

**REPORT TO: POLICY & RESOURCES COMMITTEE ON 22 JUNE 2010**

**SUBJECT: THE MORAY COUNCIL ENERGY STRATEGY – PROGRESS REPORT**

**BY: HEAD OF ESTATES SERVICES**

**1. REASON FOR REPORT**

- 1.1 The report is submitted to the Policy and Resources Committee to advise on progress in reducing energy consumption as well as progress and developments on a number of energy issues.
- 1.2 This report is submitted to the Committee in terms of Section A (37) of the Council's Administrative Scheme relating to ensuring that the organisation, administrative and management processes of the Council are designed to make the most effective contribution to achieving the Council's objectives.

**2. RECOMMENDATION**

**2.1 It is recommended that Committee:**

- a) **Notes the progress achieved in reducing the Council's energy consumption in non-domestic properties, which was reduced by 4% in 2008/09.**
- b) **Appoints the Director of Environmental Services as the "person responsible" within the Council for the Carbon Reduction Commitment Energy Efficiency Scheme within the Council;**
- c) **Notes the achievement of certification under the Carbon Trust Standard in January 2010;**
- d) **Approves the updated Energy Policy and Strategy for Non Domestic Properties;**
- e) **Approves the Energy Officer meeting with all the Council's Departmental Management Teams to assess and agree their energy training requirements and relevant energy saving projects;**
- f) **Delegates authority to the Corporate Management Team to instruct appropriate energy saving projects recommended by the Energy Officer;**
- g) **Recommends making the Energy Technical Assistant post a permanent position (see APPENDIX 1 (iii) of the "Designing Better Services – Property Asset Management" report, also on the Agenda of this Committee).**

**3. BACKGROUND**

- 3.1 Reducing energy consumption in the Council's non-domestic properties is one of five Council activities supporting the Council's wider Carbon Management Programme. The other four are waste; street lighting; management of staff business travel and fleet management. The contribution of the other four activities will be reported separately in the Annual Carbon Management Report later this year.
- 3.2 This report is concerned with:-
- i. progress of the activities of the Energy Team in reducing the Council's energy consumption in the Council's non-domestic properties, in accordance with the objectives under the Council's Energy Policy and Strategy;
  - ii. supporting centralised energy procurement through Procurement Scotland;
  - iii. supporting the implementation of the Carbon Reduction Commitment Energy Efficiency Scheme; and
  - iv. achievement of the Carbon Trust Standard, all as detailed in the relevant sections of this report.

#### **4. REPORT**

##### **(i) Energy Saving Measures**

- 4.1 The Carbon Trust carried out an Assessment of Initial Energy Saving Opportunities Survey of Secondary Schools for the Council in April 2007. The report from this survey assisted the Council to identify energy saving measures. Further surveys have been carried out to identify potential energy saving measures, not just specific to schools.

##### **Energy Consumption**

- 4.2 The Council's energy consumption for 2008/09 was reduced by 4% on the previous financial year, exceeding the Council's target of a 2% reduction.
- 4.3 The energy saving projects that have been implemented in recent years are detailed in **APPENDIX 1**.
- 4.4 **APPENDIX 2** provides a breakdown of recently completed projects, as well as current and proposed projects. Two projects have been completed in 2009/10, although a great deal of investigative/preparatory works have been carried out on potential projects for 2010/11 – providing potential to generate significant financial savings as well as reductions in energy consumption, assisting the Council to reduce its carbon footprint.

- 4.5 Many of the 'quick win' projects have been completed over the past few years and many of the remaining identified projects involve major work to schools. The times available to implement them are limited to holiday periods to avoid disruption to staff and pupils. To make best use of the money and to produce the quickest reductions in energy use and carbon dioxide emissions some of the larger projects will be carried out in conjunction with other planned major works. There have not been many projects carried out in the last year due to other commitments placed upon the Energy Team (detailed later in this report).

#### Funding of Energy Saving Projects

- 4.6 The use of Central Energy Efficiency Fund money for a project involves a loan being taken from the fund by a Council department and paid back from the savings made. This arrangement was a requirement placed on the Council by the Scottish Government, at which point the Council received a grant of £246,000. In the present financial climate, many budget holders are reluctant to take loans unless the level of energy and financial savings to be made can be guaranteed. A guarantee cannot be given to a specific level of saving as there are many variables outwith the control of the Energy Officer, projected savings are based on current best practice and expected savings as detailed by the Carbon Trust Technology List. Maintenance or repair work discovered during the implementation of a project cannot be charged to that project as these costs fall outside the Central Energy Efficiency Fund criteria. Therefore, these costs must be met by other sources. In order to ensure viable energy saving projects are progressed it is proposed that the Corporate Management Team be authorised to approve projects recommended by the Energy Officer.
- 4.7 A number of feasibility studies have been carried out, including renewable energy projects, which have ultimately proved unviable, mainly because they fail to meet Central Energy Efficiency Fund strict criteria on payback periods. However feasibility studies are continuing and it is anticipated that these should lead to a number of successful projects being advanced/implemented in 2011/12, assisted by recent changes in legislation.

#### Verification of Utility Invoices

- 4.8 It has been agreed with the Council's Procurement Section to remove responsibility for the verification and authorisation of utility invoices from Budget Holders. New arrangements are for all utility invoices to come directly to the Energy Team for verification and validation prior to centralised authorisation and payment. This will reduce the workload at individual sites,

but will increase workload within the Energy Team. The centralisation of this work within the Energy Team and electronic billing and data transfer will benefit the Council, as it will significantly reduce the amount of utility paperwork handled, allow easier tracking of payments and rectification of incorrectly paid invoices. Over £100,000 is in the process of being recovered in respect of invoices that were paid incorrectly based on inaccurate or incorrect invoicing data.

#### Budget Monitoring

- 4.9 Budget Managers currently receive monthly budget reports including details of utility spend. Utility consumption data will be available, by request via the Council's Energy Internet website, for any interested parties (budget holders, building managers, occupiers). A great deal of work (ensuring correct financial codes, correct appropriation of costs within shared buildings, meter serial and reference numbers, contract details and full historical data) will be required to be carried out by the Energy Team to ensure that the change over from the current manual system to an electronic system goes smoothly. Electronic interfaces will be set up prior to the changeover to allow electronic file transfer between suppliers and the Energy Team's Monitoring and Targeting system and between this system and the Council's financial system, to remove the need for manual input of data. This will also require specialised training for members of the Energy Team to utilise the extra functions of the enhanced Monitoring and Targeting system.

#### Centralised Contract for Energy Procurement

- 4.10 Procurement Scotland has in place a centralised electricity contract that started in Oct 2009. Due to a current contract agreement, the Council will be joining the Procurement Scotland electricity contract on 1 April 2011. The water, gas and liquid fuels contracts are also in the process of being centralised to Procurement Scotland – currently the intended implementation date is also 1 April 2011. One of the benefits to the Council will be the introduction of centralised electronic billing reducing the manual handling of the invoices for the 624 utility accounts held for Council properties.

(ii) Carbon Reduction Commitment Energy Efficiency Scheme – Appointment of "Responsible Person"

- 4.11 The Carbon Reduction Commitment Energy Efficiency Scheme was announced in the Energy White Paper 2007; it aims to cut carbon emissions from large commercial and public sector organisations and began in April 2010 as part of the UK Government's Climate Change Bill. This is vital to achieving the UK's overall target of reducing greenhouse gas emissions by at

least 80% by 2050 compared to the 1990 baseline. It is designed to drive energy efficiency and deliver carbon savings through introducing a mandatory system of carbon trading which would penalise organisations for exceeding baseline carbon emissions and reward those who do not use their full allocation of energy.

- 4.12 The Policy & Resources Committee considered a detailed report by the Head of Estates Services on the forthcoming Carbon Reduction Commitment Energy Efficiency Scheme legislation at its meeting of 30 June 2009 (para 11 (i) of the Minute refers).
- 4.13 In terms of the legislation a 'Director' or 'Senior Manager' must be appointed as the "person responsible". Carbon Reduction Commitment Energy Efficiency Scheme Guide paras 2.4, 3.6 and 4.7.2 give some details of the roles and responsibilities and these sections are attached as **APPENDIX 3**. The full guide detailing the processes involved for an organisation participating in the Carbon Reduction Commitment Energy Efficiency Scheme is available electronically from the Energy Officer.
- 4.14 A suitable person requires to be nominated now in order to comply with the timescales - a registration package has to be completed and forwarded to the UK government by September 2010 giving the initial footprint report of energy consumption for 2008 prior to the start of carbon trading in April 2011. The nominated person will be responsible for the accurate completion of this report and once trading begins for the buying/selling of carbon allowances and associated financial risk management.
- 4.15 Civil penalties (with fines of up to £722,000) as detailed in **Table 1** below could be incurred for non-compliance. There are also criminal offences for falsification and obstruction. These are detailed in the Carbon Reduction Commitment Energy Efficiency Scheme guide.
- 4.16 The Corporate Management Team has recommended that the Director of Environmental Services be appointed as the Council's "responsible person" in terms of the Carbon Reduction Commitment Energy Efficiency Scheme.
- 4.17 The responsible person will require staff from various sections to collect and collate data and prepare reports. The trading of carbon allowances will be supported by officers within the Payments Section of Finance and ICT and the Head of Financial Services has undertaken training in the financial aspects of carbon trading (fees, buying, selling and trading allowances). Appropriate software to produce the Council's carbon "footprint" and annual report easily and quickly to ensure compliance has been purchased.

- 4.18 The Energy Team will have a crucial role in supporting the responsible person to maximise the Council's position in the Scheme by collecting, collating and analysing information/data on the energy consumption of the Council's buildings.

**Table 1**

Non-compliance	Penalties
Failure to register by deadline	£5,000 fine Additional fine of £500 per working day for each subsequent day up to a maximum of 80 working days Publication of non-compliance
Failure to make complete registration	Fine of £500 per half-hourly meter (we have 32 of these meters) Publication of non-compliance
Incorrect information	If information does not affect the emissions total – fine of £5,000 If the information affects position in the performance league table – additional fine of double any financial gain achieved
Failure to keep adequate records	Fine of £40 per tCO <sub>2</sub> emissions in most recent compliance year (Council emitted approx. 16,400 tCO <sub>2</sub> in 2008 – fine of £656,000) Publication of non-compliance

(iii) Carbon Trust Standard

- 4.19 The Policy & Resources Committee at its meeting of 30 June 2009 (para 11 (ii) of the Minutes refer) agreed that the Council should achieve certification under the Carbon Trust Standard. This was principally because organisations that hold the Carbon Trust Standard will receive a higher ranking in the Carbon Reduction Commitment Energy Efficiency Scheme performance league table and thus a greater recycle payment. In Year 1 the Carbon Trust

Standard makes up half the points awarded to determine positions in the league table. Although the financial benefit of achieving the Trust Standard can not be quantified accurately it is considered that achieving the Carbon Trust Standard could result in the receipt of £40,000 more recycled payments than if the Council did not hold the Trust Standard.

- 4.20 Certification was achieved in January 2010 following a gap analysis programme. A quantitative assessment of the consumption data for street lighting, all council non-domestic operational properties and the fuel consumption of fleet vehicles over the last 3 years was carried out. This involved a huge amount of research work by the Energy Team to ensure that valid and verified data was collected.
- 4.21 A qualitative assessment of the systematic processes for carbon reduction within the Council was also carried out. This looked at Policy and Strategy documentation, management responsibilities, reporting and communications, investments in carbon reduction programmes and training. Again this involved a huge amount of research by the Energy Team to produce the required evidence. These processes will require further work to ensure that a robust system remains in place and is improved for future use.
- 4.22 The Carbon Trust Standard assessor made the comment that “despite very limited resources the organisation has made steady progress in reducing energy use and emissions over the last few years. Since a recent improvement in resources much more effort on a broader front is evident. There is also obvious enthusiasm and a clear focus on making improvements that are known to be necessary. In that context the organisation is making rapid progress to one in which good overall carbon management practices will be firmly established”.
- 4.23 The Carbon Trust Standard will be contacting the Council's PPR & Communications Officer to discuss press releases and publicity activities.

(iv) The Moray Council Energy Policy and Strategy – Non Domestic Properties

- 4.24 The Council's current Energy Policy and Strategy was produced in early 2005 to align with the existing Council Corporate Plan, Environmental Charter, Environmental Forum's Objective and LA21 Strategy. There have however been many changes in legislation regarding energy and carbon reduction since then and an updated Energy Policy and Strategy – Non Domestic Properties has been produced using the model in the “Carbon Trust

Management guide CTC733 – An energy management best practice model for Scottish Local Authorities”. The reviewed document is attached at **APPENDIX 4**. The document was part of the qualitative evidence for the Carbon Trust Standard. Once approved by the Council and signed by the Chief Executive Officer the document will be made available via the Energy Internet website.

(v) Other Energy Issues

Energy Website

- 4.25 An Energy Internet website has been completed. This website is the initial point of entry for staff into Council energy matters. The website contains copies of the Energy Policy and Strategy and the Carbon Management Programme documents as well as copies of the Carbon Management Programme, Carbon Trust Standard and Climate Change (Scotland) Declaration certificates. Sections on; Why save energy?; Energy in the home; Energy at work; Energy in the school; News and events as well as a direct email contact to the Energy Team. It is envisaged that this website will evolve through use and further sections may be added. The website will be used to advise building managers, budget holders and occupiers of relevant energy matters. An energy awareness section has very recently been added to the Council's Intranet site.

Corporate Training

- 4.26 Energy Awareness briefings are now included in the Corporate Induction Training programme and an energy briefing note was issued to Head Teachers prior to their meeting in May 2010. Energy Awareness sessions are carried out, when requested, at many primary schools in support of educational themes being studied by the pupils.
- 4.27 In partnership with the Carbon Trust, the Energy Team is investigating a pilot training course for janitorial staff at schools. This half-day course, to be carried out during in-service training days, will be provided by the Carbon Trust, free of charge, to staff to raise their awareness of how they can actively participate in reducing the amount of energy used at our schools. If successful then this course could be rolled out to all janitorial staff and building managers.
- 4.28 The Energy Team have tried to encourage the role of “Energy Champions”, staff who take on an active role for energy reduction within their own section and after specialised training provide awareness briefings and training to their colleagues. Initially the response to these sessions was encouraging, however recently staff have been reluctant to put themselves forward for this role and it has been difficult to get staff to attend energy awareness sessions, as they are busy with core tasks and often the awareness sessions are seen as a secondary option. It is proposed that the Energy Officer arranges to meet with all the Council's Departmental Management Teams on a periodic

basis to assesses and agree their energy training requirements and energy saving projects.

#### Energy Team Training

- 4.29 The increased use of the Energy Monitoring and Targeting system for the handling of electronic data files and the increased use of specialist reports to other sections within the Council in support of the Carbon Reduction Commitment Energy Efficiency Scheme, Carbon Management Programme and building managers/occupiers will require specialist training for Energy Team staff to ensure the best use of this resource.
- 4.30 The increase in the number of awareness and training sessions will require specialised training for members of the Energy Team to make certain that the sessions are delivered correctly, ensuring training objectives are met.
- 4.31 The Building Energy Management Systems will require regular monitoring and management by trained personnel within the Energy Team to allow the Council to achieve best use of its investment.

#### (vi) Future Energy Savings

- 4.32 Although significant progress has been made in recent years in reducing the Council's energy consumption it is considered that there is scope to achieve further significant reductions, principally as a result of:-
  - (a) Further energy saving projects
  - (b) Participation in the Carbon Reduction Commitment Energy Efficiency Scheme
  - (c) Raising corporate awareness and corporate training
  - (d) Collation of accurate consumption data
  - (e) Better utilisation of Building Energy Management Systems and other systems to analyse accurate energy data and identify energy saving opportunities

## **5. SUMMARY OF IMPLICATIONS**

### **(a) Single Outcome Agreement/Service Improvement Plan**

The implementation of these measures will help to achieve the energy efficiency objectives of the Single Outcome Agreement and the Estates Services Service Improvement Plan.

### **(b) Policy and Legal**

The Council's energy and carbon actions are consistent with a number of national and Scottish Government initiatives including Scotland's Climate Change Programme, the Local Authority Carbon Management Programme, the Carbon Reduction Commitment Energy Efficiency Scheme, achieving sustainable development through Best Value and the Local Government Act 2003.

**(c) Resources (Financial, Risks, Staffing and Property)**

Financial/Risks

The Council's annual energy bill for properties is approximately £2,000,000. Based on the reduction in energy usage of 4% (para 4.2 above) the financial saving to the council is £80,000. Energy savings are often masked by external and environmental conditions, the recent prolonged cold temperatures will clearly impact on the Council's energy usage for the current year, as will occupancy levels in buildings. **APPENDIX 2** identifies the anticipated savings in kWh and £'s for each proposed project, based on average improvements from similar projects measured by the Carbon Trust.

All current and proposed energy saving projects have to be funded from within present budgets and with the assistance of the Central Energy Efficiency Fund where applicable. At present there is approximately £45,000 remaining in the Energy Efficiency Spend to Save budget and approximately £200,000 in the Central Energy Efficiency Fund.

A lack of finances to assist with future projects could severely reduce the Council's ability to reduce its energy consumption and carbon emissions. This could lead to a poorer performance in the Carbon Reduction Commitment Energy Efficiency Scheme performance league table and subsequent reduction in recycled payments. Financial penalties could also arise from failure to comply with this new legislation (see **Table 1** above).

The Council will be required to purchase carbon allowances as part of the Carbon Reduction Commitment Energy Efficiency Scheme. The recycled payments are to be used to carry out energy reduction projects and should result in a payment back to the Council of approximately £180,000 to £220,000 dependent on the performance league position of the Council.

**Table 2** summarises the main financial benefits of the Council's Energy Team.

**Table 2**

Issue	Financial Implications
Energy Costs	Annual consumption reduced by 4% (£80,000)
Planned Energy Saving Projects	Potential annual savings of approximately £10,000 identified
Carbon Reduction Commitment Energy Efficiency Scheme	Penalties of up to £722,000 for failure to comply
Carbon Trust Standard	Estimated benefit in recycled payments of up to £40,000
Collation of accurate consumption information	£100,000 of over payments being recovered

A number of other risks have been specifically detailed in this report.

### Staffing

Core energy issues include the analysing/auditing of energy consumption at Council buildings to identify potential energy saving projects/initiatives, investigating energy saving projects, verification and validation of all utility invoices and data to ensure accurate payments and in preparation for contract transfer to Procurement Scotland, provision of support to the implementation of the Carbon Reduction Commitment Energy Efficiency Scheme, raising energy awareness/conducting staff training and the provision of energy management support to corporate Carbon Management programmes.

The Energy Team are currently collecting and collating data for use in reports for the following:-

- In preparation for the Carbon Reduction Commitment Energy Efficiency Scheme
- Core duties reporting on energy consumption in the Council's non-domestic buildings.
- The Carbon Management Programme

These three reporting chains require differing information to be presented in many varied formats, at different times. All the data is available within the Council, but is time consuming to collate as the

reports require selective energy consuming activity data for specific reports.

The future workload for the Energy Team is set to expand to include additional energy awareness training/briefings, updating the energy website and responding to requests for site specific data or information, management of the Building Energy Management Systems, verification and authorisation of utility invoices and management of the transfer of utility contracts to Procurement Scotland, supporting the implementation of the Carbon Reduction Commitment Energy Efficiency Scheme and responding to further legislative changes.

Training in specialist systems will also be required to maximise the potential benefits of energy saving systems and initiatives.

The present Energy Team establishment has 1 permanent FTE Energy Officer; 1 (temporary) FTE Technical Assistant and 0.6 FTE (temporary) Clerical Assistant.

Details of the roles, responsibilities and grades of each post are attached as **APPENDIX 5**.

The Technical Assistant post is to be considered as part of the Agenda ["Designing Better Services – Property Asset Management" - **APPENDIX 1 (iii)** of the Report refers].

The Clerical Assistant post will be given appropriate consideration as and when the clerical and administrative support is determined for Property Asset Management.

The following initiatives/measures to minimise the Council's energy consumption and costs could be implemented if the current staffing compliment were confirmed on a permanent basis:-

Energy Saving Projects as detailed in **APPENDIX 2**;

Support the Council's commitment to the Carbon Reduction Commitment Energy Efficiency Scheme and the Carbon Management Programme.

Maximise use of current and proposed Building Energy Management System to identify poorly performing areas and take appropriate remedial measures;

Data trend analysis to identify energy saving opportunities utilising the Monitoring & Targeting system;

Corporate Training – as detailed in paras 4.26 – 4.28;

Energy staff training – invest in specialised training to get best value from the current resources and encourage staff to expand their knowledge base into the more complex areas of the systems;

Property

The property implications are as detailed in this report.

**(d) Consultations**

The Chief Legal Officer, Chief Financial Officer, Director of Environmental Services, Head of Development Services and Aileen Scott, the Principal Solicitor (Commercial and Conveyancing) have been consulted and their comments incorporated in this report.

**6. CONCLUSION**

- 6.1 Although progress has been made in reducing the Council's energy consumption it is considered that there is potential for further significant reductions. As well as minimising the Council's energy costs further progress will be essential if the Council is to maximise its financial position in terms of the Carbon Reduction Commitment Energy Efficiency Scheme.**

Author of Report: Bill Anderson, Energy Officer  
Background Papers: As referred to in this report.  
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