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# Briefing

## Cleaner cars and Greener homes

Climate change and Budget 2007

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## Summary

The Stern review of the economics of climate change made it clear that if left unchecked the economy will be just as much of a casualty of climate change as the environment. So far the Government has failed to respond to the policy implications of Stern for the UK economy

At the Budget the Chancellor has the opportunity to change this and to create a socially progressive package of tax rises on polluting activities to fund tax breaks and spending on environmentally beneficial activities. This will benefit the climate, meet social objectives, save businesses money and create jobs.

Friends of the Earth proposes that the Chancellor raise taxation on the most polluting cars and aviation in order to invest in public transport, and help fund grants and tax breaks to make our homes energy-efficient and cheap to heat.

The specific measures we are calling for in Budget 07 are far from a comprehensive list of all the possible green measures the Chancellor could take and even if enacted in full they would not create a low carbon economy. They do however represent two areas where the Chancellor has fallen particularly short in the past and where action is expected.

### **Tax the pollution caused by transport:**

- Increase Vehicle Excise Duty to provide a real incentive to buy less polluting cars - £2000 for new gas guzzlers (Band G) with a zero rate for the least polluting cars (Bands A and B).
- Reintroduce the road fuel tax escalator, spend the revenue on providing decent transport alternatives to motoring.
- Introducing an Air Passenger Duty Escalator.

### **A £2.4 billion fund to help tackle climate change from homes including:**

- £1.4bn for Council Tax rebates for those making their homes more energy efficient. Stamp Duty rebates for those making their homes energy efficient immediately after purchase.
- £1bn annually for grants and tax breaks to help roll out microgeneration technologies, and a fair payment for the electricity they generate.
- Cutting the VAT for refurbishing homes to high standards of environmental sustainability and a commitment to negotiate at the EU to cut VAT on DIY energy saving measures.

At the Pre Budget Report in December 2006 the Chancellor increased the rate of fuel duty by inflation and made a small rise Air Passenger Duty. Friends of the Earth criticised this as a feeble response to the Stern Report. Our detailed response to the PBR is available at

[www.foe.co.uk/resource/press\\_releases/brown\\_budget\\_fails\\_green\\_t\\_06122006.html](http://www.foe.co.uk/resource/press_releases/brown_budget_fails_green_t_06122006.html)

## Changes to Vehicle Excise Duty

**Road transport is responsible for around a fifth of the UK's carbon dioxide emissions. Emissions are rising – they are up 5% since 1997, and are predicted by the Government to continue to rise until 2020<sup>i</sup> – this is against a Government target to cut overall carbon dioxide emissions by 20% by 2010, and 60% by 2050. The transport sector as a whole is at present the largest barrier to the Government meeting its overall climate targets.**

There are two main reasons for road transport emissions continuing to rise. First, the cost of motoring has fallen in recent years, while the cost of less polluting modes – rail and buses – have risen.

Second, the average efficiency of cars has only improved very slowly. This is because the industry target for increasing new car efficiency has been voluntary, so there are no penalties for failure to comply. This is compounded by weak financial incentives to persuade buyers to choose a less polluting car.

### Vehicle Excise Duty

One of the biggest effects individuals have over their carbon emissions is what sort of car they buy. In each of the 4 main classes of cars (“superminis”, “lower medium”, “upper medium” and “4x4”) the best performing model has over 25% lower emissions than the average in the class.

The Government has 7 bands for car emissions (A-G), yet although engine efficiency has been improving over the years, in 2005, only 3% of new car sales were in the least polluting categories A and B, and 8% would have been captured in the Government's newly created most polluting category G (over 225 g/km).

The point of purchase has a major effect on future emissions, but there is currently little incentive for people to buy a more fuel efficient car. The Government has accepted that differentials have an impact on people's purchasing choices. The move to create zero rate of VED for the cleanest cars is welcome, however, the differentials introduced in the March 2006 budget for the most polluting cars were too small to make a difference to people's choices – just £20 between the top two bands.

The Department for Transport (DfT) has published research showing that wider differentials would work – wider VED differentials would persuade people to buy a less polluting car. They say that: “*the current graduated scheme does not offer a large enough incentive to encourage behavioural change*”.

A recent OECD report notes that “reform of vehicle taxation (purchase, registration and annual circulation taxes), so that it is based on a vehicle's specific CO<sub>2</sub> emissions *and strongly differentiated*, should be a top priority in Europe”<sup>ii</sup> [emphasis added]

The research also shows that with a £300 difference between bands, 72% of consumers would change their purchase to a lower emission vehicle.<sup>iii</sup>

To provide better incentives for motorists to purchase less polluting cars, we advocate:

- Creation of a zero rate for Band B (the same as Band A)
- Major, immediate increases for new cars in the most polluting bands
- Minor increases for existing cars, with a clear commitment that existing cars will pay the same rate as new cars by 2010.

**Proposed VED rates for new petrol cars, registered after March 2007.**

£ per year VED band	CO <sub>2</sub> g/km	Current - 2006	2007
A	<100	0	0
B	101-120	40	0
C	121-150	100	100
D	151-165	125	300
E	166-185	150	700
F	186-225	190	1200
G	226+	210	2000

For existing cars, we advocate the same drop to zero for Band B, frozen rates for Bands C, D and E, an increase to £250 for band F and an increase to £500 for band G. These rates would remain frozen to 2009, but would then be harmonised at new car rates in 2010.

The announcement at the 2006 budget of a band G was welcome, but as it only applied to new cars, it added a layer of complexity. Announcing the intention to harmonise rates for all cars by 2010 would also help Treasury simplify the process.

For existing car users, people with cars in bands A-E will all have lower or the same VED until 2010. People with cars in bands F-G will see rises in 2007, then constant until 2010.

**The changes could result in carbon dioxide savings of over 9 million tonnes CO<sub>2</sub> by end 2010.**

For new car purchases, VED rises steeply – creating a strong incentive for any new car purchaser to choose a greener model. This is essential given the backdrop of increasing purchases of gas guzzling vehicles. This is also a completely avoidable tax – if people buying a new car do not want to pay a £2000 annual VED, they have the choice buy a less polluting car.

A recent Guardian/ ICM poll in February 2006 showed that the majority of people (63%) approved of a green tax to discourage behaviour that harms the environment. Another poll, this time by Populus for the BBC’s Daily Politics Show in October 2006, found that 57% of people agreed that: *“the Government should impose higher taxes on activities that cause pollution, even if that means the end of cheap flights and driving a car becomes more expensive.”* Considering the negative wording of the statement this is a very high figure, indicating considerable support for environmental taxes on transport.

We advocate that revenues raised be recycled back to people via spending to improve alternatives to motoring – as part of a general tax and spending strategy to reduce the overall environmental impact of road transport.

## Cutting carbon emissions from homes

**The domestic sector contributes 27 per cent of the UK's carbon dioxide emissions. Seventy per cent of this is from space and water heating.**

**Government programmes such as Warm Front and the Energy Efficiency Commitment are forecast to approximately 1 MtC annually by 2010. However savings of over 24 MtC are required for the Government to meet its target of cutting emissions by 60 per cent by 2050.**

**The domestic sector has massive potential to reduce emissions in two ways: energy efficiency and new micro-renewable energy generation technologies.**

## Energy efficiency

Energy efficiency measures provide the opportunity for the UK to reap an early and cheap harvest in cuts in carbon emissions while benefiting the economy and meeting other social policy objectives.

The UK has one of the most energy inefficient housing stocks in Europe. Fuel poverty (defined as spending more than 10% of income on heating their homes) continues to affect over 2 million households.

The Government's own Energy White Paper identifies energy efficiency as the cheapest, cleanest and safest method of reducing carbon emissions.

### **Council Tax rebates**

In November 2004 Braintree Council instituted a scheme with British Gas which gives a £100 Council Tax rebate to households installing Cavity Wall Insulation (CWI). The scheme has proved successful and has been extended to many more local authorities. Council Tax rebates have the advantage that they can be taken up at any time (not just when moving house).

There are currently 8.5 million homes with potential for CWI installation and 6.2 million who lack loft insulation. **These two highly cost effective measures alone could save up to 3.3 MtC annually (13% of the 2050 target).**

**Friends of the Earth is calling on the Government to establish a £1.4bn<sup>iv</sup> fund to provide a £100 Council Tax rebate to those who install either CWI or loft insulation.** Both measures have payback times of well under three years, giving householders the immediate prospect of seeing their investment pay off.

### **Stamp Duty rebates**

The Chancellor has already introduced a Stamp Duty exemption for new zero carbon homes at the Pre Budget Report. This only affects a tiny number of new build properties.

A similar measure should be extended to existing homes. These are likely to contribute 70% of the housing stock of 2050. Over one million homes change hands every year.

Research by Sheffield University has shown that the time of purchase is the moment at which home owners are most likely to make home improvements.

From 1 June anyone wanting to sell their house will need an Energy Performance Certificate. Owner occupiers make up 70 per cent of the UK housing stock. The certificate will rate the energy efficiency of their home (A to G) and suggest cost effective ways to improve it. Friends of the Earth believes that EPCs could be a powerful and effective policy if combined with Stamp Duty rebates and reduced VAT on refurbishments.

One 2005 study estimated that a Stamp Duty rebate capped at a maximum of £800 could be taken up by 450,000 householders and would cost the Treasury £350m.<sup>v</sup>

### **VAT on refurbishment**

It is time to end the anomaly where new build housing is zero rated for VAT but refurbishment attracts the full rate of 17.5%. Friends of the Earth agrees with the Sustainable Development Commission that a reduction of the VAT rate on refurbishment to high environmental standards, of which energy efficiency is one part, is needed to eliminate a perverse incentive to demolish homes in existing communities.<sup>vi</sup> EU law currently allows a reduced rate of VAT to be applied to refurbishment. The Government should apply this rate and actively engage in negotiations at an EU level to allow a further reduction.

### **VAT on energy saving equipment, materials and their supply and installation**

The 2002 Budget introduced a reduced rate of VAT for the installation of a number of energy saving measures (including energy efficiency and microgeneration measures). The cost to the Treasury is small at around £50m<sup>vii</sup>. However this currently excludes such basics as energy efficient light-bulbs because DIY energy saving products are not covered.

The Government should commit itself to actively engaging in negotiations at an EU level so that VAT levels can be lowered further in the future on products and materials bought for DIY as well as professional installation.

## **Microgeneration technologies**

A major part of the solution to domestic sector emissions would be for households to generate their own renewable heat and power.

According to the DCLG Review of the Sustainability of Existing Buildings *“Under current existing [housing] stock conditions and with currently known technologies...a 60% reduction [in carbon emissions] would require the application of microgeneration technologies.”*

Measures to promote microgeneration technologies, like renewable technologies generally, also offer considerable benefits to the UK economy at large. Countries that have invested in renewable energy have reaped the economic benefits. The German solar industry has

increased turnover ten-fold in the last six years, is worth 3.7 billion euros annually and employs 42,500 people in production, distribution and installation<sup>viii</sup>.

Waiting until the possibilities of energy efficiency measures are exhausted to start to develop a domestic microgeneration strategy would risk the UK falling far behind other countries and losing the opportunity to gain from international microgeneration markets.

## Financing a quantum leap in micro-renewables

According to the Sustainable Development Commission high up-front costs deter households from investing in micro-generation technology.<sup>ix</sup> Grants offer a way to reduce the initial outlay.<sup>x</sup>

The Government's programme for delivering grants for micro-renewable technologies is the Low Carbon Buildings Programme. The total LCBP is currently £80m.

After running out half way through 2006 the Government topped up the funding available for the domestic section of the scheme to £12.7m until 2008. This works out at just 58p for each household in England and Wales.

The LCBP attracted considerable media attention when it recently descended into farce when the £500,000 of grants available for March ran out just 75 minutes after they went online for applications! This revealed the massive gap between the level of demand among the public for micro-generation and the Government's willingness to financially support these technologies.

The Stern Report argues that "uncertainty about the long-term future framework for carbon pricing is also a reason why additional measures to encourage the development of low-carbon technologies are important."<sup>xi</sup> It calls for up to a five-fold increase in deployment incentives.

However, given the absence of effective carbon pricing and the UK's trailing position in terms of support for the renewables industry, Friends of the Earth believes that a five fold increase to £400m would be inadequate. In order to finance the quantum leap necessary for the UK to catch up with other European countries we believe that the Government must go much further than dealing with the immediate crisis in the LCBP **and find at least £1bn annually to assist a massive roll out of these technologies across the domestic, public, not for profit and business sectors over the next few years.**

## 'Sell-in' or 'export tariffs'

Tariffs that allow households investing in microgeneration schemes to sell their electricity back to the grid would significantly reduce the payback time for these technologies (for example a Photo-voltaic system is especially costly with a 1.5kw array costing around £9,000 and a payback time of several decades) and thus increase the incentive to homeowners.

There is currently no obligation for energy suppliers to pay a standard tariff on electricity exported from micro-generation.<sup>xii</sup> UK energy supply companies all pay different and very low rates (between 4p and 10p a kilowatt hour). In Germany legislation to allow

householders to sell electricity to the grid has been in place for over a decade with current sell-in tariffs at 35p/kWh. A fair settlement would see the same tariffs paid for microgeneration exports to the grid as for other renewable electricity.

The Chancellor should signal his support at the Budget for a standardised fair scheme of export tariffs to reduce pay-back times for investment in microgeneration.

## References

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- i [http://www.dft.gov.uk/stellent/groups/dft\\_transstats/documents/downloadable/dft\\_transstats\\_613483.pdf](http://www.dft.gov.uk/stellent/groups/dft_transstats/documents/downloadable/dft_transstats_613483.pdf), section 3.7
- ii 'Cutting transport CO2 emissions: what progress?' European Conference of Ministers of Transport (OECD 2007)
- iii DfT 2005. Assessing the Impact of Graduated Vehicle Excise Duty - Qualitative Research
- iv Providing a £100 rebate for the 8.5m homes that lack CWI and £100 rebates for the 6.2m homes that loft insulation would require a fund of £1.4bn. There is likely to be considerable overlap which will make many homes eligible for a maximum potential rebate of £200 in any one year. However householders in receipt of certain trigger benefits will be eligible for loft and CWI free as part of the Energy Efficiency Commitment. That and other schemes mean that it may be unnecessary for the Government to finance a rebate for every potentially eligible household.
- v Using Stamp Duty to bring about a Step Change in Household Energy Efficiency. Eoin Lees Energy, 2005.
- vi BREEAM ECO Homes Excellent or equivalent standard for homes and BRE 2006 standards for commercial and public buildings.
- vii The UK Tax System and the Environment, Institute for Fiscal Studies, 2006.
- viii Federal Ministry of Economics and Technology (2004), citing Bundersverband Solarwirtschaft BSW.
- ix Stock Take: Delivering improvements in existing housing. Sustainable Development Commission 2006.
- x Other mechanisms could also be used such as a personal tax allowances similar to the Enhanced Capital Allowances available to businesses.
- xi Stern Review: The Economics of Climate Change (HMT 2006). P347.
- xii Unlocking the Power House: Policy and system change for domestic micro-generation in the UK. Sussex Energy Group, 2006.