



# BT and the environment

BT Social and  
Environmental report



THE QUEEN'S AWARDS  
FOR ENTERPRISE:  
SUSTAINABLE DEVELOPMENT  
2003

# BT and the environment

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 2004 financial year).

## Environmental management system (EMS)

Our experience shows that good environmental management saves money and improves business efficiency. BT's environmental management system 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.

Our main environmental impacts in the UK are:

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

We used to have a separate impact category for environmental risk, to ensure that a special effort was put into reducing the major risks from fuel storage and hazardous telephone exchange materials. These risks have been minimised and we have integrated them into the other categories.

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 radical structural changes, but we have retained the ISO 14001 certification for all UK operations.

BT Openworld and BT Global Services are not currently certified. But we have completed an initial health, safety and environmental impact identification assessment of all our BT Global Services' operations. This has helped us develop systems to collect environmental performance data from our international operations so that we can incrementally include them in our environmental reporting.

We are establishing an EMS that covers all BT Global Services' activities in every country of operation. We are running a pilot project in Ireland (ESAT BT) to produce an EMS that is effective, robust and transferable to all countries, cultures and activities. We are hoping to integrate BT Openworld into the EMS early in the next financial year.

Once our international EMS is in place, we will seek to obtain the ISO 14001 certification and/or registration with the Eco-Management and Audit Scheme (EMAS), where appropriate. EMAS is an EU voluntary initiative designed to help companies and other organisations evaluate and report their environmental performance.

## 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 extract

BT is committed to preventing 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 of whenever possible, and promote recycling and the use of recycled materials
- Design energy efficiency into new services, buildings and products and manage energy wisely in all operations
- Reduce wherever practicable the level of harmful emissions
- Market products that are safe to use, make efficient use of resources, and use resources that can be reused, recycled or disposed of safely
- Work with our suppliers to minimise the impact of their operations on the environment through a quality purchasing policy
- Site our buildings, structures and operational plant so that we minimise visual, noise and other impacts on the local environment
- Support through our community programme the promotion of environmental protection by relevant external groups and organisations

- Include environmental issues in discussions with the BT unions and in BT training programmes; encourage all BT people to implement sound environmental practices.

As a minimum, we will monitor progress and publish details of our environmental performance in our Social and Environment report, on an annual basis.

For more information, see our full Environmental Policy in the Environment section of our online report.

## Environmental prosecutions

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

During the 2004 financial year, there have been no environmental prosecutions in the UK.



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# Fuel, energy and water

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

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. This has been significantly expanded, using data collected at half-hour intervals from over 6,000 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 2004 was 2,624GWh. This is made up of:

- 1,711GWh electricity (approximately) to run our networks
- 363GWh electricity (approximately) used at our office premises
- 550GWh (gas and oil use) for all our sites.

For data on emissions, see the Data and targets section of our online report.

## Trends in energy use

Investment in energy management has enabled us to halt the increase in electricity consumption, despite a growth to our networks. This year, we have reduced consumption by some 32GWh. This is made up of a 5GWh decrease in the electricity used to power our networks and a 27GWh decrease in the

electricity used by our offices. Total consumption was 2,074GWh compared with 2,106GWh in the 2003 financial year. We are working hard to improve our network growth forecasting and to accurately assess the impact of broadband 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).

## Heating, ventilation and air conditioning (HVAC) investment

We continue to improve our equipment. For example, we are installing:

- Liquid pressure amplification (LPA) pumps in the air conditioning chillers of central refrigeration plants. This further improves their efficiency and has cut costs by up to 32% a year
- Building management systems that integrate heating and cooling, further eliminating waste.

## 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. 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>s
- Particulates that contribute to breathing problems.

Taken together, the use of new green and low-CO<sub>2</sub> electricity delivers a reduction in CO<sub>2</sub> emissions of 187,000 tonnes a year compared with electricity generated from fossil fuels.

In the 2004 financial year, we participated in a number of initiatives to promote the use of renewable energy. Special efforts were made to develop 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 the 2004 financial year, we made a strategic alliance with Wind Dam, commissioning the company to build and test two 2.5kW turbines in Cornwall, UK.

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

## Powering major UK sites from wind

Three large wind turbines, according to the Carbon Trust, would be sufficient to power one of our large satellite communications sites in the UK. We are in negotiations with the authorities to install the turbines there and at a redundant radio transmission site in the UK West Country.

Both sites would become tourist attractions 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 2005 financial year we will investigate the feasibility of new systems, including those that combine the use of solar energy and wind.

We will also 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.



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## Fuel, energy and water continued

### 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 Actionenergy 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 are tackling this problem at a supplier, industry and regulatory level and have seen a slow improvement.

### Eliminating waste

Energy targets help us to cut waste. They cover:

- Purchase of green/renewable energy
- Process energy (networks)
- Premises energy (offices and buildings)
- Metered water use
- Bio-fuel investigation.

In the financial year 2004, BT Wholesale invested £657,000 in its energy conservation programme. This has resulted in savings of over 14GWh.

Our three-year investment programme in electricity metering and action plan to improve the quality of electricity data has significantly increased data accuracy to over 97%. This data is the baseline that provides the basis for all future monitoring and targeting.

See the Data and targets section of our online report 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.

A key objective has been to consolidate our energy management and plant replacement strategy, and build on the delivery mechanisms within our supply chain in property, facilities management and energy supply.

Throughout the financial year 2004, 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.

Our most significant achievement in the financial year 2004 was the continued roll-out of half-hour metering, now installed at over 6,000 sites. This means 95% of all our electrical energy is remotely metered every half hour, which allows us to identify and eliminate waste energy more effectively. We no longer have to rely on imprecise billing.

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 the Data and targets section of our online report.

### Premises energy

Premises energy includes all the electricity, oil and gas required for more than 1,000 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 2004, premises energy consumption decreased by 3.8%, compared with the previous year. In the same period, degree-day corrected heating energy was down by 1.3%, the equivalent of 3,428KWh per degree-day. Average degree-days for the year were 0.18% higher than in the previous year.

For more, see the Data and targets section of our online report.

### Process energy

Process energy includes all the electricity to power more than 6,300 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 2004, we generated 21GWh 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.

Four years ago, we began a programme to test all our fuel tanks. At the end of the financial year 2004, we had spent £11 million on the testing and remedial work. This has substantially reduced the risk of pollution from our oil storage tanks.

A specialist company visited 1,391 sites, tested 1,168 tanks, passed 714 (61%) and provided detailed recommendations for remedial action. Over 324 remedial sites were identified, 157 of which resulted in the decommissioning of the existing tank and replacement with a new internal tank. The remainder required either pipe-work repairs or other minor works. The testing programme has also identified 91 tanks that no longer pose a risk to the environment.

### 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

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

In the financial year 2003, we established a new process that required details of incidents to be recorded on a database. In the financial year 2004, eight actual, or potential, spillage-related incidents were investigated, with recommendations made for improvement.



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## Fuel, energy and water continued

Of these, four were classified as serious, three as significant and one as local. Additionally, one case was investigated where conditions found on site required remedial work to avoid any potential incident occurring in the future.

The approximate known quantity of diesel fuel lost as a result of these incidents was 507 litres.

### Site questionnaires

A comprehensive site questionnaire has been developed to improve our detailed understanding of the environmental risks associated with each of our facilities. It covers information such as drainage plans, the proximity of the fuel delivery points to drains, and whether the site has oil interceptors that are regularly maintained.

We completed questionnaires for all of our sites in 2002 and have an ongoing programme whereby assessments are completed annually on our behalf by BT's contracted facilities management supplier, Monteray.

### Oil recovery

In the financial year 2004, over two million 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.

Of this, 30,000 litres have been reused for heating purposes at other BT sites, and 620,000 litres have been reused in replacement generator tanks. Where it has not been possible to reuse internally within BT, other external reuse options have been considered. As a result, 1.34 million litres of recovered oil have been sent for reuse in the manufacture of road surface material. As a last resort, we disposed of 33,500 litres as controlled waste so that the fuel tank decommissioning programme would not be delayed.

For more, see the Data and targets section of our online report.

### 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 3.15%, (from 2.1 million cubic metres in 2002–03 to 2.04 million cubic metres in 2003–04). The year 2003–04 has been very dry, causing a larger number of underground water leaks from fractured supply pipes.

We are now 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 the Data and targets section of our online report.

# Waste

We produced around 107,303 tonnes of waste in the 2004 financial year. Of this, we recycled 27,626 tonnes and sent 79,677 tonnes to landfill (11.35% 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 type of waste generated
- The BT Waste Forum
- Performance against key waste targets
- Working with our property partners.

For further details, see the Data and targets section of our online report.

### 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.

### 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.



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Waste continued

Performance against key waste targets

Target by March 2004	Achievement	Comment
Increase the amount of items recycled (recorded in tonnes) by 10%, measured against the March 2003 outturn figure	No	Unfortunately, because we successfully reduced the overall amount of waste we generated – down by 10,000 tonnes this year – we did not meet this target. However, as reduction is a preferred option to recycling, we are very pleased with this outcome.
Introduce improved disposal routes and processes for spoil/rubble from BT field operations using BT engineering sites	Yes	After trials at four UK sites, users at nominated sites have agreed to provide dedicated skips for this waste.
Develop new disposal and recycling routes and processes for site-level fluorescent tubes in line with current regulations	Yes	A new procedure to recycle fluorescent tubes (about 1,200 a year) will be used throughout BT from 1 April 2004.
Review all information communication channels on waste management and recycling for BT people, including the introduction of new computer-based training courses, improvement to existing training programmes and communications to enhance environmental awareness	Yes	A new computer-based training module was introduced in November 2003, available to all BT people. This – plus environmental briefings and a new 108-strong dedicated team at site level – will increase local awareness.

For further details, see the Data and targets section of our online report.

Working with our property partners

Over 6,700 of our buildings 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 32,633 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 2004, our commercial fleet has reduced by 4%, with a corresponding reduction in fuel consumption of 4%. See full details in the Data and targets section of our online report.

We achieved our target to use smaller vans and to remove 832 (actual achievement was 878) vans from the commercial fleet. These improvements were achieved because of a number of initiatives and policies, such as:

- Engineering productivity targets and systems, which improved vehicle routing to eliminate unnecessary travel
- 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.

In the financial year 2005 we will:

- Reduce our commercial fleet by 2,000 vehicles
- Test potential fuel savings from a new speed limiter function on vans, and get driver feedback
- Participate in the UK Transport Energy Best Practice programme. It provides vehicle operators with free specialist advice on fleet efficiency (eg, fuel management, fleet mileage, driver training) and helps develop action plans to improve.

See further details in the Data and targets section of our online report.

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
- Improved advice and communications to company car drivers, encouraging users to choose lower-emission cars.

Reducing fuel consumption

The UK's new tax regime – it 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.

Since April 2001, when our new car policy was introduced, the company car fleet size has reduced by 25% (nearly 4,000 vehicles) with a combined mileage reduction of over 19 million kilometres (8.45%) for company cars and private vehicles on BT business.

## Transport continued

### 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 CO<sub>2</sub> 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 the Data and targets section of our online report.

### Fuel efficiency devices

Tests on a fuel economy device found it produced average fuel savings of 12% and reductions in diesel smoke emissions of 36%. 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 is taking part in the TH!NK@bout London mobility project, originally launched and supported by motor manufacturer Ford. This project helps businesses and environmental groups in London join forces with local, regional and central governments to introduce electric vehicles to the city's streets.

Phase 1 began in August 2001 when London Mayor Ken Livingstone presented BT Fleet with the keys to a new electric vehicle for the company to use around the capital. Phase 2 began on 9 April 2003 when BT Fleet was again presented with a Th!nk car to use in London for 18 months.

The silent, zero-emission electric car provided by TH!NK@bout London will again be used by a network planning team for light delivery work and site visits in and around the capital. The electric car, which replaces a Ford Fiesta van, is fitted with telemetry systems to check performance. The data is sent directly to Ford for analysis.

Like phase 1, phase 2 of the project was heavily over-subscribed and BT was one of 15 companies chosen to participate. This is because we were considered an environmentally aware, high-quality and innovative organisation that reflects the diversity of transport users in London.

There are now 88 Th!nk cars on the UK roads, as part of various programmes, including Th!nk@bout London, Th!nk@bout London Boroughs and Th!nk@bout Edinburgh.

The Th!nk electric car will continue to be rigorously tested in London every day.

### 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 CO<sub>2</sub> 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.



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# 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 CO<sub>2</sub>. We have achieved:

- A 62% reduction in CO<sub>2</sub> emissions since 1991 because of improved energy efficiency
- A 38% reduction in CO<sub>2</sub> emissions since 1992 because of improvements to transport.

This is equivalent to an annual saving of almost 1.2 million tonnes of CO<sub>2</sub>.

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

For more on the CO<sub>2</sub> Model and a CO<sub>2</sub> equivalent emissions chart, see the Data and targets section of our online report.

## 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.

In the 2004 financial year, installed volumes of refrigerant gas increased by 1,078 kg and gas emissions by 21 kg. This is because we have, for the first time, included office buildings in our reporting. These buildings are managed by our facilities contractor Monteray.

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% of the total refrigerants held. The end-of-year total was 2.9%.

For further details and a CFC-11 equivalent emissions chart, see the Data and targets section of our online report.

## 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% of the year.

## 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 also recently introduced a newly designed type of fan (the EC-motored fan) that brings considerable energy savings compared to the usual fan.

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 the Data and targets section of our online report.

## 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 addresses 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.



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# Procurement and the environment

In the 2004 financial year, BT spent over £8.2 billion on products and services. Our purchases range from telephone exchange equipment and vehicles to accommodation, fuel and energy, stationery, office machinery and postal services.

In the UK, this makes us one of the largest purchasers, with an environmental influence that extends well beyond that of our own staff and workplaces. In recognition of this, and to comply with the ISO14001 standard, we identified Procurement as one of eight company activities that affect the environment.

## Environmental objective

Our environmental objective in procurement is to seek to influence the environmental performance of our suppliers and contractors through our purchasing policy.

We have set specific objectives to ensure appropriate supplier environmental data is collected. After evaluating our suppliers' environmental impacts, we encourage poor performers to improve.

We have adopted a risk-based approach focusing attention on improvements in the areas where the greatest impact can be made.

## Methodology

The implementation of our procurement environment objective has three main strands:

**1. Assess suppliers' general environmental policies and procedures.** We do this with our environmental impact online questionnaire (GS13). The supplier must complete this after agreeing a mandatory pre-contract award commitment to work towards continuous improvement, if required. In this way we can identify and drive continuous improvement with

those suppliers who do not have the procedures needed to manage the environmental risks of the product or service we buy.

## 2. Managing the environmental impacts of electrical or electronic equipment (EEE).

We have a pre-contract product stewardship online questionnaire (GS19), which is mandatory for all potential EEE suppliers. This provides information on materials used and compliance with forthcoming environmental legislation. The information is assessed and sent to our buyers and product managers so that they can make informed decisions.

## 3. Auditing Waste Management Suppliers.

All our waste contractors must provide a statement on their waste disposal procedures. We assess this for legal and environmental compliance. Contractors are audited by us (using an external specialist) every year. Audit reports are sent to the relevant BT buyer and progress on any required improvements monitored by the auditor.

## Training

### • Buyers

In the financial year 2004, three training workshops were held, primarily to brief BT's overseas buyers on their environmental responsibilities. A total of 47 buyers attended these training sessions. A further 3 conference calls were held with overseas buyers who were unable to attend a face to face event, to go over the same training material attended by 30 buyers. This training was in addition to training conducted in the financial year 2003, when 11 training seminars were held and attended by 182 of BT's buyers.

Two seminars on continuous improvement were also held to give buyers extra guidance.

In 2003 we assessed the effectiveness of the buyer training by conducting a soft audit of their implementation of the environment processes. Key aspects were then reinforced through environment presentations at their team meetings. This assessment is being re-conducted in 2004.

### • Suppliers

In the financial year 2004, we hosted a training programme to help BT suppliers implement environmental management systems compatible with the ISO14001 management systems standard. Seven BT suppliers took part in the four-day course, partly funded by the European Union. Participants committed to spend 120 hours on project implementation in their companies.

## Monitoring and Driving Improvements – Performance at a glance

The Table below provides key data concerning BT's monitoring and driving environmental improvements with suppliers

Implementation of GS13 Environmental Impact Process	In Yr 2002/03	In Yr 2003/04
Number of new BT contracts	879	1,199
GS13 requirement included in new BT contracts	879	1,199
GS13 risk assessment questionnaires requested by BT to be completed by supplier*	70	568
GS13 supplier risk assessment questionnaires completed	43	410
Number of questionnaires where continuous improvement was required	18	129
Number of questionnaires where continuous improvement was being driven	7	131
Number of contracts where continuous improvement completed	0	33

\*One supplier questionnaire response may cover multiple contracts if for the same environment risk category

In the financial year 2004, we have also assessed 233 Product Stewardship Questionnaires (GS19) and audited 33 waste contractors.

## Other environmental initiatives

In the 2004 financial year, we made a commitment to the Mayor of London's Green Procurement Code. This promotes demand for recycled products in London. We are exploring ways to buy more products made from recycled materials, such as:

- **Aggregates.** This is crushed rock used to repair roads after laying underground cables.

- **Paper and stationery.** We are investigating the possibility of increasing the use of recycled content in paper and stationery used in the UK.
- **Carpet.** We have identified that we currently don't use carpet with recycled content and are exploring this possibility.



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# Product stewardship

## Why product stewardship is so important

Our world runs on electronic products. The drive to make these 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.

### This is why we share responsibility for:

- Reducing the use of hazardous materials in the manufacture of our 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

### 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 product design to maintain/enhance functionality
- Enhancing 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).

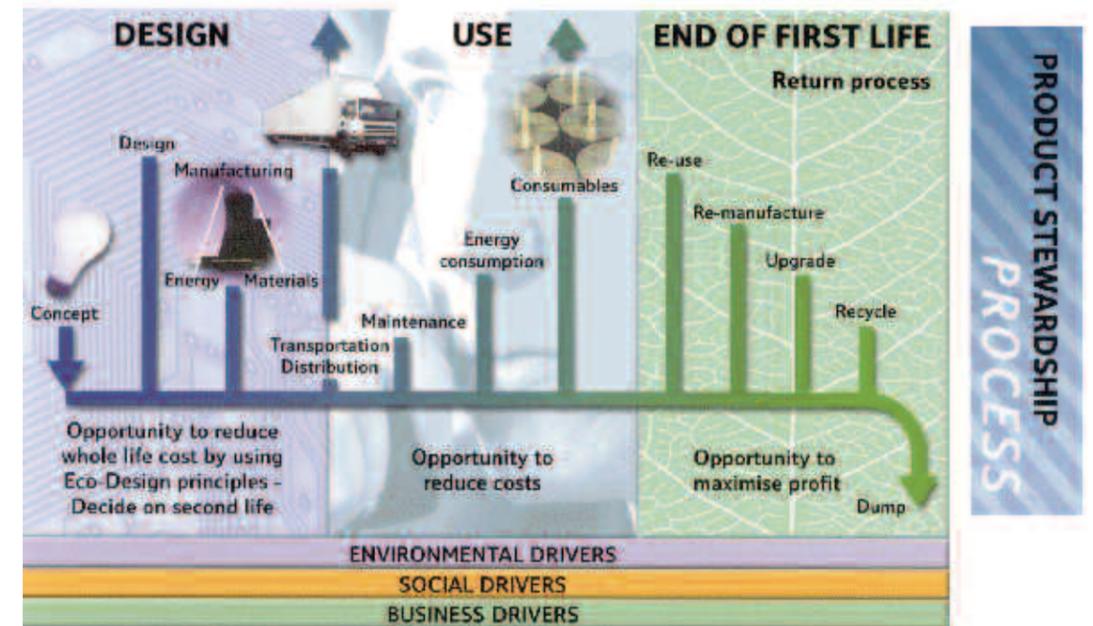
Product stewardship – the height of the indicator shows environmental benefit, eg, reuse has a greater benefit than remanufacture.

### Legislative drivers

Electrical and electronic equipment (EEE) waste is growing three times as fast as municipal waste in the European Union. It makes up 4% of municipal waste today and this proportion will grow by up to 28% every five years.

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 reuse of materials.



This will be achieved by setting targets for collection, treatment, recycling and recovery of waste EEE. 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.

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 pollution and their potential to enter the food chain and potentially affect human health. We welcome this groundbreaking legislation because it supports our desire to contribute to a more sustainable society.

A more demanding directive, called Energy-using Products (EuP), was published in August 2003. It proposes that any new EuP must have its environmental impact assessed using life-cycle analysis and will have to follow eco-design principles, before it can carry the CE mark and be sold in the EU. The CE mark will apply to all EuP and will define minimum safety and environmental standards.

Our pre-tender process (GS19) requires suppliers to provide information about their products and how they propose to comply with EU legislation.

Find out how BT is preparing to adapt to the new legislation in A Guide to the marketing, product development and manufacturing actions you need to take, which you can view at: [www.envirowise.gov.uk/](http://www.envirowise.gov.uk/). The guide was produced by Envirowise in support of the UK Government initiatives on the WEEE and RoHS directives. Envirowise is a UK Government-funded programme, helping companies to comply with the directives.

### 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.

As an active member of ICER ([www.icer.org.uk](http://www.icer.org.uk)), we work closely with manufacturers and recyclers with similar responsibilities on ways to solve issues such as how the various targets will be met, data provision and how to organise waste collection.

Find more on the EU legislation at: <http://europa.eu.int/comm/enterprise/> and [http://europa.eu.int/comm/energy/index\\_en.html](http://europa.eu.int/comm/energy/index_en.html).



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## Product stewardship continued

### Product stewardship in action

#### Broadband and home energy use

Following a study completed in the financial year 2002, which assessed the energy used in our broadband-enabled exchanges, this year we looked at the energy consumption of equipment used to connect to broadband in the home.

The findings emphasised the need to make environmental decisions based on fact, not assumption. For example, we found that older computers use up to half as much energy as new models with higher specifications. Furthermore, applications that use the graphics card extensively, such as online gaming, consume considerably more energy than downloading and viewing files or working on a document.

Among the key findings are:

- Users could reduce their energy consumption (and contribution to carbon dioxide emissions) by using computers with energy-saving features and making sure they are set up correctly
- Home computer and related equipment could contribute up to 60% of the emissions when doing nothing (standby mode)
- While the impacts of broadband energy used by consumers on climate change are significant when compared with BT's annual CO<sub>2</sub>-equivalent emissions, its overall contribution is very small – less than 0.1% of the UK's total yearly emissions
- Home users could cancel their increased emissions by reducing their car trips by between 100 and 1,000 kilometres a year.

#### Improving what we do

Carefully setting our targets each year helps us improve. In the 2004 financial year, we worked closely with our buyers, product specifiers and suppliers to improve the way we gather information on the products that we buy. This helps us comply with new legislation and make better buying decisions.

In the financial year 2005, we will continue with this important work and we have set another target to make sure that our process is effective.

EEE suppliers invited to tender are asked to complete an online questionnaire, GS19, which asks about material content and other environmental characteristics of their products.

We work with our suppliers to ensure they complete the questionnaires with all the information necessary. Since November 2002, we have assessed 227 GS19 responses from 95 separate suppliers. We requested additional information for 25 of the completed questionnaires.

This information 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.

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.

Now that we have completed our product stewardship target to monitor the effectiveness of the GS19 process, it was decided to not only redesign it but also to tailor it to fit in with other Generic Standards.

Encouraging BT's suppliers to reduce the environmental impact of their products is critical to BT achieving its own targets of minimising energy and resource use. We are working to seek to influence the design of products by non-

European suppliers. We are recording and monitoring the data on materials in products. This will help us comply with the law and will enable environmentally responsible disposal options to be considered at end of life.

#### Training

We are planning to organise a series of training seminars for BT buyers in the near future. Our procurement department is checking to see if the correct procedures are followed.

Our Computer-Based Training package (CBT), used in our first product stewardship awareness programme, is still available to BT people. It is especially relevant to buyers and suppliers of electrical and electronic equipment.

#### Reuse

We are working to ensure that we reuse as much equipment as possible. This reduces costs and wastage by maximising the life of our equipment. We use a database that lists switch equipment available for reuse and allows it to be reserved and tracked until it is delivered.

#### Our partnerships

##### e-Living – Life in a Digital Europe

We worked with the EU's e-living – Life in a Digital Europe initiative, a partnership of nine organisations which aims to generate quantitative data on the environmental impact of information and communications technology (ICT).

ICT usage and the environment is one of five areas under investigation in the e-Living research programme. We evaluated the direct environmental impacts of the use of ICT equipment by:

- Gathering data on the contribution of ICT equipment on waste, including hazardous materials and emissions of greenhouse gases through energy use
- Reporting on the influence of EU policies and regulations, especially the WEEE and RoHS directives. We also researched other EU initiatives, such as the Integrated Product Policy (IPP) and the adopted proposal for the

Framework for Eco-design of Energy Using Products directive.

The projections revealed that the ICT waste stream in Europe is likely to be larger than initially anticipated. See e-living initiative ([www.eurescom.de/e-living](http://www.eurescom.de/e-living)) for more information and the draft report.

#### Sustainability through producer responsibility

We are working with the Green Alliance, a UK-based environment organisation, on the Sustainability through Producer Responsibility project. This is a collaboration between 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, visit the Green Alliance website: [www.green-alliance.org.uk/](http://www.green-alliance.org.uk/).

To find out more about the UK Government guidelines on sustainability, see DEFRA (<http://www.defra.gov.uk/environment/sustainable/index.htm>).

#### Environmental standards

We are working with a world-renowned environmental standards organisation to produce the first worldwide environmental and ergonomic standard for telephones.

#### Achievements

Our achievements in the 2004 financial year were:

1. Setting up a database of all the hazardous materials (as required under the WEEE Directive) for all telephones made since 1970
2. Training over 80% of BT buyers in the principles of product stewardship
3. Providing BT's response to the first and second round of consultations carried out by the DTI on the implementation of the WEEE and RoHS directives



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## Product stewardship continued

4. Incorporating our innovative product assessment process (GS19) into our procurement policy as a mandatory requirement
5. Improving our core network installation requirements to include product stewardship principles
6. Completing a second study on broadband services – reporting on end-user equipment, and its energy impact and equivalent CO<sub>2</sub> emissions.

## Plans

In the financial year 2005, we will carry out environmental impact assessments on a number of our products. This will help establish where improvements can be made at the design and manufacturing stage and minimise the products' use of energy and material resources.

A major objective is to ensure that using the GS19 questionnaire becomes a common activity within our procurement system.

Our awareness training of BT buyers and the procurement department will raise the profile of product stewardship and help reduce the associated environmental and business risks to BT.

We will 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).

We will continue to contribute to the dialogue on the EuP directive within the stakeholder group co-ordinated by the UK Government.



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# 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 four 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 customers 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.



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## 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 work with our customers and the authorities 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 providing a haven for quiet enjoyment for all. BT is a founding member of the Corporate Forum for National Parks ([www.cnp.org.uk/corporateforum](http://www.cnp.org.uk/corporateforum)) and is committed to work with the Council for National Parks ([www.cnp.org.uk](http://www.cnp.org.uk)) to help them meet their objectives.

## Street furniture

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

The UK law on antisocial 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

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

## Local impacts continued

network. Our agreement with the House Builders Federation ensures a co-ordinated on-site approach by all service providers.

### 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.

In the 2003 financial year, we began a major initiative to follow up on reports of overhead wires and cables at the incorrect height. Remedial work continues.

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. For more information, see the BT and the environment section of our online report. 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. We also campaign for the protection of the environment and participate in the public debate on biodiversity.

### 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 continue to phase out the use of volatile organic solvent paints and use 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 28,000 tonnes of waste a year ending up in landfills (26% 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. (See Original Thinking on our Better World website.)

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 ([www.globe.org.uk/](http://www.globe.org.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 104 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.

### Environmental complaints

The number of environmental complaints received represents less than 1% of the total complaints received by BT (based on our data for 2002). However, we continue to review our data collection to decide how best to identify any possible trends and issues.

### 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. We received the English Nature SSSI Award for Outstanding Achievement for the site management statement and follow-up work plan in 1997. Examples from the work plan are in the Earthwatch booklet Case Studies in Business and Biodiversity. This is available as a PDF from: [www.earthwatch.org/europe/publications/bandbcasestudies](http://www.earthwatch.org/europe/publications/bandbcasestudies).

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

The MESC is a UK-based facility for environmental educational studies. (See [www.wetlands-study-centre.co.uk/](http://www.wetlands-study-centre.co.uk/) for more information.) 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 have 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.



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# Benefits

The use of Information and Communications technology (ICT) not only benefits business but also the people doing business and the environment. ICT can support social and economic development by transforming communication and access to information and is part of BT's approach to sustainability. For more information, see the Sustainability section of our online Social and Environmental report.

The use of our products and services enables us to improve the work-life balance of our people and to reduce our consumption of finite materials.

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 further information, see the ICT sustainability impacts section of our online report. For more on work-life balance, see the Employees section of the report.



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# Payphones

Our 98,000 payphones are a highly visible part of our operations. Every year about 18 million people – 37% of the UK population – use them.

We are committed to good environmental practice and our payphone business, BT Payphones, was the first in BT to gain certification to the ISO 14001 environmental management system (in May 1999).

Here we explain how we deal with the main environmental issues of payphones:

- Siting of kiosks
- Materials purchase and maintenance
- Payphones and the community
- Cleanliness, vandalism and security.

## Siting

When we site a payphone we always consider the environmental impact it will have on its surroundings. We often work with local authorities to ensure that a wide range of options are considered.

Because of the popularity of mobile cellular telephones, we are reducing unneeded kiosks in the UK, in consultation with local authorities and parish councils. This helps reduce street clutter.

## Materials purchase and maintenance

All our suppliers must demonstrate their commitment to our efforts to mitigate environmental impacts. For example, we agree recovery and refurbishment contracts with our main suppliers. Payphone spares and housings must be refurbished and reused wherever possible. Where this is not possible, secure disposal routes are established with the relevant supplier – for example, to granulate polycarbonate and recycle stainless steel. This helps us minimise waste and saves money.

In the 2004 financial year, we recovered approximately 7,000 kiosks.



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The use of vehicles used to maintain payphones is closely monitored and we look for ways to reduce trips, which saves fuel and reduces emissions and congestion.

## Payphones and the community

We operate about 73,000 public payphones and 25,000 phones located on private land, such as train stations.

We maintain about 15,000 traditional red boxes, including kiosks recognised for their historical value, even though this costs more than using modern boxes.

We are very aware of the importance of payphones in society and we are committed to safeguard them. Payphones help raise local amenity standards by promoting social inclusion, particularly in poor areas.

Payphones are also critical to community safety – 8.4% of genuine emergency calls are made from payphones (based on 2001 data) – and increase the sense of security.

With local authorities and the police, we are investigating the possibility of siting closed-circuit television cameras in or on the roofs of kiosks. This could help reduce street crime.

## Cleanliness, vandalism and security

We adhere to the highest standards of maintenance and cleanliness. A dedicated BT team oversees the contractors who clean the payphone network.

Our customer satisfaction research shows that dirty and vandalised phones, as can be expected, deter customers. We spend about £24 million annually on maintaining and cleaning payphones.

The frequency of cleaning depends on usage and need – it ranges from four times a week to once a month. Our National Contracts Office monitors the special requests made by customers or local authorities for cleaning.

If, for example, noxious substances are present, we will clean the facility within four hours. Badly damaged kiosks are repaired the next day. If a facility is reported as dirty, we will visit it within five working days, or the next scheduled visit.

The value of cleaners' contracts depends on the quality of their work. We motivate cleaners by recognising their work with excellence awards.

### **Fly-posting**

We funded trials on ways to discourage fly-posting (illegal advertising), in co-operation with UK local authorities.

Fly-posters tend to avoid sticking their advertisements over well-designed kiosk advertisements. In areas badly affected by fly-posting, we are investigating the use of a special anti-stick coating, but the cost could be disproportionate to the benefits. We prosecute fly-posters where possible.

If you witness fly-posting, please phone BT Payphones Security on 0800 169 4058.

BT Payphones operates its own security team, helped by a 24/7 Crime and Support Unit. The unit provides crime monitoring/reporting service (on payphones and street crime in general) and administrative support to the police. Every year there are between 1,500 and 2,000 arrests for payphone crime offences.

### **Prostitute cards**

BT led the campaign to criminalise the act of placing prostitute cards in payphone kiosks. Our dedicated security team works with police and local authorities to log and share the telephone numbers on the cards for enforcement action. We are the only operator willing to bar offenders' telephone numbers.



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### **Offices worldwide**

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