



**PV PANELS ON HOUSING PROPERTIES**  
**REPORT OF DEPUTY CHIEF EXECUTIVE (CORPORATE DIRECTION)**

**WARDS AFFECTED: ALL**

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1. PURPOSE OF REPORT

- 1.1 To update members on the Sustainability strand of the Housing Investment Strategy and seek support for the installation of PV Panels on identified properties.

2. RECOMMENDATION

- 2.1 That the Executive supports the principle of installing PV Panels on Housing properties.

3. BACKGROUND TO THE REPORT

- 3.1 The Council Housing Investment Strategy and Business Plan 2012 - 2017 was adopted by Council in June 2013. The aims of the Strategy were to:

- Continue to invest in existing stock to maintain good quality homes.
- Invest in new build schemes/acquire affordable housing to increase the amount of affordable housing available.
- Refurbishment/regeneration of stock which no longer meets needs.
- Environmental improvements to estates to ensure they are clean and safe.
- Invest in service delivery.
- Develop and maintain effective engagement with tenants.

- 3.2 As part of ongoing environmental improvements, Private Sector Leasing have been leading and engaged a number of suppliers who have approached us with offers relating to the installation of PV panels and the benefits they can bring to both tenants and HBBC.

- 3.3 With fuel poverty and the rising cost of energy, self generation has become a more attractive prospect. A typical UK household will consume approximately 3,300 kWh of electricity per year. A typical southerly facing PV system will generate approximately 2,300 kWh in Central England; this electricity if used is in essence free and will not register on a fuel bill.

- 3.4 However, in reality much of this free electricity will be subject to the individual and their living patterns and habits; as it is not yet feasible to store the generated electricity, it is only free if used on generation. A typical assumption is that the average occupant will utilise 50% of the generated electricity; as per the example this would be approximately 1,250 kWh which is over 1/3 of a typical household's electricity usage.

- 3.5 Back in April 2010 the UK government introduced the Feed-in-Tariff (FiT) scheme to stimulate growth in PV self generation by offering a generation based payment as an incentive to install. By late 2011, a drop in installation costs coupled with much publication of the scheme meant FiT's were a roaring success with uptake at a much higher than anticipated level. This presented an issue for the Treasury and as a consequence FiT rates were reduced which resulted in a market downturn. Since that point install costs have been gradually becoming more economic against a very slowly reducing FiT rate, as a result suppliers are now once again in a similar

position to late 2011 in terms of system payback (although profits that can be made are now much reduced).

- 3.6 There are various types of offer from suppliers but the majority operate on a "Rent a Roof" type basis. This essentially means that they are responsible for the installation and maintenance of the panels and the tenant is able to make use of the free electricity during daylight hours. Any surplus electricity is then effectively sold back to the Grid and this is where the suppliers make their profit.
- 3.7 Using this model does mean that suppliers are keen to progress with the properties with the highest return. We have already had a desktop review undertaken to assess viability of our stock and this has identified 1481 properties (approximately 40%) of our properties would be eligible.
- 3.8 Suppliers would also publicise their offer to private tenants who may also join the scheme (albeit on an individual basis).
- 3.9 As the free electricity is during daylight hours, tenants would require some support and education on changing some of their habits around electricity usage. For example, where some appliances may have historically been used overnight to benefit from reduced electricity rates (washing machines etc.), they would be advised it would be more beneficial to time these for daylight hours.
- 3.10 This type of training can be done on a train the trainer basis and we would seek to involve the Tenants Together Group to roll this out.
- 3.11 There are significant benefits to tenants and the wider local community of rolling out such a scheme:
  - Help lift property occupants out of fuel poverty (where applicable)
  - Future proofing against rising energy costs
  - Increased spending within the local community (inc rent)
  - Increased ability to comfortably heat homes, leading to better health and impacting positively on local health services.
  - Increase housing stock SAP rating
  - Reducing carbon footprint: solar electricity is green and doesn't release any harmful carbon dioxide or other pollutants. A typical home solar PV system could save over a tonne of carbon dioxide per year.

#### 4. FINANCIAL IMPLICATIONS [IB]

- 4.1 Installation costs will be paid for by the suppliers. Installed PV panels will be rented out directly by suppliers.
- 4.2 Roofing repairs costs for the non PV panel element will continue to be met from existing budgets.

#### 5. LEGAL IMPLICATIONS [EH]

- 5.1 There are no direct implications from the recommendation however there are a number of consequential legal implications which will need consideration if the scheme were to be taken forward:
- 5.2 There would need to be adequate legal agreements in place with the PV panel provider to ensure that obligations with regards to installation, repair and removal are clear and what happens in the event of a transfer of the property to a tenant.

5.3 The Council's tenants have, under their tenancy agreements, possession of the property and the Council is under an obligation not to interrupt or interfere with this except where:

- (a) Access is required to inspect the condition of the property or to carry out repairs or other works to the property or adjoining property.
- (b) A Court has given the Council possession of the property by ending the tenancy.

The installation of PV panels would not fall under either of the above exceptions as it is not a repair to the property itself, but an addition. Prior to rolling out the scheme, the consent of the individual tenants of the identified properties should be obtained as the Council will not have the right to install without consent. Consideration will need to be given, depending on the contract obligations and rights, as to whether the tenancy conditions need amending to cover properties where the panels are installed.

5.4 Consideration should also be given to including in the tenancy agreement terms which seek to indemnify us for breach of any obligations on the Council under the agreement with the PV Panel provider with regards to not damaging the panels etc, given the control of the individual tenants over the property.

5.5 There will also need to be consideration in relation to how repairs will be conducted by the company, as there is no right for them to enter on to the land unless the tenant consents, unless done through our repairs team.

## 6. CORPORATE PLAN IMPLICATIONS

- 6.1 The Housing Repairs Service contributes to all of the Corporate Aims, in particular::
- Creating a Vibrant Place to Work and Live
  - Empowering Communities
  - Supporting Individuals

## 7. KNOWING YOUR COMMUNITY – EQUALITY AND RURAL IMPLICATIONS

7.1 The Repairs Service is delivered to all Housing stock and therefore impacts on all of the Borough including rural areas. It also therefore impacts on any vulnerable groups within the Borough.

## 10. CORPORATE IMPLICATIONS

10.1 By submitting this report, the report author has taken the following into account:

- Community Safety implications
- Environmental implications
- ICT implications
- Asset Management implications
- Human Resources implications
- Planning Implications
- Voluntary Sector

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Background papers: Desktop Review (attached as Appendix one)

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Appendix One

## Hinckley & Bosworth Desktop Survey Results

<b>Total Addresses Provided</b>	<b>3683</b>	
<b>Properties Surveyed</b>	<b>3683</b>	
Rejected		556
Rejected - Flats		580
Rejected - Low Irradiance < 810kwh		354
Rejected - Too Small < 1.5kWp		684
Rejected - Too Big > 4kWp		27
Accepted		<b>1481</b>
<b>TOTAL</b>		<b>3682</b>
<b>Installation Details</b>		
Total Installation	<b>MWp</b>	4.1
Average System Size	<b>kWp</b>	2.8
<b>Predicted Productivity Details</b>		
Total Predicted Electricity Produced - Year 1	<b>MWh</b>	3.6
Predicted Average Electricity Produced - per system/Year 1	<b>kWh</b>	2.4
<b>Potential Cash Savings</b>		
Total Savings - 20 Years	<b>£</b>	£7,000,000
Average Savings per roof - 20 Years	<b>£</b>	£4,765
<b>Potential Carbon Savings</b>		
Total Carbon Savings	<b>Tonnes</b>	28,022
Average Carbon Savings per roof - 20 Years	<b>Tonnes</b>	18.92

**NOTES**

		These properties have been rejected initially for various reasons. This group will be assessed in more detail at a later stage.
		The properties are flats, some are part of your sheltered portfolio and will be assessed separately.
		These properties have poor orientation and are unable to generate sufficient electricity to meet standard qualifying criteria for our funders.
		The roofs on these properties are not big enough to install at minimum 1.5kWp system
		The roofs on these properties are able to benefit from a system larger than 4kWp and will almost certainly be included at a later stage.
		This is the balance of properties that meet the qualifying criteria of our funders. This number may decrease following a physical survey.
<b>Installation Details</b>		
		This is the total installation size
		This is the average installation size for each of 1,481 installations
<b>Predicted Productivity Details</b>		
		This is the predicted amount of electricity that will be generated across the whole portfolio
		This is the average of 1,481 systems
<b>Potential Cash Savings</b>		
		The projected aggregate savings for tenants over the 20 Year FIT period
		The average savings per household
<b>Potential Carbon Savings</b>		
		Total carbon reduction
		Average carbon reduction