

Subject:	Photovoltaic Solar Panel Implementation Plan for non-housing properties		
Date of Meeting:	9 June 2011		
Report of:	Strategic Director, Resources		
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Key Decision:	Yes	Forward Plan No: CAB22711	
Wards Affected:	All		

FOR GENERAL RELEASE**1. SUMMARY AND POLICY CONTEXT:**

- 1.1 The report provides an update on the implementation of renewables within non-housing Council properties and in particular the installation of Photovoltaic (PV) solar panels to roof spaces on a select list of sites. The report seeks approval for the purchase of solar panel equipment once detailed figures and a viable business case is demonstrated at the end of the procurement process. The installation of the PV solar panels falls under the council's Carbon Reduction Commitment and the VFM3 programme.
- 1.2 Significant investment is required in order to install Photovoltaic (PV) solar panels to a range of Council non-housing properties. This will enable the Council to benefit from renewable energy generated at each individual site, cut carbon emissions by 300-400 tonnes pa, collect revenue from the funds generated by the Feed In Tariff (FiT) and demonstrate a commitment to supporting renewable technology, as well as continuing a progressive stance on environmental matters. Through the monies generated the installation of PV panels will make efficiency savings for the council. Since December 2010 full consultations have been carried out with the relevant affected services/teams and associated business costs and benefits have been worked through in detail to identify appropriate funding. We wish to move quickly to assess the benefits of the Feed in Tariff scheme and to take advantage of any opportunity this offers the Council to gain investment and energy savings before the Feed In Tariff is reviewed in April 2012 by central government.
- 1.3 Property & Design have been working with several Council teams and services, with a particular focus on forging links with the Housing Department, who are also planning on installing PV solar panels to some of the Housing stock through their work with partners in the current Brighton & Hove and East Sussex Together (BEST) housing consortium. The reason for developing these links has been to develop a common procurement process to ensure the Council benefits from no duplication of efforts during the development stage.

- 1.4 The resulting shared procurement process with Housing has meant that all the Council buildings, deemed suitable for PV solar panels as well as the housing sites, have the ability to join a procurement framework, such as the one led by Eastbourne Borough Council. The use of a framework means that the Council can utilise shorter timescales and means that the normal 6 month procurement period can be avoided.

2. RECOMMENDATIONS:

- 2.1 That Cabinet notes the outcome of the initial soft tendering exercise and recent framework contract development indicates that there is an outline business case to support delivery of a solar photovoltaic scheme across the council's non-housing stock that saves energy costs and reduces carbon emissions.
- 2.2 That Cabinet approves the installation of Photovoltaic Solar Panels on the properties highlighted in appendix 1 subject to completion of the tendering exercise and the financial viability of each site.
- 2.3 That Cabinet approve funding of up to £2.6m for the sites identified within Appendix 1. The business case will be funded through a combination of borrowing and the use of reserves subject to the Council's overall financial position.
- 2.4 That Cabinet delegates authority to the Strategic Director Resources and the Director Finance, in consultation with the Cabinet Member for Finance & Central Services to allow them to approve the purchase and installation of the panels for these identified properties through the self finance route, once more detailed costs are provided at the end of the tender process. This will allow the Council to move quickly and take advantage of the energy savings and be able to collect the full Feed in Tariff from the start.

3. RELEVANT BACKGROUND INFORMATION:

- 3.1 Feed-in Tariffs (FITs) became available in Great Britain on 1st April 2010 as a way of encouraging microgeneration and installation of renewable technology. Under this scheme energy suppliers have to (compulsory for big six suppliers) make regular payments to householders and communities who generate their own electricity from renewable or low carbon sources such as solar electricity panels(PV) or wind turbines.
- 3.2 The scheme guarantees a minimum payment for all electricity generated under the scheme, as well as a separate payment for any electricity exported to grid. These payments are in addition to the bill savings made by using the electricity generated on-site, by the solar panels.
- 3.3 The Government will guarantee the Feed-in-Tariffs (set out in current legislation) for 25 years. The current, generous, tariff levels are only guaranteed at the present level for the 25 year period if panels are installed and operational by April 2012. Panels installed after that date will still benefit but at a reduced level. The recently announced early review of the FIT tariffs is unlikely to target this type of scheme as it will be focussed on larger installations, sometimes referred to as solar farms.

- 3.4 The proposal will help the Council to reduce its carbon footprint, through the use of renewable energy to meet some of the Council's electricity needs, as well as generate revenue from the Feed In Tariff and reduce electricity bills for the sites involved. The reduction in carbon from the use of the panels will also aid in reducing the number of allowances the Council will have to purchase as part of the Carbon Reduction Commitment. At some sites there is scope for surplus electricity being generated, which could be fed back to the national grid thereby helping to reduce the need for electricity production from fossil fuels. However, due to the scale of installations and type of usage at the various suitable sites, this is unlikely to be a regular occurrence.

4. IMPLEMENTATION and PROGRESS

- 4.1 The Corporate Energy & Water Team provided a list of sites and their postcodes to a solar company in order to carry out a soft tendering exercise and determine the viability of the programme and the sites in question. They returned information that provided an illustrated range of outputs from the estimated number of panels these properties could accommodate. This information illustrated a potential for a viable business case to be explored and enabled us to carry out further investigations.
- 4.2 Further information was gained as a result of developing links with frameworks such as the Eastbourne framework which provided more robust figures and allowed us to revise the data we have on the costs and savings that can be achieved. The current business case is based on the data collated from the tender process carried out by the frameworks we investigated.
- 4.3 The list of sites submitted has been based on a survey of suitable roof space and has identified 40 suitable non-housing properties, including civic sites, schools, etc. From these 40 sites 23 we know to be able to provide sufficient returns, the remaining 17 sites have illustrated a limited return or are in the upper thresholds of the FIT criteria. One of the conditions set within the procurement process is a request for a detailed survey that will confirm if these borderline sites are financially viable.
- 4.4 The suitable sites are based on a number of factors including orientation, the risk of 'overshadowing', security, sufficient roof space and structural integrity.
- 4.5 Through the market testing carried out by the Corporate Energy & Water Team, in conjunction with Finance the capital costs of a fully funded and operated PV solar panel scheme of this size would be in the region of £2m to £2.6m. However more accurate capital costs would be provided through a tender exercise so that the business case and financial model can be updated and it is at this point we would seek approval from the Strategic Director Resources and Director Finance, in consultation with the Cabinet Member for Finance & Central Services.

Progress to date

- 4.6 The current position with the application of PV solar panels is that Brighton & Hove City Council, through the work carried out by Procurement can utilise two frameworks. Access to the chosen framework can commence once Cabinet approval is given, the council will then be able to produce a mini-competition

within the framework contract and award a preferred bidder by the beginning of September 2011 for the supply and fitting of the panels.

- 4.7 A large number of suitable sites are schools and consultations with these sites have been initiated. Once approval is given, the next stage to develop a legal contract with the affected schools that will define collection of payments, distribution of energy, funding and resolve future ownership issues.

Reasons for short timescales

- 4.8 There is a need to procure solar panels sooner rather than later for three reasons:
- The Feed In Tariff is due to diminish as from the 1st April 2012 and in order to obtain the Feed In Tariff at the current favourable price, all panels must be procured and installed before this date.
 - As other authorities and businesses also strive to take advantage of the Feed In Tariff, the demand for panels will be significant. The concern is that demand will outstrip supply, as has been experienced in Germany and France when their Feed In Tariff initiatives were first released. Therefore the sooner orders are applied the more likely stock of solar panels will be available.
 - In order to avoid lengthy OJEU procurement timescales we are seeking approval to utilise the framework such as the one being set between Housing and Eastbourne Borough Council through the BEST consortium.
- 4.9 The other main concern is that despite the initial announcement of Feed In Tariffs, its value would be reviewed as from the 1st April 2012. Since that initial announcement there has been a change of government and the Feed In Tariff has been closely scrutinised and some reviews have already taken place. This places more pressure on obtaining and installing the required solar panels well ahead of the April 2012 deadline.

5. FINANCIAL & OTHER IMPLICATIONS:

Financial Implications:

Funding Options

- 5.1 There are various ways in which the Council can move forward with the introduction of renewables and these are:
- 5.2 Hosted: The contractor fund owns the PV system for 25 years and all the FIT payments, and the school effectively leases its roof to the fund and gets all of the electricity and carbon saving. This offer is most suitable for lowest cost, highest yield buildings with large roof areas, as this will allow the school to get maximum electricity savings for a small deposit or in some cases for free.
- 5.3 Lease offer: The site receives all of the FIT and the electricity savings and uses these to pay for the PV system over 15 years. This type of funding offer is only suitable for low cost, high yield buildings where the school/council and supplier are comfortable that the lease payments are covered by the FIT from year 1 and that the site always receives the electricity savings. In order for this to be

possible, it is best if the school/council pays as high a deposit as possible per site. High deposit, low cost of system and high yield all mean that the lease payments are low and the FIT returns and electricity savings are high. In this case the council can get some of the FIT as early as year 1, and all of the FIT for the last 10 years. The returns to the council over the 25 years are much higher than the hosted offer, but the risk of the system generation is also with the school/council.

- 5.4 Self Finance: Same as the Lease offer option, except the Council takes out its own loan and/or uses reserves as required to cover the cost of the scheme. With the preferential borrowing rates available to the Council, this would work out cheaper than a lease arrangement. Subsequently, the site receives all of the FIT and the electricity savings and uses these to pay for the PV system over lifetime of panel or sooner depending on revenue and borrowing.
- 5.5 The benefits that are common to all options are:
- The carbon footprint of the Council will be reduced
 - The level of energy expenditure will be reduced
 - The Council will earn an income from the technology
 - The timescales of payments to the Council will be 25 years
- 5.6 The Self Finance option provides the most efficient use of investment and provides the greatest savings and income generation to the council as a whole subject to the outcome of the tendering exercise.

Savings

- 5.7 From reviewing the sites highlighted as being suitable for the application of the photovoltaic solar panels and through carrying out a soft tender exercise, it is possible to calculate the level of energy produced in kWh and subsequently the level of Feed in Tariff payments and energy savings that can be attributed to the scheme. The level of energy produced ranges depending on a number of factors, most notably the level of sunlight available.
- 5.8 The amount of investment is estimated to be between £1.3m to £1.6m for the 23 sites where a business case is most likely to be proved. The additional 17 sites identified that may potentially be included would require a further investment of between £0.7m to £1m. The costings are subject to the outcome of the procurement exercise. The potential sites have been detailed within Appendix 1. The business case will be based upon using borrowing to fund the installations over 15 years, however, funding may be met through a combination of borrowing and the use of reserves subject to the Council's overall financial position.
- 5.9 The FIT payments would be generated over a 25-year period and would be available directly to the council to finance the original investment. The total annual FIT payment and utility savings less financing costs and maintenance costs would range between £26,000 and £100,000pa for the 23 sites potentially rising to between £40,000 and £158,000pa for all 40 sites.

The utility cost savings on council civic and operational buildings (estimated at between £6,000 to £23,000 annually) will come directly to the council in the form

of reduced utility bills whilst the savings generated from the school sites (estimated at between £28,000 to £42,000 annually) will go directly to each school. Future potential rises in utility bills have not been factored into these estimates and it is projected that utility bills could rise by up to 10% to 15% in this financial year alone, should this happen then the level of utility cost savings will be higher.

- 5.10 The savings projected are based upon the assumption that the solar panels are installed and operational before 1 April 2012. The investment of photovoltaic solar panels would contribute to the council's commitment to meet the Carbon Reduction Commitment and would generate additional savings of £12 for per tonne of CO2 reduction.

Finance Officers Consulted: Rob Allen

Date: 09/05/11

Legal Implications:

- 5.11 As the owner of the freehold in the properties listed in Appendix 1, the council can make alterations and improvements including the installation of solar PV panels, so long as these comply with the appropriate buildings regulations and fire safety requirements.
- 5.12 Although the procurement will make use of the framework agreement established by Eastbourne Borough Council, the Council must still comply with its own contract standing orders (CSO) in awarding the contract. Under CSO 3.1, the authority of the relevant Cabinet Member or Cabinet itself must be sought where expenditure exceeds £500,000, as it does in this instance. The council's procurement must also comply with the Public Contracts Regulations.
- 5.13 The statutory framework for the Feed-in Tariff scheme is provided by sections 41-43 of the Energy Act 2008 and associated regulations.

Lawyer Consulted:

Oliver Dixon

Date: 27/05/10

Equalities Implications

- 5.14 A full Equalities Impact Assessment will be carried out at pre project delivery stage. At present we do not foresee significant equalities implications. Outcomes of the EIS will be reported at the next decision making stage.

Sustainability Implications:

- 5.15 The proposals outlined above would bring significant sustainability benefits in terms of climate change and energy use and promoting sustainable communities.

Crime & Disorder Implications:

- 5.16 We do not foresee any significant crime and disorder implications

Risk & Opportunity Management Implications:

- 5.17 There are significant risk and opportunity implications that will be fully assessed and where necessary mitigated at pre project delivery stage.

Corporate / Citywide Implications:

5.18 The proposals support the council priorities:

- Protect the environment while growing the economy
- Better use of public money
- Reduce inequality by increasing opportunity

6. EVALUATION OF ANY ALTERNATIVES

6.1 The Council wishes to take forward any procurement of the supply and installation of PV solar panels in order to establish actual costs to inform economies of scale and further consideration of business case and appropriate funding model. Any final decision on funding options, level and source of funding to progress this scheme will be subject to Cabinet approval. However, an initial options appraisal by the Corporate Energy Water Team indicates that the greatest benefits to the Council could be achieved through a fully owned and funded model.

6.2 Indications from the initial options appraisal suggest that on balance a fully funded and owned model of delivering a solar PV scheme has the potential to create significant income, generated by the Feed in Tariff payment, to the council over a 25 year period.

7. REASONS FOR REPORT RECOMMENDATIONS

7.1 To move quickly to assess the benefits of the Feed in Tariff scheme and to take advantage of any opportunity this offers the Council to gain investment and energy savings before the Feed in Tariff is reviewed in April 2012.

7.2 To take forward any procurement of the supply and installation of solar PV panels in order to establish actual costs to inform economies of scale and further consideration of business case and appropriate funding model.

SUPPORTING DOCUMENTATION

Appendices:

1. Site Details and generation figures

Documents In Members' Rooms

None

Background Documents

None

