7 PROTECTING THE ENVIRONMENT

Sustainable development is vital to ensure a better quality of life for everyone, today and for generations to come. Economic growth and social progress must be balanced with action to protect and improve the environment. The Government is using a range of economic instruments to address the many challenges posed by sustainable development, tackling local environmental threats and controlling and reducing emissions of the gases responsible for climate change and poor air quality. The Pre-Budget Report describes the steps the Government is now taking to protect and improve the environment, including:

- **publishing details of its strategy for using economic instruments** to tackle environmental problems;
- **further action to improve waste management**, by:
  - consulting on a revenue neutral proposal to **increase the landfill tax escalator** to £3 per tonne in 2005–06 and to increase the rate of tax by at least £3 per tonne in future years, on the way to a medium- to long-term rate of £35 per tonne; and
  - **reforming the Landfill Tax Credit Scheme** to ensure that funds more effectively promote sustainable waste management, while continuing to support local community environmental projects.
- **consulting on a new proposal to allow local authorities to retain increases in business rates revenue** to spend on their own priorities;
- **a new tax incentive to encourage donations towards the running costs of Urban Regeneration Companies**;
- **further steps to promote cleaner fuels**, including through a new low rate of duty on bioethanol;
- **announcing the next steps towards introducing a lorry road-user charge** to ensure that all lorry operators contribute to the cost of using UK roads, regardless of nationality;
- discussing with stakeholders the role of **economic instruments in encouraging the aviation industry to take greater account of its environmental impact**; and
- **consulting further on the use of economic instruments** both to promote household energy efficiency and to address the environmental impacts of agriculture.

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. The Government is determined to meet the challenges of climate change, poor air quality and environmental degradation in urban and rural areas, ensuring that economic and social development goes hand in hand with progress on the environment.

A strategy for environmental taxes

7.2 The Government believes that, in general, markets provide the best means of allocating an economy's resources in the private sector. This is as true for environmental resources as for others. However, where markets do not price environmental costs properly, economic instruments such as environmental taxes or measures such as tradeable permits can be used to improve the price signals that are given, recognising the dynamic and long term nature of responses within markets.

7.3 Taxes and other economic instruments can provide incentives for behaviour that protects or improves the environment. For both consumers and businesses, these instruments can enable environmental goals to be achieved at the lowest costs and in the most efficient way. By internalising environmental costs into prices, they help to signal the structural economic changes needed to move to a more sustainable economy. They can also encourage innovation and the development of new technologies.

7.4 The Government has discussed its approach to environmental taxation with a range of stakeholders. Following these discussions, it is now setting out in detail its strategy in *Tax and the environment: using economic instruments*, published alongside this Pre-Budget Report. The strategy reaffirms the Government's commitment to its Statement of Intent on environmental taxation, first published in 1997.

7.5 *Tax and the environment* describes how economic analysis provides a framework to help determine how best to reconcile the factors which influence decisions on environmental intervention, taking into account the long time horizons which may be involved. It illustrates how economic tools should be used to appraise the costs and benefits of actions, and to identify the most efficient methods of intervention.

7.6 The strategy also provides a framework for the development and implementation of environmental economic instruments. Key features include:

- the importance of early and extensive consultation;
- early signals of the choice of instrument and then details of the tax rate or other measure, to provide sufficient lead times for households and businesses to plan changes and make the necessary investment; and
- exploring revenue neutral packages to reduce excessive impacts on business competitiveness and specific groups, as well as supporting new technologies to reinforce the behavioural change.

7.7 The correction of environmental market failures reflects the Government's wider strategy for improving the UK's productivity performance, described in Chapter 3. The removal of environmental market failures will help to ensure that the productivity of natural resources is maximised alongside the productivity of the other inputs used in production processes.

7.8 This chapter explains how the Government is using economic instruments to meet four broad environmental objectives:

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

TACKLING CLIMATE CHANGE AND IMPROVING AIR QUALITY

Tackling climate change

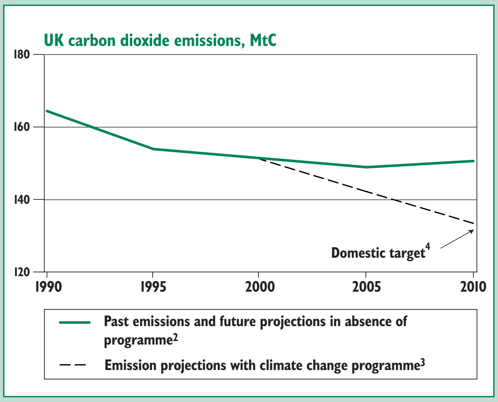
7.9 There is strong evidence that global temperatures are rising. The 1990s included seven of the ten warmest years on record, and sea levels are rising by 1.5 millimetres a year[1]. The problems of climate change are felt across society and cause harm to the natural environment. Those most severely affected are often the least well equipped to deal with the consequences. The Government is therefore taking important steps to address this challenge, controlling and reducing emissions of the gases responsible for global warming.

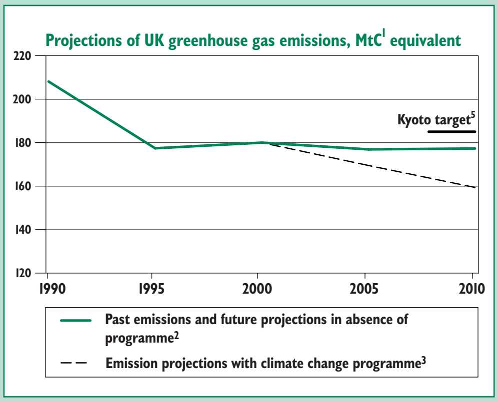
7.10 The Kyoto Protocol commits the UK to reducing greenhouse gas emissions to 12.5 per cent below 1990 levels between 2008 and 2012. Along with other members of the European Union, the Government ratified the Protocol on 31 May 2002. The Government's climate change programme is designed to take the UK well beyond its Kyoto target and towards the Government's own, more demanding, goal of a 20 per cent reduction in carbon dioxide emissions by 2010.

7.11 UK carbon dioxide emissions increased in 2000 and 2001, and provisional data based on the first six months of 2002 suggest that a further increase is likely this year. This reflects some reduction in nuclear output, lower gas burn because of current higher prices, and a levelling out of improvements in the energy intensity of the economy. Road transport emissions remained flat in 2001. The Government nonetheless remains confident that the Climate Change Programme provides an effective framework of action to deliver the UK's commitments, and the forthcoming Energy White Paper will set out the role of the energy system in delivering reductions in carbon dioxide emissions, along with other issues..

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.

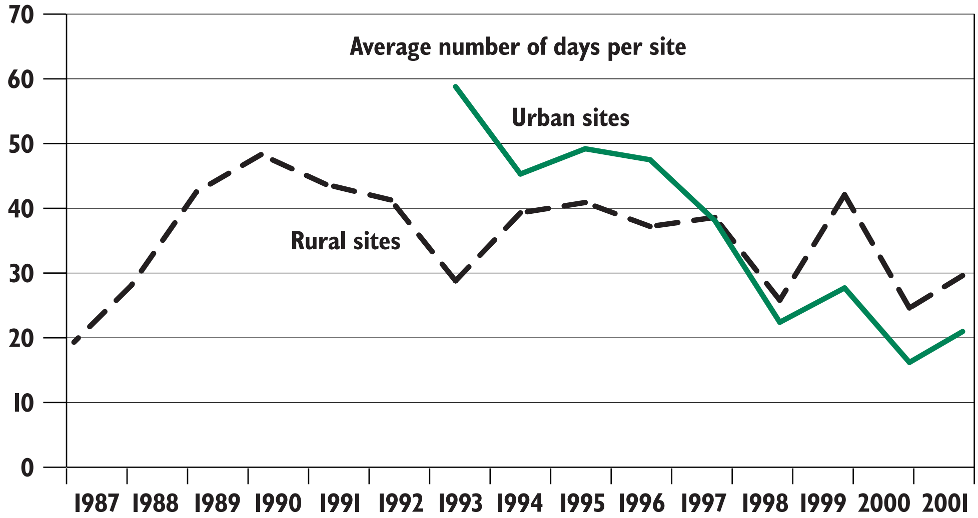
Source: The UK's Third National Communication to the United Nations Framework Convention on Climate Change, DEFRA, 30 October 2001

[1] *UK climate change programme*, DETR, 2000.

Improving air quality

7.12 Poor air quality poses risks to human health, quality of life and the natural environment. 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 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 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.*
Source: NETCEN, DEFRA.

Business

Climate change levy

7.13 The climate change levy (CCL) and its associated measures encourage business to improve energy-efficiency and reduce emissions of carbon dioxide, the principal greenhouse gas. 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).

7.14 The package of measures associated with the CCL includes exemptions for new forms of renewable energy, 80 per cent discounts for eligible sectors that have negotiated agreements to increase energy efficiency and reduce emissions, and support to help all businesses use energy more efficiently. In addition, Budget 2002 announced that **the Government intends to exempt from the levy electricity generated from combined heat and power plants sold via licensed electricity suppliers and that generated from coal mine methane**, in view of the environmental benefits of these forms of generation. The exemptions are subject to EU state aids approval.

7.15 Budget 2002 also announced that the Government would consider options for extending relief to certain processes which compete with those benefiting from the dual-use or non-fuel use exemptions. This relief was introduced by extra-statutory concession in July 2002.

The Carbon Trust and energy efficiency

7.16 The Carbon Trust, an independent company funded principally from recycled CCL revenues and the existing Energy Efficiency Best Practice programme, works to support energy-efficiency improvements and investment in low-carbon technologies by business. The programme includes:

- the Action Energy programme, which provides business with independent information to help save energy 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 flexible support to encourage the development of new low-carbon technologies. The Trust has recently launched the foundation part of this programme.

Investment in energy-saving technologies

7.17 Enhanced capital allowances for investments in approved energy-saving technologies were introduced in 2001 and currently cover over 2,500 approved products. To build on this success, Budget 2002 added a number of new technologies to the ECA scheme, including heat pumps for space heating, radiant and warm air heaters, solar thermal systems, compressed air equipment and refrigeration cabinets and compressors. The existing technology class for boilers and add-ons was also expanded to include oil-fired boilers. The new Energy Technology List took effect from 5 August 2002 and spending incurred since then on these technologies and products can qualify for enhanced 100 per cent first-year allowances. The addition of these groups will be worth £15 million during their first full financial year, 2003–04.

7.18 The Government has also expanded the ECA scheme so that spending incurred from 17 April 2002 on qualifying equipment for leasing may qualify for the allowances, provided that capital allowances would be available under the normal rules for plant and machinery leasing. The Government continues to consider new technologies for inclusion within the scheme.

Emissions trading

7.19 Trading under the UK Emissions Trading Scheme (ETS), the world's first economy-wide greenhouse gas emissions trading scheme, has made an encouraging start. In the first stage of the scheme, 34 direct participants committed to a total reduction of 1.1 million tonnes of carbon (MtC) a year by 2006 in return for an incentive worth £150 million after tax. The UK ETS has been successful in establishing for the first time a market price for carbon – an important signal of companies' abatement costs and an aid to the future development of cost-effective policies for the reduction of greenhouse gas emissions, both in the UK and internationally.

7.20 Participation in the scheme is expanding. Companies with CCL negotiated agreements can now use the scheme to trade allowances in order to meet their emissions reduction targets at the lowest possible cost and secure re-certification for 80 per cent CCL discounts. From this autumn they are also able to sell any over-achievement of their targets into the trading scheme. A majority of the 44 sectors with agreements are expected to take advantage of the flexibility this offers. A third entry route to the ETS, in which organisations will be able to generate emissions allowances from specific emission reduction projects, is currently under development.

Renewable energy

7.21 The Government is committed to ensuring that 10 per cent of electricity is supplied from renewable sources by 2010, subject to the cost to consumers being acceptable. Direct support for renewable energy, worth over £260 million, will be provided between 2001 and 2004. Most forms of renewable energy are also exempt from the CCL.

7.22 The Renewables Obligation for England and Wales and the comparable Scottish Obligation came into effect on 1 April 2002. The Obligations require electricity suppliers to supply 3 per cent of their output 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 is forecast to rise to 10.4 per cent of all licensed electricity sales by 2010-11, by which time the market incentive provided is expected to be worth over £750 million per year. Consultation on similar arrangements for Northern Ireland is under way.

Households

7.23 Encouraging greater energy-efficiency in the home is key to reducing fuel poverty and carbon emissions. Government programmes, including the Energy Efficiency Commitment and the Affordable Warmth Programme, are encouraging and assisting domestic consumers to reduce their energy consumption, ensuring that households contribute to efforts to meet the UK's emissions targets.

VAT on energy-saving materials

7.24 Budget 2002 introduced further measures to promote energy-efficiency in the home, extending the reduced 5 per cent rate of VAT 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 those on lower incomes. The extended coverage came into effect on 1 June 2002.

Economic instruments

7.25 The Government has also consulted on the potential for using economic instruments to improve household energy efficiency[2]. Once responses to the consultation have been fully considered, **the Government will consult further on specific measures to promote greater energy efficiency by households**.

Transport

7.26 In recent decades rising economic activity and increased incomes have generated a higher demand for personal travel and the transport of goods and services. A safe, clean and efficient transport system is crucial to sustaining economic growth, generating higher productivity and safeguarding the environment. The Government is pursuing three related objectives to address these issues:

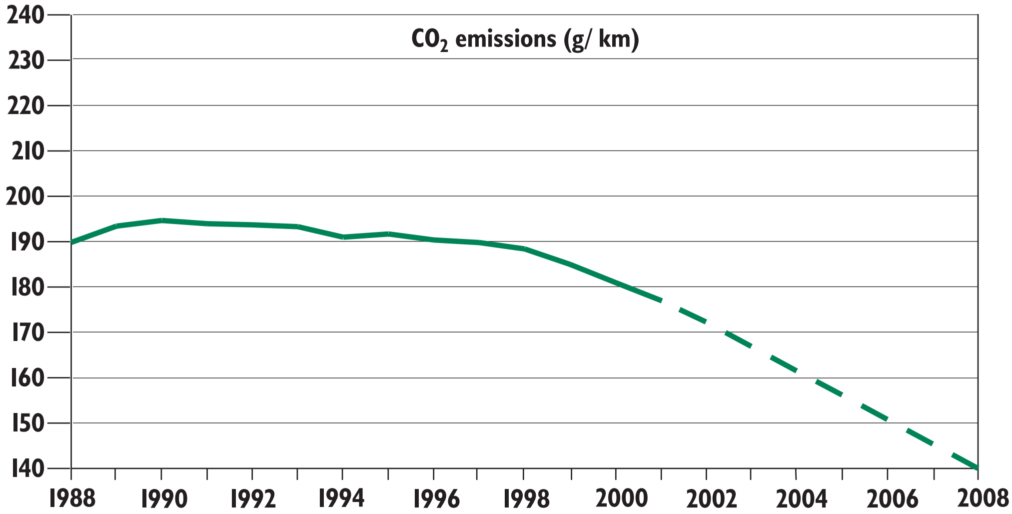
- in the long term, to assist the switch to a low-carbon economy, including zero emissions transport;
- over the medium term, to establish incentives for greener transport; and
- in the short term, to encourage the use of the best widely available fuels and vehicles.

7.27 Important steps have already been taken to advance these objectives, including new duty incentives and other tax reforms to promote the use of cleaner fuels and vehicles. Chart 7.2 illustrates how carbon dioxide emissions from new cars have fallen in recent years and are expected to fall further by 2008 in the light of the voluntary agreement between the European Community and car manufacturers. Box 7.2 describes the Government's longer term strategy to facilitate the introduction and take-up of low-carbon vehicles and fuels[3].

[2] *Economic instruments to improve household energy efficiency: a consultation document,* HM Treasury and the Department for the Environment, Food and Rural Affairs (DEFRA), July 2002.

[3] *Powering future vehicles – the Government strategy*, the Department for Transport, the Department of Trade and Industry, DEFRA and HM Treasury, July 2002.

Chart 7.2: Carbon dioxide emissions from new cars



Source: Data from 1995 to 2001 is based on DVLA monitoring. Data prior to 1995 is estimated from average new car fuel consumption figures. The petrol average new car fuel consumption data is from Transport Statistics Great Britain. An equivalent diesel figure was calculated for 1994 at 22 per cent better than petrol fuel consumption. This figure was used for all previous years in this chart, in the absence of other data. Data from 2001-2008 is a linear progression.

Box 7.2: Powering future vehicles: a strategy for low-carbon transport

The Government is committed to providing a fiscal regime that encourages the use of cleaner fuels and vehicles. The July 2002 strategy document, *Powering Future Vehicles*, sets out the Government's proposals to make the UK a world leader in the global move to clean, low-carbon transport. The Government's objectives are:

- **to promote the development, introduction and take-up of new vehicle technologies and fuels; and**
- **to ensure the full involvement of the UK automotive industry in these new technologies.**

The strategy sets stretching new targets for cleaner road transport by 2012, including that 10 per cent of all new cars sold will have carbon dioxide emissions not exceeding 100 grammes/kilometre (g/km) at the tailpipe, and that 600 or more buses coming into operation each year will be low-carbon. The strategy also describes the actions the Government will take to achieve these targets, including:

- **further work to promote the research, development and demonstration of new technologies;**
- **efforts to encourage consumer take-up of low-carbon vehicles and to overcome existing market barriers;**
- **steps to ensure effective regulation of the industry;**
- **measures to facilitate infrastructure development;**
- **steps to allow transport to play a part in the UK emissions trading scheme; and**
- **work and collaboration with international partners on these issues.**

Fuel duties and cleaner fuels

7.28 Differential rates of duty can help to encourage the rapid use of more environmentally-friendly fuels and have stimulated the development of new technologies to improve the environmental performance of road vehicles. Duty incentives introduced by the Government have already encouraged industry to convert unleaded and diesel sales for road vehicles to ultra-low sulphur petrol (ULSP) and ultra-low sulphur diesel (ULSD), leading to important reductions in the impact of motoring on local air quality.

Sulphur-free fuels

7.29 Sulphur-free fuels offer further environmental benefits over ultra-low sulphur fuels, delivering greater long-term reductions in carbon dioxide emissions when used in new engine technologies, and further air quality improvements. The Government is aware, however, that there is a risk of a net increase in carbon dioxide emissions in the short term if this fuel is introduced too early. The Government will therefore discuss with the oil industry and vehicle manufacturers the role of a duty incentive for sulphur-free fuels, taking into account the industries' medium-term investment plans, the environmental benefits of these fuels, and relevant discussions at an EU level.

Biodiesel

7.30 A new duty rate for biodiesel, set at 20 pence per litre below the ULSD rate, was introduced in July 2002, to support the production of this fuel and allow the UK to benefit from the reduced greenhouse gas emissions it can offer. Biodiesel is now establishing a market across the country; more than 300,000 litres were sold in October – a five-fold increase in sales since the introduction of the duty incentive – and it is expected that biodiesel will be available at over 80 fuel retailers by the end of the year.

Bioethanol

7.31 In April 2002, the Government invited bids for fuel duty reductions or exemptions to support research and development into a range of alternative fuels. All the qualifying bids covered bioethanol. In the light of new environmental data and new research[4], **the Government intends to introduce a new duty rate for bioethanol set at 20 pence per litre below the prevailing ULSP duty rate**. The Government will discuss with stakeholders when to introduce this incentive with a view to announcing decisions in Budget 2003. This differential will offset the additional production costs of bioethanol and allow the UK to benefit from the reduction in greenhouse gases and local polluting effects that this fuel can offer. While the new duty rate will apply to bioethanol produced from any feedstock, the Government is particularly keen to support the development of bioethanol from ligno-cellulosic feedstocks, such as straw or forestry residues, as this looks likely to offer particular environmental advantages. Production of ligno-cellulosic bioethanol is at a comparatively early stage of development, and the Government will therefore consider how best to give it further support.

Road fuel gases

7.32 Road fuel gases can offer important reductions in particulates and nitrogen oxide emissions compared with conventional fuels. Following progressive duty reductions, liquefied petroleum gas is now supplied at over 1,100 forecourts, and a number of haulage operators are using lorries fuelled by natural gas. The Government is committed not to increase the duty on road fuel gases in real terms until 2004 at the earliest. As part of the Green Technology Challenge, Budget 2002 introduced 100 per cent first-year capital allowances for investments in natural gas refuelling infrastructure.

Hydrogen

7.33 Hydrogen has the potential to lead to zero-emissions transport and most experts predict that it will be an important fuel for the future. As announced in Budget 2002, subject to the outcome of a Green Fuel Challenge pilot project, **the Government intends to exempt hydrogen from fuel duty for a limited period in the future** to encourage further development and early take-up. **The Government will discuss with stakeholders the issues raised by the taxation of hydrogen fuel production for road transport** to ensure that the necessary analysis

[4] See for example *Energy and greenhouse gas balance of biofuels for Europe – An update*, CONCAWE, April 2002; *Well-to-wheel analysis of energy use and the greenhouse gas emissions of advanced fuel/vehicle systems – A European study*, L-B-Systemtechnik Consultancy, September 2002; and *Ethanol emissions testing*, AEA Technology, March 2002.

is in place to implement the exemption and to make decisions about the fiscal framework in the future. Budget 2002 also introduced 100 per cent first-year capital allowances for investments in hydrogen refuelling infrastructure. Next year, three hydrogen fuel cell buses will be deployed in London for a trial period and **the Government intends to support this project by exempting the fuel used from fuel duty under the Green Fuel Challenge.**

Pilot projects for alternative fuels

7.34 In addition to those for hydrogen fuel cell buses, Budget 2002 announced that **the Government is also introducing fuel duty exemptions for two further pilot projects involving the capture, compression and use of landfill gas in vehicles and the testing of methanol in vehicles and in refuelling infrastructure**. These projects are expected to begin later in the year.

VED for cars

7.35 Since 1997, the Government has progressively reformed vehicle excise duty (VED) to provide incentives for motorists to choose more environmentally-friendly vehicles and to continue the shift towards taxing usage rather than ownership. From March 2001, VED for newly registered cars has been based on carbon dioxide emissions and fuel type. To increase incentives to use cleaner cars, Budget 2002 froze VED rates for cars and introduced a new low-carbon band offering a £30 discount for cars with emissions not exceeding 120 grammes per kilometre (g/km). Motorists are now able to save up to £100 of VED each year by choosing the most efficient and least polluting cars. To help consumers understand the environmental impact of the car they intend to purchase, the Government has consulted on proposals for a comparative, colour-coded labelling scheme and is piloting two different formats of comparative car label, based on the current VED bands and the EU A-G banded energy label.

VED for vans

7.36 Following discussions with industry and other stakeholders, **Budget 2002 announced the introduction of a new lower VED rate of £105 from March 2003 for vans meeting the challenging euro-IV environmental standard.** These vans offer 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.

VED for motorcycles

7.37 Following consultation, Budget 2002 introduced a reformed motorcycle VED system to reflect developments in the motorcycle fleet and the environmental benefits that motorcycles can offer. As a result of these reforms, 600,000 motorcyclists are now paying lower rates of VED.

E-licensing

7.38 The Government intends to introduce e-licensing and telephone licensing by 2005, enabling vehicle keepers to pay their VED over the internet or the telephone. The Government will begin to roll-out e-licensing for cars and vans less than two years old in November 2003. It will continue to ensure that valid insurance and roadworthiness certification remains in place through electronic links with insurance and MoT databases. Existing counter services through Post Offices and DVLA Local Offices will also remain in place.

Company car tax

7.39 Companies purchase approximately 50 per cent of all new cars sold in the UK and about 20 per cent of all vehicle miles are made in company cars. To promote the use of cleaner company vehicles, a new system of company car taxation was introduced in April 2002. The new system is based on carbon dioxide emissions to encourage company car drivers to switch to more efficient cars that are less harmful to the environment. A comprehensive evaluation system is underway to establish the environmental impact of these reforms. Independent surveys suggest that the reforms are already leading to environmental improvements in company cars.

Business tax incentives for low-carbon cars

7.40 To complement the new company car tax system and low-carbon VED band, the Government has introduced 100 per cent first-year capital allowances for the purchase of business cars with carbon dioxide emissions not exceeding 120g/km. These allowances provide further support to the market for cleaner, more efficient cars.

Fuel scale charges

7.41 As announced in Budget 2002, **the Government will restructure from 2003-04 the fuel scale charge that applies to employees who receive free fuel for private use in a company car.** In future, the charge will be related to carbon dioxide emissions and will include the same discounts for cleaner fuels and premiums as the company car tax system. This restructuring will be revenue-neutral and will make the system more environmentally-friendly. It will also allow a proportionate reduction in the annual charge if an employee receiving free fuel decides to opt out during the course of the year.

Company vans

7.42 Budget 2002 also announced that the Government would review the tax treatment of the private use of vans provided by employers, taking into account environmental benefits, fairness and modern working practices. The Government will discuss with industry and other key stakeholders how best to achieve this, with a view to launching a formal consultation next year. The Government will consult in particular on how to simplify the legislation for shared vans and on the scope for encouraging environmentally-friendly vans.

Lorry road-user charging

7.43 The Government recognises the important role that road haulage plays in a successful and high-productivity economy and is committed to supporting action by the haulage industry to become more competitive and less environmentally damaging. It believes that all lorry operators using UK roads should make a fair contribution towards the costs they impose, irrespective of nationality.

7.44 As announced in Budget 2002, **the Government intends to introduce a lorry road-user charge based on distance travelled in 2005 or 2006.** The Government has consulted widely on options for introducing a charge[5] and published a first progress report in April 2002[6]. It remains committed to ensuring that the UK haulage industry does not pay any more as a result of the introduction of the new charge and will introduce offsetting tax reductions for the industry. The Government is now establishing a Road Haulage Forum sub-group, including representatives of the haulage associations and other key stakeholders, to discuss work related to the charge and to take it forward. It is also undertaking a joint government-industry visit to review German plans to introduce similar reforms.

7.45 **The Government will publish a second progress report early next year,** outlining the results of work on how to implement and procure the lorry road-user charge and offsetting tax cuts.

Box 7.3: Reforming the taxation of the haulage industry

Work to introduce a distance-based lorry road-user charge alongside offsetting tax reductions for the industry is being taken forward in three key areas:

- **the Government is examining in detail the technical options for administering the charge and offsetting tax reductions, and options for procuring the system. This work is at an advanced stage and will be outlined in detail in the forthcoming second progress report. The Government hopes to issue Invitations to Tender in 2003;**
- **the Government is seeking to improve its ability to analyse the potential impact of different charging rates and criteria by commissioning new, more detailed statistics and by upgrading its modelling ability for these reforms; and**
- **the Government is pursuing European legislative reforms to secure the optimal legislative framework.**

This work programme was discussed at a special seminar in April 2002 and at a meeting of the Road Haulage Forum. The Government continues to seek stakeholders' views on the best way forward.

[5] *Modernising the taxation of the haulage industry: a consultation document*, HM Treasury, November 2001.

[6] *Modernising the taxation of the haulage industry: progress report one*, HM Treasury, HM Customs and Excise and the Department for Transport, Local Government and the Regions, April 2002.

Review of bus subsidies

7.46 The Government is currently undertaking a review of bus subsidies, to ensure that funds are used effectively to improve services and to help meet the Government's transport, environmental and social objectives. The review is focusing on the Bus Service Operators' Grant and other mechanisms of bus subsidy. It will not lead to a reduction in the overall level of Government support for bus transport. The Government has consulted[7] on options for reform and is currently considering the responses received.

Aviation

7.47 The Government recognises both the important economic benefits that aviation offers and the need to ensure that the industry faces an appropriate set of economic incentives to deliver an efficient environmental outcome. Following the Budget announcement on the role of economic instruments to encourage the aviation industry to take more account of its environmental impact, and this year's wide-ranging consultation on the future development of air transport, **the Government will discuss with stakeholders the most effective economic instruments for ensuring that the industry is encouraged to take account of, and where appropriate reduce, its contribution to global warming, local air and noise pollution.** The Government will set out its plans in its Air Transport White Paper next year.

IMPROVING WASTE MANAGEMENT

Waste strategy

7.48 Effective management of waste is an essential component of an environmentally-sustainable economy. The waste stream contains resources which can be re-used or recycled to deliver economic value. Waste also has important impacts on environmental issues such as climate change and the local environment. The UK can no longer continue to rely on cheap landfill as a simple means of disposing of waste. Some progress has been made in recent years to increase recycling, but the overall volume of municipal waste continues to grow. Further action is therefore needed to stimulate changes in waste management practice across all sectors of the economy.

7.49 The Strategy Unit is today publishing a report to the Government, following its review of waste policy[8]. The Strategy Unit report sets out the case for reducing volumes of waste. It proposes a package of measures to promote sustainable waste management, stressing the need to promote recycling and develop alternatives to landfill as the primary means of waste disposal. The report also identifies the need for a robust delivery strategy and more effective structures to support implementation of waste policy. This Pre-Budget Report sets out the first step in the Government's response, and shows how the tax system will be used to help achieve the changes in behaviour that are required.

Landfill tax

7.50 The landfill tax, currently set at £13 per tonne for active waste, 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.

7.51 The current landfill tax escalator, introduced in 1999, commits the Government to raise the standard rate of tax for active waste by £1 per tonne each year until 2004-05, by which time it will have reached a rate of £15 per tonne. As announced in Budget 2002, there is a strong case for increasing the tax rate significantly in future years to provide incentives for the development of alternatives to landfill and to reduce the volume of waste disposed in this way. **The Government will therefore consult on a revenue neutral proposal to increase the landfill tax escalator to £3 per tonne in 2005-06 and to increase the rate of tax by at least £3 per tonne in future years, on the way to a medium- to long-term rate of £35 per tonne.**

[7] *Review of bus subsidies: a consultation paper,* Department for Transport, August 2002.

[8] *Waste not, want not*, Cabinet Office Strategy Unit, November 2002.

The Government's intention is that increases will be introduced in a way that is revenue neutral to business as a whole. The Government will consult with stakeholders on options for the package, including the recycling of revenue, before making its decisions.

Landfill Tax Credit Scheme

7.52 The Government recognises that the Landfill Tax Credit Scheme (LTCS) has supported many worthwhile community and environment projects that have improved the quality of the environment at the local level. The Government has reviewed the role of the scheme in consultation with key stakeholders. The scheme has also been successful in generating local community involvement in such projects. However, there is less evidence that the LTCS has delivered a step change towards more sustainable waste management, and it has also been criticised for its administrative complexity and for failing to deliver value for money for the tax which is forgone. Recent changes have improved the administration of the scheme, but will not deliver the strategic and coherent approach to waste management which is needed.

7.53 **The Government has therefore decided to reform the LTCS from 1 April 2003**. The level of funding for the replacement schemes will be capped at the value of the tax which would have been forgone in 2002–03 if all the available tax credits had been claimed by landfill operators. Approximately one third of the funding, around £47 million, will continue to be made available through a reformed tax credit scheme for spending on local community environmental projects, ensuring that the current level of support for these types of projects is maintained. The remainder, £100 million in 2003–04 rising to £110 million in 2004-05 and 2005-06, will be allocated to public spending to encourage sustainable waste management. The design of the public spending programme will be determined following further work on the management of waste policy. The Devolved Administrations will be responsible for these programmes in their regions.

7.54 Tax credits which have already been claimed by landfill operators, or which may be claimed until March 2003, will need to be spent under the existing LTCS arrangements. This will ensure that projects which have been allocated tax credit funding will continue to benefit until such time as they are completed.

7.55 In the light of LTCS reform, the Government will announce its final decisions on sustainable waste management spending, and on the administration of the tax credit scheme for local community environmental projects, over the coming months. Reducing the rate of growth of waste volumes and increasing recycling through national kerbside recycling schemes and secondary market development will be priorities for additional investment.

7.56 Consistent with the Government's approach to improving the delivery of public services, additional resources must be accompanied by reform and based on a cost-effective delivery strategy. The Government has identified three priority steps to take waste policy forward. First it will consider all the Strategy Unit's recommendations, and, with the close involvement of the Delivery Unit, agree the robust delivery mechanism necessary to deliver waste minimisation and higher recycling rates. Second, it will consider options for recycling revenue in order to the gain the greatest impact on waste minimisation and recycling, for decisions in Budget 2003. Third, since partnership with local government is critical to successful delivery, it will ensure that mechanisms are developed in line with the Government's objective to deliver more freedom and flexibility to local service providers. To coordinate activities across government, the Economic Secretary to the Treasury will chair a ministerial group, to report in Budget 2003, involving the Department of Environment, Food and Rural Affairs (DEFRA), the Office of the Deputy Prime Minister (ODPM) and the Department of Trade and Industry.

Waste incineration tax **7.57** Budget 2002 announced that the Government would consider the case for an economic instrument for incineration. There are a range of issues associated with developing an effective waste management and disposal mix. The Government will therefore commission a review of the environmental and health effects of all waste management and disposal options. The case for using economic instruments for incineration will be considered in light of this work, and in consultation with other stakeholders. The Government will also consider how the use of economic instruments can be extended to provide a more comprehensive and coherent framework for waste management.

Waste reduction **7.58** It will also be important to minimise the volume of waste produced. This will require significant changes in household behaviour as well as action by the manufacturing and service sectors and by waste disposal authorities. The Government has ruled out the introduction of a national tax on household waste. In keeping with the freedoms and flexibilities agenda endorsed by the Local Government Association, the Strategy Unit has proposed that local authorities should be able to develop innovative waste minimisation solutions, provided that adequate recycling facilities are available.

Waste oils **7.59** Waste Strategy 2000 included a commitment to examine ways of enhancing the competitiveness of regenerated, or recycled, oils. The Government has reviewed the tax treatment of waste oil used as a fuel and has decided not to proceed with consultation on this option. Instead, it believes that other options for stimulating regeneration in waste oil may be more effective.

REGENERATING BRITAIN'S TOWNS AND CITIES

7.60 Physical, economic and social deprivation continue to affect many of Britain's urban areas. Towns and cities need to provide an attractive physical environment if they are to encourage enterprise and employment, attract investment, foster strong communities and deter unsustainable development in the countryside. The Government is therefore taking active steps to promote regeneration:

- economically, by promoting enterprise and investment in deprived areas through the Regional Development Agencies (RDAs) and Local Strategic Partnerships (LSPs), and the 2,000 Enterprise Areas and other measures described in Chapter 3;
- socially, through increased investment to ensure higher standards of public service delivery in the poorest neighbourhoods; and
- physically, through a range of measures to bring land and property into use and to improve the attractiveness of public space described in this section.

Urban policy **7.61** 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. The measures include a 150 per cent accelerated tax credit for the costs of cleaning up contaminated land, 100 per cent first-year capital allowances for creating flats for letting over shops and other commercial premises, and targeted VAT reductions to encourage the renovation and conversion of existing residential properties.

7.62 The Government has also exempted from stamp duty all property transactions up to £150,000 in the 2000 most deprived areas of the UK, and intends to **exempt all commercial property transactions in these areas from stamp duty**, irrespective of value. The Government is now actively seeking EU state aids clearance for this measure.

Urban Regeneration Companies

7.63 Urban Regeneration Companies are independent companies that engage the private sector alongside public sector partners such as local authorities, RDAs and English Partnerships in order to develop and implement regeneration strategies in urban areas. The Government has consulted on the possibility of giving tax relief on companies' donations to URCs and now **intends to introduce a new tax incentive to encourage donations toward the running costs of URCs,** helping them to play an effective role in stimulating regeneration and enterprise in many of Britain's urban areas. Regeneration encouraged by the URCs within the 2000 Enterprise Areas will also benefit from the range of Government support available in these areas, as described in Chapter 3.

Public spaces

7.64 Safe, clean and attractive local environments matter greatly to people and can help to achieve other key policy objectives, including crime reduction, healthier communities, social inclusion and increased economic well-being.

7.65 A cross-cutting review on improving public spaces was held as part of the 2002 Spending Review. The review found that better targeted mainstream funding was the key to sustainable improvements. A cross-government report[9] was published in October 2002 describing the steps now being taken to improve the quality of local environments, building on the significant increases in investment in mainstream public services allocated in the 2002 Spending Review. These steps include:

- consultation on the powers, rights and responsibilities of local authorities and others in relation to the maintenance of the local environment[10];
- a new expanded role for the Commission for Architecture and the Built Environment (CABE) with a new CABE unit to advise Government on the provision and maintenance of parks and green spaces; and
- development of a new measurement methodology to help local authorities report on levels of local environmental cleanliness in their area.

Business Improvement Districts

7.66 Partnership between business and local authorities has an important role to play in fostering urban and community regeneration. Business Improvement Districts (BIDs) will enable local authorities and business communities to work together on specific schemes, subject to local ratepayers agreeing to a levy to fund the BID. They will contribute to the safety, cleanliness and attractiveness of streets and public spaces and encourage development and growth within urban areas. Provision to introduce BIDs is included in the draft Local Government Bill, published in June 2002. ODPM is currently preparing guidance on how to implement BIDs in consultation with business and local authority groups.

Regeneration and growth incentives for local government

7.67 BIDs are a key part of the Government's approach to developing the new partnerships necessary at the local level to foster regeneration and create dynamic local economies. However, the Government believes that there is more to do to deliver a new regional economic policy that exploits the indigenous strengths in each region and city and provides the necessary flexibility and resources to allow powerful regional and local initiatives to work.

[9] *Living places: cleaner, safer, greener*, Office of the Deputy Prime Minister, October 2002.
[10] *Living places: powers, rights and responsibilities,* DEFRA, October 2002.

7.68 The Government therefore intends to explore ways in which it could build on the local government reforms outlined in Chapter 6 by **allowing local authorities to retain some or all of any additional increases in business rates revenue to spend on their own priorities**. The aim would be to provide incentives to local government to promote economic growth and regeneration, while at the same time generating additional resources to address local priorities. This is consistent with the Government's approach to localism that is also reflected in the wider review of the balance of funding for local authorities announced in the December 2001 local government white paper, *Strong local leadership – quality public services*.

7.69 Under any proposals, the additional revenue raised would come from increases in the tax base generated by local authorities successfully encouraging growth, and not from increasing the tax on existing business. The money raised would be genuinely additional to local authorities and they would be free to decide how to spend it, in line with the policy to minimise ring-fenced grants. The Government will set out proposals for consultation during 2003.

Abandoned vehicles

7.70 Abandoned vehicles are a blight on Britain's towns and cities. The Finance Act 2002 includes outline powers to reform the vehicle registration system to ensure that owners of all vehicles can be traced and that effective sanctions exist for motorists who evade their tax obligations, abandon their vehicles or commit other offences. The Government has now established a working group involving key stakeholders from the police, motoring organisations, the motor industry and others, to discuss how to implement these powers in the most effective manner.

PROTECTING BRITAIN'S COUNTRYSIDE AND NATURAL RESOURCES

7.71 The Rural White Paper, published in November 2000, sets out the Government's approach to delivering a countryside that is sustainable – economically, socially and environmentally. In tackling environmental threats to the countryside, the Government is applying the principles which underpin its wider environmental strategy, addressing market failures through a range of economic instruments. This section describes the action that the Government is taking to:

- reduce the environmental impact of aggregates extraction;
- minimise the environmental impact of agriculture;
- reduce water use and improve water quality; and
- support Britain's rural economy and communities.

Aggregates quarrying

Aggregates levy

7.72 The extraction of aggregates imposes a range of environmental costs, including noise, dust, visual intrusion, loss of amenity and damage to biodiversity. The aggregates levy, introduced in April 2002, incorporates these environmental costs into the price of virgin aggregate and encourages the use of alternative materials, such as wastes from construction and demolition, that would otherwise be disposed of to landfill. It also promotes greater efficiency in the use of virgin aggregate and the development of alternative materials, such as waste tyres. The levy was set at a rate of £1.60 per tonne on virgin aggregate commercially exploited in the UK.

7.73 Following EU state aids approval, the Government is phasing in the levy for aggregates used in processed products in Northern Ireland in view of the special circumstances of this sector. 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.

7.74 As announced in the November 2001 Pre-Budget Report, the Government has examined industry proposals for delivering additional environmental benefits through the aggregates levy by encouraging the positive use of aggregates waste. Following informal discussion with industry, the Government will shortly consult formally in order to gather further information on the issues involved.

Sustainability Fund

7.75 To help businesses and communities affected by the extraction of aggregates, the introduction of the aggregates levy was accompanied by a new Aggregates Levy Sustainability Fund (ALSF), as well as a 0.1 percentage point reduction in employer national insurance contributions. The ALSF in England was launched in April 2002 and is seeking to reduce the environmental damage caused by extraction in three ways:

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

7.76 The ALSF will run initially for two years, with £29.3 million available each year in England. The devolved administrations are currently developing their own proposals for use of the Fund in their regions. The National Assembly for Wales has recently consulted on use of the Fund in Wales.

Agriculture

7.77 Agriculture, like many other forms of business, is associated with a range of environmental issues, including nutrient pollution. As announced in Budget 2002, the Government has carried out an initial review of the environmental impacts of agriculture and the case for using economic instruments to tackle these. The findings of this review will be published with the Government's forthcoming Sustainable Farming and Food Strategy. **The Government is now considering in more detail the options for using economic instruments to address the most pressing environmental impacts of agriculture and will consult with stakeholders in 2003.**

Pesticides

7.78 The Government is committed to minimising the adverse environmental impact of pesticide use, consistent with adequate crop protection. A voluntary agreement on measures to reduce the environmental damage caused by pesticides was entered into by the industry and other stakeholders in April 2001. Provided this voluntary initiative is fully implemented, the Government believes it should be the most effective way of reducing the environmental impacts of pesticides and remains committed to this approach.

7.79 Implementation of the voluntary initiative has been generally satisfactory. Good progress has been made in assessing the current approach of farmers to the use of pesticides and in the production of good practice guidance. However, more progress is required in certain areas. In particular, targets and measures of success for the initiative have not yet been finalised between DEFRA and the industry, and incentives for encouraging farmer participation are not sufficiently advanced. The Government values the work already completed by the signatories and will continue to press for more rapid progress. However, the Government is carrying out further work and analysis on a possible tax or other economic instrument, should the voluntary initiative fail to deliver its objectives within a reasonable timescale.

Persistent pollutants

7.80 The Government has researched the use of economic instruments to tackle persistent pollutants[11]. Following discussions with the Chemicals Stakeholder Forum, it now intends to work with the industry to develop a voluntary agreement to address the impact of nonylphenols. The Government will consider the option of using economic instruments should a voluntary approach prove unsuccessful.

Water quality

7.81 While there have been significant improvements in water quality in recent years, the EU water framework directive requires more attention to be paid to the ecological quality of water. The Government is working to implement the directive and published recently for consultation details of its priorities for water policy over the longer term[12]. The Government's strategy takes into account the economic, social and environmental issues involved in water policy and seeks to ensure better integration with other policies. The European Commission is expected make legislative proposals in the near future on bathing water, groundwater, priority hazardous substances and sewage sludge.

Enhanced capital allowances

7.82 The Government has considered proposals received under the Green Technology Challenge for using tax incentives to encourage more sustainable water use and improvements in water quality. As announced in Budget 2002, subject to EU state aids approval, **the Government intends to introduce enhanced capital allowances for investment in specific technologies in 2003.** A short-list of technologies has now been established and work is continuing to determine which are most appropriate to support through tax incentives.

Supporting Britain's rural economy and rural communities

7.83 The Government is committed to improving the quality of life of people in rural areas. While many rural areas are prosperous, the economic performance of certain areas and sectors continues to lag, and some groups and communities continue to experience difficulties accessing key services. The 2002 Spending Review therefore set a new Public Service Agreement target to reduce the gap in productivity between the least well performing quartile of rural areas and the English median, and to achieve measurable improvements in the accessibility of key services to rural people.

[11] *Scope for the use of economic instruments for selected persistent pollutants*, RPA for DEFRA, 2002.

[12] *Directing the flow: priorities for future water policy*, DEFRA, November 2002.

Rural enterprise and productivity

7.84 To help achieve this target, the Spending Review allocated an additional £15 million to support work by the RDAs to encourage rural enterprise and business growth, increasing the overall size of the RDAs rural development budget to £50 million by 2005–06. This is in addition to existing support provided through the £100 million market town regeneration programme; the extension of mandatory 50 per cent business rates relief to qualifying small village shops, pubs and petrol stations; the Farm Diversification Scheme for small-scale non-agricultural enterprises on farms; and the regeneration activities of the England Rural Development Programme and European Structural Funds, which have budgets of £1.6 billion and £130 million respectively for the period 2000 to 2006.

Rural communities and services

7.85 The Government is determined to ensure that people living in the countryside have access to high quality public services. A revised Rural Service Standard, published in August 2002, sets out the Government's objectives to ensure that key public services meet the needs of rural people. The significant increases in funding for health and education announced in the 2002 Spending Review will contribute to achieving these objectives. Progress has already been made in a number of important areas:

- increased funds have been made available to help resource sharing, administrative support and the adoption of new technologies, including the £80 million a year Small Schools Fund. Only five rural schools have closed since 2000;
- by 2004, 100 new primary care mobile units and 5,000 intermediate care beds will be available in rural areas. NHS Direct is also now available throughout England offering major benefits to people living in rural areas;
- the Housing Corporation has exceeded its targets for approving affordable homes in small rural settlements in each of the last two years, and programmes such as the Rural Exception and restrictions on right to buy in rural areas are helping to ensure the availability of affordable housing in rural areas;
- £239 million has been allocated for new and improved rural transport services, while the Rural Bus Challenge has supported 1,900 new or improved bus routes in England since 1998; and
- the new rural police fund has injected an extra £30 million into rural policing in 2001–02 and 2002–03.

Second and long-term empty homes

7.86 The Government intends to give local authorities the flexibility to reduce to a minimum of 10 per cent the current 50 per cent council tax discount on second homes. Authorities will also have the power to remove or reduce the 50 per cent discount on long-term empty homes. Provisions putting the measures into effect are contained in the Local Government Finance Bill.

Sustainable farming and food

7.87 The forthcoming Sustainable Farming and Food Strategy sets out the Government's vision for the future of these industries alongside proposals to help realise this vision. The 2002 Spending Review allocated £500 million over three years to implement the strategy, including pilots of an entry-level agri-environment scheme, a new network of demonstration farms, and new structures to encourage cooperation in agriculture and the dissemination of research results. These measures will help to deliver productivity increases in the farming industry and improve environmental performance. The Government has recently consulted on reforms to corporation tax with the aim of reducing distortions and unnecessary complexity, and a major exercise to modernise stamp duty is also underway. In taking forward these proposals, the Government will take into account the need to minimise distortions that create barriers to innovation and diversification in the rural economy, and the recommendations of the Policy Commission on Food and Farming[13].

[13] *Farming and food: a sustainable future*, DEFRA, 2002.

Box 7.4: Forestry and sustainable development

Following a review of the administrative arrangements of the Forestry Commission post-devolution, DEFRA and the Treasury have commissioned a review into the economic rationale underpinning the Government's policy goals for forestry in England and the role of forestry in the Government's sustainable development strategy. A particular issue is whether it is appropriate for the role of provider of incentives, regulator and commercial operator to be located within a single organisation. The findings of the review will help to ensure that Government intervention in forestry is both streamlined and based on use of the most appropriate tools. The terms of reference for the review have been agreed by the Treasury, DEFRA and the Forestry Commission, and include:

- **to carry out an examination of the economic rationale which underpins the Government's forestry policy goals in England, to include a critique of the England Forestry Strategy;**
- **to consider the role of forestry in the Government's strategies for sustainable development in England and internationally; and**
- **in the light of findings which emerge from the examination, to make recommendations on the most appropriate organisational structure for delivery of this role in the context of the wider review of environmental and rural delivery arrangements across DEFRA and its agents, to establish how they can be rationalised and how the quality of delivery could be improved.**

The relevant economic analysis will be carried out shortly. DEFRA are commissioning an independent company to undertake this work and initial results are expected in February.

ENVIRONMENTAL APPRAISAL OF POLICY MEASURES

7.88 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 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 which have a significant effect on the environment or which serve an environmental purpose. 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.

7.89 As part of its commitment to transparency and public reporting of key performance indicators, the Government will separately publish the appraisal tables on the Treasury website. The tables will be updated based on information from monitoring of indicators and evaluation of specific schemes.

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 1999 and 2000 emissions of the basket of six greenhouse gases showed no significant changes. Since 1990 they have fallen by 13 per cent[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 30 in rural sites in 2001[3] Traffic levels in 2001 were 1.2 per cent higher than in 2000[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, DfT et al, July 2002 *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 • 100 per cent first-year allowances for cars with low carbon dioxide emissions, and hydrogen and natural gas refuelling infrastructure • Green travel plans – using tax incentives to promote their development
Improving waste management	Waste arisings and management	Proportion of household waste being recycled was over 11 per cent in 2000–01, an increase of 1 per cent over the previous year[5]	*Other Government measures* • Waste Strategy 2000, DETR May 2000 *Budget measures* • Landfill tax and landfill tax credit scheme
Regenerating Britain's towns and cities	New homes built on previously developed land	In 2001, 61 per cent of new housing was on previously developed land, increasing from around 54 per cent in the early 1990s	*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	Populations of wild birds Chemical river quality	In 2000 the decline in farmland birds – halving since 1977 – continued to level off. Woodland birds increased to their highest level since 1990[1] In 2001, 95 per cent of rivers in the UK were of good or fair chemical quality, little change from 2000[5]	*Other Government measures* • Rural White Paper, DETR November 2000 *Budget measures* • Aggregates levy and Sustainability Fund

[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 and foot and mouth disease in 2001, growth is still 1.2 per cent.*

[5] *Municipal Waste Management Survey, 2000-01, DEFRA. As the headline waste sustainable development indicator has not yet been updated this currently relates to the core indicator on household waste.*

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].
• Reduced rate of VAT on the installation of energy-saving materials	Reduction of 0.1 MtC per year by 2010[5].
• 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[6]	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[6]. The road fuel gas differential will result in a reduction in emissions of particulates and nitrogen oxides.
• 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.
• 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[8].
• 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[8]. Expected to reduce carbon dioxide and local air pollutant emissions. 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.
• 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.
• Green travel plans	Reductions in emissions of carbon dioxide and local air pollutants.
• Air passenger duty (APD)	Reductions in emissions of carbon dioxide and local air pollutants.

Table 7.2: The environmental impacts of Budget measures (continued)

Budget measure	Environmental impact[1]
• Capital allowances for flats over shops	Bringing empty space over shops back into the residential markets, helping to create greater urban diversity while reducing the pressure for new greenfield development.
• 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	Reduced pressure on greenfield site development due to the better use of existing buildings.
• 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] *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.*

[6] *DfT modelling.*

[7] *Based on Inland Revenue modelling.*