

Subject: Home Energy Efficiency Investment Options
Date of Meeting: 7th March 2011
Report of: Lead Commissioner Housing
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Key Decision: No
Wards Affected: All

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 under this priority include, reducing fuel poverty, minimising CO2 emissions and improving tenants' homes ensuring they are of high quality and well maintained.
- 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 the Government's new 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.

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.

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:

- (1) That the Cabinet Member for Housing note the Home Energy Efficiency Investment options and opportunities available to the Council, its tenants and residents through installation of solar photovoltaic panels on council and other homes to take advantage of the Feed in Tariff scheme.
- (2) That the Cabinet Member for Housing note 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.
- (3) That the Cabinet Member for Housing note that existing sub-regional local authority partners in the BEST consortium are also undertaking similar initiatives to install solar panels to take advantage of the Feed in Tariff scheme and that we have identified significant potential advantages to working in partnership to move quickly to enable economies of scale to be explored through procurement arrangements.
- (4) That the Housing Management Consultative Committee recommends that the Cabinet Member for Housing agree that BHCC works with partners in the current BEST consortium to ascertain whether BHCC can take forward any procurement of the supply and installation of solar PV panels together with those partners in order to establish actual costs to inform economies of scale and further consideration of business case and appropriate funding model. In addition, consideration will be given to procuring the supply and installation of solar PV panels with our partner Mears Ltd.
- (5) That the Cabinet Member for Housing notes any final decision on funding options, level and source of funding to progress this scheme together with any procurement supply and installation of solar PV panels as set out in this Report will be subject to Cabinet approval.

3. RELEVANT BACKGROUND INFORMATION/CHRONOLOGY OF KEY EVENTS:

- 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
- Local Area Agreement target NI 187: reducing fuel poverty

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:

- 1346 loft insulations
- 1037 cavity wall insulation
- 1481 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 electricity 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. 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.

3.5 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).
- 3.6 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.
- 3.7 We have carried out an extensive options appraisal with our existing energy efficiency managing partner 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'.
- 3.8 The options appraisal has identified that a solar PV scheme has the potential to provide lifetime carbon dioxide savings of over 48,000 tonnes.
- 3.9 Market testing by Climate Energy has been carried out as part of the options appraisal. This has 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. However more accurate capital costs would be provided through a tender exercise, at which time the business case and financial model can be updated and fully assessed by officers prior to a final decision needing to be made.
- 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 has 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 would also provide the council with an additional funding stream from the Feed in Tariff payments. Payments received from the feed in tariff would enable funding of the scheme through borrowing; FIT payments are at a level that would allow paying back loan costs whilst creating a surplus. Such an income stream can then be re-invested into housing across the city to allow the council to continue to meet the aims and objectives set out within the Housing Strategy.

- 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 In addition to Council housing, we are keen to expand the benefits of the scheme into alternative markets/tenures, including private sector housing and the commercial market. The scheme may provide other sectors with the opportunity of purchasing solar panels and paying for the installation at competitive rates, with measures in place to assist low income households to take advantage of the initiative. This would be a key part of the scheme in that the Council would be utilising its purchase power for the benefit of the wider community. Engaging with the private sector would also ensure that installation volumes remain high and keep the price per unit of the solar panel at a reasonably low level for the council housing scheme.

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 1st November 2010, 10th January & 21 February 2011. Feedback from the group has been generally positive; a summary of feedback is contained in Appendix 1.

4.2 Presentations and discussions have also taken place at Area Panel tenant participation meetings on the following dates;

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

Feedback has been positive, with residents keen to understand which buildings may be suitable (Summary of feedback is contained in Appendix 1).

4.3 Presentations have also been delivered to members, tenant reps and others through previous HMCC meetings, specifically 13.12.2010 & 08.11.2010.

5. FINANCIAL & OTHER IMPLICATIONS:

Financial Implications:

- 5.1 An initial options appraisal commissioned by Housing from Energy Managing Partner, Climate Energy indicates that there is an outline business case to support the delivery of a solar photovoltaic scheme across the council housing stock.

Following the outcome of the joint procurement exercise and consideration and possible inclusion of procuring through Mears Ltd, finance officers will conduct a full evaluation of the options available. Any future solar photovoltaic scheme and associated funding requirements will need to be reported to Cabinet for approval.

Finance Officer Consulted: Sue Chapman Date: 23 February 2011

Legal Implications:

- 5.2 Brighton and Hove City Council is a housing provider under the various housing acts. The majority of properties are held under the HRA scheme. The council holds the property as de facto freeholders and can make alterations and improvements, as long as these meet appropriate building regulations and fire safety requirements and these must form part of any arrangements which are put in place. Right to Buy will be a relevant factor for future consideration.

In relation to working with partners in the current BEST consortium to ascertain whether BHCC can take forward any procurement of the supply and installation of solar PV panels together with those partners, as the value of the contract exceeds the EU threshold for this type of contract, BHCC should work in compliance with the Council's Contract Standing Orders in addition to the Public Contracts Regulations.

Lawyer Consulted: Simon Court & Isabella Hallsworth Date: 25.2.11

Equalities Implications:

- 5.3 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:

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

Crime & Disorder Implications:

- 5.5 We do not foresee any significant crime and disorder implications.

Risk & Opportunity Management Implications:

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

Corporate / Citywide Implications:

- 5.7 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 ALTERNATIVE OPTION(S):

- 6.1 At this time the Council wishes to work with partners in the current BEST consortium to ascertain whether BHCC can take forward any procurement of the supply and installation of solar PV panels together with those partners 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 Climate Energy indicates 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 would 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. This model would be unlikely to deliver the same benefits outlined at 3.12 and the income would be significantly less than that available through a fully funded and operated model.
- 6.3 In addition to a fully owned and funded business model as described in the report or a fully externally funded and owned model described in 6.2 there is the option of a shared equity model. Shared equity would entail the establishment of a special purpose vehicle by the council in conjunction with an external partner; together the two bodies would fund the capital project and share the benefits based on the split of investment. Again the capacity of the council to deliver the benefits outlined in 3.12 would be restricted and the financial benefits would be significantly reduced.
- 6.4 There are potential benefits in the two options described above:
- No or less capital borrowing required
 - Reduced or shared risk related to delivering the installation and ongoing maintenance and monitoring of solar PV installations
 - Working in partnership with a company already established in this field would bring benefits such as expertise and established supply chain

6.5 Indications from initial options appraisal 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 and through a partnership working agreement. 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. Initial findings estimate the initial capital outlay could create a payback (after loan repayments) in the region of £16 million over 25 years. A fully owned and funded model gives the council greater influence over delivering the benefits outlined in 3.12.

7. REASONS FOR REPORT RECOMMENDATIONS

7.1 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.

7.2 We wish to work with partners in the current BEST consortium to ascertain whether BHCC can take forward any procurement of the supply and installation of solar PV panels together with those partners 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. Summary of tenant's feedback

Documents in Members' Rooms

1. None.

Background Documents

1. None.

Appendix 1 – Summary of Tenant Feedback

Feedback received from	Comment	Follow up action
Area Panels November 2010	Broadfields sheltered housing scheme could benefit from this	Details of suitable roof space to be identified through the stock survey
	Robert Lodge to benefit?	As above
	Blocks with flat roofs	Where appropriate a frame can be used to create a tilt for maximum generation
	Blocks in very exposed positions (wind / salt - near sea front)	Specific issues would be picked up at installation stage but survey of stock will identify where installations are appropriate or not
	Blocks where one part may face south but other face north	The business model and suitability of roofs based on roofs 67.5° of south on communal blocks
	A question was raised about mixed blocks where leaseholders and tenants occupy and how we address this in terms of implications for installations and income / benefit sharing	How the benefits of the scheme are to be shared has yet to be confirmed, however where there are different tenures this will be taken into account
	Please look at St James House - also can one block generate for other blocks in neighbourhood	As point 1 above. How the benefits can be shared between different sites has yet to be confirmed, however we are keen to share the benefits across the as many tenants as possible
	Risk related to pigeons and cleaning the Panels	Maintenance and monitoring of panels will be factored into the ongoing programme, regular cleaning will be included
	Importance of the solar panels being provided in conjunction with insulation and other measures	The scheme will fit into the planned programme of works

	also key	across the council housing stock which includes install of energy efficient boilers and insulation. Income generated from the scheme can be re-invested into improving housing quality including energy efficiency measures
Cabinet Members Energy Efficiency Working group	Concerns were raised that if free or cheap electricity is offered this would reduce energy efficiency in some households In addition a query arose as to how the scheme would work in blocks with communal boilers and where there was electricity use in common areas	How the generated electricity is to be shared/used has not been agreed but there is a risk and this scheme on it's own would not achieve energy efficiency, other measures including education and information sharing are important The issue around common areas and communal boilers will be included and reported upon as part of further evaluation scheme
	Maintenance costs were raised	These are included in the business/financial model at the beginning of the scheme
	What is the expected lifetime of the panels	The technology is well tested and has been extensively used across Europe, panels are expected to last at least the 25 years of the FIT payments although there would be some drop off in performance which is factored into the business/financial model
	Can residents in the private sector benefit	The initial focus is on the council housings stock however we are considering how the benefits can be rolled out to support private sector housing renewal through procurement on a larger scale and the council's involvement providing a level of assurance