

SOUTH CAMBRIDGESHIRE DISTRICT COUNCIL

REPORT TO: Climate Change Working Group

12 August 2011

AUTHOR/S: Executive Director (Operational Services) / Corporate Manager (Planning and New Communities)

INSTALLATION OF PHOTOVOLTAIC PANELS AT SOUTH CAMBRIDGESHIRE HALL

Purpose

1. Following the decision made at the meeting of Full Council on 21 July 2011 when approval was given to use capital reserves to invest in the installation of photovoltaic panels at South Cambridgeshire Hall this progress report has been prepared to inform Members of the processes that are required to be implemented to ensure the project is completed on time and within budget and the progress made to date.
2. This is not a key decision as the Climate Change Working Group is not a formal decision-making body of the Council. The Working Group's role is to provide expert Member consideration and advice in support of important climate change related issues and decisions to the Portfolio Holder for Sustainability, Planning and Climate Change or Full Council.

Recommendations

3. That Members consider the attached report with a view to raising relevant issues and questions on the options arising from the site assessment work to date so that these can be fed into the detailed survey work currently in train. This survey work will be directly reflected in the tender brief for the installation – ultimately from which the supplier/ installer selection sign-off will need to be made by the Portfolio Holder for Sustainability, Planning and Climate Change at his November meeting.

Recommendations approved by Full Council 21st July 2011

4. That an increase in the capital programme of up to £190,000 be approved to fund the installation of an array of photovoltaic panels at South Cambridgeshire Hall.
5. That the necessary scheme design and contract award approvals be delegated to the Sustainability, Planning and Climate Change Portfolio Holder in consultation with the Climate Change Working Group.
6. Reasons:
 - (a) Improved rate of return on the investment made.
 - (b) Reduction in running costs of South Cambridgeshire Hall.
 - (c) Reduction in CO₂ emissions.

Background

7. The Feed in Tariff (FIT) scheme was introduced by Government in April 2010 to promote growth in the installation of solar electricity panels and other small scale generating renewable technology.
8. One of the key Council actions for 2011/12 is, "E2 We will take advantage of the Government's Clean Energy Cash Back scheme to install appropriate renewable

energy technologies within our housing stock and complete key projects from our Climate Change Action Plan to promote renewable energy generation tied to council assets and for the wider community.”

9. Following a tender process, PRP Architects were commissioned to prepare a feasibility study to evaluate the various options available to benefit from the Feed in Tariff scheme by the installation of solar panels on the property at South Cambridgeshire Hall.
10. Their report evaluated six options and identified the costs and benefits of each. This study formed the basis of the recommendation now approved by Council.
11. The existing buildings and site conditions were examined and the availability of suitable locations for the required plant and equipment assessed. The solar resource for each area was quantified to determine the potential solar radiation that would be received and the orientation and degree of over shadowing that would be experienced. The physical constraints of the existing buildings were also examined to estimate the costs of the installation including any changes or modifications required to the existing structure, fabric and building services to integrate the equipment

Considerations

12. To obtain the 32.9p/kWh rate of tariff available the optimum proposal is one which provides for generation at just below the 50kWp threshold.
13. The level of Feed In Tariff for installations below 50kWp is expected to be reduced for future installations in April 2012 but for projects that are completed by the end of March 2012, the existing tariff will remain fixed for 25 years.
14. The time frame available to complete the project is very tight and the detailed design and procurement phases of the work need to commence at the beginning of August 2011. Approval of detail design will be required in early September and approval of the installation tenders will be required at the beginning of November 2011.
15. The scheme design will be subject to Planning and Building Regulation approval.

Options Considered

16. The two large roof areas of the main building on the Northern and Southern wings were found to be suitable and were included in the analysis. A further option of providing an array of panels mounted on a structure within the main car park was also found to be suitable.
17. The option of installing photovoltaic panels on the roof requires less upfront capital investment than the car park options and therefore produces a better rate of return for the Council with a shorter payback period. This option is therefore recommended.
18. While the intention is to provide as many panels as possible on the roof of the existing building within the 50kWp upper limit, the constrictions of the roof space available, the orientation of the building and the degree of over shadowing will determine the actual size of the installation possible.
19. Real Time Display – In order to publicly demonstrate the Council's commitment to the production of on site renewable energy a visitor oriented real time display which will

indicate the output of the solar panels and the energy use of the building will be installed in the reception area.

Project update

20. Initial Project Meeting with Design Team held 28 July 2011 to define scope of work and delivery programme.
21. Design Team appointment document prepared and issued for signature to confirm appointment
22. Collection and issue of as built information.
23. Detailed survey work instigated
24. Contact made with Utilities

Implications

25.	Financial	The capital sum required is to be within the £190,000. budget The actual payback period and the internal rate of return are to be confirmed. The net surplus to be realised from reduced energy consumption, the feed in tariff and the export of surplus energy less maintenance and replacement costs over 25 years is to be confirmed. The annual saving on running costs for South Cambridgeshire Hall is to be confirmed.
	Legal	Planning and building control approval will be obtained for the proposed installation. Legal scrutiny will be obtained before contracts are placed.
	Staffing	None.
	Risk Management	Delivery by end March 2012 – progress to be monitored against agreed project programme The withdrawal of the FIT. Government announcements to be monitored to enable the project to be aborted before contracts are placed if at all possible. The period with most risk is after the contract is placed with the delivery contractor, expected 7 Nov 2011 until the installation is complete and operational, expected 9 March 2012
	Equality and Diversity	None identified
	Equality Impact Assessment completed	No Technical paper – for consideration
	Climate Change	The reduction in the Council's CO ₂ emissions estimated at between 321,379 and 359,484 kg over 25 years is to be confirmed.

Consultations

26. Consultations continue with the Council's Planning and Building Regulation Teams to determine the approvals required.

Consultation with Children/Young People

27. None.

Effect on Strategic Aims

28. The adoption of the recommendations of this report will contribute to the Council's agreed Action Plan of reducing CO₂ emissions and will also contribute to the Council's desire to generate additional income and reduce operational costs.

Background Papers: the following background papers were used in the preparation of this report:

Report to Council Meeting 21 July 2011 and decision note issued following the meeting.
PRP Architects South Cambridgeshire District Council (SCDC) PV Feasibility Study, June 2011

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