

The Government is committed to improving the quality of life for everyone by ensuring that growth occurs in a sustainable way, balancing economic, social and environmental considerations. The Pre-Budget Report set out the challenges the Government faces in tackling climate change and improving air quality, regenerating Britain's towns and cities and protecting the countryside. Budget 2001 implements and delivers further reforms in environmental policy to build on the achievements to date.

**To help tackle climate change and improve air quality:**

- introducing the climate change levy package from 1 April 2001;
- an emissions trading scheme;
- **Green Fuel Challenge to promote cleaner fuels;**
- a new **Green Technology Challenge to further promote cleaner technologies;**
- tax incentives for businesses to promote greener modes of travel; and
- fuel duty differentials to promote use of cleaner and alternative fuels.

**To help regenerate Britain's towns and cities:**

- a stamp duty exemption for all property transactions in Britain's most disadvantaged areas;
- a cut in VAT to 5 per cent to encourage renovation and conversion of existing property;
- 100 per cent capital allowances for creating flats over shops; and
- 150 per cent accelerated tax credits to help clean-up contaminated land.

**To help protect Britain's countryside:**

- the introduction of the aggregates levy and the associated Sustainability Fund from April 2002;
- acceptance of voluntary proposals from industry to reduce the environmental impact of pesticides use; and
- a pre-announced annual increase in landfill tax to £12 per tonne, and plans to consult on future reform of the landfill tax credit scheme while challenging industry to allocate more tax credits towards sustainable waste management.

## THE IMPORTANCE OF PROTECTING THE ENVIRONMENT

**6.1** The Government is committed to sustainable development. Economic and social progress should be achieved while protecting and, where possible, enhancing the environment. Society needs to make more productive use of existing natural resources by engaging in more environmentally friendly practices and investing and developing new and renewable technologies. This will help to achieve a better quality of life today and for generations to come.

**6.2** The quality of the environment affects everyone's quality of life, directly through – for example – the air and water they consume, and also through longer-term influences such as climate change.

### Climate change

**6.3** Global temperatures are rising. The 1990s are likely to have been the warmest decade of the past 1,000 years. A recent report from the Intergovernmental Panel on Climate Change (IPCC) has suggested that, during the 21st century, global temperatures could rise by as much

as 5.8 degrees Celsius. This is almost double the IPCC's 1995 estimate. Climate change will affect the world in unpredictable and potentially extreme ways.

**6.4** Emerging evidence suggests that severe weather events are becoming more frequent and that the situation is likely to get worse. Increases in temperature, drought, flooding and rising sea levels will affect people's health and way of life and will, in particular, threaten coastal communities. The floods experienced in recent months have highlighted how vulnerable Britain is to severe weather events.

### Air quality

**6.5** Poor air quality poses risks to human health, quality of life and the natural environment. But air quality in the UK is improving. The underlying downward trend in the number of days of poor air quality in urban areas continued in 2000 with, on average, 17 days of moderate or worse air pollution, the lowest figure since the series began in 1993. Rural areas suffered moderate or worse air pollution for 25 days on average, compared with 48 days in 1999. Pollution in rural areas is mainly caused by ozone, which varies with weather conditions and pollutants blown from mainland Europe. But although the overall picture is improving, more still needs to be done. Short-term air pollution episodes are associated with 12,000 to 24,000 premature deaths and 14,000 to 24,000 hospital admissions and re-admissions for respiratory and cardiovascular problems each year. Emerging evidence suggests that the health effects of exposure to long-term pollution are significantly greater.

### Pressures on the environment in towns and cities

**6.6** The Government wants to tackle the urban decline experienced in many towns and cities. In England, alone:

- 58,000 hectares of brownfield land are either vacant, derelict or available for redevelopment – and this amount is growing;
- over 750,000 homes are empty – with approximately a third being vacant for at least a year;
- 1.3 million properties in urban areas are unfit for human habitation; and
- there is a substantial amount of empty or under-used commercial property with potential for conversion to mixed uses, including housing.

**6.7** Failure to make the most of land and buildings in urban areas affects the quality of the environment and continues to create pressure for greenfield development. There were some 20 million households in England in 1996. This is projected to grow by 3.8 million by 2021. This challenge is further exacerbated by the growing problem of low demand for housing in particular areas. Yet recent research by Heriot-Watt University<sup>1</sup> estimated that around 47,000 homes in the social rented sector and 375,000 homes in the private rented sector are in low-demand or unpopular neighbourhoods. Making the most of these resources and improving the quality of the urban environment will help to reduce the exodus of population from some towns and cities.

### Pressures on the rural environment

**6.8** The demands of an increasingly affluent population for new housing and infrastructure have inevitably put pressure on the rural environment. Recent changes in Government policy – particularly in respect of planning guidance and the Government's target of 60 per cent of additional housing to be built on previously developed land – are succeeding in refocusing the priorities of the developer and increasing the re-use of land.

<sup>1</sup>Law Demand Housing and Unpopular Neighbourhoods, DETR June 2000.

**6.9** Industry and commerce in England and Wales alone produce around 80 million tonnes of waste each year. Households produce a further 28 million tonnes. Disposing of this waste, particularly through heavy reliance on landfill, places further pressure on scarce land in the countryside. The decomposition of biodegradable waste also releases methane, a powerful greenhouse gas.

**6.10** The extraction of aggregates, the vast majority of which takes place in quarries in the countryside damages biodiversity, causes noise and creates dust and visual intrusion.

**6.11** Modern agricultural methods including the use of pesticides are associated with significant negative environmental impacts on biodiversity and water quality. For example, the number of farmland birds declined by 36 per cent between 1970 and 1998 and the number of wildlife species has also been declining, particularly since the 1970s.

## THE GOVERNMENT'S STRATEGY

**6.12** The Government has put in place a clear strategic framework for tackling these threats to the environment and the quality of life. This strategy rests on four main pillars:

- identifying problems and risks;
- setting objectives and targets where appropriate;
- appraising, selecting, consulting and implementing the most appropriate set of policy instruments (such as taxes, charges, permit trading, regulation, public spending or voluntary agreements) for the circumstances; and
- evaluating the success of policies, modifying them where appropriate and applying experience from one area of policy to another.

**6.13** The Pre-Budget Report set out this strategy in more detail. Tables 6.1 and 6.2 at the end of this chapter list the measures which have or are being put in place by the Government to meet each of its key environmental objectives and assess their environmental impacts. Budget 2001 represents the next step in implementing this strategy.

**6.14** The Government's strategic framework for delivering its environmental objectives is set out under the following themes:

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

## TACKLING CLIMATE CHANGE AND IMPROVING AIR QUALITY

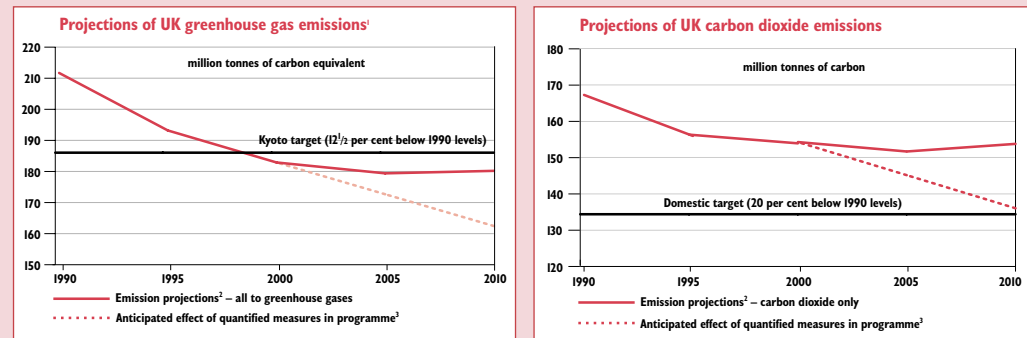
### Climate change targets

**6.15** The UK climate change programme<sup>2</sup> contains a package of policies and measures to reduce greenhouse gas emissions across all sectors of the economy. Together these measures will cut the UK's greenhouse gas emissions by 23 per cent below 1990 levels by 2010, comfortably beyond the UK's legally binding Kyoto target of 12.5 per cent reductions. On the same basis carbon dioxide emissions will fall to 19 per cent below 1990 levels by 2010, representing significant progress towards the more demanding domestic goal of 20 per cent reduction set by the Government. Box 6.1 illustrates the UK's emissions projections and targets.

<sup>2</sup>Climate Change: The UK Programme DETR November 2000.

**Box 6.1: Emission projections and targets**

The charts below show the projected effect in 2010 of all the quantifiable measures set out in the UK climate change programme. These estimates exclude other non-quantifiable measures, such as public awareness campaigns, that will reduce emissions further so that the UK's carbon dioxide emissions should reach 20 per cent below 1990 levels by 2010.



<sup>1</sup> The six greenhouse gases are carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulphur hexafluoride.

<sup>2</sup> Includes the effects of the renewables obligation, the climate change levy (including the exemptions for CHP and renewable energy), and the fuel duty escalator.

<sup>3</sup> Assumes that emissions would reduce linearly between 2000 and 2010. Includes the predicted effect in 2010 of all the quantifiable measures set out in the UK climate change programme.

**6.16** The Government recognises that far greater cuts in greenhouse gas emissions will be needed globally to avoid dangerous climate change. It believes that longer-term targets should be set internationally, recognising that climate change is a global problem requiring global solutions, but the climate change programme also begins to put in place policies that will be needed over this longer period.

**Air quality targets 6.17** The Air Quality Strategy for England, Scotland, Wales and Northern Ireland published last year set health-based air quality objectives for eight key air pollutants – benzene, 1,3-butadiene, carbon monoxide, lead, nitrogen dioxide, ozone, particles and sulphur dioxide to be achieved between 2003 and 2008. The Government is currently reviewing the objective for particles with the intention of consulting on proposals for a new, more stringent objective at the end of June 2001. This will take full account of the emerging evidence which suggests that long-term exposure to particle air pollution can have a significant effect on health. At the same time the Government intends to consult on proposals for a new objective for polyaromatic hydrocarbons.

**6.18** All sectors of the economy need to play a part in tackling climate change and air quality. The Government has put in place a range of policies to generate improvements across the UK. These include policies relating to business, households and transport.

**Business**

**Climate change levy 6.19** The climate change levy (CCL) is designed to encourage the non-domestic sector to become more energy-efficient and so reduce carbon emissions. The levy and its associated measures have a key role in the UK climate change programme, making significant contributions to the targets set under both the Kyoto Protocol and the targets set for the UK by the Government. The levy package as a whole is expected to save at least 5 million tonnes of carbon (MtC) a year by 2010.

**6.20** The climate change levy will come into effect on 1 April 2001 and will apply to non-domestic use of energy. All revenues will be recycled back to business through a 0.3 percentage point cut in employers' national insurance contributions and additional support for energy-efficiency measures and energy-saving technologies. The products subject to the levy are electricity, gas, liquified petroleum gas (LPG) and solid fuels, at the following rates:

Electricity	0.43 pence per kWh
Gas	0.15 pence per kWh
LPG	0.96 pence per kg (equivalent to 0.07 pence per kWh)
Solid fuels	1.17 pence per kg (equivalent to 0.15 pence per kWh)

**6.21** To avoid increasing fuel poverty and to encourage a more sustainable transport system the levy will not apply to energy used by the domestic sector and public transport. There will also be an exemption from the levy for energy generated from 'new' forms of renewable sources such as wind and solar power, and electricity produced in 'good quality' combined heat and power (CHP) plants.

**The negotiated agreements** **6.22** To protect the competitiveness of UK industry, the Government has recognised the need for special consideration of energy-intensive industries exposed to international competition. An 80 per cent discount on the rate of the levy is available to energy-intensive sectors that agree challenging targets with Government to increase energy-efficiency and reduce emissions.

**6.23** Targets have now been agreed with 44 sectors eligible for CCL negotiated agreements. These challenging targets will deliver reductions in emissions of at least 2.5 MtC a year by 2010 – equivalent to about 50 per cent of all emissions reductions resulting from the levy package. Sector level agreements have been signed with 29 sectors including steel, chemicals, paper and cement, and are rapidly being concluded with the others. Applications from over 7,000 prospective participant companies or sites have already been received and these are being processed so that applicants will benefit from the lower rates when the levy is introduced.

**Improving energy efficiency** **6.24** Independent research<sup>3</sup> shows that an average business can save 15 to 20 per cent of its energy costs through greater energy-efficiency. The Government has put in place an integrated package of measures to help businesses use energy more effectively – so reducing their liability for CCL and protecting the environment. These measures include providing energy-efficiency advice and encouraging investment in energy-saving technologies described below.

**6.25** The Carbon Trust will come into operation on 1 April 2001 and will be headed by Ian McAllister, Chairman of Ford UK. Initially the Trust will concentrate on short-term measures in support of saving energy, including providing energy-efficiency advice to business. However the remit of the Trust is wide ranging and also looks longer-term towards helping the UK move to a low carbon economy. Over three years, £100 million of the CCL revenues will be directed to the Carbon Trust, in addition to funding for the Energy Efficiency Best Practice Programme.

**Investment in energy-saving technologies** **6.26** The Government is directly helping business to reduce energy by providing 100 per cent first year capital allowances for investments in designated energy-saving technologies. Eight technology categories are eligible: motors; refrigeration; lighting; boilers and add-ons; variable speed drives; thermal screens; pipe insulation; and good quality CHP. Investments will qualify from publication of the Energy Technology List. Details of the scheme and the full list of eligible products and technologies will be published by 1 April 2001.<sup>4</sup> The list will be

<sup>3</sup> Source: ETSU, based on surveys and audits across industry.

<sup>4</sup> The Energy Technology List will be available at [www.eca.gov.uk](http://www.eca.gov.uk) or via the Environment and Energy Helpline on 0800 585794.

revisited annually to enable further technologies to be added if they are proven to provide cost effective improvements and satisfactory methods of certification. The Carbon Trust will work with interested parties to advise Government to ensure that the list reflects the most effective products and technologies.

**6.27** Businesses that invest in these low carbon technologies will obtain significant cash flow benefits because they will receive tax relief for their investment much earlier than would otherwise be the case. The exact cost of the scheme will depend on take-up but is estimated at around £70m in 2001–02, rising to £130 million in 2002–03. The enhanced capital allowances will encourage business to invest in energy-saving technologies which can help reduce their energy costs, reduce their CCL payments, and benefit the environment.

**Renewable energy** **6.28** The Government has set an ambitious target for 10 per cent of the UK's electricity to be supplied from renewable sources by 2010, subject to the costs to consumers being acceptable. This is a significant challenge. By the end of 1999, renewable energy sources represented only 2.8 per cent of the total electricity generated in the UK. The 10 per cent target represents sales of around £1 billion a year, requiring investment of £3 billion or more in electricity generation.

**6.29** The CCL exemptions for new forms of renewable electricity will provide extra encouragement to generators of renewable energy. This is additional to the capital grant funding of some £100 million over the next three years arising from the 2000 Spending Review and support from the New Opportunities Fund, as well as the Renewables Obligation currently being finalised by the Department of Trade and Industry, which will require electricity suppliers to secure a specified proportion of electricity from renewable generators. To further develop this market the Government has also announced **a new £100 million fund that will be used to promote environmental technologies, including additional support for renewables, such as off-shore wind, energy crops and solar power.**

**Green Technology Challenge** **6.30** The Government recognises that many environmental improvements by business require investment, and it has introduced enhanced first-year capital allowances (as described above) to encourage investment in certain energy-saving technologies and products. It believes that there is a case for extending the availability of such allowances to achieving certain other environmental objectives and other technologies. These proposals will need to represent good value-for-money, be properly targeted on achieving appropriate objectives, and be designed in such a way as to continue to encourage investment in the best available technologies. **The Government therefore proposes to consult, during the summer, on setting up a Green Technology Challenge (GTC), with the intention of offering enhanced first-year capital allowances for further environmental objectives and new technologies.** The GTC will also be designed to complement the steps being taken as a result of the Green Fuels Challenge, described below.

**Emissions trading** **6.31** The Government sees a key role for emissions trading as part of the long-term solution to reducing greenhouse gas emissions and is committed to developing a successful emissions trading scheme. The Government believes that an early start will secure important advantages to business, the financial services sector, and to Government. Entry to the trading scheme will be open to any entity responsible for emissions in the UK. In addition, companies in CCL negotiated agreements will be able to use emissions trading as a way of reducing the costs of meeting their negotiated agreement targets.

**6.32** The Government welcomes the considerable effort of businesses involved in the Emissions Trading Group (ETG), and respondents to the consultation document on the rules of the scheme which was published alongside the Pre-Budget Report.<sup>5</sup> The responses to the consultation are currently being considered. The Government will shortly set out rules for the scheme, which will see companies adopting binding emissions targets from next year. The Government will continue working with the ETG over the coming months to ensure that the progress so far is translated into a successful operating scheme that can be launched in spring 2001.

**6.33** In order to encourage as wide a participation in the scheme as possible and, to maximise the environmental benefits, the 2000 Spending Review announced that £30 million would be available in 2003–04 to provide a financial incentive for firms to join. The Government will ensure that this incentive is worth the equivalent of £30 million after corporation tax.

### Households

**6.34** Encouraging greater energy-efficiency in the home is key to reducing fuel poverty and carbon emissions. The Government's draft Fuel Poverty Strategy published on 23 February 2001 sets out the role of improving energy-efficiency in ending fuel poverty and reducing carbon emissions. A number of measures have been introduced to ensure that households play their part in meeting the UK's emission targets while protecting the most vulnerable in society.

#### VAT on energy-saving materials

**6.35** Budget 2000 reduced the rate of VAT from 17.5 per cent to 5 per cent on the installation of specific energy-saving materials (insulation, draught stripping, hot water and central heating system controls and solar panels). It also introduced a 5 per cent reduced rate of VAT for the grant-funded installation of new central heating systems and their maintenance and repair, and heating appliances (for example, electric storage heaters and gas fired boilers) in the homes of the less well off. For programmes such as the Home Energy Efficiency Scheme (HEES) in England, which provides central heating systems for low-income, older and other vulnerable householders at risk of ill-health from cold homes it is estimated to have benefited some 20,000 households.

#### Capital allowances for Affordable Warmth

**6.36** To underpin the Government's Affordable Warmth Programme (AWP) Budget 2000 introduced capital allowances to support the installation of leased heating systems for homes occupied by people on low incomes. The AWP will facilitate the introduction of new, energy efficient central heating systems in up to 1 million homes by 2005. Households will benefit from warmer homes, more efficient heating and lower fuel bills, and will contribute towards reducing greenhouse gas emissions.

### Transport

**6.37** Increased economic activity and growing incomes have generated higher demand for personal travel and the transportation of goods. Between 1968 and 1998, passenger and freight travel almost doubled. A safe, clean, convenient and efficient transport system is crucial to sustaining economic growth and promoting social inclusion, while safeguarding the environment. Box 6.2 identifies the programmes that the Government has put in place to tackle the problems of congestion, pollution, and social exclusion caused by excessive use of transport. The Government has introduced a number of measures, and is taking further steps in Budget 2001 to ensure that all sectors of the economy, including motorists, companies and hauliers play their part in delivering such a sustainable transport system.

<sup>5</sup> A Greenhouse Gas Emissions Trading Scheme for the United Kingdom, Consultation Document, DETR, November 2000.

**Box 6.2: Sustainable Transport**

The Government's Ten Year Plan for Transport is a long-term investment plan to modernise the transport system, tackle congestion, pollution and social exclusion. It is estimated to reduce emissions by 1.6 MtC by 2010. All modes of transport will benefit from an estimated £180 billion of public and private funding over the next 10 years – a 75 per cent increase in real terms on the previous 10 years.

**Public transport:**

- providing investment to support a 50 per cent expansion in rail passengers and 80 per cent in rail freight, and existing rail franchises will be re-let by the Strategic Rail Authority to facilitate public and private investment in 6,000 new carriages and trains, plus modernising and upgrading the rail network;
- a step change in provision for Local Transport Plans, providing funding for new light rail lines, improved bus services, up to 100 new park and ride services, and a new urban bus challenge fund; and
- a further £30 million a year for the Rural Bus Subsidy Grant to support services into market towns and extending the Rural Bus Challenge supporting a wide range of flexible community transport projects tailored to the needs of local people.

**Road network:**

- targeted increases in the capacity of the strategic road network with better network management to reduce delays and improve reliability, with sufficient funding for 30 bypasses and widening some 5 per cent of the network; and
- around 200 major local road improvements, including over 70 bypasses, as part of local transport plans, for safer and cleaner town centres.

**Cleaner technologies:**

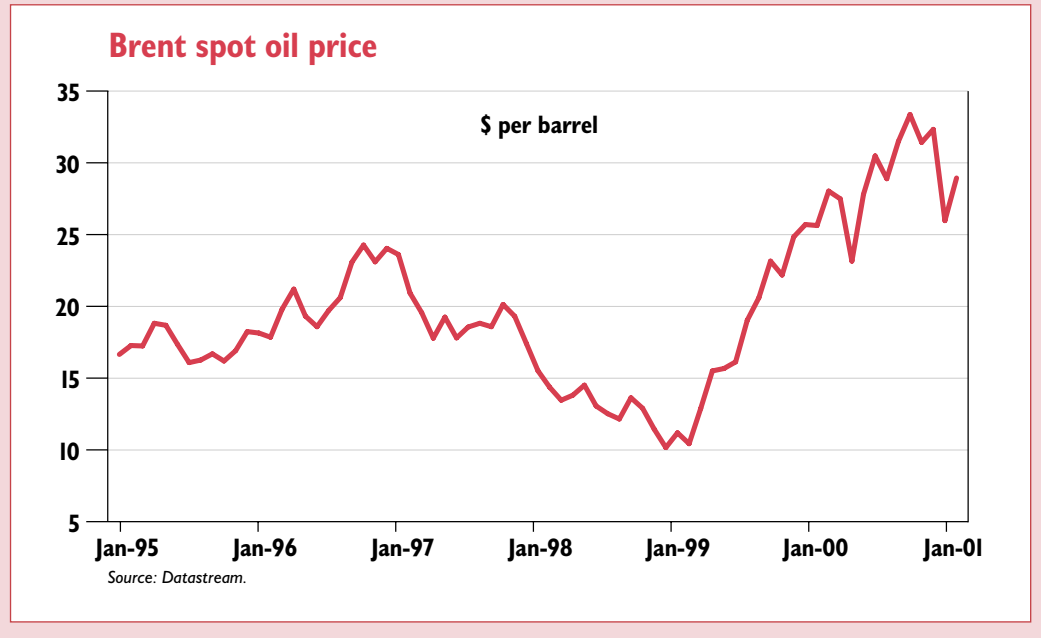
- by 2003–04 more than doubling annual spending on cleaner vehicle initiatives. Two such initiatives are Clean Up – a programme to tackle urban pollution from urban vehicles to help meet local air quality objectives – and Power Shift – to support the introduction of cleaner road transport fuels such as gas and electricity. Additional support will also be given to encourage the early introduction of technologies such as fuel cell and hybrid vehicles.

**Motorists 6.38** Motorists can contribute to protecting the environment by using cleaner fuels, cleaner technologies and more efficient cars. Measures announced in Budget 2001 will reduce the tax on motorists by an equivalent of 4 pence per litre on petrol duty while also helping to improve local air quality.

**Fuel duties 6.39** Fuel duties have played an important role in helping the UK meet its Kyoto target for reductions in greenhouse gas emissions. Taking this and the introduction of other measures for addressing climate change into account, along with recent oil prices, as announced in the Pre-Budget Report **Budget 2001 freezes duties on petrol, diesel, other road fuels and non-road fuel oils (such as red diesel) in cash terms.** This reduces duty in real terms by around 1 pence per litre.

**Box 6.3: oil prices**

Increases in oil prices in recent months have enabled the Government to introduce carefully targeted reductions in fuel duty while continuing to work towards protecting the environment, consistent with economic and social objectives.



**Ultra-low sulphur fuels 6.40** Duty differentials play an important role in encouraging the rapid use of more environmentally friendly fuels and have stimulated the development of new technology to reduce pollution.

**ULSP 6.41** Ultra-low sulphur petrol (ULSP) offers environmental benefits over ordinary unleaded petrol when used in modern cars fitted with three-way catalytic converters. Research suggests that it can lead to a reduction in emissions of nitrogen oxides of up to 6 per cent, carbon monoxide of around 11 per cent and hydrocarbon emissions of up to 14 per cent. Further reductions are expected from new petrol cars meeting Euro III/IV standards, using the latest catalyst converter technology. ULSP also enables the use of new, fuel-efficient technologies such as Gasoline Direct Injection (GDI) which can deliver substantial CO<sub>2</sub> savings.

**6.42** Budget 2000 announced a duty differential of 1 pence per litre in favour of ULSP relative to unleaded petrol. This came into effect on 1 October 2000. The Pre-Budget Report proposed that the duty rate on ULSP would be cut further subject to oil companies making this cleaner fuel widely available across the UK. The Government is satisfied that this condition has been met by the major petrol retailers and that it will be met by independent retailers shortly. ULSP is expected to account for 100 per cent of the UK petrol market by June 2001 enabling the UK to meet the mandatory EU 2005 petrol specification four years ahead of schedule. **Budget 2001 therefore cuts duty on ULSP by 2 pence per litre.**

**Unleaded petrol 6.43** The Government has recognised that the final stages of transition to ULSP have the potential to create competitive distortions in the market. Although the oil companies will have converted their retail sites to ULSP by the end of March, some smaller retailers will need more time. During this transitional period, those retailers with stocks of ULSP would be able to sell petrol 2 pence per litre cheaper than retailers who, for sound logistical reasons, have not yet been able to secure regular supplies of this cleaner fuel. To enable the introduction of ULSP to proceed as smoothly as possible and to ensure that motorists across the country can benefit, **Budget 2001 introduces a temporary 2 pence per litre duty cut on ordinary unleaded to take effect from Budget Day until 14 June 2001.**

**ULSD 6.44** Ultra-low sulphur diesel (ULSD) now accounts for all diesel consumed by road vehicles in the UK following the successful introduction of a fuel duty incentive from 1997.<sup>6</sup> This enabled the UK to meet the EU mandatory 2005 diesel specification more than five years ahead of schedule.

**6.45** ULSD provides particulate emission savings from existing diesel vehicles and allows the use of advanced emission-abatement technology such as particulate traps, which reduce emissions by up to 90 per cent. As proposed in the Pre-Budget Report, in parallel with the cut in duty on ULSD of 2 pence per litre, **Budget 2001 cuts duty on ULSD by 3 pence per litre** to maintain the existing balance between duty rates on the main forms of petrol and diesel.

**Lead replacement petrol 6.46** Lead replacement petrol (LRP), a form of higher octane unleaded, was introduced to replace leaded petrol for those older cars unable to run on unleaded. An environmental assessment carried out following the Pre-Budget Report shows that higher octane unleaded petrol, including LRP, does not cause significant environmental concerns over and above the use of ordinary unleaded. **Budget 2001 therefore abolishes the higher duty rate for higher octane unleaded petrol.** Duty on this petrol will now only be charged on the basis of the sulphur and aromatics content of the fuel. This will also provide an incentive to reduce sulphur levels in higher octane fuels.

**Green Fuel Challenge 6.47** Looking ahead, the Government is also keen to stimulate interest in developing and producing profitable alternative fuels which offer environmental benefits over current conventional fuels. In the Pre-Budget Report the Government therefore launched a 'Green Fuels Challenge' (GFC) inviting industry to come up with practical proposals for such fuels, the most promising of which would be considered for duty reductions in Budget 2001.

**6.48** 64 proposals were put forward in response to this GFC covering a range of potential alternatives. As a result, Budget 2001 introduces a series of duty cuts for alternative fuels for the short, medium and longer-term.

**Bio-diesel and road fuel gases 6.49** For the immediate future and the short to medium-term, the Government will make reductions in duty on bio-diesel and road fuel gases - compressed natural gas (CNG) and liquefied petroleum gas (LPG):

- Budget 2001 **announces a new duty rate for bio-diesel set at 20 pence per litre below the ULSD rate to be introduced in Budget 2002.** This will offset the additional production costs of bio-diesel and permit the UK to benefit from the reduced greenhouse gas emissions that this fuel can offer. Bio-diesel sourced from waste vegetable oils will also provide a useful outlet for oils which may otherwise be poured away into landfill sites or disposed of down the drain; and
- the cut by 29 per cent in duty on road fuel gases in Budget 99, followed by a duty freeze in Budget 2000, has encouraged individuals and companies to convert to these less environmentally damaging fuels. Car manufacturers and fuel suppliers have responded favourably to this demand. In order to maintain the existing duty differential between road fuel gases and the most commonly available petrol and diesel, **Budget 2001 cuts duty on road fuel gases to 9 pence per kilogramme.** Furthermore, to provide the stability needed to encourage growth in the road fuel gas market, **duty on road fuel gases will not be increased in real terms until 2004 at the earliest.**

<sup>6</sup> A more detailed assessment of the incentivisation of ULSD was published alongside the Pre-Budget Report, *Using the tax system to encourage cleaner fuels: the experience of ultra-low sulphur diesel*, HM Customs and Excise.

**Pilot projects for alternative fuels** **6.50** Other proposals made under the GFC offer potential for the medium to long-term but still require considerable research and development. To stimulate further work in the field of alternative fuels, **Budget 2001 introduces enabling legislation to allow for the introduction of duty reductions or exemptions for pilot projects.** Pilot projects for hydrogen, bio-ethanol, methanol and biogas are expected to be introduced during the course of 2001.

**6.51** Overall this approach towards green fuels provides for environmental benefits in the short term from LPG, CNG and bio-diesel, looks to new fuels for the medium-term with bio-ethanol and biogas, and paves the way for the future with the fuel-cell favourites of methanol and, most significantly, hydrogen. This demonstrates the Government's ongoing commitment to delivering both air quality and climate change benefits through increased use of more environmentally friendly alternative fuels in the UK and supports the UK's early steps towards a hydrogen-based fuel economy. The Government also proposes to consult on how to encourage the development, delivery and take-up of new alternative green fuels and technology.

**6.52** Following the success of the GFC, and intended partly to complement the steps being taken as a result, the Government will be consulting during the summer on launching a Green Technology Challenge, to consider the possible environmental objectives and technologies to be encouraged through enhanced first-year capital allowances (described above).

**VED for cars** **6.53** Budget 2000 announced a major reform to vehicle excise duty (VED) for new cars. **The introduction of a four-banded graduated VED system for all new cars purchased from March 2001** means that the rate of VED new cars now pay is linked to carbon emission levels and the type of fuel used. The least polluting vehicles will pay up to £70 a year less under this system. This will encourage the purchase of cars with better fuel efficiency and lower carbon emissions, and cars using fuels and technology which are better for local air quality.

**6.54** Budget 99 introduced a reduced rate of VED for cars with engines up to 1,100cc, benefiting 1.8 million car owners. In Budget 2000, the threshold of the lower rate of VED for existing cars was increased from 1,100cc to 1,200cc, resulting in a lower VED rate for some 2.2 million smaller cars. Owners of qualifying vehicles are currently being contacted by the Driver and Vehicle Licensing Agency and will receive a rebate in respect of their existing licences, backdated to March 2000.

**6.55** The Pre-Budget Report proposed extending the small car rate further to 1,500cc, subject to consultation with motoring organisations. **Budget 2001 cuts VED by £55 for cars with engine size between 1,200cc and 1549cc,** backdated to 1 November 2000, providing benefit to a further 5 million car owners. This new rate will come into force on 1 July 2001, and rebates will be paid to owners of qualifying vehicles in that month. Together with measures announced in Budget 99 and Budget 2000, this will mean that around a third of existing cars in total will qualify for the lower rate of VED for smaller engine cars.

**6.56** Budget 2001 goes further to shift tax away from ownership. **The Government has also decided to freeze all car VED rates until Budget 2002, which is equivalent to a cut in real terms of up to £5.** In addition, **VED on motorbikes will also be frozen in cash terms.**

**Companies** **6.57** Of the estimated 375 billion miles of car travel in the UK each year, some 16 per cent are driven for business use. The type of car chosen by a company for their employees also has an effect on the private car purchase, both through the second-hand car market and the pressure that fleet-purchasers can exert on manufacturers.

**Company car tax** **6.58** Budget 2000 announced a major reform of company car taxation: **from April 2002, the income tax charge on a company car will be based on a percentage of the car's list price graduated according to the level of the car's CO<sub>2</sub> emissions** measured in grams per kilometre (g/km). The charge will build up from 15 per cent of the car's price to a maximum of 35 per

cent – in 1 per cent steps for every 5g/km CO<sub>2</sub> above a specified level. Diesel cars will pay a supplement of 3 per cent of the car's price compared to petrol cars (up to a maximum of 35 per cent) to take account of their higher emission of particulates and pollutants which have adverse impacts on local air quality.

**6.59** The Government has published draft regulations on the Inland Revenue website<sup>7</sup> to waive this diesel supplement for clean diesel cars achieving Euro IV emission standards to encourage their early introduction. The regulations also introduce discounts for cars powered by electricity or gas, and hybrid petrol/electric cars which can reduce the car benefit tax below the normal minimum of 15 per cent of the car's price, providing further incentives to choose more environmentally friendly company cars.

**6.60** This comprehensive change to the company car tax system is estimated to save around 0.5 to 1.0 MtC per year by 2011–12. It is regarded as crucial in shaping the future car fleet of the UK given that over 50 per cent of new cars are bought by companies.

**Authorised mileage rates** **6.61** To complement these reforms to company car taxation, the Government is restructuring the system of authorised mileage rates through a two-stage reform. As announced in the Pre-Budget Report, **to provide an early incentive to use cleaner cars for business trips, from April 2001 drivers of small cars will benefit from an increase in the current two lower engine size bands to 40 pence for the first 4,000 miles and 25 pence for further miles. The rates for the two higher bands will be frozen.**

**6.62** For the second stage of the reform, **the Government will be introducing a new statutory system of mileage rates from April 2002.** They will provide a greater incentive to drive cleaner vehicles for business trips by offering a single tax and NICs free rate of 40 pence per mile for the first 10,000 business miles per year for all sizes of car; and a lower rate of 25 pence per mile for any additional business miles above the first 10,000 miles.

**Fuel scale charge** **6.63** The forthcoming tax year will be the fourth of a five year programme of annual increases announced in Budget 98 to discourage giving or receiving free fuel for private use in a company car.

**Green travel** **6.64** The Pre-Budget Report announced the introduction in Budget 2001 of a series of measures to promote environmentally friendly travel:

- **removing VAT from the purchase of adult cycle helmets with effect from 1 April 2001** to improve road safety and encourage cycle use;
- **increasing the income tax and NICs free mileage rate employers can pay for cycle use for business trips to 20 pence per mile from April 2002;**
- as part of the reform of authorised mileage rates **introducing a new passenger rate of 2 pence per mile per passenger to encourage car-sharing on business trips from April 2002;** and
- **lowering the threshold for works buses qualifying for tax exemptions from 12 to 9 passenger seats from April 2002** to assist and encourage employers in smaller companies to set up Travel Plans to help their employees to travel to work without using their cars.

<sup>7</sup>[www.inlandrevenue.gov.uk](http://www.inlandrevenue.gov.uk).

**6.65** Budget 2001 goes further, by:

- **adjusting the zero rate of VAT on passenger transport to cover smaller vehicles with 9 or more passenger seats from 1 April 2000**, increasing the range of alternative transport options, especially in rural and remote areas;
- following consultation, **increasing the passenger rate employers can pay, tax and NICs free, to 5 pence per mile per passenger**; and
- **allowing employers to provide other benefits-in-kind associated with green commuting.**

**6.66** The Government will consult on whether the tax treatment of employer subsidised contract buses should be aligned with that for employer provided works buses, in allowing employees free or reduced cost travel to work. It will also work with taxi companies, local authorities and other bodies to explore ways of encouraging less-polluting taxis in our major cities.

**Haulage industry 6.67** Efficient freight transport plays a key role in a successful sustainable economy. UK industry – from agriculture to high technology – relies on having efficient transport for raw materials, manufactured components and final products. Freight transport itself needs to be environmentally sustainable. In recent years, the Government has created incentives for the haulage industry to switch to less environmentally damaging ULSD and to fit low-emissions technology. The Government's Ten Year Plan for Transport will also increase the efficiency of freight transport and reduce its environmental impacts. However, the Government has decided to go further in helping the haulage industry become more internationally competitive and less environmentally damaging. Taken together, the measures announced in Budget 2001 should reduce costs for British business in ways which help the environment.

**VED for lorries 6.68** In the Pre-Budget Report, the Government announced its intention to build on previous changes to lorry VED by engaging in comprehensive reform. As a first step, the Government announced that hauliers would receive a rebate of up to 50 per cent of their VED payments for licences in force on 30 November 2000. By mid-February, over £200 million had been paid out to nearly 110,000 hauliers. The transitional arrangements announced in the Pre-Budget Report remain in place with lorry VED rates reduced by up to 50 per cent from 1 December 2000.

**6.69** The Pre-Budget Report launched a consultation exercise on plans for a comprehensive reform of lorry VED, to reflect better the environmental and track costs of different lorries. The Government's proposals have been warmly welcomed by the industry. In light of the consultation **Budget 2001 introduces a new system of lorry VED which will come into effect from 1 December 2001**. The new lorry VED rates are shown in Chapter A of the FSBR. These rates will reduce the total burden that lorry VED imposes on the haulage industry and at the same time improve the environmental signals that hauliers face to use lorries which cause less road damage and pollution. As a result of these reforms, UK lorry VED rates will be amongst the lowest in Europe for the cleanest and least-damaging lorries.

**6.70** However, the Government wants to go further in improving the environmental signals from the VED system. Euro emission standards are a much better criterion for judging the cleanliness of lorries than the current Reduced Pollution Scheme. **The Government therefore plans to offer reduced VED rates for lorries meeting the new Euro IV standard from around 2004**. Before then, the Government will review the future of the current reduced pollution scheme in delivering further environmental benefits.

**6.71** The Government will also review the current payment methods for lorry VED, aimed at making payment of lorry VED easier for small haulage firms especially.

**6.72** The Government will also continue to work towards the proposal, as set out in the Pre-Budget Report, of introducing some form of road-user charge for lorries, such as a 'vignette', to ensure that all users of UK roads contribute towards the cost of the damage that they impose in the UK.

**Haulage  
Modernisation  
Fund**

**6.73** The Pre-Budget Report announced a new three-year £100 million Haulage Modernisation Fund (HMF) across the UK. The Government has been in discussions with the Road Haulage Forum on how to spend this fund most effectively. As a result, the Government will, as a first step, make available in England, up to:

- £30 million for targeted support for retrofitting older lorries operating in areas of poor air quality such as Air Quality Management Zones, where nitrogen oxide and particulate emissions are most damaging. This will also enable hauliers to qualify for up to £500 lower VED rates;
- £15 million for fuel efficiency advice for hauliers, which should deliver savings of around 5 to 10 per cent in carbon emissions and similar reductions in the typical haulier's fuel bill;
- £5m for training initiatives for new drivers to help the industry meet new skills and manpower requirements;
- £3 million for increasing Government enforcement of haulage industry regulations across the UK, at the industry's request; and
- £2 million for various supporting measures, including funding a pilot scheme for the industry's proposal to take responsibility for raising standards and improving business performance.

**6.74** These measures build on the DETR's Clean Up programme to accelerate the take-up of new and cleaner technologies, which is already set to benefit from a doubling of resources to £30 million over the next three years. The HMF is expected to save at least 0.1 MtC a year. The remaining third of the HMF in England will be allocated at a later date when both the Government and the industry will have a clearer view of future requirements.

**VED for tractors**

**6.75** The Government announced in the Pre-Budget Report that, subject to consultation, VED on tractors would be abolished. After consulting with interested parties, including farming representatives, the Government has decided to abolish VED on tractors, similar agricultural vehicles and all other vehicles that currently qualify for the £40 special concessionary VED rate from 1 April 2001. This will save farmers £40 per year for every tractor, equivalent to over £10 million per year in total. The DVLA will automatically rebate owners of such vehicles for outstanding months on their VED discs in May, backdating this to 1 March 2001. To help the fight against crime, it will remain necessary to licence these vehicles annually.

**6.76** The Government recognises the agricultural industry's concerns over outstanding classification issues surrounding definitions of agricultural vehicles. Accordingly the Government will undertake further discussions with industry and will aim to conclude these by this autumn.

**VED on other  
vehicles**

**6.77** The Government has also decided to reduce VED rates on some recovery vehicles in the light of the reductions in lorry VED. In total, these reductions will lead to recovery vehicles paying one third less in VED in real terms. VED rates on buses will also be frozen in cash terms until Budget 2001.

## REGENERATING BRITAIN'S TOWNS AND CITIES

**6.78** The Government is committed to reversing the physical, economic and social neglect which characterises some parts of Britain's towns and cities. The Urban White Paper, published in November 2000, set out a comprehensive strategy for achieving this aim. The Urban Taskforce, chaired by Lord Rogers, has made an important contribution to this debate in its report of June 1999 "*Towards an Urban Renaissance*" which made 105 recommendations aimed at reversing decline and attracting people back into towns and cities.

**6.79** The Government has put in place a number of policies to help regenerate towns economically, socially and physically:

- economic regeneration – by encouraging enterprise and innovation in urban areas through the proposed Community Investment Tax Credit and Regional Development Agencies set out in Chapter 3;
- social regeneration – tackling social exclusion and deprivation through direct investment in public services and infrastructure through programmes such as the Neighbourhood Renewal Fund as set out in Chapter 5;
- physical regeneration – by introducing targeted tax cuts in stamp duty and VAT, and introducing capital allowances and tax credits as set out below.

**6.80** The Pre-Budget Report announced a number of tax measures, to be introduced in this Budget, worth over £1 billion over five years to help regenerate towns and cities. The promotion of physical regeneration – helping to bring derelict and under-utilised land and property back into productive use – will also reduce the pressure for unnecessary development in rural areas. It is intended that these measures will come into operation shortly after Royal Assent.

**Stamp duty relief for disadvantaged areas** **6.81** To help assist with the refurbishment and return to use of existing properties, and aid new developments, **Budget 2001 abolishes stamp duty on all property transactions in the most disadvantaged parts of the UK.** This will encourage businesses and families to locate in these areas, reviving depressed property markets and providing employment. The relief will be targeted at the areas most in need of regeneration, at the level of particular wards. A list of areas which will qualify for the relief will be published in due course.

**Tax relief for cleaning up contaminated land** **6.82** The Government wants to improve the confidence of owners and investors to bring contaminated land back into productive use and assist with the costs of doing so. **Budget 2001 introduces a 150 per cent accelerated payable tax credit for owners and investors for the costs they incur in cleaning-up contaminated sites.** The measure will make the development of these sites more viable, helping to tackle the legacy of previous industrial uses and reduce the pressure to develop greenfield sites.

**Tax relief for creating flats over shops** **6.83** To support the redevelopment of vacant and underused space over shops and other commercial premises, **Budget 2001 introduces 100 per cent capital allowances for owners and occupiers for the costs of creating flats over shops and similar commercial premises for letting,** enabling them to obtain up-front tax relief on their spending.

**VAT relief for residential conversions** **6.84** To help bring vacant homes back into use and provide a more diversified use of land the Pre-Budget report announced that the Government would introduce:

- a 5 per cent reduced rate of VAT for the cost of converting residential properties into a different number of dwellings; for example, a house into flats;

- an adjustment to the zero rate of VAT to provide relief for the sale of renovated houses that have been empty for 10 years or more.

**6.85** In addition, Budget 2001:

- extends the 5 per cent reduced rate of VAT to the renovation of homes empty for three years or longer to bring more properties back into use; and
- extends the 5 per cent reduced rate of VAT to cover conversions of residential property into residential communal homes such as care homes and homes with multiple occupation, helping those who are unable to live alone.

**6.86** The VAT package will create up to 3,700 homes each year through better use of the UK's existing housing stock. The Government is also considering a reduced rate of VAT for 'granny annexes'.

**Urban  
Regeneration  
Companies**

**6.87** Urban Regeneration Companies (URCs) are a new form of delivery for area regeneration schemes. They are independent bodies that engage the private sector alongside key public sector partners. They were proposed by the Urban Task Force and piloted in Liverpool, East Manchester and Sheffield. Monitoring of the pilots has demonstrated the potential added value of this approach. A programme of around 12 further URCs will be launched over the next two to three years in priority areas for regeneration. **In order to encourage public-private sector partnerships the Government will consider the scope for providing a corporation tax relief for company donations to URCs and similar bodies across the UK.**

**Grants for listed  
places of  
worship**

**6.88** The Pre-Budget Report announced that the Government was attracted to the idea of a reduced rate of VAT for the repair and maintenance of listed buildings which are used as places of worship and would be approaching the European Commission to make clear its priorities. The Commission has indicated that this will be considered in their general review of reduced rates for VAT which will take place in 2003, and the Government will continue its discussions with the Commission on this issue.

**6.89** However, **in the interim period, the Government is introducing a UK wide grant scheme to help congregations with these costs. The Department for Culture, Media and Sport will be consulting on the details but the effect of the grant will be to reduce the VAT cost to 5 per cent for new work undertaken from 1 April 2001.**

## PROTECTING BRITAIN'S COUNTRYSIDE

**6.90** The Rural White Paper published in November 2000 sets out the Government's rural policy framework for delivering a countryside that is sustainable: economically, environmentally and socially. The measures introduced by the Government to regenerating towns and cities will also reduce the pressure for development in the countryside.

**The aggregates  
levy**

**6.91** The Government is committed to maximising the use of recycled aggregate and other alternatives to primary aggregate in order to reduce the environmental impacts of quarrying such as damage to biodiversity and visual intrusion. As announced in Budget 2000, **the aggregates levy will be introduced in April 2002 at £1.60 per tonne.** The revenues raised from the levy will be returned to business and the local communities affected by quarrying through a 0.1 percentage point cut in employers' NICs and a new Sustainability Fund. The levy will ensure that the environmental impact of aggregates extraction are more fully reflected in prices and encourage a shift in demand away from primary aggregate towards alternatives such as recycled construction and demolition waste and china clay waste. It will also encourage the more efficient use of all aggregates, greater resource efficiency in the

construction industry, and the development of a range of other alternatives including the use of waste glass and tyres in aggregate mixes.

**6.92** The Government has received representations suggesting that the environmental benefits of the levy could be enhanced by introducing a differential rate for aggregates extracted from quarries with the lowest environmental costs, or so called “green” quarries. The Government is attracted to this idea in principle, but previous analysis has suggested that there would be a number of practical difficulties with a differential rate. These relate to assessing compliance, defining environmental performance, the treatment of imports, and UK competition policy. However, the Government will continue to explore options for a differential rate with interested parties which overcome these problems.

**Sustainability Fund 6.93** The Sustainability Fund will be introduced in April 2002 alongside the aggregates levy. A consultation document was issued in August 2000 on the best use of the Fund and a summary of responses was published alongside the Pre-Budget Report. In light of the representations made the Pre-Budget Report announced that £35 million per year would be allocated to the new Fund.

**6.94** Since the Pre-Budget Report, the Government has been considering the key priorities for the Fund. The consultation exercise highlighted support for a number of options, including the promotion of conservation and increased biodiversity, and programmes geared towards overcoming market barriers to increased reuse and recycling of construction and demolition wastes. The Government will continue to explore the scope for setting up a UK-wide Fund with shared objectives that maximises the environmental benefits of the Fund and complements the objectives of the aggregates levy. The Government intends to consult on the detailed proposals for the fund in due course.

**Waste 6.95** Industry and commerce in England and Wales produce around 78 million tonnes of waste a year. Local authorities collect a further 28 million tonnes, principally from households, and this is growing by around 3 per cent a year. The EU Landfill Directive has set binding targets to reduce the amount of biodegradable municipal waste landfilled relative to 1995 of 75 per cent reduction by 2010, 50 per cent by 2013 and 35 per cent by 2020. All sectors of the economy will need to work together to reduce, re-use and recover value from waste material, in particular through recycling or composting. Box 6.4 identifies programmes the Government has put in place to meet these objectives.

**Tradeable permits 6.96** The Government will introduce a system of tradeable permits to meet its targets under the Landfill Directive. These will give local authorities the greatest amount of freedom in how they meet their landfill targets, setting each authority a limit on the amount of biodegradable waste they can landfill. Authorities most successful at reducing landfill will be able to trade permits with those with a greater reliance on landfill. The scheme is expected to be operational by 2003 and will assist in reducing the cost to the UK of securing the benefits of a reduction in landfill.

**Landfill tax 6.97** By making waste producers take account of the environmental costs they impose on the rest of society when they discard waste to landfill, the landfill tax encourages efforts to minimise the amount of waste generated and to develop more sustainable forms of waste management such as recycling, composting and recovery. An assessment of the landfill tax by ECOTEC in 1998 indicated that it may have led one third of companies to introduce or step up efforts to minimise, reuse or recycle wastes.

**6.98** In line with the Government’s Budget 99 commitment to adopt a landfill tax escalator of £1 per tonne a year for five years until 2004, **the current standard rate of landfill tax will increase from £11 per tonne to £12 per tonne with effect from 1 April 2001.** The lower rate of tax that applies to inert waste will remain at £2 per tonne.

**Box 6.4: Programmes to promote recycling**

- **Waste Strategy 2000** introduced statutory performance standards for local authorities requiring an increase in household recycling and composting from 1998-99 levels of 9.4 per cent to at least 17 per cent by 2003-04 and 25 per cent in 2005-06. Public awareness of the need to recycle and reduce waste has been raised by the Government's "Are you doing your bit?" advertising campaign.
- **The Waste Resources and Action Programme (WRAP)** launched in November 2000 promotes more sustainable waste management, by aiming to remove barriers to waste minimisation, re-use and recycling, and by working to create stable and efficient markets for recycled materials and products. £40 million of government funding is available over the next three years, but the programme is also expected to attract funding from other sources, including the private sector.
- **The Government announced £150 million of New Opportunities Fund money in October 2000 to support projects for green regeneration. £50 million is available for community recycling schemes as part of this wider initiative.**

**Landfill tax credit scheme** **6.99** The Government is committed to meeting the challenging targets for waste recycling set out in Waste Strategy 2000. In the Pre-Budget Report, the Government announced that it would explore how resources going through the Landfill Tax Credit Scheme (LTCS) could be better used to increase recycling rates, particularly of household waste.

**6.100** As an initial step the Government will shortly be challenging the waste industry to meet demanding targets to allocate a greater proportion of tax credits towards sustainable waste management projects and especially projects which promote recycling.

**6.101** The Government believes that local authorities have a key role in promoting household recycling and would like to see them benefit from funds in the LTCS. In the longer-term the Government is therefore attracted to replacing all or part of the LTCS with a public spending programme to direct resources towards Government priorities on sustainable waste management. The Government will consult with interested parties on how this transition can be managed to ensure that worthwhile projects continue to attract funding both under the current scheme and under any replacement regime.

**Pesticides** **6.102** The Government is committed to a policy of minimising the adverse environmental impact of pesticides, consistent with adequate crop protection. The Government believes that a tax on pesticides could, in conjunction with other measures, be a useful tool in addressing the environmental impact of pesticides use.

**6.103** Since the November Pre-Budget Report 1999 the Government has been exploring with the agrochemical industry whether its objectives could be better achieved through a partnership approach. The Crop Protection Association (CPA) published proposals for a formal package of voluntary measures in April 2000 and the Government invited interested parties to comment. Additional work by the CPA, in conjunction with other stakeholders, led to the production of revised proposals in October 2000. The Government welcomed these but still felt they could be improved. Following further discussions the CPA and a number of other stakeholders submitted proposals for a revised package in January 2001.

**6.104** The Government welcomes the latest set of voluntary proposals for reducing the environmental impact of pesticides use from the industry and the commitments made by the various stakeholders. **The Government would like to see the voluntary package for pesticides implemented nationwide as soon as possible, subject to its concerns over delivery and monitoring being met.** Progress of the package will be reviewed in the run up to

Budget 2002 to assess whether a voluntary approach is delivering significant environmental benefits, over and above those that would result from a pesticides tax.

## ENVIRONMENTAL APPRAISAL OF POLICY MEASURES

**6.105** The Government is committed to appraising the environmental impact of all proposed Budget measures. The Government has refined its appraisal tables in light of suggestions from the Environmental Audit Committee (EAC) and others. Table 6.1 shows how Government policies fit into the overall framework of its environmental strategy. Table 6.2 describes the environmental effect of measures introduced in recent Budgets which have a significant effect on the environment or which serve an environmental purpose<sup>8</sup>.

**6.106** The Government has made available documentation about the environmental appraisal methodology underlying its estimates including those set out in the climate change programme, the associated paper on the derivation of carbon savings, the Department of Trade and Industry's working paper on emissions projections, the memorandum to the EAC on the environmental appraisal of the fuel duty escalator and an Inland Revenue paper providing an "*Integrated Impact Assessment*" of the company car tax reform. In addition, the Government has recently provided the Trade and Industry Committee with a memorandum which includes analysis of the fuel duty escalator. This will be available when their report on the impact on trade and industry of motor fuel taxation is published.

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<sup>8</sup> There are large uncertainties involved in trying to estimate the behavioural responses to the Budget measures, and it is not always possible to quantify the individual environmental effects of individual Government policies, particular when introduced as part of a package. Wherever possible, an attempt is made to separate out the effects of individual measures, but it should be noted that these are subject to large margins of error.

**Table 6.1: The Government's Budget measures and policy objectives**

Policy objective	Corresponding Budget measure	Other relevant policy initiatives affected	Sustainability development indicator <sup>1</sup>
Tackling climate change and improving air quality	<ul style="list-style-type: none"> <li>• Climate change levy and related measures</li> <li>• Emissions trading</li> <li>• Reforms to company car tax</li> <li>• VED reforms</li> <li>• Green travel plans</li> <li>• Authorised mileage rates</li> <li>• Reduced rate of VAT on the installation of energy saving materials</li> <li>• Fuel duty differentials</li> </ul>	<ul style="list-style-type: none"> <li>• Climate change programme<sup>2</sup></li> <li>• Emissions Trading Consultation Document<sup>3</sup></li> <li>• Ten Year Plan for Transport<sup>4</sup></li> <li>• Air Quality Strategy<sup>5</sup></li> </ul>	<ul style="list-style-type: none"> <li>• CO<sub>2</sub> emissions</li> <li>• Days of air pollution</li> <li>• Electricity from renewable sources</li> <li>• Energy efficiency of vehicles</li> </ul>
Regenerating Britain's cities	<ul style="list-style-type: none"> <li>• Capital allowances for flats over shops</li> <li>• Tax relief for cleaning up contaminated land</li> <li>• Stamp duty exemption for disadvantaged communities</li> <li>• Reforms to the VAT treatment of conversion and renovation activity</li> </ul>	<ul style="list-style-type: none"> <li>• Urban White Paper<sup>6</sup></li> </ul>	<ul style="list-style-type: none"> <li>• New homes built on previously developed land</li> <li>• Homes judged unfit to live in</li> </ul>
Protecting Britain's countryside	<ul style="list-style-type: none"> <li>• Aggregates levy</li> <li>• Aggregates Sustainability Fund</li> <li>• Landfill tax increases</li> <li>• Reforms to landfill tax credit scheme</li> <li>• Pesticides voluntary package</li> </ul>	<ul style="list-style-type: none"> <li>• Waste Strategy<sup>7</sup></li> <li>• A Better Quality of Life<sup>8</sup></li> <li>• Rural White Paper<sup>9</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Household waste and recycling</li> <li>• Construction and demolition waste going to landfill</li> <li>• Waste arisings and management</li> </ul>

<sup>1</sup>The full set of indicators is published in *Quality of Life Counts*, DETR April 2000.

<sup>2</sup>*Climate Change Programme*, DETR November 2000.

<sup>3</sup>*Emissions Trading Consultation Document*, DETR November 2000.

<sup>4</sup>*Ten Year Plan for Transport*, DETR July 2000.

<sup>5</sup>*Air Quality Strategy for England, Scotland, Wales and Northern Ireland*, January 2000.

<sup>6</sup>*Urban White Paper*, DETR November 2000.

<sup>7</sup>*Waste Strategy*, DETR May 2000.

<sup>8</sup>*A Better Quality of Life*, DETR May 1999.

<sup>9</sup>*Rural White Paper*, DETR November 2000.

**Table 6.2: The environmental impact of the Government's Budget measures**

Measure	Environmental impact <sup>1</sup>	
• Climate change levy package <sup>2</sup>	Levy and exemptions <sup>3</sup> Savings of at least 2.0 MtC	
	Negotiated agreements <sup>4</sup> Savings of at least 2.5 MtC	
	Energy efficiency measures Savings of at least 0.5 MtC	
• Emissions Trading Scheme	A successful scheme is estimated to deliver emission savings of at least 2MtC by 2010 <sup>5</sup> .	
• Company car tax reform <sup>6</sup>	Estimated to produce savings of around 0.5 to 1 MtC in the medium to long run.	
• Green travel plans	Reductions in CO <sub>2</sub> and air particulates.	
• Authorised mileage allowances		
• Reforms to car and lorry VED	Reductions in emissions of CO <sub>2</sub> , NO <sub>x</sub> and particulates	
• Road fuel duty escalator	The road fuel duty escalator over the period 1996 to 1999 is estimated to produce carbon savings of 1 to 2.5 MtC <sup>7</sup> by 2010 and small reductions in emissions of local air pollutants.	
• Road fuel duty differentials <sup>8</sup>	The ULSP differential is estimated to reduce NO <sub>x</sub> emissions by 1 per cent, reduce CO emissions by 4 per cent and reduce VOCs emissions by 1 per cent in 2004. The ULSD differential is estimated to result in a reduction of 8 per cent in emissions of particulates and up to 1 per cent of NO <sub>x</sub> emissions. The road fuel gas differential will result in a reduction in emissions of particulates and NO <sub>x</sub> . The real reductions in duty on ULSD and ULSP are estimated to increase carbon emissions by between 0.1 and 0.7 <sup>9</sup> million tonnes by 2010. The temporary cut in unleaded petrol will have zero impact on emissions in 2010. The duty cut in LRP will not have a significant impact on emissions.	
• Green fuels challenge	Reductions in emissions of CO <sub>2</sub> , NO <sub>x</sub> and particulates. Waste policy benefits.	
• Haulage Modernisation Fund	1 per cent reduction in particulate emissions by 2004, and reductions in NO <sub>x</sub> and CO <sub>2</sub> . Fuel efficiency training is expected to reduce emissions by around 0.1 MtC. <sup>10</sup>	
• Reduced rate of VAT on the installation of energy saving materials	Reduction of 0.1 MtC <sup>11</sup> by 2010.	
• Reduced rate of VAT on domestic fuel and power	Estimated to increase carbon emissions by 0.2 <sup>2</sup> MtC by 2010.	
• Capital allowances for flats over shops	This package of measures will lead to:	
• Tax relief for cleaning up contaminated land		• reduced pressure on the countryside due to increase in the number of empty and derelict properties brought back into use;
• Stamp duty exemption for disadvantaged areas		• increase in clean up of contaminated land; and
• Reforms to the VAT treatment on conversion and renovation activity		• regeneration and improved functioning of property markets in Britain's most disadvantaged communities.
• Aggregates levy and Sustainability Fund	Reductions in noise, dust, visual intrusion, damage to wildlife habitats and other environmental impacts.	
• Landfill tax and LTCS	Encourages waste producers and the waste management industry to switch away from landfill towards waste minimisation, re-use and recycling.	

<sup>1</sup> These estimates are subject to a wide margin of error.

<sup>2</sup> There are a number of difficulties involved in estimating the emission savings from the individual components of the climate change levy, including the need to avoid double counting. The figures are calculated using cautious assumptions and are shown for illustrative purposes only.

<sup>3</sup> Based on the DTI energy model.

<sup>4</sup> Estimates still to be finalised.

<sup>5</sup> Based on independent modelling commissioned by DETR.

<sup>6</sup> This measure is part of a package of measures, including the changes to VED and the ACEA voluntary agreements.

<sup>7</sup> Based on DTI and DETR models.

<sup>8</sup> Using the NETCEN emissions model – further detail on the methodology used in the model is provided in NETCEN's January 2000 report UK Road Transport Emissions Projections.

<sup>9</sup> Do not take account of the reduction in emissions by incentivising gasoline direct injection technology.

<sup>10</sup> DETR estimates.

<sup>11</sup> Based on HM Customs and Excise modelling.

