

# North Tyneside Council

## Report to Cabinet

### 11 May 2015

**ITEM 6(c)**  
**Solar PV Procurement**

**Portfolio(s):** Housing and Environment  
Sustainable Development

**Cabinet Member(s):** Cllr John Harrison  
Cllr John Stirling

**Report from Service**

**Area:** Environment and Leisure

**Responsible Officer:** Phil Scott, Head of Environment and Leisure (Tel: (0191) 643 7295 )

**Wards affected:** All

## **PART 1**

### **1.1 Purpose:**

This report seeks Cabinet's approval, in accordance with the Authority's Contract Standing Orders, to undertake an EU-compliant procurement exercise. The aim of the process is to identify a preferred partner to install Solar Photovoltaic (PV) systems on a range of Authority owned domestic properties, Authority owned public buildings and schools, with a potential option to offer solar PV to private and commercial properties in the borough. With the exception of a range of works required to make some Authority owned properties ready for the installation of a solar PV system, to comply with Feed in Tariff (FIT) eligibility criteria and the costs associated with the management of the scheme including contract administration, tenant liaison and compliance with Construction (Design and Management) Regulations, the scheme should be at no additional cost to the Authority.

Under Contract Standing Order 8(4), Cabinet's authority is required to proceed with the procurement exercise as the estimated contract value exceeds £0.500m.

### **1.2 Recommendation(s):**

It is recommended that Cabinet:

- (1) agree to the Authority undertaking an EU-compliant procurement exercise in order to identify a preferred provider to install solar PV systems on Authority owned domestic properties, Authority owned public buildings and schools;
- (2) authorise the Head of Environment and Leisure in consultation with the Cabinet Member for Housing and Environment and the Cabinet Member for Sustainable Development, the Strategic Manager Finance, the Head of Law and Governance and the Head of Commercial Services and Business Redesign, to undertake a procurement exercise to identify a preferred provider for the delivery of this project in accordance with all applicable procurement rules. It is recommended that this include authority to undertake the following:
  - a. determine the most appropriate procurement process, including the scoping of the exercise;

- b. approve the specification, the procurement documentation and ultimate contract terms;
  - c. set the duration of the contract (together with any extensions);
  - d. approve the evaluation criteria; and
  - e. oversee the project procurement; and
- (3) agree to receive a future report detailing the outcome of the procurement exercise with recommendations for the award of the contract, if appropriate.

### **1.3 Forward Plan:**

Twenty eight days notice of this report has been given; it first appeared on the Forward Plan that was published on 2 April 2015.

### **1.4 Council Plan and Policy Framework**

This report relates to the following priorities in the 2014/18 'Our North Tyneside Plan':

- Be a place that people like living in, and will attract others to either visit or live.
- Reduce the carbon footprint of our operations and work with partners to reduce the Boroughs carbon footprint.

### **1.5 Information:**

#### **1.5.1 Background**

**1.5.2** In April 2010 the Government introduced the Feed-in-Tariff (FIT) scheme. Under the FIT scheme, electricity generated by a range of renewable energy technologies is eligible for a payment by energy suppliers. An additional payment is available for any electricity exported to the National Grid. The tariffs were introduced by the Government to help increase the level of renewable energy in the UK, to contribute towards the target set out in the European Union Renewable Energy Directive of 15% of total energy to be derived from renewable sources, by 2020. The FIT has overtaken Government grants as the main financial incentive to encourage uptake of renewable electricity-generating technologies.

**1.5.3** During 2011 and 2012, following a public procurement exercise, the Authority in partnership with E.On installed solar PV panels on over 1,500 Authority owned residential properties. The panels generate almost 3 million kilowatt hours of electricity each year, saving tenants an estimated £132 per property, per year and providing a guaranteed income to the Council of £0.072m per year for 25 years.

**1.5.4** Through its soft market testing, the Authority has identified the potential to deliver another solar PV scheme. The solar PV market has matured since the scheme with E.On was delivered and more efficient technologies now present the Authority with an opportunity to install solar PV on properties where it was previously deemed not technically and financially feasible, e.g. those properties with East and West facing roofs.

**1.5.5** The soft market testing has shown that a number of different delivery models are available that would allow all of the up front capital equipment and installation costs to be met by a preferred partner, including the Authority receiving a roof fee (as with the current E.On model) or a gain share of FIT income associated with the solar PV system.

**1.5.6** The Authority now has an opportunity to build on the successful E.On scheme by undertaking a procurement exercise to appoint a preferred partner to increase the number and type of properties benefitting from solar PV. It is envisaged that this will predominantly be a housing-focussed project however opportunities will also be explored for public buildings and schools.

**1.5.7** The procurement exercise will also explore whether homes and buildings not owned by the Authority could access solar PV arrays through the arrangement and will provide Cabinet with any costed options.

### **1.5.8 Why the project is needed**

- (a) The Authority is committed to reducing carbon dioxide emissions across the Borough of North Tyneside, and reducing the number of households living in fuel poverty. In recent years the Authority has delivered a package of measures to reduce energy consumption in residents' homes including:
- delivery of the previous solar PV partnership with E.On, installing solar PV arrays on over 1,500 homes;
  - bringing all Council housing stock up to 'Decent Homes' standard by increasing our Standard Assessment Procedure (SAP) rating throughout the borough through the installation of high efficiency boilers, PVCu double glazed windows and doors and from a series of insulation measures including internal and external wall insulation;
  - working in partnership with Warm Zone to deliver energy efficiency measures in over 16,000 homes; and
  - participating in 3 collective energy switching schemes on behalf of residents, achieving average savings of over £200 per year per household.
- (b) Latest Government estimates show that circa 10,000 households in North Tyneside suffer fuel poverty. Provisional Excess Winter Death (EWD) statistics for England & Wales for the winter of 2013-14 were published in November 2014 and show that there were over 24,000 EWDs. The figures show that there were 800 EWDs in the North East.
- (c) Although carbon emissions in the domestic sector have reduced by 13% since 2005, the sector now accounts for 40% of all carbon dioxide emissions in North Tyneside and has overtaken industry and commerce as the biggest polluter of carbon dioxide emissions in North Tyneside. Carbon dioxide emissions in North Tyneside have reduced by 22% since 2005.

### **1.5.9 Benefits**

- (a) The E.On scheme provides a guaranteed annual income to the Council of £0.072m per year plus a percentage of any FIT received for higher than anticipated electricity generation. This equates to approximately £50 per Authority owned property with a solar PV array installed. Soft market testing indicates that a similar amount could be achievable, however to date this is based on a share of future FIT incomes which are dependent on the level of energy produced and are not guaranteed, rather than a guaranteed financial return. Consultation with the Cabinet Member for Housing and Environment and the Cabinet Member for Sustainable Development has concluded that the aims and proposed outcomes of the procurement exercise and evaluation methodology should focus on guaranteed financial returns for the Authority e.g. a regular fee payable by the provider, rather than attempting to evaluate the financial benefits claimed on the basis of assumed generation levels.
- (b) It is estimated that each Authority owned domestic property with a 2.7 kilowatt peak solar PV array installed would save approximately 1 tonne of carbon dioxide emissions per year through using the renewable electricity generated. This reduces a property's need to draw electricity from the National Grid. Therefore given the estimated 2,500 properties, the project could save up to 2,500 tonnes of carbon dioxide emissions per year.

- (c) The proposal would also help to tackle fuel poverty by reducing household electricity bills, as participating households would be able to use the electricity generated by the solar panels on their property, free of charge. The extent of savings made would depend upon the nature and extent of a household's use e.g. greater savings would be achieved if equipment such as the dishwashers and washing machines were used during the day rather than in the evening. Soft market testing has indicated that average savings of circa £175 per household, per year could be achieved, promoting financial inclusion and contributing to the reduction of fuel poverty.
- (d) The full extent of the potential benefits to the Authority will only be fully determined within the context of the procurement exercise which will seek to balance environmental and financial benefits.

#### **1.5.10 Costs and timescales**

- (a) Although the Authority's procurement documentation will state that the capital cost of equipment and installation of solar PV arrays should be met by the provider, the Authority's contract with E.On demonstrated that there will be a range of works needed by the Authority to make some properties ready for both installation of the system and to ensure that the solar energy generated and used by it can be measured and the FIT can be claimed.
- (b) Officers have estimated that up to 2,500 Authority owned homes may be suitable for solar PV arrays. The greater majority of those homes would each require an Energy Performance Certificate (EPC), and a lesser number, asbestos surveys and electrical upgrades that if it were not for the requirements of the proposed scheme, would not otherwise be required at this point in time.
- (c) There will also be costs associated with the management of the scheme, including contract administration, tenant liaison and compliance with Construction (Design and Management) Regulations.
- (d) Officers have estimated that the costs to facilitate the installation of solar PV arrays onto 2,500 homes would be circa £0.180m. There is no provision in the HRA Investment Plan to deliver this project. However, the Green Fund (the income stream from the E.On solar PV contract) currently holds £0.140m and is due a further guaranteed payment (with potential extra as gain share) of £0.072m for the 2014/15 financial year. Therefore, the Green Fund is sufficiently resourced and will be considered to fund the works necessary on HRA properties.
- (e) The ancillary costs (EPCs, asbestos surveys, electrical upgrades etc) associated with any installations on school buildings would need to be met by the individual school.
- (f) Costs associated with any installations within public buildings would be considered for inclusion within the planned maintenance programme but would be restricted to those properties identified as appropriate for such investment as part of the strategic property review and which are not part of current solar PV investment proposals being delivered via the strategic partnership with Capita.
- (g) Officers have developed a project plan for procurement of the provider, which is anticipated to culminate in contract award in October 2015. The timetable for installations would be determined through the formal procurement exercise.

#### **1.6 Decision options:**

The following decision options are available for consideration by Cabinet:

##### Option 1

Agree the recommendations detailed at paragraph 1.2 of this report.

## Option 2

Reject the recommendations detailed at paragraph 1.2 of this report.

Option 1 is the recommended option.

### **1.7 Reasons for recommended option:**

Option 1 is recommended for the following reasons:

- The procurement exercise will determine value for money for the Authority in the appointment of a provider to install solar PV systems on Authority owned domestic properties, public buildings and schools, bringing the following benefits;
  - a reduction in carbon dioxide emissions through the generation and use of renewable energy.
  - a reduction in energy bills for tenants, the Authority and schools.
  - an income stream to the Authority from each solar PV array installed.

### **1.8 Appendices:**

None

### **1.9 Contact officers:**

Phil Scott, Head of Environment and Leisure, Tel. (0191) 643 7295

Paul Nelson, Environmental Sustainability Manager, Tel. (0191) 643 6467

Lee Nesbitt, Housing Investment Manager, Tel. (0191) 643 7799

Alison Campbell, Finance Business Manager, Tel. (0191) 643 7038

### **1.10 Background information:**

The following background papers/information have been used in the compilation of this report and are available at the office of the author:

(1) Solar PV Review, North Tyneside Council, March 2015.

(2) [Feed in Tariff table, Ofgem, April 2015.](#)

(3) [Feed in Tariff factsheet, Ofgem, February 2015.](#)

## **PART 2 – COMPLIANCE WITH PRINCIPLES OF DECISION MAKING**

### **2.1 Finance and other resources**

- 2.1.1** The appointment of a provider to install solar PV systems on Authority owned domestic properties, public buildings and schools presents the Authority with the opportunity to receive an income stream from the provider that is derived from the FIT they receive through the generation and export of electricity from each solar PV array. Soft market testing indicates that an annual income could be achieved for a 20 year period and the procurement exercise will determine the level of income and whether this is an appropriate period for the contract.
- 2.1.2** Any net income generated through the scheme will support the Authority's Green Fund for future investment in carbon reduction and fuel poverty initiatives.
- 2.1.3** Although the Authority's procurement documentation will state that the capital cost of equipment and installation of solar PV arrays should be met by the provider, the Authority's previous delivery of the E.On contract demonstrated that there will be a range of works needed by the Authority to make properties ready for both installation and to ensure that the solar energy generated and used can be measured, and the FIT claimed.

- 2.1.4** There would also be costs associated with the management of the scheme, including contract administration, tenant liaison and compliance with Construction (Design and Management) Regulations.
- 2.1.5** Officers have estimated that the costs to facilitate the installation of solar PV arrays onto 2,500 homes would be circa £0.180m. There is no provision in the HRA Investment Plan to deliver this project. However, the Green Fund (the income stream from the E.On solar PV contract) currently holds £0.140m and is due a further guaranteed payment (with potential extra as gain share) of £0.072m for the 2014/15 financial year. Therefore, the Green Fund is sufficiently resourced and will be considered to fund the works necessary on HRA properties.
- 2.1.6** The Authority would expect that ongoing maintenance costs to the solar PV panels and associated equipment be met by the provider and that any damage caused during installation or maintenance work is repaired at no cost to the Authority.
- 2.1.7** Ancillary costs (EPCs, asbestos surveys, electrical upgrades etc) associated with any installations within schools would need to be met by the individual school from within their own budget.
- 2.1.8** Costs associated with any installations within public buildings would be considered for inclusion within the planned maintenance programme but would be restricted to those properties identified as appropriate for such investment as part of the strategic property review and which are not part of current solar PV investment proposals being delivered via the strategic partnership with Capita.
- 2.1.9** Detailed financial implications of progressing with the scheme will be set out in a future Cabinet report.

## **2.2 Legal**

### Planning and building regulations

- 2.2.1.** The installation of solar PV panels is considered (in the majority of cases, where strict specifications are complied with) to be “permitted development” under planning law with no need to apply for planning permission. There are, however, exceptions and provisos which must be observed and the provider will be contractually obliged to adhere to all relevant planning requirements.
- 2.2.2.** From a building regulation perspective the roof would need to have the structural integrity to support the weight of the solar PV array and there would be anchorage considerations in addition to the prevention of uplift in high winds. Any alterations to the electrical system would also need to be considered and carried out in accordance with applicable regulations and by appropriately qualified personnel.

### Procurement

- 2.2.3.** The Authority will be required to procure the provision in accordance with its Contract Standing Orders and the Public Contracts Regulations 2015. The estimated “value” of the contract would include the anticipated rate of return from the FITs. The process would include publication of an advertisement in the Official Journal of the European Union (OJEU) in order to obtain for the Authority best possible value for money and ensure compliance with relevant legislation, thereby minimising the risk of challenge.
- 2.2.4.** It has been recommended that the Authority follow an open procurement process.

## Tenancy issues

- 2.2.5.** The formal consent of the tenant occupying the home would need to be sought both for the installation of the solar PV system at their property, and the connection to the electricity supply.
- 2.2.6.** The position with tenants wishing to purchase their home under the right to buy arrangements would need to be determined. There are three potential possibilities in such a scenario:
- The solar panel would remain the property of the installing provider contracted by the Authority. In this case the tenant would be required to contract directly with the provider in order to record the new arrangement and will continue to benefit from the electricity generated. In cases of this nature the Authority would no longer have any contractual relationship with the provider or the tenant in relation to the newly private property and will therefore not receive any further income from that particular installation; or
  - The purchaser would buy the solar PV panel outright as part of the purchase of the dwelling. The installing provider would receive a payment to cover the value of the solar PV panel presumably sufficient to pay off any outstanding loan. The tenant would then not only benefit from the electricity generated but also the full benefit of the FIT. The mechanics and detail around this arrangement will need to be considered and agreed prior to the procurement process; or
  - The solar PV panel is removed. Consideration will need to be given, and detail will need to be included as part of the specification for the service as to who at that point would own the solar panels, who would pay for the removal, who would pay for any damage to the building as a result of such removal etc.

Since the E.On project, the Authority has sold 21 homes fitted with solar PV. Of these, 14 removals have taken place while 7 owners have opted into a long term contractual arrangement with E.On. The Authority currently has a further 28 applications for right to buy for properties with a solar PV system.

Each of these scenarios would lead to a reduced income for the Authority.

## Property considerations

- 2.2.7** Due diligence on the titles to the selected properties, including where relevant any occupational leases granted, will be necessary to ascertain whether there are any relevant title or development restrictions which would affect the proposals.
- 2.2.8** A thorough review of the Authority's medium to long term redevelopment and asset sale programme(s) should be undertaken in the light of the potential long term (25 year) commitments proposed.

## **2.3 Consultation/community engagement**

### **2.3.1 Internal Consultation**

A project team has been established including officers from the following service areas; North Tyneside Homes, Environmental Sustainability, Commissioning and Resources, Property Services, Legal Services, Strategic Procurement, Strategic Service and Commercial Services.

The proposed project has been presented to and approved by the Sustainable Development Board, Senior Leadership Team, and Investment Programme Board.

The Cabinet Member for Housing and Environment and the Cabinet Member for Sustainable Development have been consulted and have advised officers on a number of desired outcomes of the project.

### **2.3.2 External Consultation/Engagement**

Various options have been discussed with potential external providers to gain an understanding of the current market and to help shape the contract specification.

During delivery of the E.On contract, a range of engagement activities were completed, including:

- Presentations to tenants to raise awareness of the scheme and the benefits of solar PV.
- Creating a tenant engagement group to help develop relevant documentation on the scheme for tenants, including information sheets and frequently asked questions.
- Customer liaison advisors worked with tenants to provide on site support including advice on health and safety and practical measures such as ensuring access to wheeled bins whilst scaffolding was erected.

North Tyneside Homes provides ongoing advice to tenants on both energy consumption reduction and securing better energy tariffs, including use of the Council's collective energy switching scheme.

As the project develops a range of engagement activities will be held with tenants who could potentially benefit from solar PV arrays. The aim and purpose of such engagement is to educate and inform tenants of the benefits of solar PV systems to increase the uptake.

## **2.4 Human rights**

There are no human rights issues directly arising from this report.

## **2.5 Equalities and diversity**

There are positive implications of installing solar PV arrays on Authority owned domestic properties. For example, the availability of free electricity to tenants will help those who suffer from fuel poverty.

## **2.6 Risk management**

2.6.1 The proposed procurement process will be undertaken in compliance with the Authority's Contract Standing Orders and the Public Contracts Regulations 2015.

2.6.2 There are a number of potential costs that could be faced by the Authority and it is proposed that in order to mitigate these that any agreement ensures that all such costs are covered by the provider as part of any contractual arrangements including:

- a. Being clear as part of the tendering exercise that the successful bidder will be required to undertake and finance any survey work to finalise the number of installations as the proposed figures are only indicative.
- b. Any maintenance liabilities that arise in respect of roofs damaged by the installation.
- c. All maintenance costs of the panels themselves or associated elements of the installation.
- d. Appropriate insurance cover for the panels.
- e. If the roof needs to be repaired/renewed within the 25 year period, the cost of removing and re-installing the solar panels.
- f. Clarity of the arrangements and costs associated with solar PV systems on homes subsequently purchased under the right to buy legislation.



- 2.6.3 (i) There are risks associated with tenants refusing to have the installation on their home and this was experienced in the delivery of the E.On contract. However, this risk will be mitigated through the development of a tenant liaison programme which will work with tenants to explain the advantages of having such a system installed.
- (ii) There may be some concerns from tenants who are unable to have a solar PV array fitted to their home, because of its physical aspect or other issues such as shading. Effective communication and reinvesting some the income into the Green Fund for future investment in carbon reduction and fuel poverty initiatives could help to overcome these.
- 2.6.3 The Authority's previous delivery of the E.On contract demonstrated that there can be localised problems of pigeons nesting under the panels and this has caused a small number of tenants some dissatisfaction. Mitigating steps have been taken in these cases and the Authority will expect the provider to offer a solution to this kind of problem within the procurement process.
- 2.6.4 The provider must obtain approval from the local district network operator (DNO) prior to the installation of any large scale Solar PV projects, to ensure that the localised sub station has capacity to receive the additional loadings on the distribution networks. This risk must be managed by the provider.
- 2.6.5 The risks to the Authority through such a scheme can be significantly reduced by procuring a fully externally funded solution with provision for transferring any other risks as outlined above, to the provider.
- 2.6.6 Risks identified as the project is taken forward will be addressed and monitored in compliance with the Authority's risk management process.

## 2.7 Crime and disorder

There are no crime and disorder implications directly arising from this report.

## 2.8 Environment and sustainability

- 2.8.1 This project has the potential to significantly reduce North Tyneside's carbon footprint and increase the level of electricity generation from renewable sources.
- 2.8.2 Based on an estimate of up to 2,500 Council house roofs being suitable, any solar PV panel proposal could create a reduction in carbon dioxide emissions of around 2,500 tonnes per year. Additional carbon dioxide reductions would result from any installations on public buildings, school and private homes and buildings.
- 2.8.3 This major commitment by the Authority would potentially encourage other householders and businesses to follow the Authority's lead in this area.

## PART 3 - SIGN OFF

- Deputy Chief Executive
- Head(s) of Service
- Mayor/Cabinet Member(s)
- Chief Finance Officer
- Monitoring Officer
- Head of Corporate Strategy