

The Government is committed to delivering sustainable development and a better environment and to tackling the global challenge of climate change. It is using a range of economic instruments and other measures to protect the environment, while taking account of the need to meet social objectives and deliver sustainable economic growth. This Pre-Budget Report reviews progress and announces new steps and decisions, including:

- **the forthcoming launch of the UK climate change programme consultation** and prioritisation of climate change as a key theme for the UK's presidencies of the G8 and EU;
- **the launch of a joint Energy Efficiency Innovation Review with Defra**, supported by a new R&D fund aimed at accelerating energy-efficient technology;
- **continuation of the freeze on the main road fuel duties** in response to the sustained volatility in the oil market;
- **narrowing of the duty differential between rebated oils and main road fuels by one penny per litre** to help tackle oils fraud and a **consultation on vehicles using rebated oils**;
- **a package of measures to support the development of biofuels**, including a consultative process and feasibility study on a Renewable Transport Fuels Obligation;
- **plans to align the VAT fuel scale charge with the company car benefit charge** to provide consistent tax incentives for less polluting cars, subject to informal consultation with businesses; and
- **restoration from April 2006 of the company car tax diesel supplement on new diesel cars** registered from January 2006, to reflect the mandatory introduction of Euro IV emissions standards.

INTRODUCTION

7.1 The Government is committed to promoting sustainable development. Economic, social and environmental progress must go hand-in-hand, and policy should take account of the inter-relationship between these different objectives. Good environmental policy should promote not stifle enterprise and innovation, for example, by facilitating the development of innovative environmental technologies and encouraging investment. The key environmental challenges that the Government seeks to tackle are:

- *tackling climate change*, and reducing emissions of greenhouse gases to minimise their environmental costs;
- *improving air quality* to ensure that air pollutants are maintained below levels that could pose a risk to human health;
- *improving waste management*, so that resources are used more efficiently and wastes are reused or recycled to deliver economic value; and
- *protecting the UK's countryside and natural resources*, to ensure they are sustainable economically, socially and physically.

7.2 Meeting these challenges requires effective policy, particularly in four key sectors: energy, transport, waste and agriculture. Policy on energy use by business and households and on reducing emissions from transport is key to tackling both climate change and air quality, while effective waste management and good agricultural policy affect a range of important environmental targets.

**Global challenge
of climate change**

7.3 The Government recognises that many environmental issues need to be tackled on a global level. *Long-term global economic challenges and opportunities for the UK*, published alongside this Pre-Budget Report, explains how global economic developments will place increased pressure on world resources and on the environment in the decades ahead. In particular, climate change may have a significant impact on global economic growth in the long term, and requires concerted international action to tackle it.

7.4 There is strong evidence that the climate is changing. Average global temperatures increased by 0.6°C during the twentieth century and the ten warmest years on record have all occurred since the beginning of the 1990s. The *Third Assessment Report* of the Intergovernmental Panel on Climate Change, published in 2001, stated that there was new and stronger evidence that most of the warming observed over the last 50 years was attributable to human activities. This conclusion has been strengthened by more recent work, including that by the European Environment Agency¹ and the Hadley Centre.

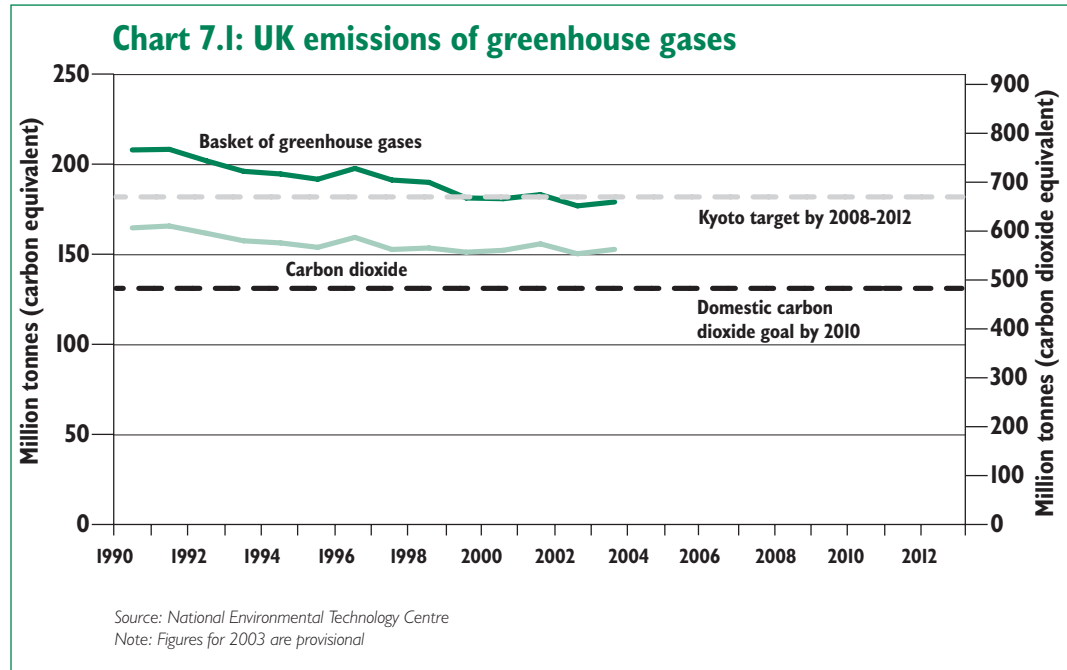
7.5 The UK climate has also changed, with annual average temperature rising by about 1.0°C over the last century. The impacts of climate change are likely to be wide ranging, affecting many parts of the UK's environment, economy and society. In the long term, potential impacts include: bad weather damaging roads and railways and leading to disruption; interruptions in the energy supply; more flooding; higher costs for building repairs and refurbishment; water shortages and weather-related health effects. Claims for storm and flood damage in the UK have doubled to over £6 billion between 1998-2003 compared to the previous five years. The Association of British Insurers estimates this could triple by 2050.²

7.6 Other areas of the world are expected to be affected even more severely. Many developing countries such as Bangladesh and India are likely to be vulnerable to rising sea levels, while central Africa may face bigger increases in temperatures than the global average. Developing countries will be less able than others to mitigate and adapt to these climatic changes. Climate change is therefore likely to put increased pressure on food and water resources, energy supplies and human settlements in already vulnerable areas, which may contribute to migration, instability and conflict.

7.7 The Kyoto Protocol commits the UK to reduce its greenhouse gas emissions to, on average, 12.5 per cent below 1990 levels between 2008 and 2012. The Government also has a national goal to move towards a 20 per cent reduction in carbon dioxide emissions below 1990 levels by 2010. Chart 7.1 sets out progress against goals on greenhouse gas emissions. Provisional data for 2003 show that UK emissions of greenhouse gases fell by 13.9 per cent between 1990 and 2003, and carbon dioxide emissions fell by 7.2 per cent during this period. Emissions in 2003 were higher than those in 2002 due in part to the high price of gas and subsequent increase in the use of coal in electricity generation. However, recent projections contained within the UK's National Allocation Plan, part of implementing the EU Emissions Trading Scheme (EU ETS), show emissions are set to resume their downward trend.

¹ *Impacts of Europe's changing climate – An indicator-based assessment*, European Environment Agency, 2004.

² *The changing climate for insurance*, Association of British Insurers, June 2004.



Other environmental challenges

7.8 The Government faces a number of other environmental challenges besides climate change. The policies of the Government and the Devolved Administrations on improving air quality are set out in the Air Quality Strategy for England, Scotland, Wales and Northern Ireland and its first addendum.³ These strategies set health-based air quality standards for nine key air pollutants and target dates for their achievement across the UK between 2003 and 2010. The Government expects to see significant reductions in levels of carbon monoxide, benzene and 1,3-butadiene. However, as indicated in Defra’s 2003 Departmental Report there are some areas of the country (mostly at some urban and roadside locations) where, despite large falls, it will be highly challenging to meet targets for reductions in the levels of nitrogen dioxide and particulates. To tackle these pollution hotspots and achieve further general air quality improvements, the Government is reviewing the Air Quality Strategy.

7.9 The rate of improvement in the biological and chemical quality of UK rivers since 1990 has slowed in the last few years and is showing signs of levelling off. New ways of assessing water quality to be introduced under the Water Framework Directive will require the UK to set environmental quality standards for a wider range of chemicals in lakes, estuaries, coastal waters and groundwater, as well as rivers, and will introduce measures to ensure those standards can be met, including on diffuse pollution from agriculture and the built environment.

7.10 Effective management of waste is also critical to an environmentally sustainable economy. The Government is committed to meeting the requirements of the Landfill Directive which aims to prevent, or to reduce as far as possible, the negative environmental effects of landfill and has also set targets for the recycling of household waste. The 2002 World Summit on Sustainable Development committed the international community to promote a ten-year framework in support of sustainable patterns of consumption and production.

A strategy for environmental policy

7.11 To help meet these challenges, the Government is committed to ensuring that sustainable development is integrated into policymaking and to do this using a range of policy instruments. In the Spending Review 2004, every department was asked to consider the economic, social and environmental implications of their policy priorities and objectives, and to integrate these into their spending programmes and policies. The Government has incorporated sustainable development into the Public Service Agreements (PSA) to ensure that they adequately reflect social, economic and environmental concerns.

³ Available at www.defra.gov.uk/environment/airquality.

7.12 As described further in Box 7.1, the Government is taking a number of steps to tackle the global challenge of climate change and is making this issue a key priority for the UK's presidencies of the G8 and EU in 2005. **The Government will be launching a consultation on the review of the climate change programme on 8 December.**

Box 7.1: Tackling the global challenge of climate change

The Government recognises that the global challenge of climate change needs to be tackled multilaterally and that, if left unchecked, in the medium to long term it may become a significant threat to continued global economic growth. The Government has already set itself challenging targets to reduce its emissions of carbon in recognition that taking mitigating actions now will lessen the risks to future generations both in the UK and beyond.

To enable progress at the international level, the Government has decided to make climate change a central theme of its G8 and EU Presidencies in 2005, described further in Chapter 2. Building on the success of the UK Emissions Trading Scheme, the Government has also helped implement the first international carbon trading scheme, the EU Emissions Trading Scheme (EU ETS), which is due to be up and running next year. This reflects the Government's commitment to secure multilateral action to tackle this global issue while protecting economic competitiveness.

At a domestic level, the Government will be launching a consultation on the review of the climate change programme on 8 December. This review will provide a comprehensive assessment of the efficacy and cost-effectiveness of existing and potential measures to meet our climate change objectives. Following the review, the Government intends to produce a revised climate change programme in the first half of 2005.

7.13 The Government uses a range of policy instruments to tackle failures of the market to take environmental costs into account including spending measures, regulatory measures, and voluntary approaches. The primary focus of this chapter is economic instruments. The Government is committed to the use of economic instruments where they are appropriate and cost effective and has introduced a number of such measures to help meet environmental targets.

7.14 The principles underlying the Government's use of economic instruments to meet environmental objectives were first set out in the Statement of Intent on environmental taxation in Budget 1997. *Tax and the environment: using economic instruments*, published by the Treasury in 2002, describes the framework by which decisions on the use of economic measures are made.⁴ The Government will continue to refine its approach to the use of economic instruments, and will build on the success of measures such as the climate change levy (CCL) and the company car tax reforms, to enable environmental goals to be achieved at least cost to business and the consumer.

ENERGY USE IN INDUSTRY AND HOUSEHOLDS

7.15 The 2003 Energy White Paper set out four goals of the Government's energy policy covering the environment, energy reliability, affordable energy for the poorest, and competitive markets for businesses, industries and households.⁵ The environmental aim is to put the UK on a path to cut carbon dioxide emissions by some 60 per cent by around 2050. This challenge will require step changes in both the source of energy, with a greater need for lower-carbon and renewable production of electricity, and in the efficiency with which energy is used. The case for improving energy efficiency has also been underlined by the recent

⁴ *Tax and the environment: using economic instruments*, HM Treasury, November 2002.

⁵ *Our energy future – creating a low carbon economy*, DTI, 2003. Available at www.dti.gov.uk.

increases in world gas and oil prices. Energy efficiency measures in both business and households are frequently cost-effective, improving productivity and reducing bills, but there are a number of barriers to their uptake. Reducing these barriers will require a range of policy responses, including the use of economic instruments such as the CCL and the EU ETS, regulatory measures and other approaches. **In support of this, Defra and HM Treasury will be jointly undertaking an Energy Efficiency Innovation Review to examine how technological, policy, financial and organisational innovation, whether by Government, business or consumers, can best contribute to a longer-term step-change in energy efficiency.**

Climate change levy **7.16** The CCL and its associated measures seek to encourage businesses to use energy more efficiently and to reduce emissions of carbon dioxide. The CCL is broadly revenue neutral for business and the service sector, with revenues recycled back to business by means of a 0.3 percentage point reduction in employer national insurance contributions, introduced at the same time as the levy, and through support for energy efficiency and low carbon technologies via the Carbon Trust.

7.17 The levy package was forecast to reduce emissions by the equivalent of at least 5 million tonnes of carbon a year by 2010, of which 2 million tonnes of carbon was attributable to the levy alone. The Government has commissioned an independent assessment of the levy and its role in tackling climate change. Early indications are encouraging and suggest that the CCL alone should deliver estimated annual savings of around 3.5 million tonnes of carbon (MtC) by 2010 – well above the 2MtC forecast at the time of the levy's introduction. The results also show that it has encouraged the installation of new renewables and combined heat and power capacity, because generation from these sources is exempt from the levy. **The Government will publish the completed evaluation for Budget 2005.**

Climate change agreements **7.18** Climate change agreements allow energy-intensive sectors to obtain 80 per cent relief from the CCL if they agree to increase energy efficiency and reduce emissions. Following consultation, Budget 2004 announced new eligibility criteria to widen the entitlement to relief, to be introduced once EU state aids approval is obtained. Applications have been received from several sectors of business for these new agreements, and negotiations to establish the environmental targets that the sectors will need to meet are continuing. State aids clearance from the EU is still awaited.

EU emissions trading scheme **7.19** The Government continues to prepare for the introduction of the EU ETS in 2005 and recently announced its proposals on the total number of greenhouse gas emission allowances to be allocated to UK industry as part of the first phase. The allocation strikes a balance between the concerns of business about potential competitiveness impacts and the UK's leadership on climate change. The industrial (non-generating) sectors will receive an allocation based on their projected requirements in the first phase. Overall, the emissions cap represents a reduction in business-as-usual emissions projections equivalent to 5.2 per cent, and will take the UK beyond its Kyoto commitment. In the first two phases, the EU ETS will contribute to the Government's domestic goal of moving towards a 20 per cent reduction in carbon dioxide emissions on 1990 levels by 2010.

Renewable energy **7.20** In January 2000, the Government announced a target for renewable sources to supply 10 per cent of UK electricity in 2010, subject to the costs being acceptable to the consumer. The key policy mechanism being used to meet this target is the Renewables Obligation, which requires all licensed electricity suppliers to supply a specific and growing proportion of their electricity from certified renewable sources each year. In line with the commitment in the 2003 Energy White Paper the Government has recently commenced a review of the obligation. The key consideration of the review will be to ensure the delivery of the 2010 target, while maximising value for money for consumers.

Investment in energy-saving technologies **7.21** Enhanced capital allowances (ECAs) for investments in approved energy-saving technologies were introduced in 2001 and currently cover more than 7000 approved products. Administration of the ECA scheme is managed by the Carbon Trust, an independent not-for-profit company funded principally from recycled CCL revenues. Budget 2004 announced the addition of further technologies to the ECA scheme, worth £5 million in 2005-06. The Government is committed to the development of the scheme and continues to consider the case for additional technologies.

7.22 As described further in Chapter 3, looking to the challenges and opportunities posed by the UK's commitment to a future low carbon economy, **the Government will help focus the growing public and private investment in this area by investing in a £20 million fund to help foster a new partnership to accelerate energy-efficient technology, run by the Carbon Trust.**

Household energy efficiency **7.23** Although energy-efficient products are often cost-effective options, demand for them from households and businesses is limited. Economic instruments can provide useful signals, encouraging consumers to purchase such goods and manufacturers to invest in their production. Following consultation, the Government introduced a package of measures to promote household energy efficiency in Budget 2004, and work has been continuing since then to build on this.

7.24 For the private rented sector, Budget 2004 announced the Landlord's Energy Savings Allowance, which is now in place. It also confirmed the Government's intention to consider the introduction of a Green Landlord Scheme. Work on the Green Landlord Scheme is under way, with the aim of identifying further effective ways to improve household energy efficiency in the short and longer term. This includes targeting particular areas of improvement within households and raising the overall energy efficiency levels of properties. The Government will discuss this further with key stakeholders ahead of an announcement on the scheme in Budget 2005.

7.25 The Government continues to support investment in renewable energy and other energy-efficient products too. A reduced rate of VAT for ground source heat pumps was introduced in Budget 2004, and the Government has also stated its readiness to introduce a reduced rate of VAT on micro combined heat and power boilers, with any decision being dependent on the outcome of the ongoing field trials. In addition, the Government will continue to negotiate with its European partners to extend the categories of permitted reduced VAT rates to include energy-saving materials for DIY installation and energy-saving products, although in the short term these negotiations are unlikely to deliver an opportunity for reduced VAT rates to be used to promote energy efficiency, beyond the existing provisions.

7.26 Besides using economic instruments, the Government has also recently set a firm target for the next phase of the Energy Efficiency Commitment (EEC) (2005-08), under which energy suppliers are required to achieve targets for installing energy efficiency measures in the household sector.⁶ The Department for Environment, Food and Rural Affairs (Defra) consulted between May and August 2004 on a proposal that would roughly double the level of activity of the current EEC and deliver savings of around 0.7 million tonnes of carbon a year by 2010. In October 2004, Defra announced an additional £3 million for an Energy Savings Trust information campaign to support the Energy Efficiency Commitment. In July the Government also gave the green light to an industry Code for Sustainable Buildings which will establish higher standards for energy and water efficiency as well as waste and use of materials. The Code will be completed by the end of 2005 for national rollout in 2006. Changes to building regulations are also expected to deliver a 25 per cent improvement in energy efficiency from 2005 by raising insulation standards.

⁶ The EEC and other measures to promote household energy efficiency were set out in *Energy efficiency – the Government's plan for action*, Defra, April 2004.

Energy Products Directive 7.27 The Energy Products Directive (EPD) came into force on 1 January 2004 and provides an EU framework for the taxation of energy products, increasing the existing minimum rates of duty on hydrocarbon oils and introducing minimum rates of duty for the taxation of other energy products, including electricity, natural gas, coal and other solid fuels. The minimum rates in the EPD do not affect any of the UK's existing rates or exemptions for hydrocarbon oils duty or CCL, but will require increases to rates in some other Member States, which will provide environmental benefits across the EU. The UK currently holds derogations on private pleasure boats, private pleasure aircraft and waste oils. These are due to expire on 31 December 2006. The Government will discuss the derogations with stakeholders before their expiry date.

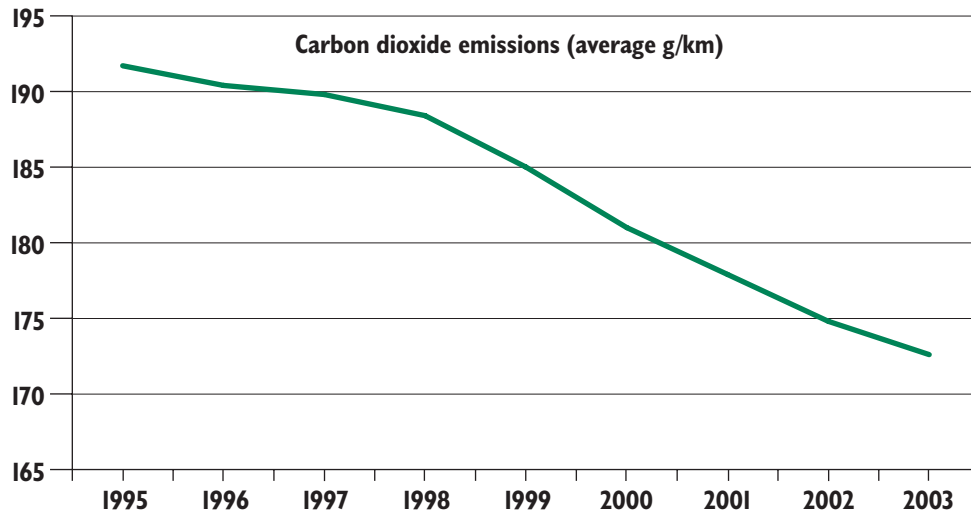
A CLEAN AND EFFICIENT TRANSPORT SYSTEM

7.28 Transport is the second largest source of carbon dioxide emissions in the UK and so has an important role to play in tackling climate change. A safe, clean and efficient transport system is also key to sustaining economic growth. The Government recognises the importance of efficient transport in boosting productivity, extending mobility and helping to create a more inclusive society. However, it recognises that these benefits must be achieved while minimising the impact of transport on the environment, now and in the future.

7.29 Over recent years, demand for travel has increased, providing additional challenges to the Government's transport and environmental objectives. The Government's long-term goal is to support the switch to a low-carbon economy, including zero-emissions transport. The recent Department for Transport (DfT) White Paper⁷ considers the factors that will shape travel over the next 30 years, with the aim of creating a transport network that can meet increasing demand for travel, while achieving environmental objectives. Reflecting the environmental impact of transport, DfT now shares key PSA targets on climate change and air quality with Defra and DTI.

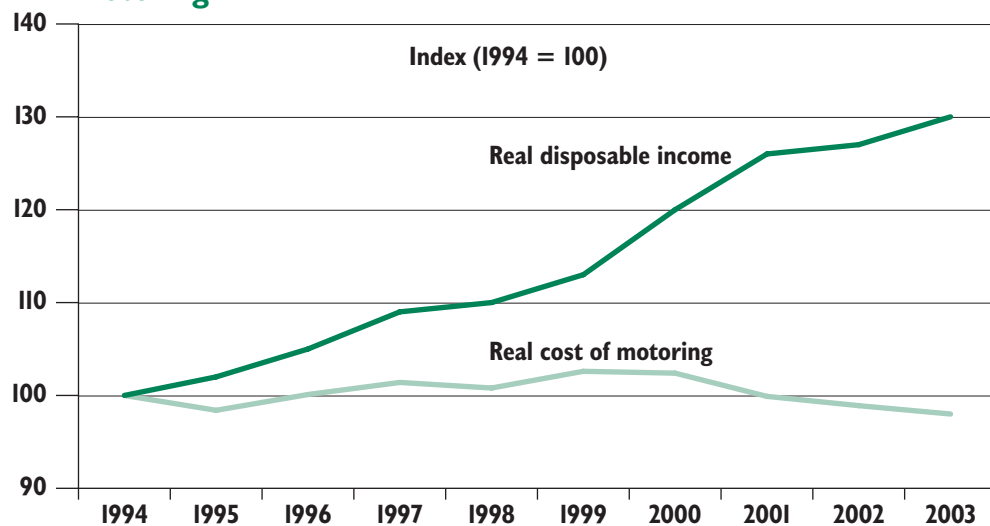
7.30 The Government has already taken a number of measures to improve the efficiency of the transport system, including support for the take-up of the most efficient fuels and vehicles, and the promotion of more environmentally-friendly forms of travel. Since March 2001, for example, all cars registered have been subject to a graduated vehicle excise duty scheme based on carbon dioxide emissions. Although growth in the transport sector led to an increase in total transport emissions in 2003, average carbon dioxide emissions from new cars in the UK have fallen in recent years, as shown in Chart 7.2. Emissions from new cars are expected to fall further with the continued impact of the voluntary agreement between the European Commission and car manufacturers, underpinned by environmentally-focused vehicle taxes. The agreement commits car manufacturers to reduce carbon dioxide emissions to an average of 140 grams per kilometre by 2008.

⁷ *The future of transport*, DfT, July 2004. Available at www.dft.gov.uk.

Chart 7.2: Carbon dioxide emissions from new cars

Source: DVLA

Costs of motoring 7.31 The cost of motoring has remained broadly constant for a quarter of a century, with a slight fall in recent years as a result of lower purchase prices and vehicle efficiency improvements, as shown in Chart 7.3. Over the same period, household disposable income has increased significantly, with average motoring costs therefore accounting for a smaller share of disposable income. This trend is set to continue in coming years as vehicles continue to become more fuel efficient.

Chart 7.3: Index of household disposable income and cost of motoring

Source: Office for National Statistics

Note: Overall cost of motoring includes purchase, maintenance, petrol and oil, and tax and insurance

Fuel duty 7.32 In July 2004, the Government announced it would review the planned inflation-based increase in fuel duties, which was intended to take effect from 1 September 2004, and report back at the Pre-Budget Report. Volatile world oil prices have meant higher UK pump prices than would have otherwise been expected in recent months. **Today, the Chancellor, in response to the continued volatility in the oil market announces the continuation of the freeze on main road fuel duties for this financial year.** It remains the Government's policy that in future years, fuel duties should rise at least in line with inflation, as the Government seeks to meet its target of reducing polluting emissions and funding public services. Given this continuation of the freeze on main road fuel duties, the differential for sulphur-free fuel will not be introduced. **The Government remains committed to the introduction of cleaner and more environmentally-friendly fuels and will aim to implement the duty differential for sulphur-free fuels when market conditions allow.**

Rebated oils 7.33 Budget 2004 announced an increase in duty on rebated oils of 2.42 pence per litre from 1 September. This was one penny per litre above the planned inflation-based increases for main road fuels and would therefore have narrowed the duty differential between rebated oils and the main road fuels to address the problem of oils fraud. In July 2004, as part of the wider fuel duty review, the Government deferred this increase until Pre-Budget Report. Today, **the Government confirms that it will implement the narrowing of the duty differential by one penny per litre between rebated oils and main road fuels.** This is part of a package of measures that aim to reduce further oils fraud in the UK.

7.34 **As a further step in its anti-fraud strategy, the Government also today publishes a consultation document on the categories of vehicles that are eligible to use rebated oils.**⁸ This consultation invites views on how best to ensure that rebated oils are used only by appropriate vehicles, thereby helping to tackle oils fraud, protecting revenues and reducing damaging emissions. More detail on the Government's oils fraud strategy is provided in Chapter 5. The Government believes that there are measurable environmental benefits to be gained from the introduction of lower-sulphur rebated oils and will continue to keep under review the option of introducing a duty differential to encourage the take-up of these more environmentally-friendly fuels.

Alternative fuels 7.35 In the 2003 Pre-Budget Report, the Government published its Alternative Fuels Framework, setting out the rationale for Government support in this area and placing environmental benefit at its core. The framework includes a commitment to a three-year rolling guarantee on the fuel duty differentials for all alternative fuels, in recognition of the need for long-term certainty in the market. The Government continues to use this structured approach to underpin further investment in this growing industry – an industry which it sees as playing a significant contribution to the future security of supply for fuel.

Biofuels 7.36 As Box 7.2 explains, the Government recognises that biofuels can offer significant environmental benefits. The DfT consulted on the Government's biofuels policy and strategy for implementing the EU Biofuels Directive during the summer of 2004. The consultation asked for views on a wide range of issues, including appropriate biofuels sales targets for the UK to set under the Directive, and appropriate mechanisms to achieve these. Today, the DfT publishes a summary of the consultation responses.⁹

⁸ *Hydrocarbon oil duty: consultation on changes to excepted vehicle schedule*, Customs and Excise, 2004.

⁹ Available at www.dft.gov.uk.

Box 7.2: Promoting cleaner road fuels

Long-term global economic challenges and opportunities for the UK, published alongside the Pre-Budget Report, explains that pressure on global resources such as oil is likely to intensify as demand in developing countries grows. The volatility of the oil market has emphasised the challenge that faces all Governments to deliver security of fuel supply and tackle the environmental damage caused by fossil fuels. The Government remains committed to using the tax system, including duty incentives, to reduce the environmental impact of road transport and, in successive Budgets, has successfully used fuel duty differentials to encourage the take-up of less environmentally-damaging fuels. Between 1997 and 1999, the rate of fuel duty for ultra-low sulphur diesel was steadily cut relative to conventional diesel. Within two years, these duty incentives succeeded in converting the entire diesel market to the cleaner fuel. A similar duty incentive was also used to encourage the switch to ultra-low sulphur petrol. The Government remains committed to the introduction of cleaner and more environmentally-friendly fuels and will aim to implement the differential for sulphur-free fuels when market conditions allow.

The Government recognises that biofuels can offer significant environmental benefits through reduced emissions of greenhouse gases and local air quality improvements, and believes they offer a cost-effective option for reducing emissions from road transport. They may also, in the future, contribute to security of fuel supply. The duty differential of 20 pence per litre for biodiesel has helped the biodiesel market to grow over the past few years and it now accounts for around 24 million litres of fuel sold each year. From 1 January 2005, a similar duty differential for bioethanol will also be introduced. The Government is also taking forward a package of further measures to support the development of biofuels in road transport. The package is set out in detail below.

7.37 To further encourage the introduction of biofuels, the Government is announcing a consultative process and feasibility study on a possible Renewable Transport Fuel Obligation (RTFO). An RTFO would require a specified proportion of aggregate fuel sales to come from renewable sources and would draw on the experience of the obligation for renewable electricity. The Energy Act 2004, includes primary legislation enabling the introduction of an RTFO in the future, which would be subject to its cost-effectiveness and feasibility. The Government is keen to discuss details of how an obligation would work with interested stakeholders and will set out next steps shortly. The consultative process and feasibility study will commence shortly and will seek to establish the cost-effectiveness, administrative feasibility, regulatory burdens and compatibility of an RTFO with other Government objectives.

7.38 Budget 2004 announced discussions with stakeholders on the possibility of extending the duty differential approach to inputs-based production of biodiesel as a means of encouraging the use of biomass in conventional fuel production. As a result of these discussions, the Government today announces work towards a pilot project to examine the potential for using duty incentives for inputs-based production, and will hold a tendering process after Budget 2005. The pilot project will be launched in 2005 and is expected to start in 2006. The Government will be working closely with stakeholders to take this forward.

7.39 The Government believes that enhanced capital allowances for the cleanest biofuels plants could encourage these more environmentally-friendly fuels. Following the launch of a stakeholder discussion document in October,¹⁰ the Government will continue detailed discussions to develop an effective and efficient scheme, and intends to set out details at the Budget.

¹⁰ *Enhanced capital allowances for biofuels – a stakeholder discussion document*, HM Treasury, 2004. Available at www.hm-treasury.gov.uk.

- Road fuel gases 7.40** Budget 2004 announced that the duty differential for natural gas (NG) would remain at its current rate and the duty differential for liquefied petroleum gas (LPG) would be reduced by one penny per litre in 2004-05 from 1 September 2004, and by a further penny per litre in both 2005-06 and 2006-07, towards a level more commensurate with the environmental benefits of the fuel. The reduction in duty differential for this year has also been deferred as part of the wider continuation of the freeze on main road fuel duties. The Government remains committed to offering support to those LPG and NG vehicles that offer the best environmental performance. **To give further support to these vehicles, the Government today announces its intention to simplify the alternative fuel discounts for company car tax at Budget 2005.**
- Company car tax 7.41** Budget 1999 reformed the company car tax system from 6 April 2002 to encourage the take-up of more environmentally-friendly cars by basing it on carbon dioxide emissions. In April 2004, the Inland Revenue published the first stage of the evaluation of the scheme which found that there had been considerable success in reducing business mileage and lowering carbon dioxide emissions as a result of more fuel-efficient cars. The Inland Revenue will continue to evaluate the scheme to ensure that it meets the Government's environmental aims.
- Company car tax – diesel supplement 7.42** **The Government announces today that from 6 April 2006, the waiver of the 3 per cent diesel supplement for diesel cars that meet Euro IV emissions standards will cease for cars registered on or after 1 January 2006.** The waiver was introduced to encourage early take up of Euro IV technology and has achieved that purpose. Euro IV emissions standards will become mandatory for all new diesel cars registered from 1 January 2006. The waiver will be retained for the life of diesel cars that meet Euro IV emissions standards and were registered before 1 January 2006. This is consistent with the principles of regulatory certainty. Reflecting the environmental benefit gained from the early introduction of these vehicles, it also continues to reward those who made the additional investment to purchase Euro IV standard vehicles, prior to standards being made mandatory.
- Capital allowances for business cars 7.43** As part of the wider Corporation Tax reform, the Government is considering options for modernising the capital allowances regime for business cars. The Government will be evaluating the possibility of encouraging greater take-up of low emissions cars with, for example, allowances graduated by carbon dioxide emissions, and will be consulting stakeholders as part of the ongoing Corporation Tax reform programme.
- Company car fuel 7.44** The company car fuel benefit charge was reformed in 2003 to follow the emissions basis of the company car tax system. This provides consistency of tax treatment and reinforces the environmental benefits of the scheme. The Inland Revenue has commenced work to evaluate the new scheme. **In addition, the Government today announces, subject to Commission approval and informal consultation with businesses, that the VAT fuel scale charge will be aligned with the company car benefit charge.**
- Lorry road-user charge 7.45** Road haulage plays an important role in a productive economy. The Government is committed to ensuring that all lorries using UK roads contribute on a fair and equal basis towards the cost that they impose. The Government is therefore progressing its plans for a Lorry Road-User Charge (LRUC), accompanied by offsetting tax cuts, to be made through a fuel duty repayment scheme. It is due to be phased in from 2007-08.
- 7.46** The third progress report on LRUC, which moved the scheme into the procurement phase, was published alongside Budget 2004.¹¹ In May 2004, the Government launched the procurement process and in August HM Customs and Excise announced the shortlist of bidders that would go through to the next stage. The Government is currently assessing the responses to its preliminary Invitation to Negotiate (ITN), and expects to issue final ITNs to shortlisted bidders in January 2005. **The Government will shortly be issuing a discussion paper, which will consider various details of how the charge might operate in practice.**

¹¹ *Modernising the taxation of the haulage industry – lorry road-user charge: progress report three*, HM Treasury, March 2004.

National road-user charge **7.47** Congestion is a serious and growing problem in the UK, with high economic and environmental costs, and traffic levels are forecast to grow by around 40 per cent between 2000 and 2025. Unpredictable and rising journey times raise costs for individuals and businesses, and have an adverse effect on UK productivity and economic growth. Congestion also creates localised air-quality hotspots, often in highly-populated urban areas. The Government is committed to tackling this situation and is developing new measures of congestion, to identify better the underlying problems and provide a better focus for policy interventions. DfT will publish new PSA targets for inter-urban and urban congestion by July 2005, and will also publish regular projections of congestion.

7.48 The policy response to congestion can be summarised in terms of two approaches: better management of supply (including better network management and physically increasing capacity); and better management of demand (including road-pricing schemes, provision of alternative transport modes and land use planning policies). While there is a case for increasing road capacity at key points on the road network, there is a need to balance road users' needs with wider environmental issues and to make more effective use of the existing road system. In this context, there are early indications from London and the new M6 toll road that road-charging schemes can help to reduce congestion, as described in Box 7.3.

7.49 In July 2004, DfT published a feasibility study that considered how and when a national road-pricing scheme might be delivered.¹² The study concluded that a national distance-based charge, with local variations in the charge rate to reflect congestion levels, could cut congestion by up to a half as well as reducing environmental costs. It found that the technology is becoming feasible and could be available for the mass market in ten years time. In the Future of Transport White Paper, the Government welcomed the feasibility study and committed to taking a number of actions in response to its recommendations.¹³ A full response to the feasibility study will be published in due course, setting out in more detail how the Government will take forward these actions.

Box 7.3: The impact of road-charging schemes on congestion

Introduced in February 2003, the London congestion charge is a cordon-based charge covering eight square miles of central London. Motorists pay £5 a day to drive within the charged area on weekdays. The scheme has been successful at reducing congestion and emissions within the charged area. Transport for London (TfL) reported a 30 per cent average reduction in congestion and a 15 per cent reduction in the volume of traffic within the charged area. These traffic changes are estimated to have reduced traffic-related emissions of carbon dioxide in the area by 19 per cent. TfL research shows that traffic flows around the edge of the charging zone have increased only marginally and that the direct impact on business activity appears to have been small. An extension to this scheme is currently being considered. Durham city centre has also operated a cordon-based charge since October 2002, where drivers are charged £2 to access a small part of the city centre. The city of Edinburgh is currently considering a cordon-based charge for possible introduction in 2006 and is due to conduct a referendum in early 2005.^a

The M6 toll road, which was privately financed and opened in December 2003, offers an alternative to the M6 motorway through the West Midlands conurbation, which is often subject to heavy congestion. In a survey after the first three months of operation,^b the Highways Agency found that the road was carrying 40,000 vehicles a day on weekdays and around 30,000 vehicles a day at the weekend. This survey also found that traffic had fallen by around ten per cent on weekdays, by around 15 per cent on Saturdays and by 20 per cent on Sundays. Journey times had consequentially fallen on the non-toll M6 motorway, with estimates of journey time improvements of up to 16 minutes on weekdays.

^a *Impacts monitoring second annual report*, Transport for London, April 2004.

^b *M6 toll traffic monitoring study*, Highways Agency, July 2004.

¹² *Feasibility study of road pricing in the UK*, DfT, July 2004. Available at www.dft.gov.uk.

¹³ *The future of transport*, DfT, July 2004. Available at www.dft.gov.uk.

Aviation 7.50 The UK Air Transport White Paper,¹⁴ published by DfT in December 2003, recognised that greenhouse gases emitted from aircraft engines make a significant and growing contribution to climate change. In the EU, aviation accounted for 3 per cent of total carbon dioxide emissions in 2001, an increase of 68 per cent from 1990 levels. Forecasts suggest that the UK's combined domestic and international aviation emissions could account for up to a quarter of the UK's total contribution to climate change emissions by 2030.¹⁵ The White Paper set out the Government's approach to tackling the global impact of aviation on the environment, and announced new measures such as increased use of scale charges for noise and local air quality, and expanded noise compensation and mitigation schemes.

7.51 The Government believes that a well-designed emissions trading regime is potentially the most cost-effective way of ensuring that aviation contributes towards the goal of climate stabilisation. This would put an overall limit on the carbon dioxide emissions from aviation and would ensure that the emissions reductions required to achieve this take place cost-effectively. This is one of the UK's key priorities for the Presidency of the EU in 2005, with the aim of aviation joining the EU ETS from 2008.

7.52 The Government is holding bilateral discussions with major EU Member States to gather support for the UK's initiative and to consider the design issues that would need to be resolved. The UK has already had significant success at international level, leading the way with European counterparts to oppose an amendment at the recent International Civil Aviation Organisation assembly which would have restricted action to tackle aviation's environmental impacts at national and European level.

IMPROVING WASTE MANAGEMENT

Waste strategy 7.53 Efficient use of resources and the effective management of waste are essential features of an environmentally sustainable economy. Over recent years the Government has taken a range of steps to develop more sustainable waste management practices and reduce the UK's reliance on landfill. Next year the Government will be conducting a review of Waste Strategy 2000 to evaluate progress made and inform future policy decisions across all waste streams.

Landfill tax 7.54 The landfill tax encourages efforts to minimise the amount of waste generated and to develop more sustainable waste management techniques. It contributes to the achievement of the Government's waste strategy targets through the diversion of waste away from landfill. Total waste received at sites registered for landfill tax fell by nearly 20 per cent in the period from 1997-98 to 2003-04. As announced in Budget 2003, the standard rate of landfill tax will be increased by £3 a tonne in 2005-06 to £18 a tonne, and by at least £3 a tonne in the following years to reach a medium- to long-term rate of £35 a tonne. There are early indications that this announcement has encouraged reductions in disposals of active waste to landfill – such disposals are down by over 4 per cent compared with the year before the announcement was made.

Recycling landfill tax revenue 7.55 Budget 2003 announced that future increases in the standard rate of landfill tax would be introduced in a way that is revenue neutral to business as a whole and to local government. In line with this commitment, the 2004 Spending Review announced that a spending programme, rising to £146 million a year in England by 2007-08, will be used to support business in improving resource efficiency.¹⁶ Box 7.4 provides more detail on the Business Resource Efficiency and Waste programme announced by Defra on 22 November 2004. Following the announcement in the Spending Review the Government will also consult key stakeholders on the potential for a new enhanced capital allowance scheme for waste and associated resource efficiency technologies. The additional funding for the Environment, Protective and Cultural Services block grant in the Spending Review included provision to ensure that the increases in landfill tax from 2005-06 are revenue neutral to local government.

¹⁴ *The future of air transport*, DfT, December 2002. Available at www.dft.gov.uk.

¹⁵ This includes the radiative effect (or 'radiative forcing') of condensation trails generated by air traffic in the upper troposphere.

¹⁶ Funding for the devolved administrations was determined in the Spending Review in accordance with the established devolution funding arrangements.

Box 7.4: Business Resource Efficiency and Waste Programme

The Business Resource Efficiency and Waste (BREW) programme in England has been developed in consultation with business to help them become more resource efficient. A steering committee of business representatives will monitor and advise the programme as it develops. The programme is worth £43 million in 2005-06 rising to £146 million in 2007-08.

In November 2004, Defra announced the 2005-06 allocation of funds. This included an expansion of independent advice to businesses on ways to minimise waste, support for the development of new markets for waste and, through co-funding of the DTI Technology Strategy, support for research and development aimed at waste minimisation and energy efficiency. Funding of £2 million in 2005-06 will be allocated to the Environment Agency to boost their efforts to tackle illegal dumping of waste, ensuring a level playing field for business.

Landfill tax credit scheme 7.56 The Landfill Tax Credit Scheme (LTCS) redresses some of the environmental costs of landfill by improving the environment in the vicinity of landfill sites. Projects benefiting from LTCS funding include the reclaiming of land, improvements to local community facilities and repairs to places of worship. In 2003, the landfill tax credit scheme was reformed and extended to include habitat creation projects in support of biodiversity. In addition, a number of changes have been made to the running of the scheme: simplifying administration and streamlining processes, introducing a small grants scheme, and introducing better information systems. Value for money indicators are also being developed. Budget 2004 announced that the value of the scheme would be increased in line with inflation so that it is worth £48.3 million in 2004-05. The Government recognises the important contribution made by the LTCS and has received positive representations from stakeholders on the value of the projects funded by the scheme. The Government will announce the value of the scheme for the coming year in Budget 2005.

Incineration 7.57 In the 2002 Pre-Budget Report, the Government announced that it would review the case for a tax on incinerated waste following independent assessment of the evidence on the health and environmental effects of waste management options. In May 2004, the Government published this assessment¹⁷ and concluded that on the evidence of the studies so far, the disposal of municipal solid waste has at most a very minor effect on health and that, in particular, the risks to human health from incinerating waste are small compared to other day-to-day risks. The evidence on environmental impacts suggests that the significant adverse environmental effects of waste management are limited to those that are already being tackled, such as methane emissions from landfilling waste.

7.58 Defra has today published a second report¹⁸ providing an independent assessment of the costs of the impacts identified in the first report. In addition, HM Customs and Excise has published a summary paper,¹⁹ which brings together key findings of these two reports and attempts to value the impacts of different disposal options. The paper highlights the wide range of uncertainty to which the figures are subject and the difficulties in trying to rank the disposal options.

7.59 International comparisons demonstrate the relatively small role that incineration plays in waste management in the UK. In 2001, Germany incinerated 22 per cent, France 32 per cent and Denmark as much as 60 per cent of waste, compared to the UK's 7 per cent.²⁰ Environmental standards that incinerators have to meet have been significantly tightened over recent years and are set to become even tighter.

¹⁷ *Review of environmental and health effects of waste management: municipal solid waste and similar wastes*, Defra, 2004.

¹⁸ *Valuation of the external costs and benefits to health and the environment of waste management options*, Defra, 2004.

¹⁹ *Combining the Government's two health and environment studies to calculate estimates for the external costs of landfill and incineration*, HM Customs and Excise, 2004.

²⁰ *e-digest of environmental statistics*, Defra, 2004. www.defra.gov.uk/environment/statistics/index.htm.

7.60 The Government has a legal commitment under the landfill directive to reduce reliance on landfill and, to help to achieve this, is increasing the standard rate of landfill tax. Incineration has a part to play in meeting this commitment, in particular by dealing with the residual waste that will be left even after achieving the much higher levels of recycling and reuse that the Government is aiming for. Taking into consideration all these factors, including existing barriers to incineration, the Government is not convinced that there is a strong case for the introduction of a tax on incinerated waste. The Government is continuing to explore barriers to new waste management technologies, such as mechanical and biological treatment, and ways of facilitating their introduction, including the potential role of enhanced capital allowances.

**Improving local
waste
management**

7.61 Defra will be announcing in the next few weeks the allocation of £45 million to local authorities in 2005-06 from the reform of the Waste Minimisation and Recycling Challenge Fund. The funding will be used to support local authorities in introducing more sustainable waste management practices; to assist the introduction of the landfill allowance trading scheme; and to help deliver £299 million of efficiency gains on waste services announced in Spending Review 2004. To facilitate best practice the Government aims to ensure that one of the planned local authority regional centres for excellence being established will have specific responsibility for waste. It is also essential that the planning system is equipped to assist delivery of the necessary waste disposal facilities where and when they are needed to support the UK's waste objectives. Defra and ODPM will shortly issue a joint consultation on revised policy guidance to facilitate strategic and spatial planning for waste management.

PROTECTING THE UK'S COUNTRYSIDE AND NATURAL RESOURCES

7.62 Sustainable development requires that economic growth is not pursued at the expense of the environment, but works to protect, preserve and improve it, while supporting economically and socially stable communities. The Government is committed to ensuring that the UK's natural resources are used efficiently and responsibly.

Agriculture

7.63 Over 75 per cent of land in the UK is used for agricultural purposes, so farming practices have a significant impact on the UK's environment. Good agricultural practice can help preserve and improve the natural environment. However, agriculture can also be the source of a range of environmental problems, including water pollution from the inappropriate use of fertilisers and pesticides and climate change through the impact of methane, carbon dioxide and nitrous oxide emissions.

**Diffuse water
pollution**

7.64 **The Government is today publishing a summary of responses to the consultation on catchment-sensitive farming²¹ that was launched in June 2004.** The Government is taking immediate steps to work with stakeholders on early voluntary action and supportive approaches and will continue to work on improving the evidence base to inform policy in this area. The Government will consider using other measures where required to tackle diffuse water pollution and meet the Government's commitments under the Water Framework Directive. The Government is mindful of the cumulative impact of forthcoming measures in the agricultural sector and will continue to work with stakeholders in 2005 to develop an effective package of measures for further consultation in due course.

²¹ Summary of responses to the joint Defra-HM Treasury consultation on 'Developing measures to promote catchment-sensitive farming', Defra, December 2003.

Pesticides 7.65 An industry voluntary initiative on measures to reduce the environmental damage caused by the agricultural use of pesticides has been in place since April 2001. To cover the potential case that the voluntary initiative might fail to deliver the required environmental benefits within a reasonable timescale, the Government has continued to keep the options for an economic instrument under review. A study of key design issues for potential economic instruments carried out on behalf of Defra was published in September 2004.²² In particular, it examined the design of a workable banded tax that would differentiate between pesticides on the basis of risk and encourage switching toward less environmentally-hazardous products.

7.66 The voluntary initiative is due to come to an end in 2006 and the Government will evaluate the success of the scheme and its environmental impact to assess which further actions are required beyond 2006. The Government continues to believe that, if fully implemented, the voluntary initiative is the most effective way of reducing the environmental pollution associated with pesticides. However, to judge the initiative a success the Government is conscious that the targets specified must be challenging and rigorous and that the initiative must be delivering good environmental outcomes. The initiative must be able to develop stretching and meaningful environmental targets and to demonstrate clearly the benefits to biodiversity and water quality. The national targets proposed for biodiversity need to be refined and progress may have to be demonstrated at a local level.

Water 7.67 In October 2004, the Government issued its final guidance on improvements to environmental and drinking water quality to the industry regulator, Ofwat, as part of the wider Periodic Review process. Ofwat is today announcing five year price limits for the period from April 2005-10, and water companies will invest around £5 billion to ensure compliance with the UK's statutory obligations and deliver a further package of quality improvements. Quality investment proposals have been closely scrutinised by Government. In 2003, the Government introduced 100 per cent first-year enhanced capital allowances for business investments in qualifying water efficiency technologies. The scheme currently supports six technologies. The Government is committed to the continued development of the scheme.

Aggregate extraction

Aggregates levy 7.68 The aggregates levy was introduced in April 2002. In the light of independent research, the levy was set at a rate of £1.60 per tonne on primary aggregate commercially exploited in the UK. Revenue from the aggregates levy is recycled to businesses through a cut in employer national insurance contributions, and through the aggregates levy sustainability fund, which supports projects seeking to minimise the impact of quarrying on local communities. Box 7.5 provides a brief overview of progress and shows there are strong indications that the levy is achieving its objectives. Further details will be published by Budget 2005.

Northern Ireland relief scheme 7.69 Budget 2004 announced that the Government intended to extend the scope and duration of the relief that applied on aggregates used in Northern Ireland because the levy was not achieving its environmental objectives there. EU state aids approval has now been received and the extended relief came into effect from 1 April 2004. It is now fixed at 80 per cent of the full rate until 31 March 2011. To benefit from the extended relief, aggregate businesses in Northern Ireland have to agree to implement environmental improvements to their operations. There has been unqualified support from the aggregates industry in Northern Ireland with more than 160 applications to join the extended scheme. HM Customs and Excise have been co-operating with other law enforcement agencies to ensure that those paying tax are not disadvantaged by competing with those operating outside the law. Since 1 January 2004, 15 new registrations for aggregates levy have been made in Northern Ireland as a result of enforcement action.

²² *Review of key issues related to economic instruments to reduce the environmental impact of pesticide use*, Defra, April 2003.

Box 7.5: The aggregates levy

The aggregates levy aims to reduce the amount of primary aggregate being extracted directly from quarries and to encourage alternatives, including the use of recycled aggregates and by-products from other industrial processes. The early indications are that it is proving successful in achieving these aims:

- production of primary aggregate in Great Britain fell by 3 per cent between 2002 and 2003, to its lowest level since 1982. Between 2001 and 2003 production fell by 8 per cent. The fall in aggregate production is against a backdrop of buoyant construction activity and GDP growth;
- in England, a study produced by the Symonds Group^a shows that the estimated production of recycled aggregates increased by over 3 million tonnes between 2001 and 2003. In a survey of expanding recycled aggregate businesses, the levy was the most frequent reason given for growth since 2001; and
- sales of by-products such as china clay waste and slate waste used as aggregate have risen significantly as a result of the aggregates levy exemptions granted to these products. The national production of slate for 'fill and other' uses increased by 65 per cent in 2003, compared with the pre-levy year 2001.

^aSurvey of arisings and use of construction, demolition and excavation waste as aggregate in England in 2003, Symonds Group, October 2004.

Sustainable land use

Sustainable housing 7.70 Discussed further in Chapter 3, the Government's strategy for housing places key housing, planning and regeneration policies in the context of wider requirements for sustainable communities, including employment, quality public services, transport, a safe and healthy local environment, and sound local government. The Barker Review also recognised the need for housing policy to balance the environmental and social implications of housing development against the risks to macroeconomic stability and long-term affordability of not delivering a substantial increase in housing supply.

Contaminated land tax credit 7.71 As part of a package of measures to promote urban regeneration, Budget 2001 introduced the contaminated land tax credit to provide business with incentives to clean up contaminated land. The Barker Review recommended that the Government should consider the extension of the tax credit to land that has lain derelict for a period of time, but that this should encourage genuine new investment in brownfield remediation, and not simply subsidise development that would take place in any case. The Government continues to examine options to extend the credit in an efficient way, taking into account the Barker recommendation. **Research into the effectiveness of the contaminated land tax credit is under way and, depending on the outcome of that research, the Government will consult next year on extending the credit.**

ENVIRONMENTAL APPRAISAL OF POLICY MEASURES

7.72 The Government is committed to appraising the environmental impact of Budget measures, and aims to ensure that policy design, appraisal and evaluation take account of costs and benefits, the precautionary principle and the need to internalise costs by making the polluter pay. The Government constantly monitors the environmental impact of its policies to ensure they achieve their desired effect: evaluations of several key measures, such as the climate change levy and aggregates levy are under way and the findings will be published in 2005. These will help to build a more comprehensive picture of the effectiveness of environmental taxes and will inform the review of the climate change programme and a further stock take of the evaluation of environmental tax policy for the Budget.

7.73 Table 7.1 shows how Budget measures sit alongside other policies as part of the Government's approach to the environmental elements of sustainable development. Table 7.2 sets out the environmental impact of measures introduced in recent Budgets that have a significant effect on the environment or which serve an environmental purpose. To increase transparency and public reporting of key performance indicators, the environmental appraisal tables are also available on the Treasury website. The tables will be updated regularly to reflect continuing monitoring of environmental indicators and further evaluation of specific schemes.

Table 7.1: The Government's policy objectives and Budget measures

Policy objective	Sustainable development indicator ¹ and recent trend data	Recent Government measures
Tackling climate change and improving air quality.	<p><i>Emissions of greenhouse gases</i> UK greenhouse gas emissions were 13.9 per cent below 1990 levels in 2003.²</p> <p><i>Days when air pollution is moderate or higher</i> The number of days with moderate or higher air pollution increased from 20 to 50 in urban areas and from 30 to 61 in rural areas between 2002 and 2003.³</p> <p><i>Road traffic⁴</i> Between 1998 and 2003, total motorised traffic volume rose by 6.9 per cent, however, road traffic intensity (vehicle kilometres per GDP) fell by 6.0 per cent between 1998 and 2003.</p>	<p><i>Government measures</i></p> <ul style="list-style-type: none"> • Climate change programme, DETR, November 2000. • UK Emissions Trading Scheme, Defra, August 2001. • Energy Efficiency Commitment, Defra, April 2002 and April 2004. • Renewables Obligation, Defra, April 2002 and December 2003. • Energy White Paper, DTI, 2003. • Energy Efficiency – the Government's Plan for Action, Defra, April 2004. • Air Quality Strategy, DETR, January 2000, and Addendum, Defra, February 2003, and review, Defra, 2003-04. • Implementation of Integrated Pollution, Prevention Control regime, Defra, 2002. • Continued support for local air quality management system. • Negotiation and implementation of EU air quality directives and international agreements 2003-04. • Ten Year Plan for Transport, DETR, July 2000, and review, DfT, 2003-04. • Powering Future Vehicles, DfT et al, July 2002. • Air Transport White Paper, DfT, December 2003. <p><i>Specific Budget measures</i></p> <ul style="list-style-type: none"> • Climate change levy (CCL) package. • Green Technology Challenge. • Road fuel duty and differentials. • Reforms to car, lorry, van and motorcycle VED. • Company car tax and fuel scale charge reform, and authorised mileage allowance payments. • Duty rate for rebated fuels. • Landlord's energy saving allowance. • Reduced VAT on installation of energy-saving materials and renewables.
Improving waste management.	<p><i>Household waste and all waste arisings and management</i> Household waste increased from 22.5 million tonnes in 1996-97 to 25.8 million tonnes in 2002-03. However, over the same period the proportion of household waste being recycled increased from 7.5 per cent to 14.5 per cent.⁵</p>	<p><i>Government measures</i></p> <ul style="list-style-type: none"> • Waste Strategy 2000, DETR, May 2000. • Waste Implementation Programme, Defra, 2002. • Reform of the Waste Minimisation and Recycling challenge Fund. <p><i>Specific Budget measures</i></p> <ul style="list-style-type: none"> • Landfill tax and landfill tax credit scheme. • Business Resource Efficiency and Waste programme.
Regenerating Britain's towns and cities.	<p><i>New homes built on previously developed land</i> In 2003, 66 per cent of new housing was on previously developed land, increasing from around 54 per cent in 1990.</p>	<p><i>Government measures</i></p> <ul style="list-style-type: none"> • Urban White Paper, DETR, November 2000. • Package of measures to tackle abandoned vehicles. <p><i>Specific Budget measures</i></p> <ul style="list-style-type: none"> • Capital allowances for flats over shops. • Contaminated land tax credit. • Stamp duty exemption for disadvantaged areas. • Reforms to the VAT treatment of conversion and renovation activity.
Protecting Britain's countryside and natural resources.	<p><i>Populations of wild birds</i> Farmland birds almost halved between 1977 and 1993. However, declines have lessened in recent years and 2003 populations were virtually unchanged from 1993. Woodland birds fell by about 30 per cent between 1974 and 1998. Since then, however, populations have remained broadly constant.</p> <p><i>Chemical river quality and biological river quality⁶</i> In 2003 about 95 per cent of rivers in the UK were rated as having good or fair chemical quality and approximately 96 per cent of UK rivers were of good or fair biological quality.</p>	<p><i>Government measures</i></p> <ul style="list-style-type: none"> • Regulations transposing the Water Framework Directive came into force 2 January 2004. • Rural White Paper, DETR, November 2000. • Strategy for sustainable farming and food, Defra, December 2002. <p><i>Specific Budget measures</i></p> <ul style="list-style-type: none"> • Aggregates levy and aggregates levy sustainability fund. • Pesticides voluntary initiative.

¹ Achieving a better quality of life – review of progress towards sustainable development, Defra, March 2004 – latest data from www.sustainable-development.gov.uk.

² The six main greenhouse gases are: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride (provisional figure).

³ Air quality headline indicator for sustainable development: 2003, Defra (provisional figures).

⁴ Provisional data from DfT.

⁵ Municipal Waste Management Survey, 2002-03, Defra.

⁶ New measures of water quality will be needed under the EU Water Framework Directive; the Environment Agency is currently characterising water bodies to help establish these.

Table 7.2: The environmental impacts of Budget measures

Budget measure	Environmental impact ¹
Climate change levy package.	Forecast savings of at least 5 million tonnes of carbon per year by 2010. ²
Landlord's energy saving allowance for energy efficiency.	Reductions of carbon dioxide emissions.
VAT reduction for energy saving materials and domestic installation of renewable energy technologies.	Reduction of carbon dioxide emissions.
Enhanced capital allowances for energy-saving and water efficiency technologies.	Reductions in energy and water use by business.
Road fuel duty and differentials. ³	<p>The non-revalorisation of fuel duties is expected to have resulted in higher carbon emissions that would otherwise have been the case, although this is expected to have been partially offset by higher oil prices.</p> <p>The shift to ultra low sulphur petrol from ordinary unleaded is estimated to have reduced nitrogen oxidised emissions by 1 per cent, carbon monoxide emissions by 4 per cent and emissions of volatile organic compounds by one per cent per year between 2001 and 2004.</p> <p>The shift to ultra low sulphur diesel from ordinary diesel is estimated to have reduced emissions of particulates by 8 per cent and nitrogen oxides by up to 1 per cent per year between 2001 and 2004.</p> <p>The increased use of biodiesel and the introduction of bioethanol will help reduced carbon dioxide emissions.</p> <p>The road fuel gas differential will result in a reduction in emissions of particulates and nitroge oxides.</p>
Rebated fuels.	A narrowing of the differential with main road fuels will reduce levels of fraud, which will deliver environmental benefits through increased use of less polluting fuels.
Reforms to car, lorry, van and motorcycle VED.	Reductions in emissions of carbon dioxide and local air pollutants.
Company car tax system.	Estimated carbon dioxide emissions savings of 0.15 to 0.2 MtC in 2004. In the long run it is forecast that carbon dioxide savings will be between 0.5 and 1 MtC per year. ⁴
Employer-provided van benefit.	This will remove the incentive to drive older, more polluting vans and reduce emissions over time.
Company car fuel benefit charge.	<p>The programme of increases over five years in the fuel scale charge between 1997-98 and 2002-03 is estimated to have reduced the number of drivers in receipt of free fuel by around 300,000.⁴</p> <p>It is expected that the programme has reduced carbon dioxide and local air pollutant emissions due to fewer private miles travelled where fuel has been paid for by drivers and not their employers.</p> <p>Restructure of the fuel scale charge in 2003 to relate it to carbon dioxide emissions and to include the same discounts and premiums as in the company car tax system will further reduce emissions of carbon.</p>
100 per cent first year allowances for cars with low carbon dioxide emissions, and hydrogen and natural gas refuelling infrastructure.	Reductions in emissions of carbon dioxide and local air pollutants.
Air passenger duty.	The freeze in rates will lead to a small increase in emissions of carbon dioxide and local air pollutants.
Landfill tax.	Encourages waste producers and the waste management industry to switch away from landfill disposal towards waste minimisation, re-use and other waste management options.
Landfill tax credit scheme.	A scheme supporting local community and environmental projects in the vicinity of landfill sites.
Aggregates levy and aggregates levy sustainability fund.	Reductions in noise and vibration, dust and other emissions to air, visual intrusion, loss of amenity and damage to wildlife habitats.
Capital allowances for flats over shops.	Bringing empty space over shops back into the residential market, helping to create greater urban diversity while reducing the pressure for new greenfield development.
Contaminated land tax credit.	Bringing forward remediation of contaminated land.
Stamp duty exemption for disadvantaged areas.	Regeneration and improved functioning of property markets in the UK's most disadvantaged areas.
Reforms to the VAT treatment of conversion and renovation activity.	Reduced pressure on greenfield site development due to the better use of existing buildings.

¹These estimates are subject to a wide margin of error.

²Based on the DTI energy model. There are a number of difficulties involved in estimating the emissions savings from the individual components of the climate change levy, including the need to avoid double counting. Of the 5 MtC (million tonnes of carbon) per year by 2010, the levy and exemptions account for 2.0 MtC, the negotiated agreements account for 2.5 MtC and energy efficiency measures account for 0.5 MtC. A related measure, the UK emissions trading scheme, involves 31 direct participants who have undertaken binding commitments to deliver emissions reductions of 1.1 MtC by 2006. Subject to revision dependent on final outcome of Cambridge Econometrics review.

³Using NETCEN emissions models – further detail on the methodology used is provided in NETCEN's January 2000 report, UK Road Transport Emissions Projections. Between 1977 and 1999, the fuel duty escalator is forecast to have reduced emissions between 0.1 MtC and 0.2 MtC per year by 2010.

⁴Based on Inland Revenue modelling.