

## COMMUNITY AND SOCIAL AFFAIRS

13 FEBRUARY 2012

### REPORT OF THE HEAD OF COMMUNITIES & NEIGHBOURHOODS

#### SOLAR PANEL INSTALLATION

#### 1.0 PURPOSE OF REPORT

- 1.1 To seek approval from Members for the installation of solar panels on approximately 550 Council properties.

#### 2.0 RECOMMENDATIONS

- 2.1 **Members consider the recommendation of the Housing Repairs Contract Task Group for Solas Power to install Solar PV panels on Council properties, in light of the professional advice.**

#### 3.0 KEY ISSUES

#### 3.1 BACKGROUND

- 3.2 A report was brought to this Committee on 21 September 2011, asking members to note the progress being made on energy efficiency initiatives and in particular with Solar PV and seek Member's approval to progress the solar panel initiative.

- 3.3 Solar Photovoltaic (PV) is a system which uses one or more solar panels to convert sunlight into electricity. It consists of multiple components, including the photovoltaic modules, mechanical and electrical connections and mountings and means of regulating and/or modifying the electrical output. These are usually fitted to the roof of a property and work at their optimum when facing in the quadrant from southeast to south west. The inverter which converts sunlight to electricity is usually installed into the roof space. This technology has seen a rise in use recently, with the introduction of the Government's 25 year Feed-in-Tariff (FiT) which came into effect on 1 April 2010.

- 3.4 The financial return for the Solar PV systems is made up of three components:
- Generation tariff – a set rate paid by the energy supplier for each unit (or kwh) of electricity generated. As at 21 September 2011, this figure was set at 43.3p per kWh but this was expected to reduce significantly after 31 March 2012
  - Export tariff- a further 3.14p per kwh from energy suppliers for each unit exported back to the electricity grid (when it is not used on site)
  - Energy bill savings – savings on electricity bills for tenants. As electricity is generated to power appliances it means not as much electricity needs to be bought from suppliers. The amount saved will vary depending on how much electricity is used in the property. On average tenants can expect to save anything from £200-£300.

- 3.5 The Housing Repairs Contract Task group was tasked with seeing the project through. The Group was made up of Members, Tenant Forum Executive Committee (TFEC) representatives and Officers.

- 3.6 At the Community & Social Affairs Committee of 21 September 2011, members received a report advising members of potential companies that could fit the PV Solar Panels which

would benefit tenants but also potentially secure an income for the council. Members concluded that:

*As part of further work members also requested that the Head of Communities & Neighbourhoods also explore the potential of the council carrying the work out and using the income from the feed in tariff to pay off any borrowing costs.*

3.7 At the meeting on the 18 October 2011 the Task Group was brought up to date on the two possible routes for procurement.

(a) On advice from the Procurement Unit, an existing framework was identified through Alliance Homes. They had invested £10M in installing 1,200 properties with PV panels. They had undertaken a procurement through the OJEU process which allowed for 75,000 roofs to be fitted with PV panels enabling other Housing Associations and Local Authorities to use the framework to procure the panels- saving time and significant procurement costs. The actual installation of the panels on the roofs would still need to go through a tender process. In this scheme, the Council would need to make the investment to buy the panels and to have them fitted, but would be able to take the FiT monies to pay for this investment and potentially make a profit.

(b) The alternative scheme was the 'Rent-a-roof' scheme, where an investor would pay for all the panels and the fitting of them. They would then take the profits from the FiT and at some point pass these back to the Council, who would then receive the FiT payments.

At this stage there were concerns about the timescales involved but the Group wanted the options explored further.

3.8 On 31 October 2011, the Government announced significant changes to the FiT rate, such that any schemes fitted after 12/12/11 would now only receive 21p from 13/12/11 and 16.8p from 01/04/12. This put the whole scheme into major doubts and other schemes across the Country were being postponed and cancelled following this decision. Inside Housing were quoted as saying that this was now a major issue for landlords and one article in a national newspaper started with the heading 'Sun sets on solar scheme' as the changes threatened the solar power industry and in their opinion the proposal put an end to the 'rent-a-roof' schemes. The solar power industry then had to re-examine their financial models, talk to their suppliers and try to identify if the fitting of solar panels was still a viable concern. Due to these issues a special CSA was cancelled as the implications were understood as it would have been impossible for the Council to have had panels fitted on roofs by the 12/12/11 deadline.

3.9 Discussions continued with Alliance Homes as they believed that the scheme was still viable and their financial models were investigated. A conference call took place with Alliance Homes on 15 November 2011, who stated that they were, as was the industry in general, relooking at their financial models, talking to their suppliers and considering whether the scheme was still viable. Exchanges took place in terms of their revised financial models. On 24/11/11 the Task Group was brought up to date with the latest position and decided that the possibility of fitting solar panels should still be pursued. Further work continued and in addition to Alliance Homes, a further supplier was brought to the Council's attention that could supply Solar Panels at no cost to the Council. A meeting was arranged with the suppliers and on 22/12/11 presentations to the task group were made from Alliance Homes (requiring Council expenditure) and Ecoskies (who would purchase the panels and fit them for no cost to the Council in return for the FiT payments. The view of the group was that although the maximum number of properties that could be fitted with Solar Panels for an investment of £1.6M was 240 (as opposed to the 600

properties that Eco skies could potentially fit), the Alliance Homes option should be pursued although Ecoskies were asked to provide their financial model to the group for consideration.

- 3.10 At a further task group meeting on 10/01/12, the group were brought up to date on a visit to Alliance Homes and their panel supplier's Low carbon Exchange on 5 January 2012. The Task group was also advised that despite contact with their representatives, Ecoskies had not provided any further information on their business model and so were discounted from the process. Procurement advice was although the purchase of the panels could be carried out through the Alliance Homes framework, in terms of the contract for fitting the panels the maximum that could be spent up to the OJEU limit was £170K which approximated to around 140 properties. The total cost to the Council would be £916K for these 140 properties. Work was undertaken to get ready to go with Alliance Homes but the final recommendation to this committee was to be taken by the task group on 30/01/12.
- 3.11 Prior to the meeting on 30/01/12, the Council was approached by an Energy Consultant who had a partner, SolasPower who would be willing to fit the 600 properties at no cost to the Council. The Council was advised by an Energy Consultant that from a selection of suitable funders, Solas Power were identified because they were 'head and shoulders above the rest re flexibility and resources'. The company were invited to the Task Group meeting to make a presentation on their proposal. Following their presentation, the Task Group voted to recommend that the option to fit Solar panels was to be continued and the preferred supplier was to be SolasPower. It was agreed this then needed to be brought back to a Special CSA and potentially PFA. At this meeting, the Chair of the Task Group requested that Solas Power provide a business/financial model for consideration.
- 3.11.1 Following the meeting, the Place Manager spoke to the Product Development Director of Solas Power and asked him for a business plan/financial model, if they had worked with any Council/Social Housing Providers in England and if not for them to provide references from other works undertaken. Heads of terms/contract information for the Committee to make a decision was also requested. This was also put in an email on 30 January 2012. A reply was received on 1 February 2012 from Solas Power stating that Eversheds Solicitors would contact the Council directly and the required information would be received by the Council by 12 noon on the 2 February. On 3 February, a further email was sent to Solas Power stating that no contact had been received from Eversheds and we were still awaiting for the other required information. The effect of not having this information was that a proposed CSA on 8 February 2012 could not take place as there was insufficient information and the date had to be rescheduled for the 13 February. To date this vital information has not been received.
- 3.12 Members are also asked to note that officers are pursuing other 'energy' initiatives such as:
- 3.12.1 A Fuel Poverty Group has been set up with TFEC members and meets on a regular basis. The aim of this group is to try and improve energy efficiency and reduce fuel poverty. A number of articles have been put into the Tenant's newsletter and information provided to Customer Services to help give advice to customer's calling the Council. The Council's website has been improved to have a 'fuel poverty' section which provides advice and signposts a ll residents within the Borough on how improvements can be made. A meeting has taken place with the Rural Community Council on how Tenant's may reduce energy costs through changing their suppliers. Leaflets have been provided and again tenants are to be given information regarding this. A request of TFEC was to put individual thermostatic valves in suitable voids and this is now being done which allows tenants to regulate the amount of energy they use more effectively.
- 3.12.2 To support all residents and in particular the more vulnerable, the Council has worked closely with the Money Advice Service (MAS) to provide a service which covers all aspects

of financial decision making - budgeting, credit and borrowing, mortgages, pensions, insurance and taxation and benefits advice in a 45 minute 1-1 session. MBC were the first Council in Leicestershire to work with the MAS and it is believed the first in the Country to have them co-located in Council Offices where they provide this service.

- 3.12.3 The Council has been in touch with Somerby Parish Council to help promote the setting up of an Oil Co-operative within the Parish to reduce the costs of Oil through bulk buying. The aim is for a local resident to co-ordinate the setting up of a co-operative, with support of the Council, to achieve reductions in energy costs. It is hoped that this pilot can then be rolled out to other areas within the Borough.
- 3.12.4 Through funding obtained by the County Council in partnership with the RCC, the Council is sending staff to a training event for 'Energy Champions.' Energy Champions will be provided with information on identifying fuel poverty, reducing heat loss, grants schemes and fuel payment methods, as well as how to help others to manage their heating controls, get free insulation and find out about the local 4 Ways to Warmth loft emptying scheme for vulnerable people.
- 3.12.5 The Council is currently in discussions with Worcester Bosch regarding their Air to Air Heat Pumps. These would provide a more efficient, flexible and lower cost solution to other methods such as Storage Heaters. An initial meeting has taken place and we are looking to set up a visit to their factory. Worcester Bosch have advised us that there are new options coming into the market and they will keep us advised of these.
- 3.12.6 Discussions have also taken place with the County Council regarding the Government's 'Green Deal'. The Green Deal is the Government's pioneering programme to refit British buildings, offering energy efficiency improvements with no up-front costs to consumers. Millions of homes and businesses right across the country could benefit. The Green Deal could cut our energy imports by up to £3 billion per year, save households up to £400 per year in gas and electricity, and help us cut our carbon emissions. However, the Green Deal is still more than a year away and if this year mirrors last then many households could be severely affected by the cold in the coming winter months. The Government has, following consultation, extended the Carbon Emissions Reduction Target (CERT), an obligation on fuel suppliers to support the take-up of energy efficiency measures.

Following several meetings with representatives of the County Council and the District Councils of Leicestershire to explore opportunities to work together to maximise the take up of grants that are available under CERT a Leicestershire Home Insulation Partnership has been proposed.

The proposal is that Leicestershire local authorities act together to maximise local take up of energy efficiency measures especially insulation measures. Working with the Energy Saving Trust advice centre a scheme will be delivered that offers best value to customers and minimises the resources required from individual authorities.

The HeatSeekers programme has been developed and mobilised by the Energy Saving Partnership – using vehicle mounted thermal imaging the teams have the ability to assess over 1,000 properties an hour by automatically detecting and determining the insulation condition of a property. Operating at night, during the heating season, the thermal-imaging technology inside a specially adapted vehicle determines the address of each property and produces an energy efficiency verdict which is attached to a thermal image. The HeatSeekers team, works with a number of Local Authorities and communities using thermal imaging technology to identify homes that may benefit from improved insulation. Our specially equipped vehicles take thermal images of homes during evenings in the winter months to identify those homes showing heat loss through poorly insulated walls and lofts.

- 3.12.7 The Council will be identifying properties which have recognised expensive heating systems – e.g storage heaters and look to replace them with more cost effective solutions.

This will be helped by the meeting with Worcester Bosch and further investigations within the industry including the Energy Savings Trust.

#### **4.0 POLICY AND CORPORATE IMPLICATIONS**

- 4.1 A project of this nature is in line with the MBC's green Corporate Plan as the introduction of solar panels will help reduce carbon emissions. This could be as much as 45% reduction for some homes.
- 4.2 The installation of Solar PV panels will also help reduce fuel poverty for a number of tenants which aligns with the MBC's Corporate Strategy around People and Places.

#### **5.0 FINANCIAL AND OTHER RESOURCE IMPLICATIONS**

- 5.1 One of the major drivers for the introduction of solar panels was the benefit to Council tenants. The potential savings in electricity charges for tenants is expected on average to be between £200-£300 per year. This could rise as electricity prices rise.
- 5.2 SolasPower have advised that there will be no cost to the Council in purchasing, fitting and for the maintenance of the panels. The panels are remotely monitored and if damaged or not working to full capacity can be individually identified and replaced or fixed as appropriate. Questions have been raised concerning potential costs to the Council if a roof needed to be replaced or fixed and where would the costs lie in this situation. SolasPower has advised that their engineers will inspect all roofs before fitting the panels. They will advise the Council if there are any problems with the roof that would affect the installation. The Council could undertake remedial work at this point if necessary. However, if there are issues in the future, the Council may be liable for the costs in removing and replacing the panels. The approximate cost to fit panels to a roof is £1,200.
- 5.3 The current FiT rates are for properties fitted and registered by 3 March 2012 43.3p kWh. After this date up to 31 March 2012 the rate is 21p kWh. It is expected that from 1 April 2012 this rate for aggregated schemes – such as the Council would want to install- will reduce to 16.8p. There is however, some talk of a Community Tariff for social landlords which might go back to 21p or more, but no further details are available.
- 5.4 As part of their investment, SolasPower will take all the FiT for the 25 years of the scheme. To install 600 properties with solar panels would cost in the region of £4M. The payback to SolasPower will depend on the number of properties that they could have fitted by 3 March 2012, when the 43.3p tariff would end and then at 31 March when the 21p tariff would finish. As part of our calculations based on information provided to the Council by Alliance Homes, for 140 properties at an expenditure to the Council of £916K, receiving the 21p tariff the projected cumulative profit after 25 years would have been £460,262. Based on a 5% discounted rate, the value of this sum after 25 years would be £170,837. The figures based on 16.8p showed no payback to the Council for the investment.
- 5.5 The only income identified to the Council from the proposal would be a peppercorn rent for the rental of the roofs – £1 per property per year was discussed and potentially an income from the export tariff – see paragraph 3.4-. According to SolasPower and their representatives, this could amount to £25K per year – although there are no figures to verify this.
- 5.6 Solaspower has been asked to provide a business model to support their proposal; however, to date this has not been received (08/02/11). We have also asked for references and information to show the viability of the Company and we are still waiting for these. We

have been advised that they have sufficient insurance, that if should something happen to the company the Council could claim against this insurance for the ongoing maintenance of the installed solar panels. No analysis of the functionality of the solar panels has been undertaken.

- 5.7 In response to a request for references relating to previous work SolasPower has undertaken, they informed the task group that whilst they have fitted large commercial solutions they have not installed Solar panels on domestic properties in this Country.
- 5.8 As previously mentioned, the inverter is an integral part of the Solar PV system. The inverters used by SolasPower have a life expectancy of 10 years and cost £1,000 to replace. SolasPower advise that they are currently pursuing an insurance policy which covers the life of the inverters for 25 years.
- 5.9 SolasPower has advised that if they are given the go ahead by 14 February 2012, they would be able to get the 600 properties installed with solar panels – excepting any that there are issues with- and registered. There are concerns about the drop in tariff level and what would happen from 1 April 2012 when the tariff reduces to 16.8p kWh and one of the factors is dependent upon the cost of the panels which are currently going down in price as to whether they could continue to undertake all 600 properties.
- 5.10 The Finance Section have emailed our external auditor for advice to ensure that this means of financing will not affect our borrowing cap and the relevant accounting treatments will be correctly observed. This email has also been forwarded to CIPFA help team for their advice.
- 5.11 If the recommendation is accepted, resources will be needed, with support from TFEC, to contact the tenants to get their permission for the panels to be put on their properties and discuss the benefits of the solar panels with them. There may also be Officer time to deal with those tenants who have not received the Solar Panels on their property. Officer time will also be required to oversee the installation of the panels, tenant engagement and quality of work. In terms of the surveying, installation and registration, this will be all down to SolasPower.

## 6.0 **LEGAL IMPLICATIONS/POWERS**

- 6.1 As part of any agreement we may need to ensure that the company is part of REAL assurance Scheme.

The REAL Assurance Scheme was set up by the Renewable Energy Association. Their aim is to guarantee a high quality experience for consumers wishing to buy or lease small-scale energy generation systems for their homes. The REAL Assurance Scheme logo is a sign that the company has agreed to abide by the high standards set out in their Consumer Code.

In addition we would only sign a contract with a company that is certified under the Microgeneration Certification Scheme for the technology we are looking to install. The information we are still waiting for may assist in these matters.

- 6.2 The potential cost of this scheme is £4M. One of the issues that have been highlighted is the timescale to follow the procurement route. If the Council had to go through an OJEU process, this could take 3-6 months to achieve, which would negate the effect of the current FIT rates. SolasPower were questioned around the procurement and advised the Task group that their solicitors, Eversheds, have told them that the Council does not have

to go through this route as we would be entering into a joint venture on a property transaction which is exempt from the OJEU process. SolasPower have been asked to provide the evidence for this from Eversheds which will then be passed to the Legal Section and then on to a third party for a judgement on the advice being given.

- 6.3 The energy consultant working with SolasPower also advised that Leicester City Council have installed solar panels on their roofs without going through the full procurement route. They have supplied extracts from a report that went through their reporting process and these are shown below:

**Legal Implications**

*The transaction is that council will make available by way of licence some of its roofs of its housing stock upon which xxxxxxxxxx (through a Special Purpose Company) will install its micro generation solar panels. The council will receive a licence fee of a minimum of £xx per year per roof and allow the electricity produced by the panels to be used by the residents. Any electricity not used by the tenant is intended to be exported to the grid. The solar panels will be owned by the Special Purpose Company*

*On balance the likelihood is that this is a property transaction and therefore outside the EU procurement regime.*

*Further as a licence it is considered that this transaction is not subject to either the s123 Local Government Act 1972 (the provision for obtaining best consideration on property transactions) or s33 Housing Act 1985 (the provision requiring the approval of the Secretary of State for disposals of HRA housing stock)*

**Procurement**

*This proposal has not been subjected to any form of competition. Under the proposed agreement the City Council would not be purchasing equipment or paying for any solar installation work to be carried out. Housing Services would be granting a concession on domestic property roof slopes (in return for a nominal annual income).*

*The Head of Corporate Procurement has agreed that, because the Council is not specifying anything, this is not deemed to be "procurement".*

Members may consider that as we are having input into the Type and specification of the panels, as well as advising on its location and assessing the roofs there will be an element of specification by the council for this work

- 6.4 The Head of the Welland Procurement Unit has been asked to give his advice on the Legal situation in relation to this as a procurement route. His comments are shown below:

*I am concerned that the proposed joint venture is a device created in order to avoid both the Public Contracts Regulations and also basic requirements of fair and equal treatment.*

*SolasPower have not been selected through any competitive process, nor have their credentials been formally reviewed.*

*On the information provided, neither SolasPower's solicitors nor Leicester City Council (whose input has been submitted) can assure us without reservation that the proposed route is legal, and as such my advice is that further legal advice be sought in order to protect the Council's interests.*

- 6.5 At the Tenants Forum meeting of 6<sup>th</sup> February 2012, attendees were informed of the current position around the information/references requested not been provided as yet and the potential legal and procurement issues. TFEC advised that they would not condone the

council making decisions that may breach the legal requirements; members at the Forum also supported this view and stated that it needed to be 'watertight'

6.6 Issues around right-to-buy need to be resolved. If a tenant purchases their property, are they committed to having the panels on their roof for the remainder of the 25 year timescale?

## 7.0 COMMUNITY SAFETY

7.1 There are no direct links to community safety arising from this report.

## 8.0 EQUALITIES

8.1 Please find attached Equalities Impact Assessment. The 550 properties chosen to receive the Solar panels have been selected based on their position – in a quadrant between South-east and South West facing to the sun- to maximise the impact of the panels. This leaves 1,200 properties within the Council stock that will not receive this benefit.

## 9.0 RISKS

9.1 The risks are considered in the table below

Probability ↓						Risk No.	Description
Very High A				3		1	The proposed procurement route is not legal and the Council will be subject to a challenge.
High B				1,2		2	Contractor experience for installing solar PV in domestic properties in this Country – no reference point for the Council to view completed schemes
Significant C				4		3	Timescales around verifying of contract proposals to safeguard Council interests now and in the future
Low D		5,6				4	Business, financial models, viability of the company not received in time for committee decision to be made
Very Low E						5	Cost for replacing invertors falling to the Council if Insurance Policy not in place and Contractors go out of business
Almost Impossible F						6	Time taken to engage with tenant's reduces the number of properties able to receive solar panels
		IV Negligible	III Marginal	II Critical	I Catastrophic		
		→ Impact					

## 10.0 CLIMATE CHANGE

10.1 There are climate change issues directly arising from this report. Solar Panels do not emit carbon and can reduce the carbon emissions of a property by up to 45%. This will contribute to the Council's reduction in carbon footprint for the year 2020. The system monitoring the panels will be able to identify the amount of reduction in tonnes of carbon dioxide.



## 11.0 CONSULTATION

- 11.1 Tenants have been consulted through their tenant representatives on the tenant's forum (TFEC) on the Housing Repairs Contract Task Group. TFEC and in particular the Chair, have been strong proponents and the initial driving force behind the introduction of the scheme.
- 11.2 TFEC has undertaken their own customer survey of their tenants in relation to energy efficiency and fuel poverty. 585 replies were received 3 of the questions tenants were asked and their replies are shown below:

	YES %	No %	N/A %
If the Council were to install solar panels on your roof in order to help reduce your electricity bill would you agree?	90.25	6.15	3.60
Do you think the Council should install solar panels to reduce your bills?	87.69	8.03	4.28
Do you find paying energy bills is harder to do?	92.99	5.81	1.20

## 12.0 WARDS AFFECTED

- 12.1 All wards affected.

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Contact Officer: Martyn Bowen, Place Manager  
Harry Rai – Head of Communities and Neighbourhoods

Date: 1/02/12

Appendices:

Background Papers: None

Reference: X: Committees/CSA