7 PROTECTING THE ENVIRONMENT

Economic and social progress must be achieved while protecting and, where possible, enhancing the environment. The Government is pursuing a long-term strategy to tackle climate change, improve air quality, regenerate towns and cities, and protect the countryside and natural resources. Budget 2002 delivers and reports on further environmental reforms, while responding to the recent high and volatile levels of world oil prices. Measures include:

- two new **exemptions from the climate change levy (CCL)** for forms of electricity generation with environmental benefits, while freezing the rates of the CCL;
- the launch of **the world's first economy-wide greenhouse gas emissions trading scheme** to allow business to meet emissions targets at least cost;
- new **enhanced capital allowances for investments in environmentally-friendly technologies** to promote business energy-efficiency;
- a **freeze in duty on the main road fuels and on road fuel gases;**
- plans to introduce **duty incentives favouring sulphur-free fuels** in 2003 and to exempt **hydrogen** from fuel duty in the future;
- **a freeze in vehicle excise duty (VED) rates** and introducing a new **low-carbon VED rate for cars** with the lowest emissions, and reforming **VED for motorcycles and vans** to reflect environmental benefits;
- **enhanced capital allowances for business cars with low emissions**, and a **restructuring of the fuel scale charge** from 2003-04 to relate it to carbon dioxide emissions rather than engine size;
- a new **distance-based lorry road-user charge**, to be introduced in 2005 or 2006, to ensure that lorry operators contribute to the costs that they impose irrespective of their nationality;
- **a freeze in air passenger duty** and extending the scope of the lower rates that currently apply to European Economic Area countries;
- an increase in the standard rate of **landfill tax** to encourage efforts to minimise waste generation and to promote more sustainable waste management; and
- plans to review the role of economic instruments in **addressing the environmental issues associated with agriculture**, including nutrient pollution.

INTRODUCTION

7.1 The Government's Sustainable Development Strategy aims to deliver a better quality of life for everyone, today and for future generations. This requires action to improve and preserve the quality of the environment. Climate change, poor air quality and environmental degradation in urban and rural areas are all pressing problems which threaten the quality of life for every citizen. The Government is determined to tackle them, ensuring that economic and social development goes hand in hand with progress on the environment.

The Government's approach to environmental taxation

7.2 The Government's Statement of Intent on Environmental Taxation was first published in July 1997. The Statement sets out the Government's aim to reform the tax system, over time, to encourage behaviour that minimises environmental damage. The Government will continue to develop its strategy towards environmental taxation in discussion with other stakeholders.

7.3 The Statement of Intent follows an economics-based approach to environmental issues. The Government believes that the focus of Government intervention to address environmental problems should be to correct for market failures, the most appropriate policy in each case depending on the costs and benefits of intervention and the nature of the market failure.

7.4 This chapter explains how the Government is implementing its strategy and describes recent developments and the next steps in meeting three broad environmental objectives:

- tackling climate change and improving air quality;
- regenerating Britain's towns and cities; and
- protecting Britain's countryside and natural resources.

TACKLING CLIMATE CHANGE AND IMPROVING AIR QUALITY

Tackling climate change

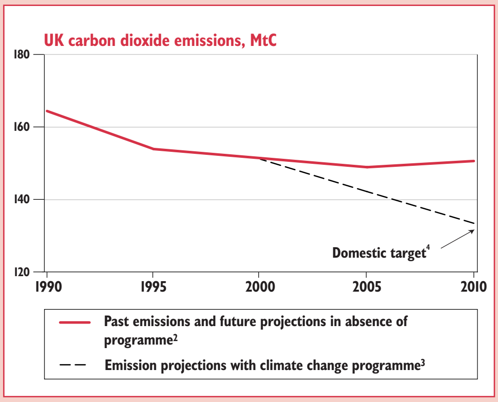
7.5 There is strong evidence that global temperatures are rising. The 1990s included seven of the ten warmest years on record, and scientists estimate that sea levels are rising by 1.5 millimetres a year[1]. Climate change affects households, businesses and governments across the world, with those most severely affected often the least well equipped to deal with the consequences. The Government is taking important steps to address this challenge, controlling and reducing emissions of the gases responsible for global warming.

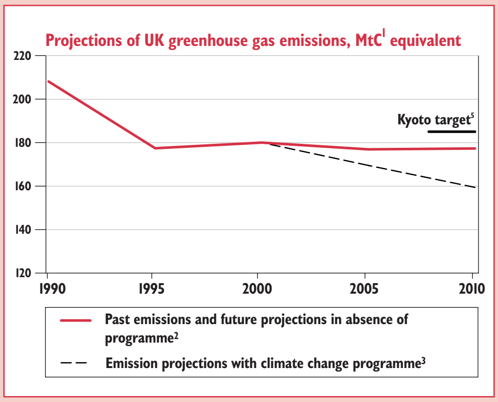
7.6 The Kyoto Protocol commits the UK to reducing greenhouse gas emissions by 12.5 per cent below 1990 levels between 2008 and 2012. The Government's climate change programme is designed to ensure that the UK meets this target and that progress is made towards the Government's own, more demanding, goal of cutting carbon dioxide emissions by 20 per cent below 1990 levels by 2010. The Government intends to ratify the Protocol, along with the other members of the European Union, before the World Summit on Sustainable Development in Johannesburg this summer.

[1] *UK Climate Change Programme*, DETR, 2000

Box 7.1: Emission projections and targets

The charts below show the historic emissions and projected effect to 2010 of all the quantifiable measures set out in the UK climate change programme. Along with additional measures, such as public awareness campaigns, emissions should be reduced further so that the UK's carbon dioxide emissions reach 20 per cent below 1990 levels by 2010.





[1] The six greenhouse gases are carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulphur hexafluoride.

[2] Includes the effects of the Renewables Obligation, the climate change levy, (including the previous exemption for CHP and exemptions for renewable energy), and the fuel duty escalator.

[3] Includes the estimated effect in 2010 of all the quantifiable measures set out in the UK's climate change programme, and released in the UK's Third National Communication on Climate Change.

[4] Domestic target is 20 per cent below 1990 levels by 2010.

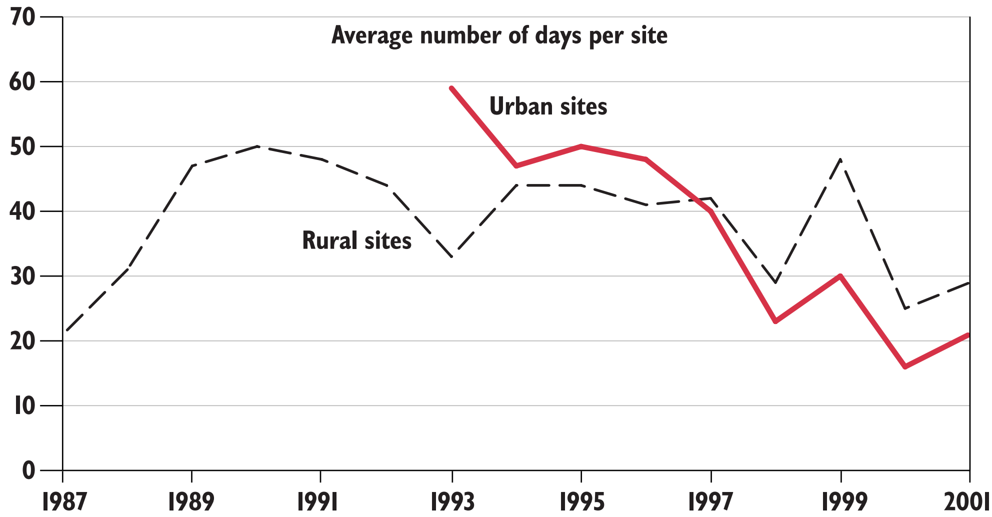
[5] Kyoto target is 12½ per cent below 1990 levels by 2008-12.

Source: The UK's Third National Communication to the United Nations Framework Convention on Climate Change, DEFRA, 30 October 2001

Improving air quality

7.7 Poor air quality poses risks to human health, quality of life and the natural environment. It affects everyone, particularly children and elderly people. Chart 7.1 shows the number of days of poor air quality each year. In general, air quality in the UK is improving, especially in urban areas. But much more remains to be done. The underlying trend in rural air quality is much less clear, reflecting variability in levels of ozone – the main cause of pollution in rural areas. Moreover, exposure to air pollution continues to be associated with an unacceptable number of hospital admissions and premature deaths each year.

Chart 7.1: Days when UK air pollution is moderate or higher[1]



[1] Sites added to the network after 1997 are excluded. Figures for 2001 are provisional.
Source: NETCEN, DEFRA.

7.8 The Government's Air Quality Strategy[2] sets health-based standards and policy objectives for eight key air pollutants. In September 2001, the Government and the Devolved Administrations began consulting on adopting new, tighter objectives for some of these pollutants and on introducing a new objective for a ninth pollutant. The proposals aim to cut air pollution further and deliver greater health benefits, while avoiding unreasonable social and economic costs. The proposals will be finalised in mid-2002, in the light of responses to this consultation.

Responsibilities

7.9 All sectors of the economy have a part to play in tackling climate change and improving air quality. Progress towards meeting the Government's domestic and international goals requires action by business, households and the transport sector.

Business

Climate change levy

7.10 The climate change levy (CCL), a tax on the business use of energy introduced in April 2001, encourages business to improve energy-efficiency and reduce emissions of carbon dioxide, the principal greenhouse gas.

7.11 The package of measures associated with the CCL includes exemptions for new forms of renewable energy, 80 per cent discounts for eligible energy-intensive sectors that have signed up to negotiated agreements to increase energy-efficiency and reduce emissions, and support to help businesses use energy more efficiently. This support includes energy-efficiency advice through the Carbon Trust and enhanced capital allowances (ECAs) to encourage investment in energy-saving technologies. The package is broadly revenue-neutral for business, with CCL revenues recycled back to business principally by means of a 0.3 percentage point reduction in employer national insurance contributions (NICs). **Budget 2002 freezes the rates of the CCL**.

[2] *The Air Quality Strategy for England, Scotland, Wales and Northern Ireland*, DETR, 2000

Further CCL exemptions

7.12 In addition to the existing exemption for renewable forms of energy, the Government is **exempting two further sources of energy generation from the CCL** in view of their environmental benefits. The exemptions will cover:

- **electricity from combined heat and power (CHP) plants sold via licensed electricity suppliers**, in recognition of recent changes in energy prices. This exemption, which is subject to EU state aids approval, will take effect shortly and be reviewed in the light of changes in energy prices. It builds on other forms of support provided to CHP through the CCL package; and

- **electricity from coal mine methane (CMM) sold via licensed electricity suppliers**. Methane is a greenhouse gas that escapes into the atmosphere from abandoned coal mines. Trapping CMM to generate electricity results in environmental benefits, as well as giving economic benefits to former coalfield areas. This exemption, which is also subject to state aids approval, will take effect shortly and be reviewed during 2004-05 in the light of further information on the environmental benefits of CMM.

Dual-use processes

7.13 The Government welcomes the European Commission's recent decision that the exemption from the CCL for fuel used in dual-use processes is a logical and integral part of the levy. The Government has also considered options for extending relief to certain processes which compete with those benefiting from the dual-use or non-fuel use exemptions, and the Commission has given state aids approval for such a relief. The Government will take forward its proposals for this relief with the sectors concerned.

The Carbon Trust and energy-efficiency

7.14 The Carbon Trust, an independent company funded principally from recycled CCL revenues, was established in April 2001 and has begun work to support energy-efficiency improvements by business. The programme includes:

- the Energy Efficiency Best Practice programme and the Environment and Energy Helpline, which provide business with independent information to help save energy, cut waste and reduce carbon emissions;

- administration of the enhanced capital allowance (ECA) scheme for investments in energy-saving technologies; and

- the Low Carbon Innovation Programme, through which the Trust is developing a flexible support framework to encourage the development of new low carbon technologies.

Investment in energy-saving technologies

7.15 Enhanced capital allowances for investments in approved energy-saving technologies were introduced in April 2001. The scheme now covers over 2,000 approved products and eight groups of technologies.

7.16 Building on the success of the scheme to date, the Government has been considering applications for further technologies received through the Green Technology Challenge. As a result, the Government will **introduce ECAs for investments in five groups of technologies: heat pumps, radiant and warm air heaters, solar heaters, energy-efficient refrigeration equipment (including display cabinets), and compressor equipment**. Work to define precise performance standards is continuing. Subject to EU state aids approval, the Government anticipates that these technology groups will be added to the lists of qualifying technologies during the summer. The addition of these groups will be worth £15 million during their first full financial year in 2003-04. The Government will also **extend the ECA scheme for energy-saving technologies to include investments in assets for leasing**.

Emissions trading

7.17 The Government launched the world's first economy-wide greenhouse gas emissions trading scheme in April 2002. This major new initiative allows participants to meet emission reduction targets at lowest cost, by reducing their own emissions or, if it is cheaper, by buying emissions allowances from other participants who have found it worthwhile to beat their targets.

7.18 Emissions reduction targets for each participant were determined at an auction in March 2002, when an incentive worth £150 million after tax was allocated in the form of payments per tonne of emission reduction. In this first stage of the scheme, 34 participants have committed to a total reduction of 1.1 million tonnes of carbon (MtC) a year by 2006 – a significantly higher reduction than had been anticipated.

Box 7.2: The UK emissions trading scheme

Emissions trading is a market-based policy instrument which enables those who produce emissions, such as greenhouse gases, to reduce their emissions at the lowest possible cost. Instead of stipulating uniform levels of emission reduction by participating firms, emissions trading allows those firms with the lowest costs of abatement to make the largest contribution to meeting overall targets.

The first stage of the UK emissions trading scheme, which is now under way, is a 'cap and trade' scheme. This means that an overall emissions reduction target is set covering a group of organisations, all of whom agree to individual targets and receive a corresponding amount of allowances. Provided the overall target is met, individual company emissions are unimportant. Participants in the scheme can therefore achieve their targets in a flexible way by choosing to:

- **meet their target by reducing their own emissions;**
- **reduce their emissions below their target and sell or bank the excess allowances; or**
- **let their emissions remain above their target and buy allowances from other participants.**

Organisations that do not wish to enter the scheme by committing to an individual emissions reduction target may open an account to buy and sell allowances.

Emissions trading in the UK will develop further this year when organisations will be able to generate emissions allowances through specific emission reduction projects, and sell these allowances to participants in the trading scheme. Rules for this element of the scheme are currently being finalised. Companies in CCL negotiated agreements will be able to trade allowances in order to meet their emissions reductions targets at the end of this year.

Renewable energy

7.19 The Government is committed to ensuring that 10 per cent of electricity is supplied from renewable sources by 2010. In support of this target, the Renewables Obligation for England and Wales and the comparable Scottish Obligation came into effect on 1 April 2002. Consultation on similar arrangements for Northern Ireland is under way. Each Obligation requires all electricity suppliers to supply 3 per cent of their electricity from renewable sources in 2002-03, excluding electricity from large-scale hydroelectric stations and energy recovery from the incineration of mixed waste. The proportion of electricity to be supplied from renewable sources will be increased annually, reaching 10.4 per cent of all licensed electricity sales by 2010-11. The market incentive provided by the Obligations is expected to be worth over £750 million per year by 2010. Contracts awarded under the Non Fossil Fuel Obligation and comparable arrangements for Scotland will continue to be honoured.

7.20 The Government is also providing direct support for renewable energy, worth over £260 million between 2001 and 2004, and including £55.5 million for research and development under the Department for Trade and Industry's Sustainable Energy Programme. As described above, most forms of renewable energy are also exempt from the CCL.

Households

7.21 The Government recognises that energy-efficiency improvements by the domestic sector are key to reducing fuel poverty and carbon emissions. It continues to support the Energy Saving Trust, which promotes energy efficiency in the domestic sector, and has introduced a number of measures to ensure that households play a fair part in helping to meet the UK's emissions targets.

Domestic energy efficiency

7.22 The Energy Efficiency Commitment (EEC) requires gas and electricity suppliers to make significant energy savings between 2002 and 2005 by encouraging and helping their domestic customers to reduce energy consumption. The EEC is expected to cut greenhouse gas emissions by around 0.4 MtC a year by 2005. Half of these energy-efficiency benefits will be received by low-income consumers.

7.23 Those at the greatest risk of ill-health from cold homes also benefit from access to improved heating and insulation through the Home Energy Efficiency Scheme, which had helped some 250,000 households by December 2001. In addition, around 39,000 households are benefiting from central heating installations carried out under the Government's Affordable Warmth Programme.

VAT on energy-saving materials

7.24 The Government is now taking further steps to promote energy-efficiency in the home. Budget 2000 reduced the rate of VAT on the grant-funded installation of new central heating systems and heating appliances. To further support the Home Energy Efficiency Scheme, Budget 2002 announces that **the 5 per cent rate of VAT will be extended to apply to the grant-funded installation of factory-insulated hot water tanks, micro combined heat and power systems, and renewable energy heating systems in the homes of the less well-off**, with effect from 1 June 2002.

Economic instruments

7.25 The Government will consider ways in which economic instruments may be used to improve household energy efficiency, consistent with its objective of eliminating fuel poverty and not introducing new taxes on household energy.

Transport

7.26 A safe, clean, convenient and efficient transport system is crucial to sustaining economic growth, improving the quality of life, and safeguarding the environment. The Government's draft strategy, *Powering Future Vehicles*,[3] sets out how the Government proposes to oversee the move to low-carbon road transport. This section describes a range of measures to promote the following environmental objectives:

- in the long term, to assist the switch to a low-carbon economy, including zero emissions transport;
- over the medium term, to set incentives for greener transport; and
- in the short term, to encourage the use of the best widely available fuels and vehicles.

[3] *Powering Future Vehicles*, DTLR, DEFRA, HMT and DTI, December 2001

Box 7.3: Powering Future Vehicles

The Government is committed to providing a fiscal regime that encourages the use of cleaner fuels and vehicles. In December 2001 the Government published a draft strategy document, *Powering Future Vehicles*, which sets out and invites comment on proposals to make the UK a world leader in the move to a low-carbon road transport system, including:

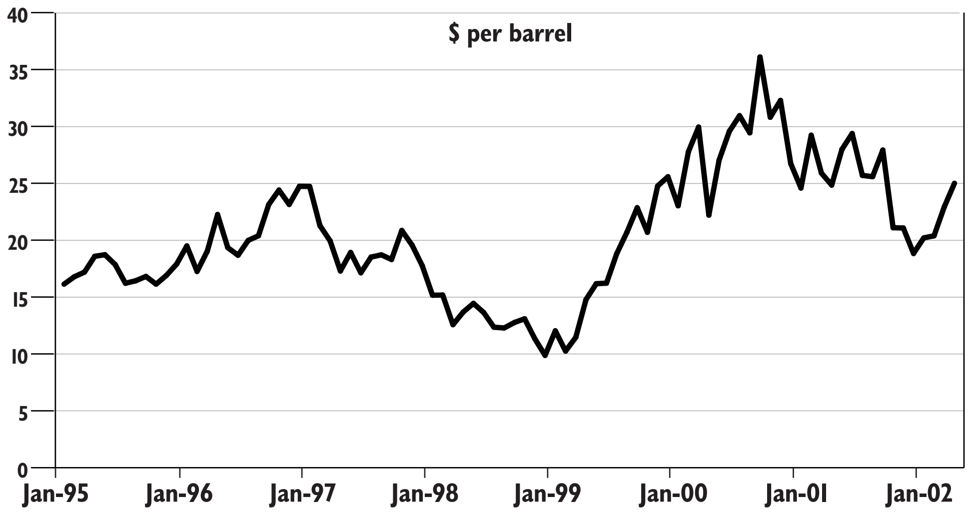
- **promoting research and development;**
- **ensuring effective regulation;**
- **facilitating infrastructure development;**
- **laying the foundations for transport to play a part in the UK emissions trading scheme;**
- **working with international partners; and**
- **setting targets to help promote the transition to low-carbon vehicles and fuels.**

The Government is currently evaluating responses to the document and will publish a final strategy by the summer.

Fuel duties

7.27 Decisions on fuel duties take account of environmental, economic, and social objectives. In November 2000, the Government announced that road fuel duties would be frozen in Budget 2001. Given recent steep rises in oil prices and their continued volatility, Budget 2002 **freezes fuel duty on ultra-low sulphur petrol (ULSP), diesel (ULSD), other road fuels and non-road fuel oils, such as red diesel**. This reduces duty in real terms on ULSP and ULSD by around one pence per litre.

Chart 7.2: Brent spot oil price



Source: Datastream

Cleaner fuels

7.28 Duty incentives introduced by the Government have already encouraged industry to convert unleaded petrol and diesel sales for road vehicles throughout the UK to ULSP and ULSD. ULSP offers environmental benefits over ordinary unleaded petrol when used in modern cars fitted with three-way catalytic converters. ULSD reduces particulate emissions from existing diesel vehicles and allows the use of advanced emission abatement technology, which in turn reduces particulate emissions by up to 90 per cent.

Sulphur-free fuels

7.29 Sulphur-free fuels offer further environmental benefits over ultra-low sulphur fuels, delivering greater reductions in carbon dioxide emissions and further air quality improvements. Sulphur-free fuels also offer consumers important fuel economy savings by encouraging the early introduction of Petrol Direct Injection technology. The European Commission has proposed a directive which would apply further controls to the standards for petrol and diesel and require the widespread availability of sulphur-free fuels from 2005. To provide incentives for fuel companies to produce these fuels, and for motorists to use them, **the Government will introduce duty incentives favouring sulphur-free fuels in 2003**, subject to European agreement.

Biodiesel

7.30 As announced in Budget 2001, Budget 2002 confirms **a new rate for biodiesel at 20 pence per litre below the ULSD rate** to take effect from Royal Assent of the Finance Bill. This will allow the UK to benefit from the reduced greenhouse gas emissions that biodiesel can offer. There are already signs that this initiative is stimulating activity, including investment in production facilities and plans by one major supermarket chain to use biodiesel in lorries.

Road fuel gases

7.31 Road fuel gases offer important reductions in particulates and nitrogen oxide emissions compared with conventional fuels. To encourage individuals and companies to make greater use of them, Budget 2001 reduced the duty on road fuel gases to 9 pence per kilogramme and announced that the duty would not be increased in real terms until 2004 at the earliest. Liquefied Petroleum Gas (LPG) is now supplied at over 1,000 forecourts, and large haulage operators, including at least one major supermarket chain, are using lorries fuelled by Compressed Natural Gas (CNG). Budget 2002 **freezes duty on these gases**. Following the Green Technology Challenge, Budget 2002 also **introduces enhanced capital allowances (ECAs) for investments in CNG fuelling infrastructure**.

Green Fuel Challenge

7.32 In the November 2001 Pre-Budget Report, the Government announced that, subject to European agreement, fuel duty exemptions would be awarded to three pilot projects under the Green Fuel Challenge:

- a hydrogen fuelling infrastructure for fuel cell buses;
- the capture, compression and use of landfill gas (biogas) in a variety of vehicles; and
- the testing of methanol in various vehicles, and in the refuelling infrastructure.

7.33 The administrative arrangements for these projects are currently being agreed and the pilots will be introduced from later this year. Given the level of interest in the first round, the Government will shortly invite **a second round of bids and will seek to support research into a wider range of alternative transport fuels with duty reductions or exemptions**.

Hydrogen

7.34 The Government recognises that hydrogen has the potential to lead to zero-emissions transport and that most experts predict that it will be an important fuel for the future. Subject to the outcome of the Green Fuel Challenge pilot project and other developments, **the Government intends to exempt hydrogen from fuel duty for a limited period in the future** to encourage further development and early take-up. Budget 2002 also **introduces ECAs for investments in hydrogen fuelling infrastructure**.

VED for cars **7.35** Vehicle excise duty (VED) for cars first registered from March 2001 is based on the car's carbon dioxide emissions and fuel type. This has offered motorists the opportunity to reduce their VED bills by up to £70 a year by choosing less polluting cars. To increase incentives to use cleaner cars, Budget 2002 **freezes VED rates for cars and introduces a new low-carbon band offering a £30 reduction for cars that produce carbon dioxide emissions not exceeding 120 grammes per kilometre (g/km)**. As a result of these measures, motorists will be able to pay up to £100 less VED a year by choosing the most efficient and least polluting cars.

7.36 To help consumers understand the environmental impact of the car they intend to purchase, the Government is also consulting on proposals for a comparative, colour-coded labelling scheme based on the current VED bands.

VED for vans **7.37** Following discussions with industry and other stakeholders on how best to encourage van manufacturers and users to develop and adopt new technologies with environmental benefits, Budget 2002 also **reduces VED to £105 for vans meeting the challenging euro-IV emissions standard from March 2003**. These vans offer benefits in the form of significantly lower levels of harmful emissions, particularly in urban areas. The discount will be reviewed in the run-up to this standard becoming mandatory in 2006. Budget 2002 **freezes other van VED rates.**

VED for motorcycles **7.38** Building on the reforms to VED for cars, Budget 2002 also reforms motorcycle VED. These reforms follow a consultation exercise[4] and take account of the views of some 12,500 respondents. They will lead to over 600,000 motorcyclists paying lower rates of VED.

7.39 In addition, the Government will shortly publish a consultation document seeking views on measures to tackle the problem of theft of VED discs from motorcycles and to reduce evasion of VED payments by motorcycle keepers.

Companies **7.40** Companies purchase approximately 50 per cent of new cars in the UK and about 20 per cent of all vehicle miles are made in company cars. The Government is therefore taking steps to encourage the use of cleaner, more efficient company vehicles.

Company car tax **7.41** As announced in Budget 2000, from 6 April 2002 the income tax charge and NICs charge on a company car is based on a percentage of the car's list price graduated according to the level of the car's carbon dioxide emissions. Discounts are available for cars powered by electricity or gas and for hybrid petrol/electric cars, and premiums are payable for diesel cars that do not meet euro-IV emission standards. This broadly revenue-neutral reform of company car taxation will promote the use of more environmentally-friendly company cars.

Tax incentives for low-carbon cars **7.42** As part of the Green Technology Challenge, the Government has considered proposals for using enhanced capital allowances (ECAs) to encourage the use of cleaner fuels and vehicles. As a result of this consultation, Budget 2002 **introduces ECAs for the purchase of business cars with carbon dioxide emissions not exceeding 120g/km**. These allowances, which will be subject to regular review, will complement the introduction of the new low-carbon rate of car VED, providing a further boost to the market for more efficient cars.

Approved mileage allowance payments **7.43** To complement the reforms to company car taxation, a series of further measures to promote more environmentally friendly business travel were introduced from 6 April 2002. These include:

- a new statutory system of income tax and NICs free mileage rates, providing greater incentives to drive more efficient vehicles for business trips and for drivers to use smaller, more efficient cars;
- a new passenger rate of 5 pence per mile per passenger to encourage car-sharing on business trips; and
- an increased income tax and NICs free mileage rate of 20 pence per mile where employers pay for cycle use on business trips.

[4] *Reforming Motorcycle Vehicle Excise Duty*, HM Treasury, November 2001

Fuel scale charges

7.44 Budget 1998 announced a five year programme of annual increases to discourage giving or receiving free fuel for private use in a company car. 2002-03 is the final year of the programme and the new rates were confirmed on 15 March 2002. Following consultation[5] earlier this year, the Government **will restructure the fuel scale charge from 2003-04 to relate it to carbon dioxide emissions and to include the same discounts and premiums as in the company car tax system**. This restructuring will be revenue-neutral and will make the system more environmentally-friendly than it is at present. It will also allow a proportionate reduction in the charge if an employee receiving free fuel decides to opt out part way through the year.

Company vans

7.45 The Government will **review the tax treatment of the private use of vans provided by employers**, taking into account environmental benefits, fairness and modern working practices.

Employer-subsidised bus services

7.46 Building on previous reforms to encourage cleaner, greener forms of commuting, and following consultation[6], Budget 2002 **introduces a further tax exemption to enable employees to benefit from discounted travel in buses subsidised by their employer**.

Haulage industry

7.47 Recent Budgets have introduced a variety of measures to support action by the haulage industry to become more internationally competitive and less environmentally damaging, recognising the important role that haulage plays in a successful and high-productivity economy.

Lorry road-user charging

7.48 The Government is determined to ensure that lorry operators from overseas pay their fair share towards the cost of using UK roads and has consulted on options for introducing a road-user charge that would apply to lorry operators regardless of their nationality[7]. The consultation revealed a strong preference for a distance-based lorry road-user charge from a range of organisations, including haulage associations, environmental groups and general business organisations. **The Government has therefore decided to introduce a distance-based lorry road-user charge and aims to introduce it in 2005 or 2006**. The Government remains committed to ensuring that the UK haulage industry does not pay any more as a result of a new charge and will at the same time introduce offsetting tax reductions for the industry. Further details of the new lorry road-user charge will be outlined shortly.

VED for lorries

7.49 A new system of VED for lorries, announced in Budget 2001, came into force in December 2001. The system encourages hauliers to use lorries that cause less road and environmental damage, and reduced rates for the cleanest and least damaging lorries to among the lowest in the European Union. Up to 80 per cent of lorry VED re-licensing can now be carried out at post offices, and hauliers are no longer required to re-licence each time they switch vehicle types. Budget 2002 **freezes VED rates for lorries**.

HGV impounding

7.50 In January 2002 the Government introduced powers to allow the Vehicle Inspectorate to impound illegally operated heavy goods vehicles. These operators are a minority but they are a serious risk to other road users. They ignore the safety and environmental standards required by the licensing system and observed by the great majority of the industry. Their vehicles are twice as likely to have serious safety faults as those of licensed operators. The Vehicle Inspectorate can now dispose of impounded illegally operated vehicles and offset the proceeds against the cost of operating the new scheme, which is intended to be self-financing.

[5] *Consultation on possible structures for a more environmentally friendly free fuel scale charge*, Inland Revenue, February 2002
[6] *Consultation on the tax and NICs treatment of employer subsidies of public bus services*, Inland Revenue, October 2001
[7] *Modernising the Taxation of the Haulage Industry*, HM Treasury, November 2001

Bus fuel duty rebate

7.51 The Government is committed to securing improvements in public transport as part of the long-term strategy set out in the Ten-Year Plan for Transport. Buses are key to the delivery of targets under the Plan. Buses are the main public transport option for most local journeys, are key to accessing services in rural areas, and are especially important for the socially excluded and lower income groups. The majority of public transport journeys are by bus.

7.52 The Government currently provides more than £1 billion a year to support local bus services. To ensure the most effective use of these funds in improving bus services and delivering the Government's transport, environmental and social objectives, the Government will review the support mechanisms for buses as part of the forthcoming Spending Review and the current review of the Ten-Year Plan. In particular, **the Government will review the fuel duty rebate for buses** to assess whether it provides effective support for buses in a way that is consistent with the Government's objectives, including increasing passenger numbers. The review will not lead to a reduction in the overall level of Government support for bus transport.

Air passenger duty

7.53 A new system of air passenger duty (APD) was introduced in March 2001. Budget 2002 **freezes the rates of APD**.

7.54 In anticipation of the future expansion of the European Union, **the lower rates of APD that apply to countries which are signatories to the European Economic Area agreement will be extended to all EU applicant countries and to Switzerland, with effect from 1 November 2002**[8]. This will reduce the duty to holiday destinations such as Cyprus, Malta and Turkey by at least £15 a flight. Overall, nearly 4 million passengers each year will pay less in duty.

7.55 The Government's Aviation White Paper, due to be published later this year, will examine the potential for using economic instruments to encourage the aviation industry to take more account of its environmental impact.

REGENERATING BRITAIN'S TOWNS AND CITIES

7.56 Towns and cities need to provide an attractive physical environment and a good quality of life if they are to attract investment, foster strong and vibrant local communities and reduce unsustainable development in the countryside. The Government is committed to reversing the physical, economic and social neglect that continues to characterise too many of Britain's towns and cities and is introducing a range of reforms to promote regeneration:

- economically, by encouraging enterprise and investment in disadvantaged areas through a new Community Investment Tax Credit and the Regional Development Agencies (RDAs) described in Chapter 3;
- socially, by tackling social exclusion and deprivation through investment in local public services in the poorest neighbourhoods as part of the National Strategy for Neighbourhood Renewal, described in Chapter 5; and
- physically, through the range of measures to bring land and property into use and to improve the attractiveness of public space described in this section.

Urban White Paper

7.57 The Urban White Paper set out a package of fiscal measures worth £1 billion over five years to encourage the physical regeneration of Britain's towns and cities. These measures, most of which have been available since May 2001, include a 150 per cent accelerated tax credit for the costs of cleaning up contaminated land, 100 per cent capital allowances for creating flats for letting over shops, and targeted VAT reductions to encourage the renovation and conversion of existing properties.

[8] The EU applicant countries are: Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, the Slovak Republic, Slovenia and Turkey.

7.58 As described in Chapter 3, the Government has also exempted from stamp duty all property transfers up to £150,000 in the UK's most disadvantaged areas and will legislate in the Finance Bill to **abolish stamp duty altogether for all non-residential transfers in these areas**, subject to EU state aids approval.

Urban Regeneration Companies

7.59 Urban Regeneration Companies (URCs) are a new form of delivery for urban regeneration schemes. They are independent companies that engage the private sector alongside public sector partners such as local authorities and RDAs. The Government recognises the important role that URCs can play in organising and delivering major regeneration projects in key urban locations and has consulted key stakeholders on the prospect of giving tax relief on company donations to URCs. The Government will continue to monitor the progress of URCs and consider the potential for using tax incentives to encourage private sector involvement in their development.

Public space and the local environment

7.60 In April 2001, the Prime Minister set out a series of measures designed to improve local quality of life. By tackling local environmental problems and ensuring that public spaces are safe, clean, and well maintained and designed, the measures serve the needs of all groups, including those with disabilities and minorities. Local authorities will have the freedom to prioritise and tackle issues which are important in their areas, working within a framework set by central Government.

7.61 As part of the 2002 Spending Review, the Government has also launched a cross-cutting review on public space. The review has shown that safe and attractive local environments matter greatly to people and have important links with other Government priorities, including crime reduction, health, economic well-being and social inclusion. The 2002 Spending Review will include proposals for how targets, funding and an improved cross-Government approach to delivery can clearly establish improved streets and public places as a priority local service.

7.62 The Government is also embarking on a review of the statutory responsibilities and powers of local authorities in relation to the local environment, so that they are better able to deal with various forms of environmental nuisance. Funding from the Capital Modernisation Fund (described in Chapter 6) is being made available to support local environmental improvement demonstration projects.

Abandoned vehicles

7.63 The Government has consulted[9] on a range of proposals to deal with the growing problem of abandoned vehicles. On 10 April 2002, the Government announced a package of measures to help remove abandoned vehicles more quickly and to enable their owners to be traced more effectively in the future. In particular, the Government **intends to introduce reforms to the vehicle registration system to ensure that, in future, all vehicles can be traced to the correct keeper**.

PROTECTING BRITAIN'S COUNTRYSIDE AND NATURAL RESOURCES

7.64 The Rural White Paper, published in November 2000, set out the Governments vision of a countryside that is sustainable - economically, socially and environmentally. In dealing with environmental threats to the countryside, the Government is applying the same principles as those which underpin its wider strategy for environmental policy, acting to address market failures by applying a range of economic instruments, including taxes, spending programmes and voluntary agreements. This section describes the action that the Government is taking to:

[9] *Abandoned Cars – a consultation document*, DTLR and DEFRA, October 2001

- reduce the environmental impact of extracting aggregates;
- promote waste minimisation and more efficient waste management;
- minimise the environmental impact of agriculture, including pesticides use; and
- bring about reductions in water use and improvements in water quality.

Aggregates quarrying

Aggregates levy

7.65 The extraction of aggregates imposes a range of environmental costs, including noise, dust, visual intrusion, loss of amenity and damage to biodiversity. Following extensive consultation with industry, the Government introduced the aggregates levy on 1 April 2002 to incorporate these environmental costs in the price of virgin aggregates. In the light of independent research, the levy was set at a rate of £1.60 per tonne on virgin aggregate commercially exploited in the UK.

7.66 The levy will encourage the use of alternative materials, such as wastes from construction and demolition, that would otherwise be disposed of to landfill. It will also promote greater efficiency in the use of virgin aggregate and the development of alternative materials, such as waste tyres.

7.67 As announced in the November 2001 Pre-Budget Report, **the Government has considered in detail the impact of the aggregates levy in Northern Ireland and has decided to phase in the levy for aggregates used in processed products there**, subject to EU state aids approval. The rate for aggregates used in these products has been set at zero for the first year of the levy, and will rise by 20 percentage points each year for five years. The Government will backdate the first year zero rate for aggregates used in processed products in Northern Ireland once EU state aids approval has been received.

7.68 Revenues raised from the introduction of the levy are recycled to business and communities affected by aggregates extraction through a 0.1 percentage point cut in employer NICs and a new £35 million Sustainability Fund.

Sustainability Fund

7.69 Introduced on 1 April 2002 alongside the levy, the Sustainability Fund in England is concentrating on three areas:

- minimising demand for primary aggregates by promoting greater use of alternatives and supporting more sustainable practices in construction;
- promoting environmentally friendly extraction and transport, including funding projects on cleaner and quieter lorry transport and encouraging the use of rail and water transport; and
- reducing the local effects of aggregate extraction including funding of biodiversity projects and the conservation of geological features.

7.70 The Fund in England will be delivered by public expenditure through existing programmes in order to minimise administration costs and make the most of existing expertise. The devolved administrations are developing their own proposals for the Fund in Scotland, Wales and Northern Ireland. The National Assembly for Wales has just completed its consultation on the use of the Fund in Wales.

Waste

Waste strategy

7.71 Waste Strategy 2000 sets out the Government's vision of sustainable waste management in England. The Strategy sets challenging targets for recycling and composting, recovery of household and municipal waste and reducing the amount of industrial and commercial waste sent to landfill. The Cabinet Office Performance and Innovation Unit (PIU) is currently conducting a review of waste policy in England and is considering the role of different policy measures, including economic instruments, in achieving the Government's waste targets. Separate waste strategies are being developed in Scotland, Wales and Northern Ireland.

Landfill tax

7.72 By making waste producers take account of the environmental costs they impose when they discard waste to landfill, the landfill tax encourages efforts to minimise the amount of waste generated and to develop more sustainable waste management techniques. It makes an important contribution to the Government's waste strategy targets by encouraging diversion of waste away from landfill.

7.73 In line with the Government's Budget 1999 commitment to increase the standard rate of landfill tax by £1 per tonne each year until 2004, the rate was increased from £12 to £13 per tonne with effect from 1 April 2002. The lower rate of tax for inert waste remains at £2 per tonne. The Government anticipates that the rates of landfill tax will need to be increased significantly in the medium term as part of the mix of future policy measures. The Government will take future decisions on landfill tax, and consider the case for a tax on incineration, in the light of the findings of the PIU waste project.

Landfill tax credit scheme

7.74 To ensure that the funds in the landfill tax credit scheme (LTCS) are used to address its priorities, the Government has set an indicative target that 65 per cent of landfill tax credits should be allocated to sustainable waste management projects and that at least one third of these should be used for recycling projects. While the targets have not yet been met, there is evidence that the industry is making progress towards achieving them. Around 53 per cent of LTCS spending commitments entered into between September 2001 and February 2002 have been allocated to sustainable waste management, and around one third of these to recycling.

7.75 The Government is consulting on the future of the LTCS, examining the priorities for funding, the merits of different funding mechanisms, and transitional arrangements if there is any change to the current scheme. The results will be considered in the context of the 2002 Spending Review.

Waste oils

7.76 Waste Strategy 2000 also included a commitment to examine ways of enhancing the competitiveness of regenerated, or recycled, oils. To take this forward, **the Government will be consulting the waste oils industry during 2002 about the tax treatment of waste oil used as a fuel**.

Persistent pollutants

7.77 The Government is undertaking research on the scope for using economic instruments to tackle persistent pollutants. On the basis of this research it will consider the case for introducing measures in this area.

Pesticide use

7.78 The Government is committed to minimising the adverse environmental impact of pesticide use, consistent with adequate crop protection, and believes that a tax on pesticides, in conjunction with other measures, could be a useful tool.

Voluntary package

7.79 A voluntary package of measures to reduce the environmental damage caused by pesticide use was implemented by the industry and other stakeholders in April 2001. The package is intended to run initially for five years nationwide and is overseen by a steering group comprising the signatories to the package and representatives of an equivalent number of environmental organisations, under an independent chairman. While progress has in general been satisfactory, the Government believes that more urgency is required in implementing certain aspects of the package. The Government will continue to monitor progress to ensure that identified areas of weakness are addressed rapidly and that the package is delivering benefits over and above those that would result from a pesticides tax.

Water quality

7.80 There have been significant improvements in water quality in recent years, including in coastal and bathing water. The EU Water Framework Directive requires more attention to be paid to the ecological quality of water, taking account of a wider range of influences. The European Commission is expected to propose new or revised directives over the coming year on bathing water, groundwater, individual priority hazardous substances and sewage sludge. The Department for Environment, Food and Rural Affairs (DEFRA) aims to produce a strategy covering the environmental quality of water by the end of 2002, in order to identify the most important issues in relation to water quality and what these imply for the future direction of policy.

Enhanced capital allowances

7.81 As set out in the 2001 Pre-Budget Report, the Government has considered proposals under the Green Technology Challenge for using tax incentives to encourage more sustainable water use and improvements in water quality. Subject to EU state aids approval, the Government intends to **introduce enhanced capital allowances for investment in designated technologies to minimise water use and improve water quality during 2003**. Work is proceeding to define the most appropriate qualifying technologies.

Nutrient pollution

7.82 Agriculture, like other forms of business, is associated with a range of environmental issues, including nutrient pollution. The Government will review the role that economic instruments, such as taxes, could play in addressing these issues and helping to provide a level playing field for less environmentally harmful forms of farming.

ENVIRONMENTAL APPRAISAL OF POLICY MEASURES

7.83 The Government is committed to appraising the environmental impact of Budget measures and will continue to make available the methodology underpinning the figures presented in the appraisal tables. Table 7.1 shows how Budget measures fit 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 which have a significant effect on the environment or which serve an environmental purpose. In line with its sustainable development policy, the Government 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 producer pay.

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

Policy objective	Sustainable development indicator[1]	Data indicating recent trends	Recent Government measures
Tackling climate change and improving air quality	Emissions of greenhouse gases Days when air pollution is moderate or higher Road traffic	Between 1998 and 1999 emissions of the basket of six greenhouse gases fell by approximately 6 per cent [1, 2] Number of days with moderate or high air pollution increased from 16 in urban sites and 25 in rural sites in 2000 to 21 in urban sites and 29 in rural sites in 2001[1,3] Traffic levels in 2000 were 0.3 per cent higher than in 1999[1, 4]	*Other Government measures* • Climate Change Programme, DETR November 2000 • Emissions Trading Scheme, DEFRA August 2001 • Air Quality Strategy for England, Scotland, Wales and Northern Ireland, DETR January 2000 • Ten Year Plan for Transport, DETR July 2000 • Powering Future Vehicles, DTLR et al, December 2001 *Budget measures* • Climate change levy package • Reduced rate of VAT on the installation of energy saving materials • Road fuel duty • Green Fuel Challenge • Reforms to car, lorry, van and motorcycle VED • Company car tax and fuel scale charge reform, and authorised mileage allowance payments • ECAs for clean cars, and hydrogen and CNG fuel infrastructure • Green travel plans
Regenerating Britain's towns and cities	New homes built on previously developed land	In 2000, 57 per cent of new housing was on previously developed land. This has remained at about the same level since 1995[1]	*Other Government measures* • Urban White Paper, DETR November 2000 • Package of measures to tackle abandoned vehicles *Budget measures* • Capital allowances for flats over shops • Tax relief for cleaning up contaminated land • Stamp duty exemption for disadvantaged areas • Reforms to the VAT treatment of conversion and renovation activity
Protecting Britain's countryside and natural resources	Waste arisings and management Populations of wild birds Chemical river quality	Proportion of domestic waste being recycled was over 10 per cent in 2000, an increase of 2 per cent from two years previously[5] In 2000 bird populations of all native species increased by over 3 per cent compared to the previous year[1] In 2000, 94 per cent of rivers in England, Wales and Northern Ireland were classified as being of good or fair chemical quality, compared to 91 per cent in 1995[1]. In Scotland 98 per cent of rivers were of good or fair chemical quality[6]	*Other Government measures* • Waste Strategy 2000, DETR May 2000 • Rural White Paper, DETR November 2000 *Budget measures* • Aggregates levy and Sustainability Fund • Landfill tax and landfill tax credit scheme

[1] *Achieving a Better Quality of Life, DEFRA January 2002 – latest data from www.sustainable-development.gov.uk*

[2] *The main six greenhouse gases are: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perflourocarbons, sulphur hexaflouride*

[3] *2001 results were slightly poorer than for 2000 (the best year to date), mainly due to the weather*

[4] *After adjustment for the effect of the September 2000 fuel protest, growth is 0.7 per cent*

[5] *Municipal Waste Management Survey, 1999-2000 DETR. The next update for the waste sustainable development indicator will be later in 2002. Currently data is only available for 1997-1998*

[6] *A change in the river classification scheme means previous data for Scotland is not directly comparable to 2000 figures*

Table 7.2: The environmental impacts of Budget measures

Budget measure	Environmental impact[1]
• Climate change levy package	Savings of at least 5 MtC[2] per year by 2010[3,4] *Budget 2002* Freezing the CCL will reduce savings by 0.05 MtC per year, but including other related Budget measures, such as extending ECAs, the overall impact will be to ensure that the CCL package achieves its 5 MtC saving target[5]
• Reduced rate of VAT on the installation of energy-saving materials	Reduction of 0.1 MtC per year by 2010[6] *Budget 2002* Extending the scope of the reduced rate of VAT will lead to further small savings of carbon
• Reduced rate of VAT on domestic fuel and power	Estimated to increase emissions by 0.2 MtC per year by 2010[4]
• Road fuel duty differentials[7]	The shift to ULSP from ordinary unleaded is estimated to have reduced nitrogen oxide emissions by 1 per cent, carbon monoxide emissions by 4 per cent and emissions of volatile organic compounds by 1 per cent per year between 2001 and 2004 The shift to ULSD 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 The reduced rate for biodiesel could save up to 0.2 MtC per year by 2010[8] The road fuel gas differential will result in a reduction in emissions of particulates and nitrogen oxides *Budget 2002* Freezing duty on the main road fuels will increase emissions by 0.1 MtC per year by 2010[6]
• Green Fuel Challenge	Identify fuels which could result in reductions in emissions of carbon dioxide and local air pollutants. Potential waste policy benefits
• Reforms to car, lorry, van and motorcycle VED	Reductions in emissions of carbon dioxide and local air pollutants *Budget 2002* Introducing a new low carbon car VED rate, reforming motorcycle VED and reducing VED for vans meeting the challenging euro-IV emissions standard will lead to further reductions in emissions of carbon dioxide and local air pollutants
• Company car tax reform	Savings of 0.05 to 0.1 MtC in 2002-03. In the long run savings are estimated at between 0.5 and 1 MtC per year[9]
• Fuel scale charge reform	Programme of five-year increase in the fuel scale charge is estimated to have reduced the number of drivers in receipt of free fuel by over 150,000[9]. Expected to reduce carbon dioxide and local air pollutant emissions *Budget 2002* Restructuring 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 reduce emissions of carbon dioxide and local air pollutants
• Authorised mileage allowance payments	Reductions in emissions of carbon dioxide and local air pollutants
• Enhanced capital allowances for clean cars, and hydrogen and CNG fuel infrastructure	Reductions in emissions of carbon dioxide and local air pollutants
• Green travel plans	Reductions in carbon dioxide and local air pollutants *Budget 2002* Further tax exemption to enable employees to benefit from discounted travel in buses subsidised by their employer will increase enviromental benefits
• Air passenger duty (APD)	Reductions in carbon dioxide and local air pollutants *Budget 2002* Freezing the rates of APD and extending the lower rate of duty to European Union applicant countries and to Switzerland will reduce the average air fare and could lead to a small increase in carbon dioxide emissions [6,10]

Budget measure	Environmental impact[1]
• Capital allowances for flats over shops	Reduced pressure on the countryside due to an increase in the number of empty properties brought back into use
• Tax relief for cleaning up contaminated land	Increases in the clean up of contaminated land
• Stamp duty exemption for disadvantaged areas	Regeneration and improved functioning of property markets in Britain's most disadvantaged areas
• Reforms to the VAT treatment of conversion and renovation activity	
• Aggregates levy and Sustainability Fund	Reductions in noise and vibration, dust and other emissions to air, visual intrusion, loss of amenity and damage to wildlife habitats
• Landfill tax and landfill tax credit scheme	Encourages waste producers and the waste management industry to switch away from landfill towards waste minimisation, re-use and recycling

[1] *These estimates are subject to a wide margin of error*

[2] *Million tonnes of carbon*

[3] *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 5MtC 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 emissions trading scheme, is forecast to save 1.1 MtC per year by 2006*

[4] *Based on the DTI energy model*

[5] *The other related Budget measures are: exemptions from the CCL for electricity produced by coal mine methane and combined heat and power, an exemption for cetain secondary production processes, and the new enhanced capital allowances for energy saving technologies*

[6] *HM Customs and Excise modelling*

[7] *Using NETCEN emissions models – further detail on the methodology used is provided in NETCEN's January 2000 report UK Road Transport Emissions Projections. Between 1997 and 1999, the fuel duty escalator is forecast to have reduced emissions by 1 to 2.5 MtC per year by 2010. The reductions in fuel duty in Budget 2001 are estimated to have increased emissions by between 0.1 and 0.2 MtC per year by 2010*

[8] *DTLR modelling*

[9] *Based on Inland Revenue modelling*

[10] *Substitution effects from the APD measures which are difficult to model could have a small positive or negative impact and could mean overall carbon impact is neutral*