

Making energy efficiency and low carbon improvements

This guide outlines an approach and funding sources for investment in energy efficiency and low carbon measures. It should be noted that the funding sources listed are only those that are open to use at the time this document was produced. The topics below will be discussed to facilitate a sustainable approach to delivering energy efficiency and low carbon improvements:

1. Energy Management Policy
2. Climate Change Levy (CCL) Exemption
3. Enhanced Capital Allowance (ECA) Scheme
4. Low Carbon Buildings Programme (LCBP)
5. Biomass
6. Community Funds
7. Northern Ireland Projects Fund
8. Transport
9. EU
10. National Health Service
11. National Lottery

1. Energy Management Policy

An Energy Management Policy is an overarching strategic document that:

- Ensures commitment to energy and the environment – This indicates that the organisation is genuinely concerned about energy and sustainability.
- Outlines transparent and realistic objectives over a period of time – These are a series of clear guides on what is to be achieved and when.
- Details an approach to implementation – This provides a parameter to making investment decisions as well as resource allocation.
- Monitors and reports on progress – This allows for continual review of the effectiveness of activities, uptake of initiatives and bottom-line performance.
- Establishes framework for continual review and revision.

If the OGC low energy and carbon activities initiatives are to have a long term approach, we recommend:

- Energy Management Strategies are established;
- Government estate shows leadership through a uniform energy and environmental reporting system.

The Energy Efficiency Action Plan 2004 sets out Governments objectives as:

- Reducing the absolute carbon, from fuel and electricity used in buildings on their estate, by 12.5 per cent by 2010–11, relative to 1999–2000;
- Increasing the energy efficiency of the buildings on their estate measured in terms of kWh of fuel and electricity use per square metre of buildings floor area or estate area by 15% by 2010–11, relative to 1999–2000.
- To source at least 10% electricity from renewable sources by 31 March 2008.

For further information see:

<http://www.archive2.official-documents.co.uk/document/cm61/6168/6168.pdf>

Note(s)

1. EI www.energyinst.org.uk
2. Carbon Trust www.thecarbontrust.co.uk
3. DEFRA <http://www.defra.gov.uk/environment/business/envrp/guidelines.htm>

2. Climate Change Levy Exemption

The Climate Change Levy is applied to non-domestic use of energy. Exemptions can be sought through activities such as investment in specific technologies. Savings made against expenditure on the CCL can be a source of funding for an organisation. The following investments are exempt from the CCL:

- Electricity generated from new renewable energy (e.g. solar and wind power)
- Fuel used by good quality combined heat and power schemes ("Good Quality CHP" - certified via the CHP Quality Assurance Programme CHPQA)
- Fuels used as a feedstock
- Electricity used in electrolysis processes, for example, the chlor-alkali process, or primary aluminum smelting.

Note(s)

1. HM Treasury http://www.hm-treasury.gov.uk/media/20F/1D/bud06_ch7_161.pdf
2. DEFRA <http://www.defra.gov.uk/environment/ccl/>

3. Enhanced Capital Allowance Scheme

The Enhanced Capital Allowance (ECA) Scheme enables an organisation to claim a 100% Corporation Tax Return on the first year of capital allowance on an energy efficiency investment. Companies can normally claim only 25% capital rebates. *This does not apply to public sector organisations.*

This scheme is linked to the Energy Technologies List which exhibits specific products and manufacturers that have achieved accreditation. The scheme is provided by the Inland Revenue and DEFRA. It is administered by the Carbon Trust.

In accordance with the 2003 Sustainable Energy Act the government set a target to source 15% of electricity from Good Quality CHP by 2010. This technology is included in the Energy Technologies List. Approval from HM Treasury is required to enable government estate to

Notes

1. Website: www.eca.gov.uk/etl

4. Low Carbon Buildings Programme

The Low Carbon Buildings Programme provides grants for microgeneration technologies for householders, community organisations, schools, the public sector and businesses. Two streams of funding will be made available.

The second stream fund of £50m applies to projects which include businesses, community organisations and the public sector. This incorporates all microgeneration technologies and applies to installations in local housing authorities, housing associations, schools and other public sector and charitable bodies. Applications and expressions of interest should cover the criteria below:

- Which technologies are you interested in providing?
- What would be the unit sizes (in terms of kWh output) you would be interested in providing? Could you contract for a range of sizes to allow final orders to be adjusted according to demand, or would the contract have to relate to a specific unit size in order to allow you to reduce costs?
- What is the minimum number of installations you would need to contract for to enable you to achieve a significant reduction in price? Above this what price-quantity trade-off do you believe it may be possible to achieve for the different technologies you are willing to provide?
- What is the nature of the service package you are interested in providing?
- When could you be in a position to start installations, and at what rate do you expect you could supply installations over the life of the programme.
- What grant levels would be required from the ?50m phase of the Low Carbon Buildings Programme to provide end-users with a realistic payback period, under what assumptions?
- Are there any end-users you are particularly interested in supplying, or does it make no difference?

Awards will be based on an assessment of:

- Quality of overall offering, made up of the following criteria (listed in order of importance)
- technical merit
- accreditation
- warranty, service and maintenance arrangements
- product lifespan
- ancillary products included (e.g. meters)
- Per unit price including assessment of the impact the offer will have on the long-term price and competition structure of the market in the technologies covered

The deadline for submissions is 27 July 2006. For further information see:

http://ted.europa.eu/Exec?DataFlow=N_list_results.dfl&Template=TED/N_result_details_curr.htm&Page=77&docnumber=2006122797&StatLang=EN

Low Carbon Building Accelerator Programme aims to accelerate the take-up of cost-effective, low-carbon initiatives during non-residential building refurbishment.

The Low-Carbon Building Accelerator seeks to demonstrate that major refurbishments of non-residential buildings can be completed in both a low-carbon and a cost-effective manner. It involves the Carbon Trust's specialist consultants working with a range of building projects in the retail, hospitality, government and education sectors. The specialist consultants are working with developers and their advisors, providing input on how to ensure that refurbishment projects are carried out in a way that minimises the carbon emissions from the building. Case studies backed up by robust data will be published at the end of each project. Funding opportunities can be accessed through engagement with the Carbon Trust specialists.

Note(s)

1. EST <http://www.est.org.uk/housingbuildings/funding/lowcarbonbuildings/>
2. Carbon Trust <http://www.thecarbontrust.co.uk/technology/technologyaccelerator/lcba.htm>

5. Biomass Accelerator Fund

The Biomass Heat Accelerator Fund was launched by the Carbon Trust in 2006. £5million is available to assist the commercial deployment of small-scale biomass (0.2-2MWth) in the UK. This focuses on existing and new users of biomass heat networks as well as installers.

Notes

1. Website www.carbontrust.co.uk/technology/technologyaccelerator/biomass.htm

6. Community funds

The Scottish Community and Householder Renewables Initiative (SCHRI) has been awarded an extra £3 million to help support small-scale clean energy developments such as solar panels and roof-top wind turbines. The money increases the annual SCHRI funding for the next two years by 60 per cent, up from £2.2m to £3.7m per annum. SCHRI is run by the Energy Savings Trust (EST) and Highlands & Islands Community Energy Company. Householders can receive up to 30 per cent of the total cost of their project up to a limit of £4,000. Community schemes can receive a maximum grant of £10,000 for a feasibility study and a maximum grant of £100,000 for a capital project. The following technologies are covered by the fund:

- hydro-electric
- wind
- solar water heating
- solar space heating
- heat pumps (ground, air and water source)
- automated wood fuel heating systems

The Local Authority Energy Financing (LAEF) Scheme established by the Carbon Trust provides match funding for investment in energy efficient technologies. It assumes a £1m total fund, equally funded by the CFV and the LA, with tranche payments as outlined in table above, and average actual payback period of 6 years (which corresponds to a 75% payout for an average 4 year project payback); pre-consideration of administrative costs and fees. The scheme is managed by Salix Finance, an independent organisation dedicated to energy saving financial products for the public sector.

Notes

1. Website <http://portal.est.org.uk/housingbuildings/funding/community/>
2. SCHRI Website <http://www.est.org.uk/schri/community/>
3. LAEF Website <http://www.salixfinance.co.uk/overview.html>

7. Northern Ireland Projects Fund

The purpose of the NIPF is to take forward energy saving issues and projects that are important to Northern Ireland (NI). It will fund potential schemes from the community, transport, renewable and energy efficiency sectors.

The Fund will be used to play a catalytic role and will also support research, feasibility and pilot studies where possible. In a fund of this type, flexibility and innovation are important, allowing support to be provided through a variety of mechanisms and stakeholders.

Accordingly the rules of operation will not be restrictive. Decisions made on funding will aim to support a wide range of projects in order to assist and overcome NI's specific energy issues.

Project funding can be made in three ways:

- Small-scale projects (up to £10,000) may receive 100 per cent funding.
- Medium-scale projects (between £10,000 and £20,000) may receive up to 75 per cent or £10,000, whichever is the greater.
- Larger projects (over £20,000) may receive 75 per cent or £15,000, whichever is higher, up to a maximum of £20,000.

Note(s)

1. Website www.est.org.uk/housingbuildings/funding/

8. Transport

The Energy Savings Trust (EST) is a main source of information and funds in this sector. At present, the only funding opportunity available relates to the alternative refueling and electric charging points. The funds available are:

- Grants of 40% of eligible costs are permitted for electric recharging points;
- Grants of 30% of eligible costs are permitted for natural gas/biogas, hydrogen and bioethanol refuelling stations, pumps and dispensers.

Other fiscal saving measures were introduced in the 2006 Budget. These include a new zero rate of vehicle excise duty for the small number of cars with the very lowest carbon emissions and a new top band for the most polluting new cars.

Note(s)

1. Website www.est.org.uk/fleet
2. Website www.hmtreasury.gov.uk
3. An energy and environmental policy can incorporate fleet management and transport links.
4. Organisations can also affect their supply chain and incorporate these environmental improvements into their overall energy and environmental performance.

9. EU options

Intelligent Energy – Europe (IEE) is a main means of converting EU policy for smart energy use and more renewables into action on the ground, addressing today's energy challenges and promoting business opportunities and new technologies. IEE supports [European projects](#), [one-off events](#) and the setting up of local/regional energy agencies with a total budget of €250 million, covering up to 50% of the costs. The programme currently supports more than 200 international projects, over 30 local/regional energy management agencies, and just under 30 European events for the promotion of:

- new and renewable energy sources (ALTENER)
- energy efficiency, notably in buildings and industry (SAVE)
- energy aspects of transport (STEER)
- co-operation with developing countries (COOPENER)

Note(s)

1. EU – IEE Programme http://ec.europa.eu/energy/intelligent/index_en.html

10. National Health Service

The NHS 2 targets in England:

- a) reduce primary energy consumption by 15% of 2000 levels by 2010, and
- b) achieve 35-55Gj/100m³ energy efficiency performance for all new capital developments and major redevelopments or refurbishments.

The Department of Health and the Carbon Trust produced a technical guide on issues relating to energy management and procurement called EnCO₂de which can be accessed from:

http://www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/PublicationsPolicyAndGuidanceArticle/fs/en?CONTENT_ID=4131671&chk=2MbXaC

11. National Lottery

The following National Lottery streams might be relevant to public sector energy and environmental efficiency are:

Awards for all – for local communities

Heritage Fund – for local and national heritage sites

Nesta – exploring new and innovative ideas, products and services in science and technology that provide a commercial and social benefit.

Further information can be obtained from: <http://www.lotteryfunding.org.uk/england.htm>

Energy Institute

The Energy Institute is a professional body incorporated by Royal Charter to promote public confidence and understanding in the subject of energy, energy professionals and companies. EI achieves these aims through the development of sound science and engineering excellence. For further information please contact:

Sanjeev Kumar
Energy Institute
61 New Cavendish Street
London
W1G 7AR

t: +44 (0)20 7467 71210
f: +44 (0)20 7255 1472
e: skumar@energyinst.org.uk
w: www.energyinst.org.uk