



Report of: **Executive Member(s) for/ or Director (if Joint Board/committees)**

Meeting of:	Date	Agenda item	Ward(s)
Policy and Performance Scrutiny Committee	22/01/2015		

Delete as appropriate	Exempt	Non-exempt

## **SUBJECT: Photovoltaic Panels on Corporate Buildings.**

### **1. Synopsis**

- 1.1 The council has an opportunity to invest in photovoltaic panels on its roofs: the cost of solar panel installations has reduced significantly in the UK over the last few years, and could now represent a feasible investment.
- 1.2 Investment is limited to properties with an energy performance rating of D or higher, which attract the mid-rate FIT tariff. The return from the lower FIT tariff is not economic.

### **2. Recommendations**

- 2.1 To acknowledge the content of this report, and note the parallel PV panel Task and Finish Group and Community Energy Scrutiny.
- 2.2 To recommend that the Executive Member for Finance and Performance includes a capital bid of £1.103,794 (and associated revenue costs) to fund the investment and additional income of £135,995 in the 'Budget Proposals 2015-16' report to Executive on 12 February 2015 to reflect the income anticipated from the activities outlined in this report.

### **3. Background**

- 3.1 In 2011 Islington Council undertook a lengthy process to agree a contract to install solar photovoltaic (PV) panels on the roofs of our buildings. A licence concession agreement secured a fixed rental income and a 7.5% share of the feed in tariff (FIT). Shortly after this national government unexpectedly reduced the FIT rates by a large percentage with very little notice. This action effectively stopped further

installations. There are 20 systems installed through this agreement – 2% of the original project’s intent.

Additionally, six council funded installations were completed by before the drop in tariff rates in December 2011. Again, the cut to the tariff rates effectively removed the financial case to continue.

The cost of PV systems has now dropped significantly in price (by around 40%). This now means that the FIT rates that we are eligible for may again present an attractive business case.

### 3.2 Maximum scale of opportunity

We have roof space to accommodate £3.4m of PV on our corporate buildings. This is divided between non-domestic council buildings (£1.1m), schools (£1.7m) and leisure centres (£0.5m).

### 3.3 Factors for consideration

The opportunities have been assessed through desktop analysis, some site specific issues cannot be confirmed at this stage including (but not limited to): Structural capacity; building energy ratings and district network conditions. These issues could impact on the design and specification of individual systems.

### 3.4 Business Case

The figures below highlight the investment potential from the specific building categories identified. The total return shared across all sites is £375,280 per annum (PV income plus energy bill savings).

	Units/ bldgs.	Est. install cost	PV FIT Income p/a	Energy bill Saving p/a <sup>1</sup>	Payback years	Lifetime savings	NPV
Non-domestic council buildings	56	£1,103,794	£64,694	£71,301	8.1 years	£2,600,206	£756,555
Schools*	52	£1,743,058	£117,206	£56,791	10 years	£3,263,107	£598,583
Leisure Centres*	6	£513,172	£31,585	£33,704	7.9 years	£1,247,341	£379,361
<b>Combined Total</b>	<b>114</b>	<b>£3,360,025</b>	<b>£213,485</b>	<b>£161,795</b>	<b>9.0 years</b>	<b>£7,110,655</b>	<b>£1,734,500</b>

\*Note schools and leisure centres pay their own energy bills and would currently receive the associated benefits.

### 3.5 Non-domestic council buildings

These buildings represent the most attractive investment to the council. The buildings comprise of offices; depots; libraries; day centres and community centres. These buildings are expected to use 100% of the electricity generated, leading to greater savings. Buildings will need to meet an energy performance rating of ‘D’ or better to meet the FIT income modelled.

### 3.6 Schools

Schools are closed across the peak generating months (July and August), this reduces their potential to benefit from the electricity generated at these times. Schools pay energy bills from their own resources and would therefore receive the benefit. Schools will need to be consulted on these proposals and it may be possible to develop a scheme to share costs and benefits. The outcome of consultation could impact on the income/savings identified.

### 3.7 Leisure Centres

Council leisure centres are operated by Greenwich Leisure Ltd (GLL). GLL pay energy bills from their own resources and would therefore receive the benefit. Under the existing agreement the council will need to enter negotiations with GLL in regards to installing PV on these sites and it may be possible to develop a scheme to share costs and benefits. The outcome of consultation could impact on the income/savings identified.

## 4. Implications

<sup>1</sup> Assume 50% for schools due summer school closures and 100% for other corporate buildings.

#### 4.1 **Financial implications:**

The programme is split between non-domestic council buildings (£1.1m), schools (£1.7m) and leisure centres (£0.5m).

The benefit to the council will be a combination of Feed-In Tariffs and savings on existing energy bills, with estimated annual saving as follows: non-domestic council buildings £136k, schools £174k, leisure centres £65k. Note schools and leisure centres (through GLL) pay energy bills from their own resources therefore the general fund saving is currently restricted to the non-domestic council buildings (£136k).

The 'payback period' provides indication of how long it will take to recover the initial capital investment (this is not discounted). Non-domestic council buildings are 8.1 years, schools 10 years and leisure centres 7.9 years.

The total budget requirement is £3,360,025 and for non-domestic council buildings the budget requirement is £1,103,794. There are no new capital receipts available therefore the programme will be funded from prudential borrowing which would incur associated revenue costs.

#### 4.2 **Legal Implications:**

In relation to the production of electricity the council has powers under the Local Government (Miscellaneous Provisions) Act 1976, s11 to:

- produce heat or electricity or both;
- establish and operate such generating stations and other installations as the authority thinks fit for the purpose of producing heat or electricity or both
- use, sell or otherwise dispose of heat produced or acquired (or electricity produced in association with heat) by the authority

Therefore the council may rely on the power under s11 of the 1976 Act to deploy photovoltaic solar panels on council owned properties.

Pursuant to section 11(1) and (3) of the 1976 Act councils are only entitled to sell electricity produced in association with heat unless regulations provide otherwise. The Sale of Electricity by Local Authorities (England and Wales) Regulations 2010 No 1910 permit councils to sell electricity which is produced from solar power.

In accordance with section 11(2) of the 1976 Act councils remain subject to the requirements of part 1 of the Electricity Act 1989. Part 1 of the Electricity Act 1989 prohibits unlicensed supply of electricity (s4). Therefore the council will need to obtain a licence as required under section 6A of the Electricity Act unless the estimated amount of electricity available for use/sale will be such as to qualify the scheme for a class exemption under the Electricity (Class Exemptions from the Requirement for a Licence) Order 2001 No 3270 (the "Licence Exemption Regulations"). Exemptions are based on the capacity of a generating station and the consumers of the energy.

#### 4.3 **Environmental Implications:**

Solar panels provide the generation of clean electricity with relatively little CO<sub>2</sub> emissions attached. Once manufactured there is little maintenance required and the environmental impact is insignificant when compared to the environmental benefits from the renewable energy produced. Reducing carbon emissions through solar PV is an important part of the UK strategy to reduce its CO<sub>2</sub> emissions by 80% before 2050.

#### 4.4 **Resident Impact Assessment:**

A resident's impact assessment will be undertaken.

### 5. **Conclusion and reasons for recommendations**

5.1 Investing in PV is most beneficial where the council is able to benefit from the electricity generated within the building and where we can obtain the medium level FIT for electricity generation.

**Appendices**      None

**Background papers:** (available online or on request)

Final report clearance:

**Signed by:**

Director for Joint Board/Committees or Exec Member if going to the Executive	Date
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**Received by:**

Head of Democratic Services	Date
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