified	
Pregnancy and Maternity	None Identified	
Race	None Identified	
Religion or Belief	None Identified	
Sex	None Identified	
Sexual Orientation	None Identified	
Community Safety	None Identified	
Poverty	Potential disturbance and/or modifications to the appearance of facilities used by people impacted by poverty such as libraries and day centres etc.	The Energy Team will work closely with site operators to ensure that any modifications have minimal aesthetic impact wherever possible to ensure consistency.
Health & Wellbeing	Potential changes to lighting and lux levels which may impact those with photosensitivity. Which has	All lighting designs will be compliant with the current CIBSE or other similar standards. Where an existing user who

Impact Assessment	Details of Impact	Possible Solutions & Mitigating Actions
	been known to cause migraine or similar health impacts.	experiences photosensitivity is known, the design or control strategy will be modified to accommodate the users sensitivities.
Other Significant Impacts	None Identified	