

CABINET

15 FEBRUARY 2011

REPORT OF THE CABINET MEMBER FOR ENVIRONMENT

Title: Solar Panels for Council Housing and Schools under the Feed In Tariff	For Decision
<p>Summary:</p> <p>This report sets out a proposal to install solar panels that generate electricity to up to 1000 Council homes and to the Corporate Estate including up to 55 of the borough's schools through the Feed in Tariff scheme. Under this proposal, the Council could save over 1,165 tonnes of carbon each year and financial savings of up to £150 each year on individual Council tenants energy bills , thus helping to alleviate fuel poverty and reducing the Council's energy costs.</p> <p>Authority is sought to procure a private development partner to supply, install, maintain, insure and finance the installation of the panels using a restricted procedure through the Official Journal of the European Union (OJEU). Through this process the aim will also be to maximise the number of local jobs and ensure the local supply chain is used.</p> <p>Wards Affected: All</p>	
<p>Recommendation(s)</p> <p>The Cabinet is recommended to:</p> <ul style="list-style-type: none">(i) Agree to the procurement of a commercial partner to supply, install, maintain, insure and finance the installation of solar photovoltaic panels to Council properties and schools through an OJEU procurement procedure, on the terms detailed in the report.(ii) Agree that the housing project be restricted to a scheme of between 500-1000 Council properties in the first instance.(iii) Agree that the schools project should initially be restricted to up to 50% of the potential roof space.(iv) Agree that the terms of the contract are designed to ensure that the investment is directed to areas within the Borough with particularly high levels of deprivation and fuel poverty.(v) To indicate whether it wishes to be further informed or consulted on the progress of the procurement and the award of the contract, or whether it is content for the commissioning Chief Officer to award the contract; (as provided for in the Constitution, Contract Rules 13.3).	
<p>Reason(s)</p> <p>To assist the Council in achieving its Community Priorities of "Clean", "Prosperous" and</p>	

“Inspired and Successful”.

Comments of the Chief Financial Officer

This report asks members to agree to the commencement of a tendering process for the appointment of a development partner to supply, install, maintain, and finance solar panels on up to 1,000 Council properties including schools for a 25 year contract.

Under this method, the Council will not incur any capital costs, either in the form of payments to the development partner or the direct purchase/supply of materials. The development partner will be wholly responsible for financing the project, and will get their return from the generation and export of energy from the solar panels (approx 44p per kilowatt produced from the panels). The alternative option is that the Council finances and provides the solar panel itself (rather than a development partner); however under this method it would need to find the upfront capital cost, and would also bear the risk of not receiving sufficient income from the scheme, hence this is not the preferred option.

Under this scheme, 50% of the energy produced from the solar panels will go to the tenant of the property for free, thus lowering their bills and improving fuel deprivation and poverty; and the other 50% produced will be returned to the National Grid for redistribution.

It is proposed that 1,000 homes be installed with solar panels by April 2012, which will equate to a total capital cost to the development partner of £10,000,000. It is also proposed that the development partner lease the roof space of the Council properties at a value of £1 per m² of panel. If the full 1,000 panels were to be installed this will equate to 10,000m² of panels, and therefore rental income of £10,000 per annum to the Council. The only costs that would be incurred by the Council in relation to this are minor incidental costs and staff time (funded by existing Regeneration & Economic Development budgets).

Comments of the Legal Partner

This report is seeking Cabinet’s approval to undertake an EU tendering exercise for the procurement of a private sector partner to supply, install, maintain, insure and finance the installation of solar panels on up to 1000 Council homes and to the Corporate Estate including up to 55 of the borough’s schools through the Feed in Tariff scheme.

The estimated value of the proposed partnering contract exceeds the EU threshold for services (currently £156,442); therefore there is a legal requirement to tender the contract in the EU. Furthermore, the Council’s Contract Rules (Contract Rule 3.6) require the strategy for the procurement of contracts of above £400K in value to be submitted to Cabinet for approval prior to procurement of such contracts.

The report at Paragraph 5.9 sets out the proposed strategy for the procurement of the contract in the EU. This strategy complies with the EU public procurement rules as contained in the Public Contracts Regulations, 2006.

Property law issues have been addressed at Paragraph 4 of this report.

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1. Background

- 1.1 As conventional supplies of energy diminish and in order to meet the challenges of climate change, the Council must respond to calls for a low carbon economy, in which the Authority assists by providing secure and affordable sources of energy, such as renewable energy.
- 1.2 There are statutory obligations under the Climate Change Act 2008, Energy Act 2008, EU Buildings Directive as well as legislative measures such as the Carbon Reduction Commitment Energy Efficiency Scheme (CRC) which provide an overwhelming imperative for the Council to reduce energy consumption and carbon emissions both in its Corporate Estate and the wider Borough.
- 1.3 The Feed-in Tariff (FITs) scheme is a national scheme launched by the Government, to increase investment in small scale, low carbon renewable electricity generation, such as solar Photovoltaic (PV) panels, in return for a guaranteed payment for the electricity generated. The scheme consists of two payment components, a generation and export tariff; these rates are guaranteed and provided for 25 years. The payments are considered to be highly attractive and are designed to incentivise investment in renewable technology.
- 1.4 Under this proposal, by installing solar panels on up to 1000 of the Council's homes and the wider Corporate Estate (including the Schools) the Council could save over 1,165 tonnes of carbon each year. It could also mean savings of up to £150 each year on individual Council tenants energy bills and off-set the Schools' energy bill by some £50,000 each year. Thus helping to alleviate fuel poverty and free up resources for schools.
- 1.5 Members will recall that two Council properties in Ripple Road, Barking were provided with free solar panels, fully funded by Eaga and unveiled by the then Secretary of State for Energy and Climate Change, Ed Miliband. This pilot was used to test the technology and approach taken.
- 1.6 The purpose of this report is to provide a brief overview of the proposal, set out the financial, legal and other implications and agree the next steps to implementing this project.

2. Proposal

- 2.1 The introduction of the FIT has stimulated the market for solar Photovoltaic (PV) panels and more and more organisations are looking to invest and make the most of the associated commercial opportunities. Officers have been considering a number of different options to finance the installation of the solar panels. These vary in the amount of debt and risk the Council is willing to assume and the degree of control the Council wishes to exert over a particular delivery model. The options include: attracting a private development partner to supply, install, maintain, insure and finance the installation of the panels; a shared ownership model whereby a

private development partner is appointed to supply, install and finance the upfront cost of the panels and in return provide a share of the profits but also off load the risks and ongoing costs associated with the panels to the Council; or a model whereby the Council invests and installs the panels itself through prudential borrowing. Under the three options it is proposed that the electricity generated by the panels will be provided to the tenant of the properties, free of charge.

- 2.2 A cost-benefit analysis of the three models has been conducted. This model has been scrutinised and endorsed by colleagues in Elevate. The results demonstrate that the first option, whereby the Council attracts a private development partner to supply, install, maintain, insure and finance the installation of the panels would be the most commercially viable and beneficial option for the Council.
- 2.3 Under this option, the Council could be involved in the Feed-in Tariff scheme and generate benefits for both the Council and tenants (in terms of carbon savings and fuel poverty alleviation) whilst not requiring the Council to assume the financial burden of the initial capital investment through prudential borrowing (of up to £10,000,000) nor the costs associated with management and maintenance during the 25 year life of the scheme, which would be significant. In short, the financial and maintenance burden and risks would be transferred to the development partner.
- 2.4 It is recommended that the proposal should initially be restricted to up to 1000 Council houses, as a trial, with the option to increase this to a further 1000 properties. It is also believed that the scheme should be restricted due to the proposed introduction of the Renewable Heat Incentive (RHI) from April 2011. The RHI is an equivalent market incentive to stimulate investment in renewable **heat** (as opposed to **electricity** which is the case with the FIT) sources. This includes technologies such as solar thermal panels (that heats water to provide hot water as opposed to producing electricity, as with the PV panels) and wood chip boilers. Therefore officers do not wish to restrict the future potential of roof space by using all the available roof space to install solar PV panels to produce electricity and wishes to ensure there is available roof space to install solar thermal panels to benefit from the RHI. On the same basis, it is also considered prudent that initially the FIT scheme be restricted to up to 50% of suitable roof space on schools.
- 2.5 It is important to note that the Feed-in Tariff has been designed to secure a speedy increase in investment in this technology. Therefore the generation tariff for new schemes is subject to 'degression' in which the payment rate progressively reduces each year post April 2012. There is therefore some urgency on the Council if it wishes to take full advantage of the FIT scheme under the current higher, guaranteed rates of payment.

3. Financial Issues

- 3.1 The private development partner appointed will be expected to cover all upfront costs and future outgoings, including the cost to survey, supply, install, maintain and insure the installation for the life of the contract (25 years).
- 3.2 In return the private development partner will lease the roof space for a nominal value for the 25 years. There are very few market comparables in the UK regarding the value of the roof rental for the PV panels. However, following examples in Germany (where the Feed-in Tariff idea was pioneered) it is suggest that rental

values could equate to around £1 per m² of panel. Therefore if £10,000,000 was invested in the scheme, this would deliver up to 10,000m² of panels and could therefore generate rental income of around £10,000 per annum to the Housing Revenue Account.

- 3.3 The private development partner appointed will receive all or most of the Feed in Tariff payments arising from the solar PV panels in return for investing and assuming the management and maintenance costs.
- 3.4 The lease will require the private development partner to reinstate leased premises, decommission and remove the solar panels at their own cost if the lease is determined (howsoever caused). This is to ensure that the ongoing financial burden of the panels (including insurance, maintenance and decommissioning) is not placed on the Council on expiry of the term or early determination of the lease.
- 3.5 The results of the financial analysis indicates that, should the Council select the private finance route for implementation, careful consideration and negotiation is required to ensure that the scheme is structured so that the Council can meet any costs incurred from setting up the project and any ongoing costs.
- 3.6 LBBB faces the added financial pressure of the Carbon Reduction Commitment (CRC) Energy Efficiency Scheme, expected to be circa £400k. Roof rental payments, in relation to the Corporate Estate, could be utilised to off set this pressure. If a deal can be struck to enable part of the FIT payment to be made directly to the Council, this could help reduce our liability.

4. Property Law Issues

- 4.1 The Council as freeholder will grant a 25 year lease of the roof space for a peppercorn rent to the private development partner following necessary consultation with tenants.
- 4.2 Where necessary, agreements will be entered into between LBBB, the private development partner and tenants and/or the tenancy agreements will be amended (following tenant consultation) to confer necessary rights (e.g. ancillary loft space, metering locations and ancillary cabling) where those rights lie within areas demised or controlled by the tenant. This will also include a clause that the private development partner will not be awarded exclusive rights to provide the utilities to the property.
- 4.3 The nature of the work will require the installer to enter the property. Therefore the tenant will need to provide permission to enter the property. The tenant could refuse in which event the Council would need to seek a court order requiring access. This would involve legal and court fees. The risk can be mitigated by consulting with tenants before, during and after the installation programme and using feedback to modify the process as it is rolled-out. Community events could be scheduled in the targeted areas and individuals could be contacted in advance of the programme being rolled-out. Tenants could also be made fully aware of the financial benefits in terms of energy savings.
- 4.4 Electricity from the solar panels will be provided to the tenants free of charge for the duration of the lease.

- 4.5 The private development partner will register the 25 year leases at the Land Registry as notification of interest to any subsequent owner/occupier.
- 4.6 Notices will be served by LBBD and declarations by the private development partner excluding the leases from the Landlord and Tenant Act 1954.
- 4.7 Leases will include a break clause to enable either party to terminate the lease early, not to be triggered within the first [5] years. The lease will also include a redevelopment clause in favour of the Council in the event that the building is earmarked for redevelopment during the lease term.

5. Other Implications

Risk Management

- 5.1 The private development partner appointed will own the solar PV panels and assume the responsibilities associated with the panels, including:
 - the supply and installation
 - costs of maintenance and servicing of the panels
 - inverter replacement
 - performance risk of equipment
 - risk of any future Government terminating the scheme
 - risk of damage to the panels through vandalism, theft etc
 - insurance costs
 - meter readings and data recording and monitoring
- 5.2 The private development partner appointed will need to indemnify the Council against any costs incurred due to damage to property both internal & external due to faulty equipment and/or through installation.
- 5.3 The scheme could affect building insurance costs. The private development partner appointed will be expected to meet such increases via insurance premiums payable by the Council as freeholder.
- 5.4 The agreement between the Council and the appointed private development partner will need to indemnify the Council in respect of third party claims and losses.

No liability will be placed on the Council for existing electrical systems and the Council will not accept any claim for such additional works that may be required.
- 5.5 For the Corporate Estate, the Council purchases its energy through a company called Laser, an Energy Buying Group that represents over 100 Local Authorities across the south of England. The Council is contractually obligated to buy energy from Laser for the next five years. The contract would not be affected by the solar panels as they allow a certain tolerance margin which allows 15% increase or decrease in consumption.

Contractual Issues

- 5.6 Although under the conditions of the proposal, the Council will not be procuring the equipment itself it is possible that each dwelling included in the scheme could have

up to £10,000 worth of solar PV installed and if it is assumed that up to 1000 dwellings would be suitable, then the total investment could be as much as £10m. On an assumption that all Schools participate and utilise 50% of the available roof space (24,000m²), this could lift the investment approximately by a further £10m, taking the total investment to £20 million in value.

- 5.7 The successful private sector partner stands to gain Feed In Tariff (FIT) payment, which is a payment paid by one of the “Big 6 Energy Companies” to the generator for every kW of electricity produced from the panels. From the results of the financial appraisal (which has been scrutinised and supported by colleagues in Elevate and approved by the LAW Board and CMT Board), assuming an initial investment of £10M and considering ongoing maintenance and insurance costs minus the income from the FIT, the Net Present Value (NPV) of the investment after the initial £10M is paid back would be in the region of £3M at the end of the 25 years, and this is without taking into consideration a private developer’s economies of scale and access to low cost solar panels, which could increase the NPV.
- 5.8 With this likely contract value of £3M or more, the Council will be required to procure these services in accordance with the European Procurement Rules through the Official Journal of the European Union (OJEU).
- 5.9 The restricted OJEU process will be followed to enable the Council to validate and eliminate bids that are not fit for purpose, in a clear and transparent fashion. The first validation step will be the Pre-Qualification Questionnaire (PQQ) (technical evaluation stage), and this will be scored and evaluated based on a 70/30 split between technical expertise and sustainability questions. Only those suppliers deemed competent to proceed further will pass the PQQ stage and be sent an Invitation to Tender (ITT). Tenders will be evaluated based on a quality/price split, to be decided. The contract will be awarded on the Most Economically Advantageous Tender principle, i.e. the best value against the specification set out in the ITT.
- 5.10 The table below shows an indicative timetable for the next steps if the Council proceeded with an OJEU tender (restricted procedure).

Indicative Timetable if the Scheme is Tendered through restricted OJEU procedure

Stage	Date
Publish OJEU Notice	End January 2011
Submission of completed PQQ’s	Mid March 2011
Evaluation of completed PQQ’s	Mid March 2011 – End March 2011
Expected issues of Invitation to Tender	End March 2011
Expected date for submission of Invitation to Tender	Mid-end May 2011
Evaluation of Tender Submissions	Mid-end May 2011 – Mid June 2011
Potential Interview Meetings	Start-mid June 2011
Notification of Result of Evaluation	Mid June 2011
Contract Start Date	Start July 2011

Staffing Issues

- 5.11 Although it is proposed that a private development partner will be appointed to undertake all aspects of the project, it is important to note that there will be internal staffing requirements this could include staff to:
- monitor and oversee the project;
 - provide legal support including drawing up agreements and dealing with right to buy issues;
 - facilitate tenant engagement and consultation events;
 - gain access to properties.

All these costs must be met by the tenderer.

- 5.12 In addition, part of the tender process will be to ascertain ways that the private development partner can provide local training and job creation opportunities in relation to the project. It is envisaged that this could include opportunities in relation to surveying properties, installation and post monitoring and maintenance of the panels.

Customer Impact

- 5.13 Rising fuel bills will affect most people; however it will have a greater impact on low income households who tend to live in poor energy efficient housing. These households can suffer from what is called fuel poverty. A household is said to be in fuel poverty if it needs to spend more than 10% of its income on fuel to maintain a satisfactory heating regime (usually 21 degrees for the main living area, and 18 degrees for other occupied rooms).
- 5.14 Fuel poverty is significant in the borough, owing to the fact that a high proportion of residents are on low income. The 2009 income figures for the borough indicate that household income is the second lowest in London, being 18% below the average figure for London (CACI Paycheck, 2009). Based on the Index of Multiple Deprivation 2007 average rank, our borough is ranked 11th highest of all Local Authorities nationally. The borough has 17 wards of which 5 are ranked within the 10% most deprived wards in England and a total of 14 wards are ranked within the 20% most deprived. These figures suggest that fuel poverty and poverty in general are significant issues for the borough.
- 5.15 In order to address this issue, the scheme will target those most vulnerable and those that suffer from fuel poverty, by targeting those areas of the borough identified in the 10% most deprived in England.
- 5.16 The electricity generated from the solar PV panels will be made available to the tenant of the property for consumption, free of charge. It is broadly assumed that 50% of the electricity generated will actually be used by the tenant (given that most properties are not occupied during the full 'generating day'. The remaining energy will be exported back to the grid as 'green electricity'.
- 5.17 For housing blocks it will prove to be unviable to provide electricity to each individual dwelling. Therefore for those housing blocks included in the scheme, the following options will be considered: a) utilising the electricity for communal areas including for the lifts and lighting to reduce service charges or b) sell the electricity

generated back to energy suppliers and reinvest the revenue generated into housing.

- 5.18 It is perceived that there could be barriers to targeting this scheme at the most vulnerable, especially in relation to the housing project. This includes language barriers and ensuring appropriate information dissemination. In order to reduce the risk it will be imperative that clear information is provided to residents with the use of 'Plain English' techniques as well as providing a translation service.
- 5.19 In addition, in order to understand the needs of our customers in terms of implementing the project, it will be imperative that through appropriate consultation exercises our customers are involved in the design and planning of the programme. In order to ensure this is appropriate throughout the life of the scheme, regular customer satisfaction exercises will be planned.
- 5.20 Other customer impact considerations include providing access to properties for site surveys, installation and ongoing maintenance for both the schools and housing. As the private development partner will be entering tenant's houses and schools, CRB checks of all staff to enter the property will be required. For the schools element, all works and maintenance are to be completed during holiday periods with the exception of emergency works.

Safeguarding Children

- 5.21 In relation to the schools project the income from the roof rental will help offset the schools energy bills and so free up resources to be spent on the school.

Health Issues

- 5.22 The proposal will have a positive impact on health issues locally. The project will help to reduce the number of tenants in fuel poverty. Therefore this will reduce the associated health impacts of fuel poverty, including reducing the number of excess winter deaths each year.

Crime and Disorder Issues

- 5.23 There is the potential that the proposal could increase the incidence of crime, in terms of theft and vandalism of the panels locally. It will be in the interest of the private development partner appointed that such crime is minimised, including by using security fixing bolts, alarms, identifiers and tags. It will be up to the appointed private development partner to ensure the panels and any associated equipment is adequately insured for the duration of the contract.

Property / Asset Issues

- 5.24 There is a risk that instead of the property value rising due to the PV panels on the roof that the value could decrease. This is due to the fact that the potential of the property for loft conversions would be restricted once the panels are installed. For example, if the Council or the leaseholder under right-to-buy, decided to convert the attic into an extra room, windows could not be included where the panels are installed. For any tenant with ambitions to exercise their right to buy at any time in

the future, this could be a very powerful reason to resist inclusion of their property into the scheme.

- 5.25 Through the Decent Homes Programme the Council replaced a large proportion of roofs and indicative figures from the Public Housing Stock Condition Survey suggest that 87% of the Council's housing roof space is suitable for the panels. This information will be vital to steer investment. The PV panels should only be installed on roofs that have been maintained/or replaced in the last 5-10 years and, to be eligible, the roof must have a lifetime of at least 25 years to reduce costs.
- 5.26 As mentioned tenants have a right to buy their property. Clauses within the sale agreement should allow the private development partner that invests in the panels, to maintain ownership of the panels, access rights for maintenance and to ensure payment of the FIT export payment to the private development partner after sale of the property and by future owners of the property over the remaining period of the FIT scheme.
- 5.27 Should the Council decide to transfer its housing stock to another organisation, a clause in the transfer agreement would be needed to allow the Council, or the private development partner that invests in the panels, to retain ownership of the panels/equipment and to ensure payment of the FIT to the private development partner after transfer of the stock. Should the Council decide to invest in the panels, in the event of a stock transfer it may wish to have an agreement requiring the transfer organisation to pay the residual value of the panels and so assign the rights of the payment to the new landlord.
- 5.28 Under the proposal the Council will have less control over the project and it could be argued that the private development partner would 'cherry-pick' the most commercially viable properties rather than targeting the most vulnerable households or those in the greatest need. Therefore the tender and contract will need to be specified in such a way to ensure the selected partner focuses initial investment in the jointly agreed most deprived areas of the Borough with the highest incidence of fuel poverty.

6. Options appraisal

- 6.1 As previously explained, the Team has been considering a number of different options to finance the installation of the panels. The other options considered are presented below along with the results from the cost-benefit analysis.

Option 2 – Alternative private finance model

- 6.2 EM Power is a social enterprise with charitable status. EM Power has presented an alternative model which is essentially a profit sharing arrangement whereby a proportion of the FIT income is shared with the Local Authority through a 'Community Fund'. This 'Community Fund' could include local stakeholders including the Local Authority and local Housing Associations. EM Power is backed by investors who provide the up-front finances to invest. In return the investors receive a guaranteed rate of return, funded by 80% of the FIT income. The remaining 20% FIT income is provided to the Community Fund. Again tenants will receive a proportion of the electricity, free of charge.

- 6.3 EM Power would require a Roof Access Agreement for 25 years. This would not be a lease; therefore there would be no roof rental income for the Council. Furthermore, under this arrangement EM Power would not assume any of the risks or ongoing maintenance, management or monitoring obligations. Instead, the revenue that goes into the Community Fund, as well as helping to pay for community projects, such as energy efficiency programmes, will cover the costs of these obligations.
- 6.4 The results of the financial appraisal has revealed that under **Option 2**, once the maintenance and management costs are covered, there would be little, if any, funding available within the 20% of the FIT income nominally set aside for the 'Community Fund' to actually deliver community projects. The 'Community Fund' under this model can therefore be argued to be illusory and of no potential benefit/added value. **Option 2** is therefore rejected.

Option 3 – Self-financed by prudential borrowing

- 6.5 The third option that has been assessed is for LBBB to procure, install, manage and monitor the installation of the panels, with the initial capital costs funded through prudential borrowing. Therefore, under this model, LBBB would cover all capital costs take on the risks and management obligations but would be the recipient of all FIT income over the lifetime of the scheme.
- 6.6 The options appraisal also established that **Option 3**, is not an advantageous route to delivery. The results indicate that, under this scenario, the Council is at risk of incurring significant costs that would be much higher than the revenue generated from the tariff. The main reason for this is due to comparatively and relatively high prudential borrowing rates available to the Council. In addition, unlike a private company that may be implementing a number of FIT schemes across the country, the Council would not be able to benefit from economies of scale and lower unit costs. Finally, the financial deficit would be made against a corporate borrowing burden of up to £10,000,000. The wisdom of the Council assuming extra borrowing and exposure to losses on its investment could not be supported irrespective of current financial pressures.

7. Background Papers Used in the Preparation of the Report:

- "Solar Panels for Council Housing and Schools under the Feed In Tariff", CMT Report, 19th January 2011
- "Solar panels for Council Housing and the Corporate Estate", LAW Board, 18th November 2010
- "Feed-in Tariffs Government's Response to the Summer 2009 Consultation" Department for Energy and Climate Change (2010) - http://www.decc.gov.uk/assets/decc/Consultations/Renewable%20Electricity%20Financial%20Incentives/1_20100204120204_e_@@_FITsconsultationresponseandGovdecisions.pdf
- "Making Feed-in Tariffs work for you. A toolkit for Local Authorities and Housing Associations", Energy Saving Trust (2010) - <http://www.energysavingtrust.org.uk/business/Business/Local-Authorities/Funding/Feed-in-Tariffs>