



**URGENT BUSINESS**

Cabinet

Tuesday, 4 October 2011

The following report to be dealt with under agenda item 3 is enclosed, as follows:

Agenda Item Number	Page	Title	Reason for Urgency
3	1 - 7	CLIMATE CHANGE INVEST TO SAVE PROJECTS	Decision required before the next meeting of Cabinet in November

**CABINET**

**CLIMATE CHANGE INVEST TO SAVE PROJECTS**

**4 October 2011**

**Report of Head of Community Engagement**

<b>PURPOSE OF REPORT</b>			
To seek Cabinet’s approval to the proposals set out in the report			
<b>Key Decision</b>	<b>X</b>	<b>Non-Key Decision</b>	<b>Referral from Cabinet Member</b>
<b>Date Included in Forward Plan</b>		01/02/2011	
<b>This report is public</b>			

**RECOMMENDATIONS OF COUNCILLOR HAMILTON-COX**

- (a) That Cabinet approve the allocation of £750,000 from the General Fund’s Invest to Save Reserve to install solar photo voltaic (PV) panels on the Council’s municipal buildings.
- (b) That Cabinet approve the allocation of £1M of from the Housing Revenue Account’s Major Repairs Reserve to install solar photo voltaic (PV) panels on council housing communal buildings.
- (c) That a further report is brought back to Cabinet on developing the Councils wider approach to the use of renewable energy.

**1 INTRODUCTION**

1.1 The Government has signed up to international, EU and national targets relating to Greenhouse gas emissions. Under the Kyoto agreement the UK agreed to cut greenhouse gas emissions by 80%; it is subject to the EU renewable energy directive, whereby at least 15% of our energy needs to come from renewable sources and has passed the Climate Change Act 2008 to put much of this into domestic law..

1.2 In developing its Corporate Plan for 2010-13 Cabinet redefined their priority around climate change: “Prioritising reducing the council’s energy costs and increasing income” should be the focus of Lancaster City Council’s objective to “Tackle the challenges of climate change”. (Cabinet Min No. 67 9/11/2010 refers).

## 2 Proposal Details

2.1 One of the main current incentives for local government in developing a strategic approach to energy from renewables are Feed in Tariffs (the FIT)

2.2 Feed in Tariffs give three financial benefits:

- A payment for all the electricity an organisation produces (from renewables), even if the organisation uses it themselves
- Additional bonus payments for electricity exported into the grid
- A reduction on the standard electricity bill, from using renewable energy

2.3 In addition to national targets and government incentives the Council also recognises that in terms of efficiency and value for money, it needs to do more to reduce its energy consumption. With this in mind, four potential invest-to-save projects were presented to Cabinet on the 15 February 2011.

- Replacing the boilers at Lancaster Town Hall.
- Installing secondary glazing at Lancaster Town Hall
- Laying a heat exchange pipeline between Salt Ayre Sports Centre and the adjacent landfill site
- Installing solar photovoltaic cells at Salt Ayre Sports Centre

2.4 Cabinet resolved that:

(1) *That subject to receiving further information, the most energy efficient scheme for replacement of the boilers be accepted for inclusion within the draft Capital Programme for consideration as part of the budget, together with the most appropriate means of funding, including building management systems and photo-voltaic energy generation.*

(2) *That the other three projects be taken forward for further appraisal with reports brought back to Cabinet as necessary. (Min No 108 refers)*

2.5 The proposal for replacing the boilers at Lancaster Town hall and installing a small photovoltaic cell system on the roof of that building was put out to tender in the summer, with a view that the new boilers would be operating by the start of the heating season. Only two tenders were returned and the costs were substantially in excess of the original estimate, largely due to the volume of work that contractors were undertaking at that time, particularly in the education sector. Consideration is now being given as to the best method of retendering the work to replace the boilers, although it is anticipated that the installation of the PV cells could be let under a separate contract as referred to elsewhere in this report.

2.6 The installation of secondary glazing at Lancaster Town Hall has been delayed by a lack of resources within the Council's Property Service that has now been resolved. A proposal is being prepared to ascertain costs for a scheme that would meet Listed Building requirements.

2.7 A preliminary feasibility study on the Salt Ayre Pipeline scheme suggests that the scheme would be very costly for the benefit obtained and as such is not being pursued at the moment.

- 2.8 Further development work on the fourth scheme has shown that it is feasible to install solar photovoltaic panels on Salt Ayre, Lancaster Town Hall roof and Morecambe Town Hall roof. Details of the costs and benefits are set out in Appendix 1
- 2.9 There are still a number of other considerable opportunities for the authority to develop further projects in this area. Solar PV is now a mainstream area in local government. Local authorities all over the country are looking at the opportunities offered by the fitting of solar panels to land and buildings.
- 2.10 On solar PV, the payback period for installations less than 50KW (the maximum size the authority is considering) is now less than 10 years. As FIT payments are guaranteed by HM Treasury for 25 years for solar installations, that means a surplus is made over at least the following 15 years. It should be noted that even this figure takes a conservative view of the predicted rises in energy prices over the coming years. It should also be noted that the tariff is index linked
- 2.11 It should also be noted that the government has already carried out a number of reviews of certain elements of the FIT scheme and is currently carrying out a fundamental review of the whole scheme with a view to introducing changes to the scheme in April 2012.
- 2.12 There is a compelling case for the Council to make a significant investment in solar PV technology prior to March 31 2012 in order to maximise the investment potential offered by the Government's FIT scheme. Funding is available via the Council's Invest to save budget and it is recommended that £750,000 is allocated from that fund to invest, in the first instance, in solar PV. Installations would take place on those municipal buildings that offer the most favourable opportunity to maximise that investment. This would include a number of communal buildings/flats in our council housing stock. There are approximately 140 such communal buildings with the potential for solar PV's. Not all will be suitable but to maximise the number that can be fitted with solar PV's it is recommended that up to £1million is allocated from the Housing Revenue Account to invest in this scheme.
- 2.13 The Council, as yet, does not have the necessary expertise in terms of specifying and assessing tender submissions in respect of solar PV so it is recommended that specialist consultancy support is sought as part of this process. This is estimated to cost £6,500 and will form part of the expenditure of £750K.
- 2.14 There are other significant opportunities for investment in renewable technologies that would merit the Council having a Renewable Energy Strategy complementing its Climate Change Strategy. A further report will be brought to Cabinet

### 3 OPTIONS

<b>Option 1:</b> Do not invest in solar PV installations.	<b>Option 2;</b> Invest a lesser amount than that suggested in the report	<b>Option 3:</b> Invest to the level recommended in the report
<b>Advantages</b>		
Allows Cabinet to consider other uses of the Invest to Save budget	Allows Cabinet to consider other uses of the Invest to Save budget	Maximises the financial benefits offered by the FIT scheme, reduces our energy costs and carbon footprint.  Solar PV is a proven technology
<b>Disadvantages</b>		
Misses the opportunity to secure the financial benefits offered by the FIT scheme, reduce our energy costs and carbon footprint.	Reduces the opportunity to maximise the financial benefits offered by the FIT scheme, reduce our energy costs and carbon footprint.	

#### **Risks.**

The Council has no expertise in solar technology. Whilst it is mainstream activity in many other authorities the Council will need to rely on independent expertise in this first phase.

It may be that it will not prove possible to invest the whole amount by 31 March 2012

### 4 OFFICER PREFERRED OPTION

Option 3 is the preferred option.

### 5 DETAILS OF CONSULTATION

This proposal has not been subject to any consultation.

### 6 SUMMARY

The new financial incentives for renewable energy generation can provide income streams over the long term and offer significant opportunities.

The technology is tried and tested, cost effective and productive.

In addition to the obvious benefits (free energy, cost savings and income generation) there are potentially wider benefits for our local communities, greater energy security, CO2 emissions reductions and a potential boost to the local economy)

**RELATIONSHIP TO POLICY FRAMEWORK**

**CORPORATE PLAN** Supports Economic priority in respect of 'Energy Coast' and Climate Change

**CONCLUSION OF IMPACT ASSESSMENT**

Reducing emissions will provide a positive impact to the local environment.

**FINANCIAL IMPLICATIONS**

The recommendations in this report are to invest in the installation of PV panels on the Councils municipal buildings held within the General Fund and communal buildings /flats held within the Housing Revenue Account. Full financial appraisal of each individual scheme cannot be done at this stage however based on initial discussions with industry experts it is expected that a typical investment in PV panels will generate income over 25 years, with payback between 7 to 10 years. Though payback is slightly longer than the general guidance given in the MTFs, the schemes should be considered (provided they fall within the requirements of the Prudential Code) as they meet the Council's priority on climate change and continue to generate income for long after the initial outlay have been recovered.

It is not known at this stage how many of the municipal or HRA buildings can be fitted with PV panels or the size of the system that can be housed on each building; this will be determined by survey carried out by the supplier as part of the tender process. However, the financing options of the proposals set out in this report are set out below:

i) GF - MUNICIPAL BUILDINGS

Within the 2011/12 budget, Council has set aside £1.44M for Invest to Save schemes, of which a maximum investment of £750K is being proposed in this report, to be used to finance investment in PV panels. £175K from this reserve has been earmarked for boiler and other heating works at Lancaster Town Hall.

ii) HRA - COMMUNAL BUILDINGS/FLATS

The HRA does not currently have a specific reserve set up for Invest to Save initiatives, however, the proposals in this report to invest a maximum of £1M, can be met from the Major Repairs Reserve which currently stands at £6.9M and was set up for the purpose of funding major works to the Council Housing Stock.

Each individual scheme will be subject to full business case appraisal by the established Invest to Save project board.

**DEPUTY SECTION 151 OFFICER'S COMMENTS**

Subject to the detailed appraisal of individual scheme business cases by the Invest to Save Project Board, the outline proposals are consistent with the financial criteria and objectives established for invest-to-save initiatives and represent a low risk in terms of generating future savings. In considering earmarking both General Fund and HRA funding as recommended, Members should consider the proposals in relation not only to the level of available funding but to corporate priorities and any identified alternative uses.

**LEGAL IMPLICATIONS**

There are no legal implications arising as a result of this report

**MONITORING OFFICER'S COMMENTS**

. The Deputy Monitoring officer has been consulted and has no further comments

**BACKGROUND PAPERS**

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**APPENDIX 1****Installing solar photovoltaic cells at Salt Ayre Sports Centre and Morecambe Town Hall**

A local company has carried out site assessments of Salt Ayre Sports Centre and Morecambe Town Hall to determine the suitability of installing solar photovoltaic (PV) cells on the roof. In addition a survey has been carried at Salt Ayre on the structural condition of the roof to ensure it can bear the loading introduced onto it.

Such an installation will provide free, renewable energy to both buildings therefore reducing energy costs and the carbon footprint of the buildings and will also generate income from the Feed in Tariff

**Salt Ayre**

Capacity of Solar Array (kW)	FIT Rate (p/kWh)	Estimated Installation Cost (£)	Annual income Year 1* (£)	Energy saving (estimated Year 1)*	Payback (years)
49.82	32.8	149,200	14,061	4,716	8

**Morecambe Town Hall**

Capacity of Solar Array (kW)	FIT Rate (p/kWh)	Estimated Installation Cost (£)	Annual income Year 1* (£)	Energy saving (estimated Year 1)*	Payback (years)
9.9	37.1	30,150	3,341	972	7

\* The payback figures are based on the estimated figures for Year 1 of the installation. Assuming an inflation rate of 2.5% and a 4% annual rise per annum in energy costs then over the 25 years FIT guarantee, the average annual income for Salt Ayre is £18,825 and the average annual energy saving is £6,974. For Morecambe Town Hall the figures are £4,106 and £1,438 respectively. If these figures are used then the payback periods reduce even further.

\*\* These figures do not include any maintenance costs that may be required but these are expected to be minimal.