

Committee:	Executive	Agenda Item No.:	8
Date:	16 th March 2009	Status	Open
Category	3. Part of the Budget and Policy Framework		
Subject:	Climate Change – Invest to save improvements at Sherwood Lodge		
Report by:	Director of Strategy		
Other Officers involved:	Climate Change Group Senior Management Team Director Strategy		
Relevant Portfolio Holder	Environment		

RELEVANT CORPORATE AIMS

ENVIRONMENT – Promoting and enhancing a clean and sustainable environment
 STRATEGIC ORGANISATIONAL DEVELOPMENT – Continually improving our organisation.

A corporate approach to climate change requires challenges to the current ways that services are provided and assets are managed by the Council.

TARGETS

Reduce the Council's carbon emissions to 80% of the 2006/7 levels by March 2011. The level of contribution from this scheme will equate to 268 tonnes of carbon dioxide saved.

VALUE FOR MONEY

The invest to save principles proposed in this report would see the cost of improvements repaid within approximately five years with subsequent savings being available once the initial costs have been recouped.

THE REPORT

At its meeting on 7th April 2008, Executive agreed an invest to save strategy for improvements where the initial costs were repaid over a period of three years and delegated powers were granted to the Director of Strategy to agree such works in consultation with relevant Members and officers.

It was anticipated at that time that the ongoing work of the Climate Change Group will identify further opportunities to reduce energy consumption and emissions which would benefit from an invest to save approach. Indeed, the Carbon Trust identified that further savings may be achieved by, amongst others, the use of renewable energy sources. As part of the continuing response to climate change the possibility of alternative energy sources for Sherwood Lodge have been considered in conjunction with the Department for Business Enterprise and Regulatory Reform's Low Carbon Buildings Programme. Following a detailed survey and assessment of potential alternatives, an accredited consultancy company, Cleaner Air Solutions Limited have recommended the installation of photovoltaic cells on certain elevations of the roof to Sherwood Lodge. These are shown on the plan at Appendix 1.

The total cost of installation of the proposed system is £78,075. The Low Carbon Buildings Programme will contribute 50% towards the cost of installing these improvements, which would require the Council to contribute £39,037.50.

If implemented, it is estimated that annual savings will equate to around £7,550 based on anticipated electricity prices, which are likely to increase in future years. This equates to payback of the Council's expected contribution within just over five years. In addition 10.7 tonnes of carbon dioxide emissions will be saved per annum.

The proposed modules to be installed are warranted for 25 years and over this time savings equate to around £186,000 and 268 tonnes of carbon dioxide.

ISSUES FOR CONSIDERATION

The Council has signed the Nottingham Declaration on Climate Change which, among other things, commits the Authority to contribute, at a local level, to the delivery of the UK Climate Change Programme, the Kyoto Protocol and the reduction in carbon emissions. It also includes a commitment to publicly declare and achieve a significant reduction of greenhouse gas emissions from our own operations, especially energy sourcing and use.

As part of the National Indicators, the Council is required to demonstrate community leadership in reducing carbon emissions (NI 185 CO2 reductions from the Authority's own operations and NI 186 per capita CO2 emissions).

There is currently no budgetary provision for the works outlined. However, a capital bid had been produced but this was not taken forward into the budget report as the overall Asset Management Plan budget for next year is £846,850, which is currently being reviewed to avoid any potential unnecessary expenditure. Based upon an initial review it is likely that there will be significant savings in the region of £200,000 and a further report will be brought to Members when this is complete. It is therefore proposed that some

of these likely savings be used to fund the Council's contribution to the installation of photovoltaic cells for Sherwood Lodge.

The proposed system has a maximum power capability of 15 Kwp (kilowatts peak power) and is capable of producing around 12,200 Kwh (kilowatt hours) of electricity, dependant upon climatic conditions. This equates to a saving of around £470 per year against the current costs for electricity.

Currently the Government provides an incentive to payback for clean electricity that is generated on site known as ROCs (Renewable Obligation Certificate). Based upon the output of the system it is anticipated that 24 ROCs will be available at a current market value of £45, which equates to £1080 per annum.

If the system is installed this will be classed as having an "On-site Generator" which will enable the Authority to claim an exemption from the Climate Charge Levy element of the electricity bill which equates to an average monthly figure of around £285 per month x 12 months = £ 3,420.

Taken together annual savings for these elements will be around £4,970.

The Government intends to introduce a system called "Feed In Tariffs" from April 2010, which simply means that the utility companies will have to pay Bolsover DC for each unit (Kwh) of clean electricity that is produced. This will replace the ROCs value of £1,080.00 as shown above, resulting in an additional income of £ 2,580.00 per year. The Government are indicating that the lower level should be set at around £0.30 per unit, therefore, 12,200 x 30p, should see a payback of in the region of £3,660.00 per year.

For 2009/10 the anticipated savings are £4,970 which increases to £7,550 from 2010/11 onwards, giving a potential payback period for the Council's contribution of around five and a half years.

The anticipated saving of 268 tonnes of carbon dioxide will also be a direct contribution towards the NI 185 and 186 targets.

IMPLICATIONS

Financial : The Council's proposed 50% contribution of £39,037.50 can be met from savings in the budgeted Asset Management Plan. The balance of the overall costs (£39,037.50) will be provided from a grant from the Low Carbon Buildings Programme.

Legal : The Grant Offer from the Low Carbon Buildings Programme requires that funds are drawn down by January 2010.

Human Resources : None

RECOMMENDATIONS

It is recommended that the proposed installation of a photovoltaic energy system be installed at Sherwood Lodge as outlined in the report.

REASON FOR DECISION TO BE GIVEN IN ACCORDANCE WITH THE CONSTITUTION

To assist the Council in meeting its carbon reduction target and to generate ongoing savings.

ATTACHMENT: Plan of proposed works
FILE REFERENCE:
SOURCE DOCUMENT: Quotation from Cleaner Air Solutions Limited and offer letter from Low Carbon Buildings Programme

