

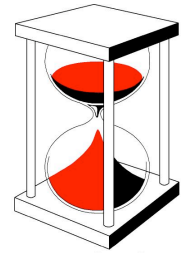


**Friends of
the Earth
Scotland**

Friends of the Earth Scotland

and the

**Association for the
Conservation of Energy**



**Association
for the
Conservation
of Energy**

European and External Relations Committee inquiry into the European Commission's Energy Green Paper

Introduction

Friends of the Earth Scotland is a Scottish charity which works to promote environmental justice. As part of our work we undertake research into, and advocate greater investment in, measures to tackle fuel poverty and promote energy efficiency, alongside increased investment in Scotland's renewable energy resource.

The Association for the Conservation of Energy is a lobbying, campaigning and policy research organisation, and has worked in the field of energy efficiency since 1981. Our lobbying and campaigning work represents the interests of our membership: major manufacturers and distributors of energy saving equipment in the United Kingdom.

The comments included in this evidence reflect the views of both Friends of the Earth Scotland and the Association for the Conservation of Energy.

Specific comments:

Heating

** What can be done to reduce substantially the energy expended in heating business, public and residential buildings?*

** Can we develop effective, long-term targeted efficiency campaigns in these areas and others in terms of wider energy use?*

- Ambitious building regulations and suitable enforcement of those regulations will help to ensure that new buildings are as energy efficient as possible. Unfortunately, although Scottish building regulations are claimed to be the most stringent in the UK, by European standards - and especially if Scotland's latitude is taken into account - they are not high. Scottish standards are certainly not on track to deliver a 60% reduction in CO₂ emissions from all buildings by 2050, which is the government's stated aim. In addition, much more must be done to ensure enforcement of standards, which anecdotal evidence suggests is poor.

- While building regulations currently focus predominantly on new buildings, they could also be used to help improve the standard of existing buildings. Some work on existing buildings – for example significant extensions, renovations or alterations – requires a building warrant. Where this is the case, a requirement for a consequential improvement

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in the energy efficiency of the original building (for example, requiring 10% of the value of the extension to be invested in improving the energy performance of the original building) could lead to significant improvements in existing buildings. This is currently being considered by DCLG (formerly ODPM) in Westminster. We are disappointed that this proposal did not appear in the recent consultation on Scottish building regulations.

- The EU Energy Performance of Buildings Directive (EPBD), if fully implemented, could help to provide a lever for the improvement of energy efficiency standards in buildings. However, it appears that the Scottish Building Standards Agency is taking a minimalist approach to implementation, which means the full benefits of the directive are unlikely to be realised in Scotland. Indeed, current proposals for implementation are unlikely to comply with the directive: Luc Werring, director of energy policy at the European Commission, recently commented that UK plans for implementation are “completely insufficient” and would be the subject of legal action by the Commission in September unless proposals are improved¹.

- Fiscal measures can help to increase the incentive for individuals to install energy efficiency measures and insulation. This is covered in more detail below.

- Public information campaigns have an important role to play in promoting the uptake of cavity wall insulation, loft insulation and other measures to improve the energy performance of buildings. Fiscal incentives alone are unlikely to have sufficient impact unless those eligible are aware of the costs and benefits of measures (the so-called ‘cost perception gap’). To this end, the work of the Energy Saving Trust and the Carbon Trust is valuable. However, we would like to see the two bodies merged in order to simplify access to information about energy saving, and to present a single gateway to information.

- A common criticism of energy efficiency measures is that they are sometimes thought to be ineffective due to the ‘rebound effect’, whereby some of the energy saved through an energy efficiency measure is then spent on more energy, rather than being saved through lower energy bills (and lower emissions). A related issue, ‘comfort taking’ occurs when a proportion of energy saving is taken as improved living conditions. The rebound loss is at least cancelled out by supply-side loss as, according to Defra, up to 30% of an energy efficiency improvement may be taken by comfort factors. Whilst leakage from comfort taking is significant, it is also true that the electricity supply sector suffers from similar loss rates as, by simply producing energy, it accounts for 35% of all emissions². However, whereas supply-side losses generally manifest as waste heat, which elicits no benefit, energy efficiency ‘losses’ are taken in the form of ‘comfort’, leading to a net welfare gain. All things being equal, one would surmise that a demand-side welfare gain, especially in low-income households, is preferable to a supply-side loss, in the form of lost heat. Therefore any rebound effect argument is *at least* matched by supply-side losses.

Public procurement

** Should public procurement support certain products and new, lower emissions technologies? Would this assist in establishing an initial market for those technologies and provide incentives for industry to research and develop new energy efficient products and processes?*

¹ “Energy in Buildings and Industry”, June 2006, p.5

² DTI (2006) Our Energy Challenge: Securing clean, affordable energy for the long term. p. 39

- Public procurement has a vital role to play in 'leading the way' on energy efficiency. We welcome the announcement in the recent Energy Review that the central government estate will be carbon neutral by 2012, and hope the Scottish Executive will at least match this pledge.

- Member States are required to adopt a public procurement approach to energy efficiency under the End Use Energy Efficiency and Energy Services Directive (Art. 5)³. This can be achieved through setting minimum environment and energy performance standards, then applying the usual tendering process.

Finance

** Are there financial instruments and other mechanisms, such as energy-efficiency funds, that might be harnessed to act as catalysts for commercial investment in energy efficiency projects and companies providing energy services? The Commission considers that there is great potential for investment in small-scale sustainable energy projects and that their scale suggests that action is best initiated at local and regional level. The Committee would be interested to learn of initiatives in this area.*

- Financial incentives play an important role in the promotion of energy efficiency. Of course, for most energy efficiency measures there is a built-in incentive, since they tend to be inexpensive to install and pay for themselves through reduced fuel bills over short time periods. However, often consumers are not aware of the potential savings, or they over-estimate the cost or installation time of measures. This is known as the 'cost perception gap', and can partially be tackled through better information and marketing by agencies. It could also be tackled through an upstream cap and trade framework, as outlined above.

- Examples of successful fiscal incentives in Scotland include 'Loan Action Scotland'. This is a zero-interest loan scheme for SMEs. Since its inception in 1999 the scheme has provided 117 loans (to end December 2005), which have enabled lifetime savings of £4m on businesses' energy bills⁴, with a corresponding carbon saving of 26,370 tonnes⁵. The Scottish Executive estimates the cost of carbon saving to be approximately £39 per tonne. This compares favourably with a cost per tonne of saved carbon through nuclear power generation of between £70 and £200 per tonne⁶. However, we believe the Executive is not currently doing enough to promote or expand this excellent scheme.

- Additional fiscal incentives which have proved successful elsewhere include council tax rebates for those installing energy efficiency or micro-generation measures. A study by the Energy Saving Trust found these could be important drivers for change⁷.

- Climate Change Agreements (CCAs) have been enormously successful. These are agreements signed by bodies eligible for the Climate Change Levy (CCL), who agree to invest in energy efficiency measures in return for a reduction in their CCL. During the first two years of operation CCAs had saved 4.5MtC. This is nearly double what they were expected to save over nine years. In addition to the financial savings gained from

³ Directive 2006/32/EC of 5 April 2006:

http://europa.eu.int/eur-lex/lex/LexUriServ/site/en/oj/2006/l_114/l_11420060427en00640085.pdf

⁴ Letter from Nicol Stephen MSP to the Enterprise Committee, 31 December 2005:

<http://www.scottish.parliament.uk/business/committees/enterprise/inquiries/bg/supp-SE2.htm>

⁵ Written question in the Scottish Parliament, number S2W-22632, lodged 25 January 2006

⁶ "The Energy Review" – Performance and Innovation Unit, table 6.1, p.108

⁷ Changing Climate, changing behaviour – Delivering household energy saving through fiscal incentives, Energy Saving Trust, 14 July 2005

the reduced rate of CCL, it is estimated that CCA participants collectively save over £450 million per year from their reduced energy consumption⁸.

- Other financial incentives which could contribute significantly to changes in consumer behaviour include stamp duty rebates for householders installing energy efficiency measures, and reduced planning gain supplement for developers building to a higher energy performance standard than that specified in building regulations.

- While we recognise that a move towards personal carbon accounts at the present time may have practical and administrative barriers, we support the recommendation made by the Energy Efficiency Innovation Review's household report that the Energy Efficiency Commitment (EEC) should move to a supplier cap and trade arrangement after 2011. We are pleased to note that the recent energy review announced a consultation with a view to taking this forward⁹. However, we believe that in the medium term (for example, by around 2020), some form of personal carbon trading scheme should be in place. This graduated process, starting with upstream and moving towards downstream carbon trading, will lead the public to be far more 'carbon literate' and will enhance incentives to reduce emissions without a significant 'rebound effect'.

Energy efficiency trading

** Under the "white certificates" system, suppliers and distributors are obliged to undertake energy-efficiency measures for final users. Certificates corroborate the amount saved and can, in principle, be exchanged and traded. Such a system is under consideration in the UK and elsewhere in the EU. The Committee is interested in how effectively such a system might operate in Scotland.*

- In principle we support the idea of white certificate trading, and welcome the introduction of the concept of placing a value on delivered energy efficiency. We believe that it is important that all sectors, even down to individual householders, are encouraged to make an equitable contribution to reducing climate change emissions. However, given the practical problems associated with setting up such a scheme, we believe the most practical level for such a scheme to operate is likely to be at the UK-wide level.

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⁸ Defra (2004) Climate Change Agreements – results from the first target period assessment V1.2.
http://www.defra.gov.uk/environment/ccl/pdf/cca_aug04.pdf

⁹ DTI (2006) The Energy Challenge, Energy Review Report 2006, p.45