

Hampshire Fire and Rescue Authority

Finance and General Purposes Committee

Item 7

28 October 2011

Progress report on potential to install solar photovoltaic systems

Report by the Chief Officer

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1 Summary

1.1 This progress report:

- Sets the potential to install photovoltaic systems in the context of our Carbon Management Plan and the Hampshire Climate Change Partnership.
- Briefly sets out the current Feed-in Tariffs (FITs) system and the impact of expected changes.
- Outlines the timescale for developing business case(s) for the Authority to consider.
- Sets out the likely options for procurement, delivery timescales, funding mechanism, and the main risks involved.

2 Recommendations

- 2.1 That work on assessing the costs / benefits of installing photovoltaic systems on some of the Authority's buildings be progressed in collaboration with property and financial advisers from Hampshire County Council; and
- 2.2 That, any such installations deemed to satisfy a rigorous business case be presented to the Authority at its meeting on 7 December 2011 for consideration and urgent approval so that the benefits of more favourable Feed-in Tariffs (during 2011/12) can be obtained.

3 Introduction and background

- 3.1 Photovoltaic systems – or solar PV as they are more commonly known – is only one element in developing our environmental improvement strategy or Carbon Management Plan. The main focus is on reducing energy use and energy costs in our buildings. Due to the impending reductions in the value of FITs (see section 4) the case for considering solar PV installations is being pursued urgently to take maximum advantage of the currently high FITs.

- 3.2 As previously reported to the Committee, the Hampshire Climate Change Partnership did not identify a lead organisation for collaborative action on Solar PV installation; and each organisation would consider whether to pursue their own projects.
- 3.3 In August 2011 a national framework contract for the supply of solar PV was established for any local authority or public body in the UK to use. This framework would be the preferred procurement route for the Authority.
- 3.4 Hampshire County Council has proceeded with its own business case for solar PV on its sites and is now beginning the procurement process (using the framework). As a result Hampshire County Council is now in a good position to provide expert advice (under our existing Service Level Agreements) to develop further the business case(s) for solar PV on selected buildings. This information would be ready for presentation in a report to the Authority at its meeting on 7 December 2011.
- 3.5 The Authority would need to be in a position to approve any viable installations at its December meeting for there to be sufficient time to procure and install systems before the FITs are reduced.
- 3.6 The estimated maximum cost of fees to develop the business case(s) is £10,000. This can be met from within existing resources and will be taken into account in assessing the total costs involved.

4 National context for Feed-in Tariffs

- 4.1 The FIT rate at which electricity generators are paid depends on the peak capacity (in kWp) of an installation and when it is installed. Payments are guaranteed for 25 years and are index-linked to the Retail Price Index. The scheme contained incentive rates for systems installed before the end of March 2012 and published the rates which would be paid for 2012-2013. In June 2011 a Government fast-track FITs review produced a new banding system and lower tariffs, notably for schemes above 50 kWp.
- 4.2 Installations below 50 kWp completed before March 2012 remain unaffected by the fast-track review. The Government has announced it will consult over the autumn on proposals to reduce FITs for smaller schemes implemented after March 2012.
- 4.3 Reduction of FITs for schemes smaller than 50kWp after March 2012 will reduce the financial attractiveness and lengthen the payback of installations. Until the new rates are announced the scale of the effect will not be known. For this reason, work on solar PV needs to be progressed as quickly as possible to maximise potential financial gains.
- 4.4 The information gathered for the business case will also allow the financial model to be revised once the new FITs are known and reassessed if installations not completed within the 2011-2012 year are still viable for delivery during 2012-2013.

5 Content of the proposed business case

5.1 The business case(s) for consideration by the Authority will include assessments and estimates of:

- the realistic area and capacity of solar PV that could be installed on our buildings;
- prioritisation of schemes based on orientation, shading, roof condition, and other relevant factors;
- the cost of installation, maintenance and end of life disposal;
- electricity output (in kWh), savings (in £) and reduction in carbon footprint (in tonnes CO_{2e});
- revenue income from the FITs;
- payback period for the installations;
- the risks involved.

5.2 The Authority will be asked to consider and decide on one of three options:

Option 1 – Approval to fund (from the Improvement and Sustainability Reserve) the installation of viable solar PV systems before the end of March 2012. This will include obtaining relevant permissions (such as planning consent where applicable). The maximum investment sought is not likely to exceed £1.5m unless there is a very strong case to invest more. [The reserve is currently £2.3m]. Any viable installations not able to be implemented by the March 2012 deadline – for whatever reason – would be reassessed based on the prevailing FITs and represented to the Authority for consideration at a later date.

Option 2 – The Authority defers making a decision on any installation until the 2012/2013 FITs are known. Once the FITs are known the Authority would be asked to consider funding installations during 2012/2013. Again, the maximum expenditure sought is unlikely to exceed £1.5m unless there is a very strong case to invest more.

Option 3 – The Authority decides not to invest in a programme of solar PV installations for the time being.

6 Supporting our corporate aims and objectives

6.1 The installation of solar PV supports our ‘environment’ and ‘resources’ priorities in the Service Plan by reducing our carbon footprint, providing a long term revenue stream, and reducing exposure to future energy price rises.

7 Risk analysis

7.1 The business case(s) will put forward a more comprehensive risk analysis but the Authority should be aware of several key areas of risk:

- Delays in procurement or a decision to wait until the FITs review is complete (Option 2) would be likely to mean that the financial case for solar PV would not be as attractive as it is currently. There is great uncertainty over the paybacks for installations after the end of March 2012.
- Due to expected FITs reductions, demand for installations before the end of March 2012 is high across private and public sectors. We may not be able to find suppliers/installers that can carry out the work before the end of March 2012. This increases the importance of prioritising the most suitable buildings.
- But, investing in renewable energy sources such as solar PV will reduce our exposure to significant energy price rises in the future.

8 People Impact Assessment

- 8.1 The proposals in this report are considered compatible with the provisions of the European Convention on Human Rights, the Human Rights Act 1998, and the Race Relations (Amendment) Act 2000.

9 Environmental and Sustainability impact assessment

- 9.1 Solar PV will:
- substantially reduce the carbon footprint of the organisation
 - generate electricity which we would otherwise have bought, thereby reducing exposure to rapidly rising energy prices
 - provide a 25 year revenue stream from the FIT payments

10 Resource implications

10.1 Human Resources

The development work for the business case will be delivered using existing staff resources and by engaging expert advice under our service level agreement for property services with Hampshire County Council.

10.2 Financial Implications

The fees for expert advice (estimated not to exceed £10,000) will be met from within existing resources. The detailed costs of any proposed installations will be set out in the business case(s) presented to the Authority in December 2011.

11 Background papers

- 11.1 The following documents disclose the facts or matters on which this report, or an important part of it, is based and has been relied upon to a material extent in the preparation of the report:

“None”

Note: The list excludes: (1) published works; and (2) documents that disclose exempt or confidential information defined in the Act.