

<b>Subject:</b>	<b>Home Energy Efficiency Investment Options – Installation of Solar Panels to council owned homes</b>		
<b>Date of Meeting:</b>	<b>22 September 2011</b>		
<b>Report of:</b>	<b>Strategic Director, Place</b>		
<b>Lead Member:</b>	<b>Cabinet Member for Housing</b>		
<b>Contact Officer:</b>	<b>Name:</b>	<b>Martin Reid</b>	<b>Tel:</b> 29-3060
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<b>Key Decision:</b>	<b>Yes</b>	<b>Forward Plan No: CAB24348</b>	
<b>Wards Affected:</b>	<b>All</b>		

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

- 1.1 One of the key strategic priorities outlined in the City-wide Housing Strategy 2009-14 is to improve housing quality, to make sure that residents are able to live in decent homes suitable to their needs. Our strategic goals include, reducing fuel poverty, minimising CO2 emissions and improving tenants' homes ensuring they are of high quality and well maintained. This is consistent with our ambitions to mitigate and adapt to climate change.
- 1.2 The Housing Revenue Account Capital programme for 2011-14 includes home energy efficiency investment as a housing commissioning investment priority for possible future investment. In order to maintain our current level of performance and meet our strategic priorities we also need to explore alternative funding streams to enable the continued delivery of home energy efficiency programmes in both the private sector and council stock. Previous reports and presentations to Housing Management Consultative Committee and Housing Cabinet Member Meeting have noted the importance of continuing to work with potential partners such as energy companies to explore means of maximising investment to meet our strategic housing goals, including potential opportunities offered by the Government backed Feed in Tariff scheme.
- 1.3 The Council has the opportunity to install solar PV panels onto its Council-owned residential properties. This has arisen out of the Government's Feed-in-Tariff incentive scheme and would:
  - Significantly raise the profile of renewable energy in the city;
  - Attract a multi-million pound investment and possibly create new business and employment opportunities;
  - Create investment into city housing stock;
  - Reduce the carbon footprint;
  - Allow some Council tenants to lower their fuel bills;
  - Create an income stream into the council and subsequently further investment opportunities.

The recommendations in this report need to be agreed now to maximise the benefits that can be achieved from the Feed in Tariff scheme prior to the governments planned reduction of the tariff in April 2012.

As part of this commitment Housing Commissioning have been working with tenants, our procured Energy Managing Partner (Climate Energy) and other local authority partners to investigate and maximise home energy efficiency investment options for our tenants and residents from Feed-in Tariffs (FITs).

## **2. RECOMMENDATIONS:**

- 2.1 That Cabinet approves a capital programme budget up to a maximum of £15.0 million for Solar Photovoltaic Panels on council housing stock to be financed through unsupported borrowing in the Housing Revenue Account, which will only be drawn against subject to the approval of the Strategic Director for Place and the Director of Finance, in consultation with the Cabinet Member for Housing to proceed with the scheme.
- 2.2 That authority be delegated to the Strategic Director for Place, in consultation with the Cabinet Member for Housing to approve the planning, supply, installation and maintenance of the panels via an approved framework agreement and a call off contract or contracts under an approved framework agreement.
- 2.3 That Cabinet notes the outcome of the initial options appraisal undertaken by Climate Energy, indicating that there is an outline business case to support delivery of a solar photovoltaic scheme across the council housing stock and to meet strategic housing and other council priorities, including private sector housing renewal, reducing fuel poverty and reducing carbon emissions.
- 2.4 That Cabinet notes the procurement exercise to establish the Solar Bourne framework agreement undertaken by Eastbourne Borough Council with involvement from partners in the BEST consortium, and that the costs identified through the above procurement further support an outline business case as indicated by the initial options appraisal work.

## **3. RELEVANT BACKGROUND INFORMATION/CHRONOLOGY OF KEY EVENTS:**

### **Business Case for the installation of Solar Panels on council owned homes.**

- 3.1 One of the key strategic priorities outlined in the City-wide Housing Strategy 2009-14 is to improve housing quality, to make sure that residents are able to live in decent homes suitable to their needs. Our strategic housing goals include:
  - Goal 4: Making best use of the housing stock
  - Goal 6: Work with home owners & landlords to maintain and improve the quality of their housing
  - Goal 7: Reduce fuel poverty & minimise CO2
  - Goal 8: High quality and well maintained council housing, improving tenants homes to meet the Decent Homes Standard

- 3.2 The Council has a strong background in delivering home energy efficiency improvements across both the council housing stock and the private sector. Across private sector housing the BEST programme has funded the Brighton & Hove Energy Action Partnership (BHEAP) that has delivered home energy efficiency measures to some of the most vulnerable residents in Private Sector Housing, including:
- 1461 loft insulations
  - 1126 cavity wall insulation
  - 1537 heating measures
  - 141 solar water heating systems

Historically across the council housing stock we have invested significantly in insulation & heating. The current SAP Energy Rating of 76.4 puts us in the top quartile of performance in this indicator. In addition:

- We are investing £3.5 million in boiler & heating replacements and upgrades, installing high efficiency condensing boilers
  - Last year we completed 2 insulated overcladding projects to Wiltshire House & Somerset Point and a communal solar hot water system at Hazelholt sheltered scheme, partly funded by utility company grant monies
- 3.3 In April 2010 the Government introduced Feed-in Tariffs (FIT) to accelerate the implementation of technologies that create on-site renewable electricity. These rates are considered generous and ultimately reward investment in renewable technologies.
- 3.4 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.
- 3.5 It should be noted that the government is currently carrying out an early review of the Feed in Tariff scheme due to the large scale solar installations that weren't anticipated under the FITs scheme, there is concern this could mean that money meant for people who want to produce their own green electricity has the potential to be directed towards large scale commercial solar projects. The government's comprehensive FITs review will assess all aspects of the scheme including tariff levels, administration and eligibility of technologies and will be completed by the end of the year, with tariffs remaining unchanged until April 2012 (unless the review reveals a need for greater urgency).
- 3.6 The proposal can help tackle fuel poverty in the following ways:
- Reducing residents' electricity bills as they can use electricity that is being generated by the panels, either free of charge or at a reduced rate
  - Through re-investment of FIT income in other energy efficiency measures
  - Creating an investment stream for further renewable energy technologies that in turn may create further investment opportunities i.e. the governments Renewable Heat Incentive (RHI).
- 3.7 The proposal will help the City to reduce its carbon footprint, through the use of renewable energy to meet some of the city's electricity needs. Surplus electricity generated is fed back to the national grid thereby helping to reduce the need for electricity production from fossil fuels.

### **Initial options appraisal by Climate Energy**

- 3.8 Our existing energy efficiency managing partner, Climate Energy, have carried out an extensive options appraisal to identify the potential benefits of a solar PV scheme across the council housing stock. The appraisal has been based on a survey of suitable roof space that has identified approximately 1,600 dwellings as being suitable based on a number of factors including orientation, roof pitch and the risk of 'overshadowing'.
- 3.9 The options appraisal has identified that such a solar PV scheme has the potential to provide lifetime carbon dioxide savings of over 48,000 tonnes.
- 3.10 There are a number of different ways that a solar PV FIT scheme can be delivered: fully owned and funded by the council (either within current structures or via a special purpose vehicle); externally owned and funded (sometimes referred to as 'rent a roof'); or a shared equity approach in partnership with an external investor.
- 3.11 The options appraisal and the information provided from the procurement exercise have indicated that the greatest benefits to the city could be achieved through a fully owned and funded model. This model would provide the same benefits in terms of CO2 savings and potential reductions in energy costs to residents but also has the potential to provide the council with an additional income stream from the Feed in Tariff payments.
- 3.12 In addition to the potential income that can be generated, there are other significant benefits to the Council of opting for the self-funding route:
- There will be complete control over investments
  - There will be greater opportunity to create local employment opportunities (including apprenticeships)
  - There will be an opportunity to recycle money back into the community
  - The fuel-poor can be assisted
  - The Council can play an important role in developing the local renewable energy economy, and support Brighton & Hove businesses
  - The scheme sets up a platform for other low-carbon technologies and further opportunities presented by both the Renewable Heat Incentive and the governments 'Green Deal'
- 3.13 Market testing by Climate Energy, carried out as part of the options appraisal, indicated that the capital costs of a fully funded and operated solar PV scheme of this size would be in the region of £15 million.

### **Solarbourne Framework Agreement**

- 3.14 Subsequent to the initial options appraisal Brighton & Hove have participated in a procurement exercise, led by Eastbourne Borough Council to establish the Solarbourne framework agreement for the procurement of supply, installation and maintenance of solar PV panels in order to establish actual costs, to inform economies of scale and further consideration of the business case and appropriate funding model.
- 3.15 The financial modelling carried out to date cannot in itself guarantee capital costs and potential surplus but provides an indication of the likely range of capital costs

and surplus achievable. This information will be used in the planning and implementation of a detailed programme of work including in deciding the number and type of installations that can, and should, be delivered in this financial year and the next. Project management of the programme of works including updating the financial modelling based on actual installations will enable risks to be managed effectively. Sufficient costs have been included in the financial modelling to provide for the project management function.

- 3.16 Financial information provided through the Solarbourne tender exercise confirmed that the capital costs of the scheme across all suitable roofs would be in the region of £14-16 million, dependent on the supplier used from the framework. The supplier may be selected through a mini-competition exercise and there is potential for capital costs and therefore potential surplus to improve through this process.
- 3.17 Brighton and Hove are not committed to accessing the Solarbourne Framework and have been exploring options for accessing other similar frameworks to ensure that the potential scheme benefits are maximised. Legal and Procurement advice has been taken on existing framework agreements available. Officers continue to evaluate these options to ensure that the benefits are maximised for the council and local residents and will then proceed either through a mini competition with Solarbourne or other approved framework, such as that below.
- 3.18 The non-housing solar PV implementation programme is progressing, having received Cabinet approval in June. The list of approximately 40 sites identified for the installations based on specific technical criteria has been reviewed and refined due to Planning and Listed Building application requirements. Existing national and regional procurement frameworks for solar PV installations have been evaluated and the national Pro5 Microgeneration Technologies framework contract has been chosen as the most appropriate procurement route. This framework is readily accessible with 13 providers for the South East region. In order to find a value for money contractor to meet specific needs further specifications for a mini competition under the Framework are being established. Local labour, apprenticeships, suppliers, timing and capacity issues will be addressed through the mini competition process. The works will be undertaken in two lots and with the aim of being in a position to appoint the suppliers in November 2011. With approximately one month mobilisation installations are expected to start on site early next year and be complete by the end of March 2012 to take advantage of the current Feed in Tariff rates. We continue to work closely with colleagues in Property and Design to ensure learning and experience is shared for the benefit of both housing and non-housing opportunities.

#### **4. CONSULTATION**

- 4.1 Consultation has taken place with council tenants through Cabinet Members Energy Efficiency Working Group. Presentations were given and options discussed at meetings on the 1<sup>st</sup> November 2010, 10<sup>th</sup> January, 21 February 2011 & 4<sup>th</sup> April 2011. Feedback from the group has been generally positive.
- 4.2 Presentations and discussions have also taken place at Area Panel tenant participation meetings on the following dates;

- North & East Area Panel – 17<sup>th</sup> November 2010
- East Area Panel – 22<sup>nd</sup> November 2010
- West Area Panel – 23<sup>rd</sup> November 2010
- Central Area Panel – 25<sup>th</sup> November 2010

Feedback has been positive, with residents keen to understand which buildings may be suitable.

- 4.3 Presentations have also been delivered to members, tenant reps and others through previous HMCC meetings, specifically 8<sup>th</sup> November, 13<sup>th</sup> December 2010 and 13<sup>th</sup> June 2011.

## **5. FINANCIAL & OTHER IMPLICATIONS:**

### Financial Implications:

- 5.1 Financial modelling has taken place using the information provided from the Solarbourne procurement exercise. The potential net present value (NPV) surplus, based on the assumption that the majority of units will be installed after 1 April 2012 and therefore utilising the post April 2012 Feed in Tariff (FITs) rates, is in the region of £9 million for 1,600 properties. (Note that the NPV surplus is after repayment of borrowing).
- 5.2 The potential surplus will be dependent on a number of variables including the original capital outlay, when installations are completed, the performance of the panels and the actual 'yield' created. Figures in the financial modelling have been calculated allowing for reasonable and foreseeable contingencies in project delivery and ongoing management.
- 5.3 Any changes to the FIT rate will be modelled as part of a mini competition/tender process to ensure that the scheme provides a positive NPV return for the scheme to proceed.
- 5.4 The Capital funding of the Solar Panel scheme will be met through unsupported borrowing through the Housing Revenue Account, which will be repaid from the annual surpluses that the scheme provides. Self financing of the Housing Revenue Account will be implemented from 1 April 2012 and the borrowing of £15 million will be within the borrowing ceiling limit that will be introduced as part of self financing.
- 5.5 The Solar Panel scheme budget will be included in the HRA Capital Programme budget for the appropriate year and the unsupported borrowing will be built into next years HRA Budget Strategy.

*Finance Officer Consulted: Susie Allen*

*Date: 25/08/11*

### Legal Implications:

- 5.6 The Councils procurement through any framework agreement must comply with the Public Contracts Regulations 2006. The Council is entitled to access any suitable framework agreement(s) which have been set up with contractors to provide for the planning, supply, installation and maintenance of Solar PV panels on council housing stock, (including but not limited to the Solarbourne framework

once it has been concluded and the Council has signed the access agreement with EBC). Without the delegation of authority recommended in paragraph 2.2, contracts called off from any framework could require separate approval under Contract Standing Orders, depending on the value of the call off contract.

- 5.7 The statutory framework for the Feed-in Tariff scheme is provided by sections 41-43 of the Energy Act 2008 and associated regulations.
- 5.8 As the owner and landlord of properties let on secure tenancies, the Council is empowered to install Solar Photovoltaic Panels. The installation of the panels must be undertaken with due regard to tenants' rights under the Human Rights Act to respect for private and family life and protection of property.

*Lawyer Consulted:*

*Isabella Hallsworth*

*Date: 25/08/11*

*Liz Woodley*

*Date: 31/08/11*

Equalities Implications:

- 5.9 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 EIA and subsequent actions will be monitored and managed through the project management stage.

Sustainability Implications:

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

Crime & Disorder Implications:

- 5.11 There are no significant crime and disorder implications foreseen.

Risk & Opportunity Management Implications:

- 5.12 Risks and opportunity played a significant part of the Solarbourne procurement process and the design of the specification for both equipment and installation programme. The ongoing management of risk and opportunity implications will be fully assessed and where necessary mitigated through the project delivery stage.

Corporate / Citywide Implications:

- 5.13 The proposals support the council priorities:
- Tackling inequalities
  - Making Brighton & Hove the most sustainable city in the UK

And the corporate priorities;

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

## **6. EVALUATION OF ANY ALTERNATIVE OPTION(S):**

- 6.1 The Council has worked with partners in the current BEST consortium to establish the Solarbourne framework agreement for the provision of the planning, supply installation and maintenance of solar PV panels in order to establish actual costs and to take advantage of any potential for creating economies of scale. The outcome of this procurement process, led by Eastbourne Borough Council, allows further consideration of the business case and appropriate funding model. The actual costs identified in the framework agreement support the business case developed as part of the initial options appraisal by Climate Energy. Both the framework agreement and the options appraisal indicate that the greatest benefits to the city could be achieved through a fully owned and funded model.
- 6.2 Solar PV installation companies, together with the backing of private investment companies, are willing to pay the capital costs to install solar PV panels onto the roofs of homes if, in return, they receive the Feed In Tariff (FIT) incentive over a 25-year period. It may be possible for the Council to generate additional receipts, by some form of “profit share” or roof rental agreement. This would be in addition to an element of free or cheap electricity and the CO2 savings such a scheme would generate. There are potential additional benefits in this option including; no or less capital borrowing required and reduced or shared risk related to delivering the installation and ongoing maintenance and monitoring of solar PV installations. However this model would be unlikely to deliver the same benefits outlined in the report, and the income would be significantly less than that achievable through a fully funded and operated model. The Solarbourne framework agreement includes an option for the ‘rent a roof’ scheme. However only one supplier is on the framework and the information available to us at this stage is not sufficient to calculate what the expected return would be.
- 6.3 Indications from the initial options appraisal, by Climate Energy, suggest that on balance a fully owned and operated scheme has the potential to provide significantly greater benefits to the city as a whole and that risks associated with this model can be adequately mitigated through in-house and procured expertise. These initial indications have been backed up through the Solarbourne framework agreement procurement exercise. 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. A fully owned and funded model gives the council greater influence over delivering the benefits outlined in this report.
- 6.4 The focus of work to date has been on the procurement of the Solarbourne framework agreement to inform a business case for proceeding with the installation of solar PV on council housing. We are not committed to accessing this framework and have explored options for accessing other frameworks to provide further opportunities and as a contingency if issues arise that prevent the council from maximising potential benefits through the Solarbourne framework agreement. Legal and procurement advice has been taken on other existing framework agreements for supply and install of solar PV which are accessible by the council and meet our needs. Officers continue to assess these options to ensure benefits are maximised for the council and local residents.



## **7. REASONS FOR REPORT RECOMMENDATIONS**

- 7.1 Approval is required now to realise 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 Approval is required now to realise the benefits of CO2 reductions and the provision of free or cheap electricity to tenants who may be living in, or at risk of, fuel poverty.
- 7.3 To realise and maximise the additional benefits outlined in this report.

## **SUPPORTING DOCUMENTATION**

### **Appendices:**

None

### **Documents in Members' Rooms**

None

### **Background Documents**

None