

HOUNSLOW CLIMATE CHANGE FUND

19 February 2008

1. PURPOSE OF THE PAPER

- 1.1. To outline proposals for operating a Hounslow Climate Change Fund.
- 1.2. To progress the ambition of the London Borough of Hounslow achieving beacon status for sustainability.
- 1.3. To request the setting up of a £1,000,000 fund by the Executive (supported by full borough council) to invest in local energy efficiency and Climate Change mitigation.

2. EXECUTIVE SUMMARY

- 2.1. The Sustainability Working Group is making progress in developing a Hounslow Climate Change Strategy.
- 2.2. To substantially progress the group's work funding is needed to improve the Council's monitoring and targeting of energy use/users and ability to finance carbon saving projects on the council's estate.
- 2.3. This paper proposes three options for the allocation of £1,000,000 in the 2008/9 budget.
- 2.4. In addition, this fund might be used to fund carbon saving projects in the wider community.

3. RECOMMENDATIONS

- 3.1. That one of the three options to set up a £1,000,000 Hounslow Climate Change Fund be agreed:
 - 3.1.1. Option 1: An increase of £11.80 in the Band D Council Tax.
 - 3.1.2. Option 2: A £1,000,000 drawing on the balances provision.
 - 3.1.3. Option 3: An increase of £5.90 in the Band D Council Tax and a drawing of £500,000 on the balances provision.
- 3.2. That the Executive and full borough council delegates authority for the spending of the fund to the Executive Member for the Environment in consultation with the Sustainability Working Group and the Council's Environmental Strategy Manager (or Energy Manager in future) and Director of Finance.
- 3.3. Schemes, such as a British Gas home insulation scheme, could be supported with match funding from the Climate Change fund
- 3.4. That the Executive Member for Environment be authorised to delegate some aspects of these decisions to an officer when they think fit, including to the Environmental Strategy Manager, for project proposals that are in line with the criteria that are described at paragraph 4.5 of the paper.

4. DETAIL

4.1. The challenge: Energy costs and climate change

- 4.1.1. Hounslow needs to use less energy both to help in the battle against climate change and because energy costs are rising. However, energy efficiency programmes are costly and lack of capital has traditionally

prevented councils being able to fund equipment and building retrofits. Furthermore, energy costs tend to be buried in annual municipal operational budgets and municipal budgets rarely provide for annual efficiency investments. There is fierce competition for municipal capital and a widespread reluctance to incur debt to be repaid by uncertain energy savings.

4.1.2. An Invest to Save (or Revolving Energy) Fund model is an excellent way to direct funds at energy and water efficiency projects in Hounslow Council buildings. Whilst identifying suitable projects could be a task for officers responsible for energy services, the key here is to make sure the Director of Finance can influence the process. This is essential to support investment decisions that will achieve both quick wins and longer-term savings, delivering cost effective energy, CO₂ and financial savings in Council buildings.

4.1.3. In the longer term, the scheme could be expanded to include energy efficiency loans to households and small businesses in London Borough of Hounslow. This was pioneered by the Northern Ireland Office and is now commonplace in the United States. Households and small businesses would be loaned a proportion of the cost of the energy efficiency investment and required to pay it back out of future savings.

4.2. Background

4.2.1. An Invest to Save Fund (a.k.a. Revolving Energy Fund (REF)) is a device which has helped many institutions to focus on how best to finance investment in energy efficiency measures. A capital fund is established to invest in energy and water efficiency projects that will provide future energy cost savings. Then, in future budgets, these savings are allocated to the fund so that the money can be re-invested in further energy efficiency projects. Through this process, a REF can grow and allow councils to pursue energy saving projects that might not be funded through standard budget processes.

4.2.2. The most successful example of an REF is the one launched by Woking Borough Council in 1990. Woking started with £250,000 in capital and over 12 years made cumulative savings of £5 million. Corporate energy use was reduced by 46% and corporate emissions were reduced by 75%.

4.2.3. Kirklees Council decided not to use a corporate landlord approach for their REF, but instead pioneered the provision of seed funding to departments as loans to be paid back when energy savings were realised.

4.2.4. Meanwhile, the Northern Ireland Office has established a Revolving Energy Loan Fund aimed at small and medium-sized enterprises (SMEs), which provides low interest loans that are repaid out of energy savings.

4.3. Funding

- 4.3.1. To support the delivery of Hounslow's sustainability strategy/action plan, it is proposed that the fund be divided as follows:
- £430,000 "Invest to Save Fund" is made available to finance projects meeting the criteria outlined in paragraph 4.5, or otherwise to be

considered by the Leader and Executive Member for Environment in consultation with the Sustainability Working Group.

- Up to £70,000 for updating the Council's energy management software and installing automatic meter reading technology to improve monitoring of the Council's energy use and targeting of high energy users.
- £50,000 for match funding a home insulation scheme.
- The balance of £450,000 is set aside for now to be considered later in 2008 following the Council's participation in the Carbon Trust's Local Authority Carbon Management Programme.

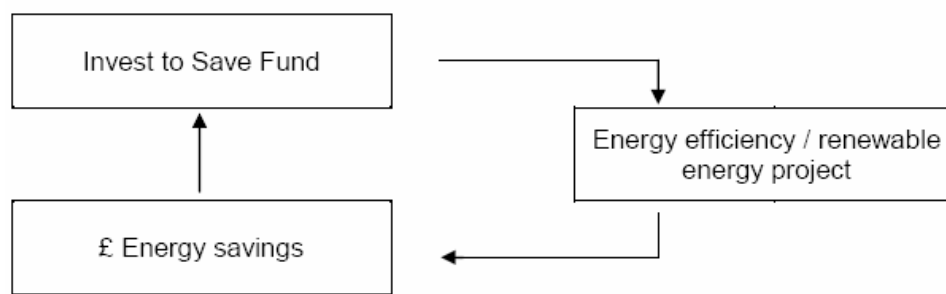
4.3.2. This paper provides further detail on each item below including a description of how the "Invest to Save Fund" will operate. A paper to Executive later in 2008 would outline the recommendations to invest the remainder of the Climate Change Fund, acting on knowledge gained through working with the Carbon Trust.

4.4. Invest to Save Fund

4.4.1. The Climate Change Fund will be used to set up an Invest to Save Fund to provide interest free internal 'loans' for energy efficiency and renewable energy projects in: council buildings, schools and other council assets.

4.4.2. The financial savings accrued will be paid back into the fund until the cost of the original investment has been recouped, and 2 years thereafter, after which they will accrue to the revenue accounts of the budget holder. As repayments are recycled back into the fund they become available for re-investment, hence creating a self-sustaining and slowly growing fund. The fund growth will both increase its impact over time and also provide some inflation proofing.

4.4.3. Priority will be given to energy saving measures with the shortest payback periods allowing money to be quickly recouped and ploughed back into further measures. Both the IDeA and the Carbon Trust recommend this model for local authorities. The design of the Invest to Save Fund described below is based upon that of Salix's Ring-Fenced Fund Scheme - the financial arm of the Carbon Trust which provides match funding for local authority invest to save funds.



4.4.4. New developments, large-scale refurbishments of council buildings (including schools) and transport projects will not be eligible for financing from the Invest to Save Fund.

4.5. Criteria

- 4.5.1. The Executive Member for Environment, in consultation with the Sustainability Working Group, will delegate, to the Environmental Strategy Manager (or Energy Manager in future), the authority to agree to finance projects that meet the following criteria:
- <10 year payback for energy saving measures and <15 year pay back for renewable energy technologies. All associated costs should be included in determining the payback period (i.e. capital costs, project management costs and ongoing maintenance).
 - Minimum annual payback is 75% of annual savings.
 - Maximum size of loan is £25,000. No minimum size.
 - Projects must deliver both long term CO2 savings and revenue benefits
 - Provides Additionality. If an investment were to be made anyway the Invest to Save Fund can only support the additional investment to select a higher energy saving option.
 - Loans will not be offered for projects where an alternative source of funds is available for the full project costs.
 - Director of Finance to sign loan agreement (one-page document setting out annual loan repayment schedule in line with estimated cost savings).
 - Three years of energy data for site made available to Environmental Strategy Unit.
- 4.5.2. Projects requiring a loan of over £25,000, or that do not meet any of the other criteria listed above, may be referred to the Leader and Executive Member for Environment in consultation with the Sustainability Working Group for consideration (e.g. projects with a pay back period > 15 years or buildings occupied by community organisations).

4.6. Prioritisation

- 4.6.1. To ensure that the Invest to Save Fund is used for projects that deliver long-term energy and CO2 savings, all compliant projects will be prioritised on the basis of their capital cost per tonne of CO2 saved on a lifetime basis (£/tCO2LT). To calculate this, a “persistence factor” is used to derive the estimated lifetime savings for different technology types:
- $\text{£/tCO2LT} = \text{Project Capital Cost}$
 - $\text{Annual CO2 Savings} * \text{Persistence Factor}$
- 4.6.2. The use of persistence factors assumes that savings decay over time. This happens for three main reasons:
- End of useful life
 - Degradation
 - Lack of proper maintenance
- 4.6.3. For example, cavity wall insulation will deliver CO2 savings far more consistently over a very long period compared to discreet user adjustable heating controls which tend to diminish after just a few years. Persistence values are produced by the Carbon Trust and subject to regular review.

4.7. Design of Fund

The invest to save element of the Hounslow Climate Change Fund will consist of a series of individual ring-fenced funds which will provide internal loans to finance energy efficiency and renewable energy projects. Loans made by each ring-fenced fund will be repaid on the basis of estimated energy savings as documented in the loan agreement. An additional charge may be levied on projects to recover costs incurred for any feasibility work and improved metering for measurement and verification purposes.

4.8. Loan Agreement

4.8.1. Loans will be made on an interest-free basis and based on estimated energy savings at the time the loan is agreed. Loan repayments will be made annually on 1st April, with the first payment 6 to 12 months after the loan is drawn down. Annual repayments can be set at between 75-100% of estimated cost savings to provide increased flexibility to the budget-holder, The full loan repayment schedule will be detailed in the project loan agreement which must be signed by the Director of Finance before funding is made available.

4.8.2. In addition to the loan repayment schedule, the project loan agreement also includes a project proposal section which shows the project cost, pay back calculations, estimated CO2 savings, and £/tCO2LT.

4.9. Administration

The Environmental Strategy Manager (or Energy Manager in future) will be responsible for managing the Invest to Save Fund and individual ring-fenced funds within this.

4.10. Marketing

The Invest to Save Fund will be marketed across the Council to ensure that all those involved in energy management are aware of it. It is anticipated that most projects will come from the Sustainability Working Group.

4.11. Identification

4.11.1. Suitable projects will be identified through planned and ad hoc surveys of Council buildings conducted by the Environmental Strategy Unit, Facilities, Property Services, or external consultants. Accurate and frequent energy data will be essential in targeting high energy users (see 4.13 below).

4.11.2. On receiving an expression of interest the Environmental Strategy Manager will review the project proposal to ensure it meets the criteria in 4.5.1 above and complete the loan agreement.

4.11.3. Where projects do not the criteria, they will be referred to the Leader and Executive Member for Environment, in consultation with the Sustainability Working Group, for consideration.

4.12. Implementation

Where possible, projects will be implemented internally by Facilities and Property Services. Alternatively external providers will be invited subject to the Council's procurement policies.

4.13. Monitoring & Targeting (M&T)

4.13.1. Energy data will be collected and monitored to:

- (a) understand where and how energy is being used;
- (b) identify areas where energy consumption can be reduced; and
- (c) confirm whether energy-saving measures are working to improve the quality of energy data collected by the council.

4.13.2. The Environmental Strategy Unit will work with facilities to improve energy management, and prepare a proposal to install Automatic Meter Reading (AMR) technology to measure electricity, gas and water consumption across the council estate.

4.13.3. This paper proposes that Executive delegates authority for implementing AMR to the Cabinet Member for Environment in consultation with the Sustainability Working Group, subject to the cost being less than £70,000 over five years.

4.13.4. AMR is the technology used for automatically collecting data from energy meters (electric, water, gas) and transferring that data to a central database for billing and/or analyzing. This means all readings will be based on actual, rather than estimated consumption, and will allow the council to select the frequency of readings giving better control of electricity, gas and water consumption.

4.13.5. According to the Carbon Trust, improved monitoring and targeting typically results in cost savings of 5%-15% for gas and electricity and 5%-30% water, with a payback period of less than 12 months.

4.13.6. All larger projects (>£20,000) financed by the Invest to Save Fund will be required to install smart meters to monitor energy consumption. The cost of installing the smart meter will be added to the repayment charge, but not used to determine the payback period.

4.14. Reporting

4.14.1. A Climate Change Fund progress report will be provided to the Sustainability Working Group, Executive and Overview & Scrutiny Committee biannually. Each report will contain a summary of new loans issued during that period and repayments received from existing loans and those due over the next 12 months, as well as an overall update on estimated CO2 savings.

4.14.2. The report will also include loan requests to be decided by the Leader and Cabinet Member for Environment in consultation with the Sustainability Working Group, rather than the Environmental Strategy/Energy Manager (i.e. where they are for above £25,000 or where they fail to match other parts of the criteria listed at paragraph 4.5.1 of this paper).

4.15. External funding

Match funding up to £250,000 is available through Salix, the Carbon Trust's financial arm. For renewable energy projects match funding is available through the BERR's Low Carbon Buildings Programme.

4.16. British Gas Council Tax Rebate Scheme

4.16.1. Insulation is one of the most cost effective ways of reducing a building's energy use and the measures above will typically save a household at least £125 a year.

4.16.2. British Gas are running a scheme that offers residents a £50 rebate (to be credited to their council tax bills) for installing cavity wall or loft insulation with one of their approved contractors (£250 and £274 respectively for a three-bed semi detached).

4.16.3. Councils that have provided match funding (i.e. a £100 rebate) have seen much greater uptake of the scheme. To promote the scheme and encourage residents to insulate their homes, it is proposed the Council sets aside £50,000 of the overall fund to enable a £100 rebate for the first 1000 residents. After this the rebate level would drop back to £50.

5. CONSULTATION

This paper has been prepared in consultation with the Finance Department and the Environmental Strategy Unit. It is now circulated by Cllr Dakers, Leader of the Liberal Democrat Group, with an appeal for cross-party consideration and support in advance of the final budget.

6. FINANCIAL IMPLICATIONS

One possibility would be to include in the 2008-09 budget a one off contribution to set up the "Hounslow Climate Change Fund". In order to set up an adequate initial fund, a one off contribution would be required in 2008-09. The proposed fund of £1m could be funded by:-

An increase of £11.80 in the Band D Council Tax.

or

A £1,000,000 drawing on the balances provision. This would avoid a need for an increase in the Council Tax. However, it would reduce the balances provision. This would increase the risk of unavoidable spending pressures exceeding the available balances, although this could be mitigated by more careful management of balances.

or

An increase of £5.90 in the Band D Council Tax and a drawing of £500,000 on the balances provision.

7. POLICY IMPLICATIONS/CONSIDERATIONS

This area of work has cross party support and is fundamental to making the London Borough of Hounslow a beacon council for sustainable development.

8. RISK ASSESSMENT

8.1. Risks have been carefully considered and the criteria and delegated authority for spending of the Climate Change Fund will ensure that it is well managed and individual projects are thoroughly assessed. The Council's Procurement Code will ensure effective commissioning of monitoring and targeting (M&T) hardware and software.

8.2. Despite good experiences from other Councils, there is a risk that British Gas or their contractors provide a poor service, which in turn may reflect badly on the Council. All communication will make clear that the Council cannot be responsible for the work carried out under the scheme by British Gas or their contractors.

9. EQUALITY IMPACT/CONSIDERATIONS

Energy savings measures can help to reduce the impact of high energy costs on council service units and residents with limited budgets. Climate change can impact particularly on vulnerable people.

10. LEGAL IMPLICATIONS

10.1. The creation and use of this fund shows the benefit of the power of environmental well-being contained in the Local Government Act 2000. The

fund also fulfils responsibilities arising from the Sustainable Communities Act 2007.

10.2. To avoid any possible suggestion that the home insulation scheme favours a particular provider, the authority should be open to considering alternative suggestions from others, subject of course to the funding being available and to suitable arrangements offered.

10.3. Executive functions may be arranged to be exercised by the Executive itself, or delegated to a committee of the Executive, to one (or more) Members of the Executive, to an officer, through joint arrangements with other authorities, or to another authority.

11. BACKGROUND DOCUMENTS

- Motion to full council (June 2006) Enabling a one planet economy in Hounslow
- LB Hounslow (January 2007) Achieving beacon status in sustainable development
- LB Hounslow (October 2007) Second update on achieving beacon status in sustainable development
- Carbon Trust (2002) Good Practice Guide 312: Invest to Save
- Climate change policies of Woking, Richmond, Camden and many other local authorities

12. CONTACTS

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