

# BT and the environment



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**better**  
**world**

# BT and the environment



**Global Warming CO<sub>2</sub> emissions** – expressed as a percentage of our 1996 emissions level



**Waste to recycling** – percentage of total waste recycled

**Telecommunications is perceived as an environmentally friendly technology. But as one of the UK's largest companies - and biggest energy consumers - we have an inevitable impact on the environment.**

We have a duty to manage this and to report on our performance - as we have done since 1992.

**Here we explain:**

- Our Environment management system
- Our Environmental Policy
- Environmental prosecutions (none in the 2005 financial year).

**Environmental management system (EMS)**

Our experience shows that good environmental management saves money and improves business efficiency. BT's environmental management system (EMS) complies with ISO 14001, an international standard for the certification of environmental management systems.

**These are three of its key requirements:**

- The organisation shall identify and assess the significance of the impact its activities can have on the environment. These impacts are described as environmental aspects.
- Objectives and targets designed to reduce the organisation's environmental impact shall be established and a programme for achieving these objectives and targets shall be in place.
- The company's Environmental Policy must contain a commitment to continuous improvement, prevention of pollution and compliance with relevant environmental legislation, regulations and other requirements.

ISO 14001 certification helps keep us focused on reducing the environmental impact of our operations during a time of very significant business, organisational and cultural changes for BT.

**In the 2005 financial year:**

- BT in the UK was awarded a renewed ISO 14001 certificate after a full re-assessment audit
- BT Spain's certificate was renewed
- BT Ireland was certified for the first time. This model will be used to extend our EMS to other regions.

**Our main environmental impacts in the UK are:**

- Benefits
- Emissions to air
- Fuel, energy and water
- Local impacts
- Procurement
- Product stewardship
- Transport
- Waste

Our decision to classify our environmental impacts by category, each with an 'owner' (rather than by location), has proved sound. Since 1999, BT has undergone many radical structural changes, but we have retained the ISO 14001 certification for all UK operations.

In the 2005 financial year, for the first time, we report on energy, water and waste data for our Global Services operations.

We are in the process of establishing an EMS that covers all BT Global Services' activities in every country of operation and we have recently completed our pilot project in BT Ireland to produce an EMS that is effective, robust and transferable to all countries, cultures and activities. BT Ireland was certified to ISO 14001 in March 2005.

Additionally, we integrated BT Openworld and BT Payphones into the UK-certified EMS in the 2005 financial year.

**Our Environmental Policy**

Our Environmental Policy establishes our targets in sustainable environmental improvement and compels us to measure and monitor our performance regularly.

We communicate the Group's environmental objectives, action plans and achievements because we want to help every BT person understand and implement the policy in their daily work.

**Policy**

In pursuit of our intention to be the best provider of communications services and solutions, BT seeks to maximise opportunities for the provision of services and solutions, which can help to reduce environmental impacts, and which may provide significant environmental benefits. Electronic communications are often used as a substitute for travel or paper-based messaging and this contributes to environmental protection and resource conservation.

We recognise, however, that in our day-to-day operations we inevitably impact on the environment in a number of ways and we are committed to minimising the potentially harmful effects of such activity wherever and whenever possible.

This policy statement provides the framework on which our environmental programme is based. This enables us to set targets and measure progress as well as strive for continuous environmental improvement.

We have undertaken to help every BT person understand and implement the relevant aspects of this policy in their day-to-day work through the regular communication of objectives, action plans and achievements.

We will also ensure that BT's joint ventures and other partners are aware of this policy and promote the principles of sound environmental practice.

The Chief Executive Officer of BT has ultimate responsibility for the company's environmental policy and performance. The Company's Corporate Social Responsibility Steering Group (CSRSG) oversees the implementation of all social and environmental programmes across the BT Group. The chairman of the CSRSG is a member of the Management Council and is also BT's overall CSR Champion. BT's Environment Champion - with personal responsibility for environmental policy development, implementation and co-ordination - is a senior operational manager and is also a member of the CSRSG.

BT is committed to prevention of pollution and minimising the impact of its operations on the environment by means of a programme of continuous improvement. In particular BT and its wholly owned subsidiaries will:

- Meet all relevant legislative and other requirements, and where appropriate exceed or supplement these by setting our own exacting standards.
- Seek to reduce consumption of materials in our operations, reuse rather than dispose whenever possible, and promote recycling and the use of recycled materials.
- Design energy efficiency into new services, buildings and equipment and manage energy wisely in all operations.
- Reduce wherever practicable the level of harmful emissions.
- Develop products that are safe to use, make efficient use of resources and which can be reused, recycled or disposed of safely.
- Work in partnership with our suppliers to minimise the impact of their operations on the environment through a quality purchasing policy.
- Seek to minimise the visual, noise and other impacts on the local environment when siting our buildings, structures and equipment.
- Work with external groups and organisations to promote the concepts and practices of environmental protection.
- Include environmental issues in discussions with the BT unions and the BT training programmes, and

encourage the implementation of sound environmental practices by all BT people.

- Monitor progress and publish details of our environmental performance in our Social and Environment report, as a minimum, on an annual basis.

**Environmental prosecutions**

BT recognises that it has clear legal obligations for the management of its environmental programmes.

During the 2005 financial year, there were no environmental prosecutions in the UK.



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# Fuel, energy & water

**We are one of the UK's biggest energy users. Here we describe how we manage our fuel and energy us**

**This section covers:**

- Energy consumption
- Energy initiatives
- Energy benchmarking and surveys
- Energy management
- Premises energy (offices and buildings)
- Process energy (networks)
- Fuel tanks
- Water use.

## Energy consumption

We continuously monitor energy consumption, using one of the UK's largest computer-based monitoring and targeting systems. We collect data at half-hour intervals from over 6000 sites.

Our investment in new electricity meters - these monitor consumption every half-hour - has helped us identify wastage earlier rather than relying on a monthly bill.

Energy consumption for BT's network and estate during the financial year 2005 was 2624GWh. This is made up of:

- 1854GWh electricity (approximately) to run our networks
- 286GWh electricity (approximately) used at our office premises
- 485GWh (gas and oil use) for all our sites.

See [Data and targets](#) for emissions.

## Trends in energy use

Investment in energy management has enabled us to decrease the electricity we use in our office estate consumption by 77GWh. However, as expected, the energy used by our networks increased due to the success of Broadband rollout. This has resulted in an increase to our network electricity use of 143GWh. Total electricity consumption was 2139GWh compared with 2074GWh in the 2004 financial year.

We are working hard to improve our network growth forecasting and to accurately assess the impact of broadband and 21st Century Network (21CN) on energy demand.

We are continuing to reduce our use of heating fuel (gas and oil) with improvements shown when the data is corrected to take into account weather conditions throughout the year. Gas consumption continues to rise because of oil to gas heating conversions.

## Energy initiatives

Here are some of the ways we try to improve our energy efficiency.

## Plant replacement

We look at the whole life of our plant when we assess its cost, including its energy efficiency, which influences the cost of running the machinery. Buying more efficient equipment helps save energy and can reduce demand for cooling, cutting the cost of the plant over its whole life. Further cost savings can be made by replacing refrigerant-based cooling (air conditioning) with automated fresh-air cooling systems (which also reduce the use of refrigerant gases, such as HCFCs and HFCs). Building management systems that integrate heating and cooling, further eliminating waste, are now installed as standard.

## Energy awareness

We have continued our energy awareness programme, through in-house publications, and an intranet guide to our ISO 14001 certification. Workshops with our suppliers and contractors help us jointly to maximise our environmental performance. In the financial year 2004, BT won a Liveable City award in the contribution to air quality and climate change category. The judges acknowledged BT's commitment to lessen the impact of its operations on air quality, by reducing its carbon dioxide emissions worldwide. Our initiatives in this area include research on the use of urban wind turbines, government lobbying on global warming and moving to low emission and renewable energy sources.

## Renewable energy

We are committed to meet and, where possible, exceed the UK Government's sustainability targets to buy renewable energy.

In the 2005 financial year, we signed a three-year contract with npower and British Gas that will see nearly all of BT's UK electricity supplied by 'environmentally friendly' energy. This makes us the world's largest purchaser of green energy.

The electricity will be supplied from renewable sources and combined heat and power (CHP) plants.

We believe this initiative will reduce our carbon dioxide emissions by approximately 325,000 tonnes a year, equivalent to that produced by approximately 100,000 cars.

We work with our suppliers to increase capacity and we are investigating housing our own renewable generation systems, such as wind turbines, at suitable sites.

Using renewable energy has major environmental benefits, including reductions in:

- Air emissions
- Greenhouse gas emissions, particularly CO<sub>2</sub>, SO<sub>2</sub> and NO<sub>x</sub>
- Particulates that contribute to breathing problems.

We participate in a number of initiatives to promote the use of renewable energy, particularly in the development of new technologies using wind energy.

## The Carbon Trust partnership

We created a partnership with the UK's Carbon Trust to investigate the suitability of using BT buildings to house wind turbines for trials in the 2005 financial year. The Carbon Trust has listed the 250 windiest sites, including microwave towers, radio stations and telephone exchanges in rural areas.

## Rooftop wind turbines

We support turbine specialist, Wind Dam, in its development and deployment of rooftop vertical wind turbines. This innovative system is not as popular as traditional horizontal wind turbines that use propellers. The outer blades of the Wind Dam turbine follow the prevailing wind and guide the energy towards the inner blades. It is discreet and ideal for use on rooftops.

In 2004 we made a strategic alliance with Wind Dam, commissioning the company to build and test two 2.5kW turbines in Cornwall, UK.

We are trialling a small vertical axis wind turbine on the roof of one of our telephone exchanges in Cornwall. When connected, this could provide between 5 and 10 per cent of the energy used at the exchange.

If successful, this turbine could be used in urban environments, where it would be less visible and noisy than traditional wind propellers.

## Powering major UK sites from wind

Last year we reported that three large wind turbines would have been sufficient to power one of our large satellite communications sites in the UK. Following a meeting with the MOD on site, we now agree with them that this is not practical. Therefore, we are now proposing to install two smaller turbines at the site's visitor centre. This would, we hope, become a tourist attraction and provide an opportunity to demonstrate the benefits of renewable energy while celebrating the history of radio and satellite communications.

## Photovoltaics and biofuels

Using sunlight to power small telephone exchanges holds great promise but the cost of photovoltaics is prohibitively expensive. Nevertheless, in the 2006 financial year we have set two targets to install both small-scale wind and PV systems.

We will also further explore the use of fuels made from plants (biofuels) to replace the diesel used in our emergency generators. Biofuels are considered to be carbon neutral because the plants store as much carbon in their growth as that emitted when the fuel is combusted.

## Energy benchmarking and surveys

Our contracted facilities management team continues to conduct energy surveys at poorly performing sites, to minimise energy and water consumption. Web-based electricity reports, updated every half-hour, have helped our building facilities supplier to focus further on waste. This has been supported by energy surveys from BT within our network buildings, and surveys carried out by specialist consultants as part of the government Action Energy programme.

## Home working

BT continued its home-working programme. This enables many of our people to travel less and allows us to close some of our older, less efficient offices.

## Contract and supply strategy

Like many UK organisations, we have found that imprecise electricity bills have hampered our energy efficiency programmes because poor data makes it difficult to judge progress. We tackled this problem at a supplier, industry and regulatory level and have seen a slow improvement. During this year we have negotiated new contracts, which include performance measures on billing accuracy.



# Fuel, energy & water continued

## Eliminating waste

Energy targets help us to cut waste. They cover:

- Installation of renewable energy solutions
- Process energy (networks)
- Premises energy (offices and buildings)
- Metered water use.

In the financial year 2005, BT Wholesale invested £5.9 million in its energy management programme. This has resulted in savings of over 16.3GWh. See [Data and targets](#) for details.

## Energy management

Our energy management programme helps us maintain our:

- Energy efficiency accreditation (with the UK National Energy Foundation)
- Fuel storage tank environmental testing and remedial works programme
- ISO 14001 certification.

We consolidate our energy management and plant replacement strategy into business-as-usual activity, in conjunction with our supply-chain partners in property, facilities management and energy supply.

Throughout the financial year 2005, we continued to invest in energy efficiency and embedding it in our business. This integrated approach makes it more difficult to isolate the cost savings we make through energy efficiency initiatives.

In addition, our energy management team is still working effectively in partnership with the owners of the BT estate. This will help us speed up our energy efficiency improvements.

See [Data and targets](#).

## Premises energy

Premises energy includes all the electricity, oil and gas required for more than 1000 offices, warehouses and depots.

As we rationalise and refurbish our premises, our overall energy use is decreasing. Although it is a fact that air conditioning increases energy consumption per square metre, our rationalisation and refurbishment programme enables us to use our office buildings more efficiently (more people, less empty space). This helps us reduce energy use per person.

In the financial year 2005, premises energy consumption decreased by 15 per cent, compared with the previous year. In the same period, weather corrected (using degree days) heating energy was down by 6.54 per cent. Average degree-days for the year were approximately 5 per cent lower than in the previous year.

## Case study

In Spain, we buy around 15 GWh of renewable electricity each year for our head office and main network nodes in Madrid. In the 2005 financial year, we reduced our electricity consumption in Madrid by just over 5 per cent despite increased growth in our business. We did this through conservation, such as increasing the air-conditioned temperature at our sites by 1 degree C, which produced a saving of 7 per cent in consumption.

See [Data and targets](#).

## Process energy

Process energy includes all the electricity to power more than 6300 transmission stations, satellite earth stations and telephone exchanges that support our voice, data and internet networks.

We generate electricity on site using our own generators. This is done to provide extra electricity at peak times and during supply failures. In the financial year 2005, we generated 15GWh of electricity.

We still expect to see an increase in the demand for energy to power our fast-expanding networks but are working hard to improve our network growth forecasting and to accurately assess the impact of broadband on energy demand.

## Fuel tanks

We have several thousand fuel storage tanks, many below ground. The fuel is used for heating and to supply standby diesel generators used to power the network during a power failure. If spilled, the fuel poses a threat to drinking water supplies, particularly in sensitive areas close to water abstraction points. This is a highly regulated issue.

Testing, repair and decommissioning of fuel tanks are a vital part of BT's programme to reduce the risk of pollution from fuel storage.

Six years ago, we began a programme to test all our fuel tanks. At the end of the financial year 2005, we had spent £15.9 million on the testing and remedial work. This has substantially reduced the risk of pollution from our oil storage tanks.

A specialist company visited 726 sites, tested 874 tanks, passed 735, failed 135 and provided detailed recommendations for remedial action. Four tanks were found to be foam filled and were not tested. A number of remedial actions have been identified.

## Incident reporting

Even with good controls, spills happen. To reduce the number and severity of these incidents, it is important that they are investigated promptly, lessons are learned and any changes are made quickly. BT classifies environmental incidents as:

- Serious - where the spill has entered, or is likely to enter, either the drainage system or topsoil
- Significant - where the spill covers a wide area but is confined to a hard standing area only and there is no evidence of entry into the drainage system or topsoil
- Local - where a minor spill is contained within a very small area.

For significant and serious incidents, a specialist contractor cleans up.

For serious incidents in the UK, the Environment Agency (EA) or the Scottish Environment Protection Agency (SEPA) are also informed.

## Investigation process

BT's Wholesale Power Technology Support team investigates fuel-related environmental incidents. The team's investigative skills, technical understanding and legal/regulatory awareness help to improve our performance in this area.

In the financial year 2005, a total of six oil-related incidents were recorded, a reduction of two from the previous year. Of these, three were classified as serious, one as significant and two as local. As a result of our investigations, various remedial works have been instigated and recommendations for improvement have been adopted to avoid recurrence on similar plant.

The known quantity of oil discharged was 613 litres.

A reported loss at one site is still being investigated and ground water monitoring by a specialist contractor continues. After a 6-month period no oil has been detected at ground water level. This will continue for a further 6-month period.

## Oil recovery

In the 2005 financial year, over 785,083 litres of oil have been removed from tanks that have been decommissioned as a result of our fuel tank integrity testing programme or conversions from oil to gas-fired heating systems. This has been sent for reuse in the manufacture of road surface material. See [Data and targets](#).

## Water use

We use water mainly for catering, washing and toilets. All our sites have water meters. A concerted effort to reduce our water consumption (leak detection, underground pipe replacement and water-saving devices) has led to a reduction in consumption of 6.1 per cent (from 2.04 million cubic metres in the 2004 financial year to 1.91 million cubic metres in the 2005 financial year).

We are very close to the economic benchmark for optimising water efficiency in most of our buildings. Despite this we will continue to target metered water use.

For more information, see [Data and targets](#).



# Waste

We produced over 110,000 tonnes of waste in the 2005 financial year. Of this, we recycled 37,000 tonnes and sent 73,000 tonnes to landfill (eight per cent less than last year).

To retain our ISO 14001 certification we must run an efficient and effective waste management system. We are tenants in much of our property and our building facilities are managed by a contractor. We work in partnership with them to ensure effective waste management.

**Here we describe:**

- The types of waste generated
- The BT Waste Forum
- Recycling
- Performance against key waste targets
- Working with our property partners.

For further detail on type of waste and recycling data see BT's [Waste recovery Model](#) and [Data and targets](#).

**Types of waste**

We generate different types of waste.

- Category 1 - does not present a danger of environmental pollution, such as paper
- Category 2 - not toxic or hazardous in unmodified form, but which has the potential to become so if not treated properly on disposal, such as cable
- Category 3 - inherently toxic or hazardous and requires the most careful handling at all stages of the disposal process, such as diesel oil. For further details see BT's [Waste recovery model](#).

**The BT Waste Forum**

We have a waste forum, made up of key people across BT. Its role is to:

- Set and monitor waste environmental targets
- Review contractors' environmental performance
- Ensure we comply with all environmental legislation
- Manage our packaging obligations
- Promote and communicate environmental initiatives and awareness
- Consider any new ideas on waste management.

**Recycling**

Of the 110,000 tonnes of waste we generated in the 2005 financial year, we recovered 37,000 tonnes for recycling. In the 2005 financial year, we recycled over 34 per cent of our total waste, around eight per cent more than the previous year.

Much of our general waste is disposed of through materials recovery facilities. These are huge depots where paper and other recyclable materials, such as cans, plastic and paper cups, are sorted, separated and sent for reprocessing.

During the 2005 financial year, we took a number of initiatives to recycle redundant equipment, such as computing equipment, standby generators and mobile engine sets. This increased the total tonnage of the materials we recovered by over 10,600 tonnes.

**Recycling paper**

Much of our waste paper is recycled. In the 2005 financial year, we recycled over 1200 tonnes of paper and over 5700 tonnes of cardboard.

Our facilities management supplier, Monteray, works with contractors to collect and recycle large amounts of office paper. The paper is sent to processing plants where it is graded according to colour, weight and quality - this determines what end product it can be used for. The best quality paper - about 20 per cent - is likely to be turned into photocopy paper, while the rest is recycled as hand wipes, kitchen towels or toilet paper.

In the 2005 financial year, our human resources team recycled old paper records. This generated 74 tonnes of paper.

In the 2005 financial year, we were one of the first major companies to introduce a new type of environmentally friendly copier and printer paper. The paper contains a minimum of 70 per cent reclaimed fibre from south-east England. The balance is from sustainably managed forests.

For more information on how e-business reduces our paper consumption, see [e-business](#).

**Performance against key waste targets**

Target by March 2005	Achievement	Comment
Increase the amount of items recycled (in tonnes) by 5%, measured against the March 2004 outturn figure.	Completed	The target was exceeded by a considerable amount largely because of recycling of computing equipment, standby generators and engine sets.
Review the drainage infrastructure of pole stacks to determine the preferred cost-effective drainage solution to ensure environmental compliance; arrange a trial to prove the effectiveness of the recommended solution	Completed	Discussions with the Environment Agency have been continuing. A trial is going ahead at one of our key sites in East Anglia.

For further details see [Data and targets](#) and BT's [Waste recovery Model](#).

**Working with our property partners**

Nearly all of our properties are owned by Telereal and our facilities management is carried out by Monteray. We work closely with them in partnership to ensure that our waste is properly managed, ensuring our continued certification to the ISO 14001 environmental management systems standard.



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# Transport

**We run a fleet of 31,969 vehicles, managed under contract by our subsidiary, BT Fleet.**

We use our considerable purchasing power to ensure we achieve the best possible value for money and lowest costs for the full life of our vehicles. BT Fleet is responsible for the management of our transport environmental impacts. This is part of BT's UK certified ISO 14001 environmental management system (EMS).

**Here we discuss:**

- How we operate our commercial vehicle fleet
- Our company car policy
- The use of alternative fuels and fuel efficiency devices
- Noise suppression efforts
- Electric vehicle trials
- Awards.

## Commercial vehicle fleet

In the financial year 2005, our commercial fleet was reduced by two per cent, with a corresponding reduction in fuel consumption of 3.5 per cent. See full details in [Data and targets](#).

We removed 664 vans from the commercial fleet during the year. This was achieved despite an unusually high level of telephone line faults during the autumn 2004 (making BT engineers travel) and our decision to accelerate the implementation of the next generation of BT's network and services infrastructure (21CN).

The reduction of our commercial fleet was possible because of a number of initiatives and policies in place, such as:

- Engineering productivity targets
- Operational policies, optimising vehicle use
- Vehicle replacement cycles, which ensure the fleet benefits from latest technologies and emission standards, while delivering greater reliability and lower maintenance frequency and costs
- Vehicle pools, which provide services for those people who cover few miles
- Utilising pools of larger or specialist vehicles to help reduce the number of these vehicle types.

We participated in a seminar held by the UK Government Transport Energy Best Practice programme and debated our environmental systems with specialists in the field. We may consider taking further specialist advice on fleet efficiency offered by the programme eg motivate scheme.

In the 2006 financial year we will:

- Aim to reduce our commercial fleet by a further 500 vehicles
- Test potential fuel savings from a new speed limiter function on vans, report on driver feedback and make recommendations
- Aim to review our approach to alternative fuels.

See further details in [Data and targets](#).

## Company car policy

Our company car policy supports the key objectives of the UK Government's emissions-based company car taxation initiative. It offers the following benefits:

- Increased allowance to employees who opt out of company car ownership
- Improved tax efficiencies for employees who opt for lower-emission cars
- Advice and communications to company car drivers, encouraging users to choose lower-emission cars.

BT company cars are provided on either a three years or 60,000 miles, or a three years or 70,000 miles replacement cycle. Better car design, increased intervals between servicing and improved vehicle life, means in the future we will replace cars in four years or 80,000 miles.

We are now providing the Vauxhall Astra Estate 1.7 CDTi for our 'business need' drivers. This achieves an extra seven mpg fuel efficiency compared to the previous model used, and carbon dioxide emissions are 19g/km lower. BT also benefits because the road fund licence for this model costs less.

## Reducing fuel consumption

The UK tax regime, which no longer rewards high mileage, has helped us to reduce mileage. We penalise company car drivers with cars that return less than 23 miles per gallon with a £20 per month surcharge.

The company car fleet size has reduced by eight per cent (932 vehicles) over the previous year. This reflects the downward trend in the fleet size and mileage, with a reduction of over 12 million miles compared with the previous year.

## Online ordering

Our company car ordering system for car drivers is completely web-based, with links to all the vehicle manufacturers and to all new vehicles' fuel consumption and CO2 emission data. Information to help drivers minimise their impact on the environment is included. This enables drivers to make fully informed choices when buying cars and supports the UK Government's aim to encourage the use of lower-emission cars.

## Alternative fuels

Our fleet is mainly medium and large vans - nearly all diesel-powered. There are alternative fuels, but each has its drawbacks:

- We could replace diesel with petrol vehicles, but this would reduce fuel economy because petrol vehicles are less efficient than diesel equivalents.
- Liquid Petroleum Gas (LPG) is the cleanest-burning fossil fuel, but supplies are limited. Furthermore the additional space needed for LPG tanks on the vehicles would mean replacing existing vehicles with larger, less fuel-efficient models.
- Vehicles using both LPG and petrol (dual fuel) are being assessed as we await clarity from the UK Government on fuel duty.

Further details are available in [Data and targets](#).

## Fuel efficiency devices

Tests on a fuel economy device found it produced average fuel savings of 12 per cent and reductions in diesel smoke emissions of 36 per cent. But it risked damaging the fuel injection system and the device was rejected.

## Noise suppression

We have worked hard to develop specifications that minimise noise for our operators and those in the vicinity of our specialist cabling vehicles. Over the years we have:

- Developed the vehicle specifications to include higher horsepower engines (allowing operation at lower engine revs)
- Introduced sound-deadening panels behind the engine
- Revised the hydraulic valve component to reduce noise.

Despite increased power demands, we have reduced noise to a level where operators no longer have to wear ear defenders.

We specify that all vehicles fitted with hydraulic systems return to tick over when not powering the system. This reduces fuel usage and exhaust fumes, and keeps operating noise to a minimum.

## Electric vehicle trials

BT took part in the TH!NK@bout London mobility project, launched in 2001 and supported by Ford. The silent, zero-emission electric car provided by TH!NK@bout London was used by a network planning team for light delivery work and site visits in and around the capital.

Ford has halted work on the electric car and the TH!NK car has been returned.

BT Fleet is investigating the feasibility of a replacement.

## Awards

In the 2004 financial year, BT received two London Liveable City Awards, which recognise and promote sustainable business.

BT won the award in the Air Quality and Climate Change category. The judges recognised our efforts to reduce the impact of our worldwide operations on air quality and cut our CO2 emissions.

We were also 'highly commended' in the Traffic Reduction and Transport Management category for our innovative conferencing technologies and flexible home-working initiatives. The award recognised the significant reduction in the amount of travel by BT people, including in and around the congested area of London. The judges also praised our efforts to encourage business customers to reduce the environmental impact of their transport activities.



# Emissions to air

**Emissions to air are gases released into the environment, such as car exhaust fumes. This is a highly regulated area because some emissions are harmful and others, such as carbon dioxide from our vehicles, contribute to climate change.**

We closely monitor our air emissions.

**Here we explain our:**

- Action on climate change
- Ozone depletion and refrigerants.

## Action on climate change

Since August 2000 we have been reporting on our impact on global warming, using the UK Government guidelines. These recommend that the impact is measured in equivalent tonnes of CO2. We have achieved:

- A 71% reduction in CO2 emissions since 1991 because of improved energy efficiency
- A 40% reduction in CO2 emissions since 1992 because of improvements to our commercial transport fleet.

This is equivalent to an annual saving of almost 1.4 million tonnes of CO2.

Our emissions savings already exceed the UK Government's target to reduce greenhouse gases emissions by 20 per cent, by 2010 (from a 1990 baseline). This goes beyond the Kyoto Protocol target of a 12.5 per cent reduction by 2010.

In the 2005 financial year, we signed a three-year contract with npower and British Gas that will see nearly all of BT's UK electricity supplied by 'environmentally friendly' energy. This makes us the world's largest purchaser of green energy.

The electricity will be supplied from renewable sources and combined heat and power (CHP) plants.

We believe this initiative will reduce our carbon dioxide emissions by approximately 325,000 tonnes a year, equivalent to that produced by approximately 100,000 cars.

For more on the CO2 Model and a CO2 equivalent emissions chart, see [Data and targets](#).

## Ozone depletion and refrigerants

Wherever possible, we use fresh air to cool our telecommunications equipment. But on warm days we have to use air conditioning. We are working to improve electronic equipment so that it needs less cooling.

We report on our ozone-depleting emissions - as defined by the Montreal Protocol - in accordance with the requirements of the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines.

We control the net amount of refrigerants purchased (the quantity purchased minus the quantity returned or recycled) so that it is no higher than 4 per cent of the total refrigerants held. In the 2005 financial year, the end-of-year total was 2.88 per cent.

We have also reduced the number of ozone depleting HCFC/CFC air-handling units in our network by over 8 per cent in the last two years. This is in line with our policy to use the less polluting R407C gas in all our new units.

For further details and a CFC-11 equivalent emissions chart, see [Data and targets](#).

## Fresh air cooling

Where possible, our communications equipment complies with the requirements of the European Telecommunications Standards Institute. This means we can make full use of fresh air cooling - with its inherent lower energy and maintenance costs - for about 70 per cent of the year.

We will also be adopting a fresh air cooling policy for our 21st century network rollout wherever possible.

## Refrigeration cooling

Our key environmental concern here is to prevent the accidental release of refrigerant gas.

All cooling units purchased since February 2000 use an ozone-friendly, chlorine-free refrigerant gas, R407C. All refrigeration units are hermetically sealed.

In addition, air-conditioning units are fitted with pressure transducers, a new control system, and are designed to be operated without the need for refrigerant analyser gauges through which refrigerant gas can escape.

We introduced a newly designed type of fan (the EC-motored fan) that brings considerable energy savings compared to the usual fan in November 2003. Since then, all new units have been supplied with the new fans as standard.

We continue to monitor available refrigerants that comply with the requirements of the European Union 2000/2037 Regulation on the use of ozone-depleting substances. Where possible, we will use ozone-friendly HFC refrigerants in new and existing plants.

For further details see [Data and targets](#).

## Product design

Through our active participation in the European Telecommunications Standards Institute (ETSI), we continue to explore opportunities to improve the energy/cooling efficiency of the equipment we purchase. We try to influence the design of future communication equipment to ensure that standard cooling practices can be applied.

One of these initiatives addressed the problem of increasing heat dissipation out of communication equipment racks and cabinets. BT has been instrumental in the process of updating the current ETSI standards and in the proposal to include a thermal management standard for equipment installations.

# Procurement

As one of the UK's largest purchasers, we have an environmental influence that extends well beyond that of our own staff and workplaces.

We present the key aspects of our relationship with suppliers and how we promote environmental good practice in all our purchasing activities in the [Procurement and the environment](#) section of Suppliers.



# Product stewardship

## Why product stewardship is so important

Our world runs on electronic products. The drive to make them better, faster and cheaper is good for customers and business, but it creates waste.

When we buy products for our own business or for resale, we place demands on the Earth's resources. For example, we may not mine minerals ourselves but through our supply chain we inevitably support the extraction of minerals. The products and services we sell inevitably lead to consumption and waste.

Although manufacturers are primarily responsible for their products, we

all share responsibility for:

- Reducing the use of hazardous materials in the manufacture of products
- Minimising the energy consumed during their life
- Enabling their reuse, recycling and safe disposal.

Product stewardship is a set of principles designed to reduce the environmental impact of a product (or service) throughout its life.

Practising product stewardship brings benefits to the environment and to business. For example, designing products to use the minimum resources during manufacture, use and disposal can reduce costs and environmental impacts. Refurbishing used products for reuse can increase revenues and reduce landfill.

Here we report on the legislative and business initiatives that are driving product stewardship.

## Why we have to manage our products

BT's business relies heavily on electrical and electronic equipment (EEE). We buy vast amounts of the equipment to run our own business and to serve our customers. This, combined with the regulation on the disposal of EEE, means it is crucial we improve the way we manage the equipment. We must also continue to improve the management of non-electrical equipment, such as telephone poles, exchanges and towers.

## How product stewardship supports sustainability

Product stewardship reduces the environmental impacts of products, particularly electrical and electronic equipment.

The approach considers the entire life-cycle impacts of a product and its packaging by:

- Minimising the actual amount of material used
- Reducing or eliminating the use of toxic materials
- Minimising the energy used in sourcing, processing, manufacturing and transport
- Extending product life by incorporating 'future-proofing' into the design, to maintain/enhance functionality and durability.

We do not make products ourselves (those that bear our name, such as telephones, are made by others), but we use electrical equipment in our own network and in our customers' premises (eg, routers, servers, modems, telephones).

To sell their products in the European Single Market, manufacturers need to ensure that their equipment - and components - comply with the European directives on EEE.

Product stewardship - the height of the indicator (left) shows environmental benefit, eg, reuse - has a greater benefit than remanufacture.

## Legal drivers

An estimated one million tonnes of electrical and electronic equipment is thrown away every year. Some of that waste is hazardous to people and the environment.

Two EU directives address the problem: Waste Electrical and Electronic Equipment (WEEE) and the Restriction of the use of certain Hazardous Substances (RoHS).

Both directives aim to minimise the use of hazardous materials in electrical and electronic equipment, to minimise the amount of hazardous waste going to landfill, and to encourage the reuse of materials. Setting targets for collection, treatment, recycling and recovery of waste EEE helps comply with the law.

The directives embrace the concept of extended producer responsibility, requiring manufacturers to finance the cost of taking back equipment at the end of its life. This means that we have producer responsibility for BT-branded products as well as other products that we distribute.

The directives ban the use of hazardous materials, including lead-based solders, mercury, cadmium and brominated plastics. These materials will have to be treated before landfilling, which will significantly reduce the risk that they will enter the food chain and potentially harm human health. We welcome this groundbreaking legislation because it supports our efforts to contribute to a more sustainable society.

We have created a company standard to help us select products that comply with EU legislation and are more sustainable. Our pre-tender process (GS19) requires that suppliers provide information about their products and how they propose to comply with EU legislation.

Before awarding contracts to suppliers we also consider their overall environmental and safety performance.

A more demanding directive, called Energy-using Products (EuP), was published in August 2003. It proposes that EuP products have their environmental impact assessed at design or development stage, and/or meet minimum environmental requirements, such as energy efficiency. The CE mark, which confirms that products sold in the EU conform to minimum safety and environmental standards, will have to be carried by all energy-using products.

## Contributing to legislation

BT continues to contribute to legislative developments by working with industry bodies, such as the UK Industry Council for Electronic Equipment Recycling (ICER). ICER provides forums for discussion with trade associations and gives feedback to the UK Government.

Through ICER, we work closely with manufacturers and recyclers with similar responsibilities on ways to solve issues such as how to meet legal targets, data provision and ways to organise waste collection.

We gave BT's response to the first, second and third round of consultations carried out by the UK Department of Trade and Industry on the implementation of the WEEE and RoHS directives.

Find out more about the [EU legislation](#), and [ICER](#).

## Working with our suppliers

Since 2002, the Product Stewardship team has been monitoring the responses to our supplier questionnaires (GS19). The team works closely with our buyers to make sure that we are making the right purchasing choices. The information gathered from the questionnaires is needed to ensure that BT meets its obligations under EU law, intended to encourage suppliers to design products that have less environmental impact, increase recovery and recycling, and reduce hazardous materials in new equipment.

For example, the questionnaire asks if products contain materials described in the RoHS directive and if suppliers have programmes to phase out:

- Lead
- Mercury
- Cadmium
- Hexavalent chromium
- PBB brominated flame retardant
- PBDE brominated flame retardant.



# Product stewardship continued

## Improving what we do

The RoHS directive requires us to monitor what we and suppliers do to ensure products and components comply with the law by 1 July 2006. We meet regularly with our buyers and waste management people to discuss ways to reduce further the environmental impacts of our products and operations. In the 2005 financial year, we successfully tested a kit that provides a quick, cost-effective method to check if a product has been made with lead-based solder. This means we can physically check the information we gather from suppliers on the solder components.

## Product stewardship in BT

BT has a well-established environmental management system (EMS) of which product stewardship is one of eight aspects (or main environmental impacts). An important part of this management system is to identify, assess and manage the environmental impact of our business activities.

We have been reviewing what product stewardship means in BT. We accept that we have a responsibility for the products we sell to customers as well as those we use to run our business and networks. This assessment has helped us determine where we can further improve.

## Training

We make sure that our people are kept up to date with the latest developments, especially the environmental legislation affecting electrical and electronic products. This is particularly important for buyers, product managers and all the people

who decide what products enter BT supply chain. We do this in several ways:

- Our computer-based training programme (CBT), designed to raise awareness of product stewardship, includes the latest legislative developments.
- Our regular bulletins to our product managers and buyers help them understand what they must do to comply with the WEEE and RoHS directives. For example, they have to check that our suppliers switch to products made with lead-free solder.
- Our recent training programme for buyers emphasised the importance for suppliers to complete the pre-tender questionnaire if they intend to supply BT with electrical and electronics products.

## Product stewardship in action Equipment reuse

We have systems in place to help us reuse as much equipment as possible. This reduces costs and wastage by maximising the life of our equipment. Initiatives to encourage reuse include:

- A database that lists switch equipment available for reuse and allows the products to be reserved and tracked until delivered.
- A local returns system at BT Exact to recover, refurbish and re-issue surplus personal computers. This complements a BT-wide system.
- A programme introduced by BT Retail during the 2005 financial year that rebuilds and reissues surplus stock to meet all requests for new personal computers.
- A web-based management system at BT Payphones that lists available

spares and shows which items can be recycled.

- A returns service to repair and refurbish faulty meters and test equipment used by our engineers.
- A national campaign to encourage BT people with surplus computing equipment to hand it back.

## Our partnerships Sustainability through producer responsibility

We continue to work with the Green Alliance, a UK-based environment organisation, on a project called Sustainability through Producer Responsibility. This is a collaboration of business, government and non-governmental organisations. Its objective is to examine the potential impact of producer responsibility programmes on the use of resources. It also seeks to develop a set of widely agreed guidelines to design and implement producer responsibility initiatives in the UK.

For more information, see [Green Alliance](#).

To find out more about the UK Government guidelines on sustainability, see [DEFRA](#).

## Looking to the future

BT's product stewardship team is working with the Imperial College in London (on behalf of BT Wholesale) to carry out a life-cycle analysis of alternative materials to make poles to hold telecommunication cables. This will help us make an informed decision on the future of our overhead network distribution system.

## Achievements

1. Set up a database of all the hazardous materials (as required under the WEEE Directive) for all telephones made since 1970.
2. Trained over 4,000 employees in the principles of product stewardship.
3. Provided BT's response to the first, second and third round of consultations carried out by the UK Department of Trade and Industry (DTI) on the implementation of the WEEE and RoHS directives.
4. Designed, developed and launched a pre-tender process (GS19) to help BT buyers consider the whole-life impacts of electrical and electronic products.
5. Improved our core network installation requirements to include product stewardship principles.
6. Presented BT's position at the European Telecommunications Network Association (ETNO) Sustainability conference on the implementation of the WEEE and RoHS directives in the UK.
7. Established a test to confirm that EEE products are lead free (as required by the RoHS directive).
8. Conducted a major review of product stewardship in BT in the 2005 financial year. This has given us a better understanding of our roles and responsibilities.

## Plans

We will continue to:

1. Improve our product stewardship pre-tender process for EEE equipment so that we make informed buying decisions and comply with legislation.
2. Encourage our suppliers to design products that have less environmental impact by making it easier to recover materials and recycle and reduce the use of hazardous materials in new equipment.
3. Support the phase-out of lead solder, hexavalent chromium, brominated flame-retardants and all the other materials covered in the RoHS directive (we ended the use of cadmium as a pigment in all telephones in 1989).
4. Contribute to the dialogue on the EuP directive within the stakeholder group co-ordinated by the UK Government.
5. Work with all people in the various lines of business to ensure that BT can meet its obligations under the WEEE and RoHS directives.



# Local impacts

**The impact of our activities, such as the visual intrusion of telephone wires or the disruption caused by construction work, affects people's immediate surroundings.**

The infrastructure supporting our 28 million customer lines in the UK includes around 4 million telegraph poles, millions of manhole covers, thousands of roadside cabinets, 24 tunnels running under cities and hundreds of radio stations. Our network is expanding and changing as technology progresses. We are conscious that this has a potential impact on the environment - on the countryside, on skylines and cityscapes - and concerns all our stakeholders.

- Our approach to local impact is embedded in our network planning rules and procurement policies. We have established channels to help stakeholders communicate with us about these issues. We support the four principal elements set out in the UK Government's sustainable development agenda:
- Social progress which recognises the needs of everyone
  - Effective protection of the environment
  - Prudent use of natural resources
  - Maintenance of high and stable levels of economic growth and employment.

## Here we discuss:

- Visual amenity
- Street furniture
- Street works
- Wires and cables
- Radio masts
- Biodiversity
- Biodiversity action

- Environmental management
- Campaigning and public debate
- Environmental complaints
- Special projects in the UK.

## Visual amenity

The UK Government defines visual amenity as 'the preservation of a view or prospect available to a member of the local community from a public location which is designated as protected'.

It can be difficult to strike the right balance when installing equipment. For example, replacing overhead wires with buried underground cables has both benefits and drawbacks. Underground cables may have less visual impact, but burying wires consumes much more energy and materials.

Our telephone poles are made from timber grown in sustainably managed forests and can be regarded as a renewable resource. Underground installation requires plastic ducting, concrete and metal manhole covers, which are made from non-renewable sources.

We remain committed to work with local authorities and other interested parties to achieve a balance between visual impact, cost and the use of resources.

We also recognise the unique value of the UK's national parks, their breathtaking scenery, rare wildlife and cultural heritage which provide a haven for quiet enjoyment for all. BT is a founding member of the [Corporate Forum for National Parks](#) and is committed to work with the [Council for National Parks](#) to help them meet their objectives.

## Street furniture

Our roadside cabinets are sometimes vandalised with fly posters and graffiti. We are working with a number of local authorities and community groups to improve streetscapes and find commercially viable solutions to the problem.

The UK law on anti-social behaviour has been changed and will be fully in force in our financial year 2005. We will report on how it affects our work in improving streetscapes.

## Street works and new housing developments

We are committed to follow the UK Government's revised framework on street works. We work closely with developers of housing estates to minimise the impact of construction activities when extending our network. Our agreement with the House Builders Federation ensures a co-ordinated on-site approach by all service providers.

Our network optimising system helps our planners minimise the installation of underground plants on new development sites as part of our commitment to reduce local impacts.

## Wires and cables

Complaints about our wires and cables range from the visual intrusion in the landscape to the noise and mess created by birds sitting on wires.

Our asset assurance programme deals with issues arising from the impact of our vast network of overhead wires and cables.

When installing new telephone poles or replacing old ones, we consider

environmental impacts, such as tree roots and hedgerows. This is particularly important in areas of outstanding natural beauty, on listed buildings and in other protected areas.

## Radio masts

Radio communication remains an important part of our network, particularly in rough terrain, such as the Scottish Highlands. We have around 300 radio stations in the UK.

Radio masts can impair the beauty of the landscape. We are experimenting with the use of satellite communications, but radio masts will have to be used for some time.

We continue to share space on radio masts and towers with many other radio operators. This prevents unnecessary structures and minimises the number of antennas. We are also working with other service providers to use existing street equipment - lamp posts, telephone kiosks and telegraph poles - when installing local mobile telephone networks in cities and towns.

## Biodiversity

Biodiversity is the variety of life on Earth and is protected by UK law. Its conservation is a key test of sustainable development, because biodiversity:

- Enhances quality of life
- Provides natural assets from which economic benefits can be derived (eg, pharmaceuticals)
- Demonstrates that the environment is in good health
- Enables future generations to meet their needs.

We have an impact on biodiversity through our use of natural resources, energy and transport. These impacts are covered by our [environmental policy](#) and [environmental management systems](#). We take every opportunity to promote and encourage biodiversity.

## Biodiversity action

Protecting biodiversity is integral to our environmental management system. This ensures that all our activities, from procurement to waste management, take biodiversity into account.

## Environmental management

Here are some examples of our actions to conserve biodiversity:

- Our procurement policy specifies that we only buy telephone poles from sustainably managed forests.
- We no longer use volatile organic solvent paints and use only water-based alternatives on our radio towers in areas high in biodiversity.
- We have a comprehensive recycling programme for BT and our customers, preventing nearly 37,000 tonnes of waste a year ending up in landfills (34 per cent of our total waste). Operational plants, cable, batteries, oil, mobile phones, paper, toner cartridges and telephone directories are all recycled.
- Many of our new office buildings and telephone exchanges use fresh air rather than refrigerated cooling, to minimise the use of ozone-depleting gases. Many buildings have bird and bat boxes to encourage local biodiversity.

## Campaigning and public debate

We work with others to ensure that we implement our policy and stimulate debate and learning about biodiversity.

We published [Variety and Values](#) to advance the discussion of global cultural and biodiversity issues.

We commissioned Forum for the Future, a UK-based sustainable development charity, to study the impact of the telecommunications sector on biodiversity and best-practice business approaches to manage biodiversity. The studies showed that nearly all major companies manage some of their biodiversity impacts in broader environmental, social or sustainability management strategies without drawing these together under the biodiversity umbrella.

We work with UK schools to promote biodiversity. In the 2004 financial year, we sponsored [GLOBE UK](#) which is part of an international environmental education project that encourages pupils to explore and measure their local areas, and report their findings on the Internet.

The initiative links students and scientists in 107 countries as they exchange and collect data about their environment and enter it on the GLOBE database.

Classroom activities encourage the scientific gathering of data, which can be compared over time, between schools and between countries. The data serves as a basis for discussions on how we can change our lifestyles to promote sustainable development.



## Local impacts continued

### Environmental complaints

The number of environmental complaints received represents less than 1% of the total complaints received by BT (based on data taken from our complaints system between January and March 2005). However, we are working hard to ensure that complaints related to local impacts are monitored to help us target areas for improvement.

### Special projects in the UK

We work with appropriate conservation organisations to protect biodiversity at our sites with significant biodiversity importance. These sites include:

#### • Goonhilly Downs SSSI

One of our satellite communications centres, which is 171 acres in area and a component of the Lizard Special Area of Conservation, is located on Goonhilly Downs, designated a Site of Special Scientific Interest (SSSI) for its rare lowland heath habitat. We have an agreed site management statement with English Nature (EN) to maintain and improve the site's biodiversity. Examples from the work plan are in the Earthwatch booklet [Case Studies in Business and Biodiversity](#).

#### • Madley Environmental Education Centre (MESC)

The MESC is a UK-based facility for environmental educational studies. The centre, which is part of 218 acres of land, owned by BT, has made available 11 acres of wetland, woodland and meadows where children and adults can study or just enjoy the wildlife. MESC is supported by the Environment Agency (EA), Hereford Council and BT. We manage the land's wildlife and provide

technical facilities, purpose-built, innovative classrooms and a lecture auditorium on the site.

#### • Adastral Park

Adastral Park is a 99-acre site in the Suffolk Coast and Heaths Natural Area. The BT site at Adastral Park shows that development can contribute to local socio-economic stability without loss of biodiversity if good environmental management practices are adopted. To ensure we optimise biodiversity at Adastral Park, we previously partnered with English Nature on their Lifescapes initiative. This aims to achieve landscape-scale changes to support wildlife through habitat re-creation, wildlife-friendly land use and generally by building a landscape that encourages biodiversity.

#### Case study

##### Tunnel to curb otter deaths

Next to the Goonhilly complex, BT built an underpass tunnel to stop the local population of otters being killed while crossing the busy Helston to St Keverne road. Otters were reintroduced to the area over recent years in a bid to stop a fall in numbers but the road threatened their long-term survival. The project, backed by the Environment Agency and English Nature, was completed in February 2005.

## Benefits

The use of information and communications technology (ICT) has the potential to benefit business (greater efficiency), the people doing business (improve work-life balance) and the environment (reduce consumption of finite resources).

ICT can support social and economic development by improving communication and access to information. The responsible use of ICT is part of BT's approach to sustainability.

We identify some of the key sustainability impacts of ICT, using quantified examples from our own experience. These include:

- The economic, environmental and social impacts of phone and video-conferencing.
- The social and travel implications of more flexible workstyles. We discuss the pros and cons of teleworking as identified by the [SusTel BT Pilot Report](#) and the [SusTel UK Survey](#).
- The social and environmental impact of e-Business, such as paper-free billing.

For more information on work-life balance, see [Employees](#).

## Glossary

### ADSL:

Asymmetric Digital Subscriber Line. ADSL transforms the existing twisted copper pairs between the local telephone exchange and the customer's telephone socket into a high-speed digital line.

### Audioconferencing:

A conference enabling a number of people to communicate by voice over a telephone line.

### BREEAM:

Building Research Establishment Environmental Assessment Method.

### Brown Electricity:

Electricity produced by burning fossil fuels.

### Bunded fuel tank:

An above ground fuel tank with a protective wall to prevent leakage.

### CFCs:

Chlorofluorocarbons. Gaseous compounds used as refrigerants and propellants. Break down ozone in the atmosphere.

### CHP:

CHP is a very efficient technology for generating electricity and heat together. A CHP plant is an installation where there is simultaneous generation of usable heat (normally for space heating) and power (usually electricity) in a single process. CHP typically achieves a 35-40% reduction in primary energy usage compared with power stations and heats only boilers.

### CO2:

Carbon dioxide.

### Data conferencing:

A conference that enables users to book conferences over the internet, to share data or slides while in the conference, and to receive recordings or transcriptions after the conference call.

### DEFRA:

The Department for Environment, Food and Rural Affairs (UK).

### Degree days:

Degree days are a measure of the variation of outside temperature. Their use enables energy managers, building designers and users to determine how the energy consumption of the building is related to the weather, and allows energy-saving measures within the building to be monitored and compared year-to-year.

### ETNO:

European Telecommunications Network Operators Association. It has produced an environmental charter, to which BT was a founder signatory.

### Green electricity:

The government defines green energy in two ways:

**Old Green** - This includes large-scale hydro, uncertified CHP and waste-to-energy. The green energy we currently purchase is old green and this is not exempt from the Climate Change Levy (CCL).

**New Green** - New green refers to the technology and not the date of installation. Technology recognised as new green is: certified CHP; wind; wave; small-scale hydro and photovoltaic. New green energy receives an exemption from the CCL on a specific building basis.

### GS13:

BT's environmental procurement standard for suppliers.

### GS18:

BT's Sourcing with Human Dignity standard.

### GS19:

BT's product stewardship standard.

### Halons:

A group of potent ozone-depleting chemicals related to CFCs used in many fire extinguishers.

### HCFCs:

Hydrochlorofluorocarbons. Alternative to CFC refrigerants.

### Home-worker:

A person registered to work from home and provided with all the necessary furniture, equipment and communication links.

### ICT:

Information and Communications Technology.

### Intranet:

An internet-based technology that allows members of one organisation to share private information.

### IP:

Internet Protocol. This is the set of communication tools that enables computers to 'talk' to each other over the internet.

### ISO 14001:

An international environmental management system standard.



## Glossary continued

### **Kyoto Protocol:**

A legally binding agreement signed in Japan in 1997 to reduce emissions of a basket of six greenhouse gases.

### **Montreal Protocol:**

An international agreement to phase out the major chemicals that destroy ozone in the stratosphere.

### **NOX:**

Oxides of nitrogen.

### **NO2:**

Nitrogen dioxide.

### **OFCOM:**

Office of Communications (UK regulator for the communications industries).

### **UK's Packaging Regulations:**

These regulations require certain businesses to recover and recycle packaging waste. Targets for individual businesses are based on the overall amount of packaging (on products) that they supply to their customers.

### **PCNs & PCBs:**

Substances classified as hazardous.

### **PM10 particulate:**

Fine airborne particulate less than 10 microns in diameter.

### **Recycled paper:**

Paper made from discarded and previously used paper.

### **SDH:**

Synchronous Digital Hierarchy.

### **SOX:**

Oxides of sulphur.

### **SO2:**

Sulphur dioxide.

### **Street Works Notice:**

A requirement of the New Roads and Street Works Act is that the Street Authority must be informed of certain types of street works when BT issues a notice. A notice serves a number of functions:

- It is part of the co-ordination process, especially in traffic sensitive streets and major projects
- For emergency and urgent works it can prompt emergency procedures of other organisations
- It triggers the inspection regime
- It forms the basis of the records for guarantee purposes
- It can help prevent damage
- It provides a basis of assessment whether works have been unreasonably prolonged (in England only).

### **Sustainable business:**

A business that can sustain its own needs environmentally, socially and economically.

### **Sustainable development:**

Development that allows us to meet the needs of our own generation without compromising the ability of future generations to meet their needs.

### **SUSTEL (Sustainable Teleworking):**

A two-year research project financed by the European Commission on the impacts of teleworking.

### **Teleworking:**

Working from outside a conventional office by using advanced telecommunications like video conferencing.

### **TRIAD:**

TRansmission Infrastructure And Demand charge. Agreements to use standby generators in order to manage electrical loads at times of peak demand.

### **UNEP:**

United Nations Environment Programme.

### **Videoconferencing:**

A meeting where two or more people communicate through networked cameras that relay pictures and sound to all of the participants.

### **VOCs:**

Volatile organic compounds, a widely used group of chemicals which when released into the atmosphere help to form damaging low-level ozone, harmful to human health and animal and plant life.

### **WEEE:**

The EU Waste and Electronic Equipment directive.

## How to contact us

This page is for enquiries and comments relating to BT's environmental performance and the way we report on our environmental impacts.

**Please note:** If you have a general customer enquiry go to [Contact us](#). If you have a complaint about our external operations or network - such as the sighting of a pole or mast, damage to property or graffiti - please go to [Complaints about our services](#).

For complaints about the unsatisfactory state of BT buildings and/or grounds, contact **0800 223388**. For any Payphone related issues, e.g. noise disturbance, contact **0800 661610**.

**It is important that you use the appropriate channel because it enables us to direct your enquiry or complaint to the correct department, follow it up and keep you informed.**

This page is for feedback or questions (not complaints) relating to BT and the environment. Please contact us with your questions and comments at the following:

### **By telephone:**

Freephone: **0800 731 2403**  
International callers please use: **+44 1793 547023**

### **By e-mail:**

[bt.environment@bt.com](mailto:bt.environment@bt.com)

### **By post:**

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