

At O2 our activities focus increasingly on sustainable development – achieving a responsible balance between economic, social and environmental considerations. We know that this is what many of our employees, customers and other stakeholders want us to do.

# Sustaining

## CARING FOR THE ENVIRONMENT

Our environmental impact | Managing waste | Recovering handsets | Upgrading network equipment | Reducing waste from our offices and shops | Energy consumption and greenhouse gas emissions | Transport emissions | Environmental procurement | Ozone-depleting refrigerant gases | Local pollution risk

### BITC AND GRI REFERENCES

#### ENVIRONMENT

2.9, 2.16, 2.19, 2.22, 3.6, 3.7, 3.12, 3.14, 3.15, 3.16, 3.17, 3.19, 3.20, EN1, EN2, EN3, EN4, EN5, EN8, EN9, EN11, EN13, EN14, EN15, EN16, EN17, EN19, EN33, EN34 and TA1

At O2 our activities focus on sustainable development – achieving a responsible balance between economic, social and environmental considerations. We know that this is what many of our employees, customers and other stakeholders want us to do.

People are concerned about the world's energy resources, habitats, water reserves and ecological systems and expect companies like O2 to find ways to meet the needs of the present without compromising the future. This involves taking the long-term view and assessing how operations can be maintained and developed for the future with minimal environmental impact.

Energy is at the heart of sustainable development and we will continue to develop policies with effective energy management as a key objective. Our objectives have been aligned with the European Commission Environment Action Programme, 'Our Future Our Choice', an initiative to tackle climate change, protect nature and wildlife and to preserve natural resources.

We work in partnership with several organisations to preserve and create bio-diverse habitats, including Rainforest Concern, Future Forests and the Tree Council of Ireland.

A MORI poll among 2,000 British consumers in 2004 asked which areas of corporate responsibility were most important for the wireless communications sector. Respondents put the protection of the environment at the top of their list. We want our environmental performance to be seen as intrinsic to the O<sub>2</sub> brand.

### Our environmental impact

We have identified the main ways our business affects the environment, and have put an environmental policy in place, supported by the Board, to mitigate them. The key issues are:

- energy consumption and the associated greenhouse-gas emissions that come from running our networks, our buildings and transport;
- disposal of redundant handsets;
- waste management of our offices, shops and networks;
- engaging with our supply chains;
- reducing ozone-depleting substances used in our offices and by our networks;
- controlling the risk of local pollution from storage of fuel oil.

We manage these effects with care, aiming to continually improve our performance using measurable targets that help us check we are making progress. Our targets specifically address greener ways of working and we undertake projects that align with the aims of the Kyoto Protocol to minimise energy use and reduce the effects of global warming.

Our Group environmental targets are externally reviewed by BSI as part of our ISO 14001 continuing assessment programme. In 2004/05, each of our businesses achieved registration to the international environmental management standard ISO 14001.

O2's Group Environmental Forum reports every six months to the Board through the Group environmental champion, Peter Richardson, Managing Director of Airwave.

**CHART 1:** Recovered materials from handset recycling in 2004/05 (kg)

<b>Al</b> Aluminium 92.08kg	<b>Cd</b> Cadmium 5.68kg	<b>Co</b> Cobalt 9.95kg	<b>Au</b> Gold 0.14kg
<b>Li</b> Lithium 0.81kg	<b>Mn</b> Manganese 1.42kg	<b>Ag</b> Silver 1.24kg	Stainless steel 4.73kg
<b>Zn</b> Zinc 1.42kg	<b>Cu</b> Copper 512.47kg	<b>Pd</b> Palladium 0.08kg	

We encourage our suppliers to achieve high standards through the implementation of our ethical and environmental procurement policies.

#### Managing waste

We have a number of important waste management challenges, such as dealing with redundant handsets, network and IT equipment waste.

As with all legislation, we aim to enter into the spirit of the law and ensure compliance. The European Commission Waste, Electrical and Electronic Equipment (WEEE) Directive will be implemented in each of our main countries of operation, requiring us to ensure that processes are in place for recovering redundant mobile handsets and accessories. We have processes in place to assist in carrying out our obligations under the WEEE Directive when they are finalised.

#### Recovering handsets

Our phone recycling schemes ensure that customers, employees and the public can safely dispose of redundant handsets for recycling or re-use. These schemes ensure that the process of refurbishing or recycling phones does not result in significant amounts of waste going to landfill and equally that the refurbished phones are sold in countries where appropriate recycling schemes are in operation.

We collect redundant handsets and accessories through our retail shops, offices, and by post. We also include recycling envelopes in the packaging of phones sold through our online outlets. Returned items are refurbished for re-use or recycled, leaving only a small quantity of inert plastics, which is sent for controlled landfill. Recovered materials are listed in Chart 1.

In the UK, we have actively encouraged our corporate customers to use our recycling initiative and now have 52 registered to the scheme, including WS Atkins and Autoglass. We are considering encouraging these companies to launch their own phone-recycling initiatives for their customers.

We have used a proportion of the revenues raised through our recycling schemes to support Rainforest Concern in their initiatives to preserve rainforest in Ecuador, as well as local environmental initiatives such as the National Tree Week in Ireland.

We have recovered around 170,000 mobile handsets since we began this work in 2002. In 2004/05 we collected only 22,948 handsets – a drop of almost 90,000 on the previous year. About 40 per cent of the recovered phones were refurbished for re-use and some 630 kilogrammes of materials were recovered for other uses. Airwave handsets have a five-year manufacturer's guarantee and are not subject for take-back until 2008.

**NICOLA PHILLIPS, ENVIRONMENT  
MANAGER, DHL**

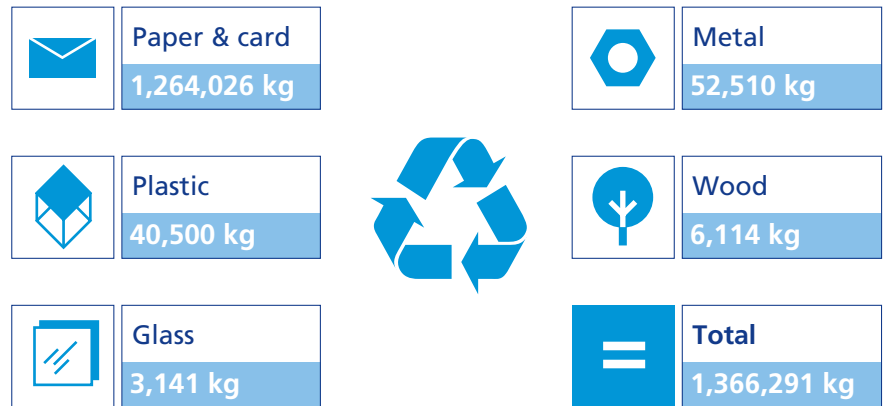
**“DHL, a key supplier of distribution services for O2, is working with the O2 environmental management team to address the key challenge of climate change. This is the start of a significant initiative to integrate environmental responsibility into the overall relationship between the two companies. DHL will also be working with O2 to share best practice findings from its own environment programme which runs across its express, freight and logistics divisions.”**

## See what you can do.

#### This is how you can recycle your mobile phone and mobile accessories:

- Bring in your redundant mobile handset to an O2 shop...
- ...or post it to us using the address: 'Freepost O2 Recycling' (UK only)
- O2's recycling partner will either recycle your phone in a carbon-neutral manner
- ...or re-sell it in a country where recycling facilities already exist
- O2 will donate generated funds to support rainforests and a local charitable initiative for every phone you bring in...
- ...and you have now supported the preservation and re-forestation of the Intag region of Ecuador as well as a community project in your own country!

**CHART 2:** Recycling of general waste in 2004/05



## All of our businesses are now ISO 14001 registered.

Increasingly we are competing with many commercial and community organisations that collect handsets as part of their business or fundraising activity. At a time when people are changing handsets regularly, we recognise that 100 million phones could reach landfill each year in Europe alone. We acknowledge we must raise our performance here and have set a target to collect at least 150,000 handsets for re-use and recycling by March 2006.

### Upgrading network equipment

We aim to ensure that the equipment we use in our networks is designated for re-use or upgrade. Consequently, we do not expect a lot of waste to arise from the roll-out of our 3G networks. Redundant network equipment is processed for re-use and recycling through our environmentally accredited partners.

O2 UK in collaboration with one of our main network equipment vendors changed the procedures of delivery and installation of our 2G Ultrasite Equipment, resulting in the following benefits:

- one on-site assembled cabinet, instead of four separately packaged units;
- reduced packaging materials and installation time by at least 30 per cent respectively, with a consequential reduction in power consumption by installation teams.

### Reducing waste from our offices and shops

We continue to develop our approach to accurately measure our waste streams. Areas that require increased focus are those where our contractors or retail partners handle waste.

We believe we have already made good progress in our offices where we have established procedures to separate, collect and recycle paper, cans and plastic cups. In 2004/05 we exceeded our Group target to increase the proportion of office waste recycled by 10 per cent. In total this amounted to 2,827 tonnes of waste, of which 48 per cent was recycled. We have also identified other waste streams that can be recycled and have established a specific process to manage computer waste for our UK offices.

We are working with a partner that actively seeks innovative solutions to IT recycling, which includes a total solution for recycling cathode ray tubes from computer screens. Other initiatives are IT waste recycling facilities and installation of refurbished equipment in schools in developing countries.

## Energy consumption and greenhouse gas emissions

Our networks account for 83 per cent of our non-transport energy consumption, with our offices and shops accounting for the remainder. Our aim is to manage energy use carefully and we aspire to cut consumption over time while using more power from renewable sources.

It is difficult to get an accurate sense of our performance in this area at a time when our business is growing fast and when we are introducing new communications networks to accommodate technological advances. As we grow, we inevitably use more energy. To get a proportional view of our energy-efficiency performance we have begun to measure consumption in new ways. These include energy consumption per active O2 sim card and per base station. This reflects the size and output of our network, and consumption per customer. We have reported these measures for the first time this year, see Table 1, and hope to establish our performance trend over the coming years.

We recognise that our energy consumption increased considerably during 2004/05 due to the introduction of our new 3G network, the completion of the Airwave network and greater uptake of data services. The consumption figure of nearly 500,000 Megawatt hours (Mwh) also includes the energy consumption of some switching centres which had not been captured previously, due to limitations in measurement activity.

We have engaged with the Carbon Trust to help us reduce our carbon emissions and to understand our impact on climate change. From this partnership we will develop a Carbon Management Programme concentrating on energy, emissions and transport. Initially we expect the initiative to help us map our carbon profile and to establish quantifiable carbon emission reduction targets by March 2006.

Our uptake of electricity from renewable sources continues to increase. In 2004/05 we reached the highest levels so far of 16.5 per cent, ahead of our target to reach 10 per cent Group-wide by 2010. We are currently undertaking assessments of our offices and base stations to explore opportunities for alternative energy sources, e.g. through wind turbines on our mast constructions.

**TABLE 1:** Proportion of electricity consumption derived from renewable sources in 2004/05

UK	Ireland	Germany	Isle of Man
19%	30%	11%	9%

**TABLE 2:** Summary of O2's environmental impacts in 2004/05

Energy consumption and CO <sub>2</sub> emissions	Total consumption kWh	CO <sub>2</sub> emissions <sup>a</sup> tonnes	Consumption from renewable sources kWh
<b>Electricity<sup>b</sup></b>			
Network (switching and cell sites)	425,589,698	199,018	72,841,072
Offices (including call centres)	55,855,679	27,671	10,469,960
Shops	14,896,760	6,968	2,758,965
<b>Natural gas<sup>b</sup></b>			
Network UK (switching sites)	5,995,569	1,139	
Offices and shops (UK, Ireland and IOM only)	17,757,314	3,374	
<b>TOTAL</b>	<b>520,095,020</b>	<b>238,170</b>	<b>86,069,997 (16.5%)</b>
TOTAL per active sim card <sup>c</sup>	<b>21.1</b>	<b>9.6 (kg)</b>	
TOTAL per base station <sup>e</sup>	<b>20,358</b>	<b>9.3 (tonnes)</b>	
<b>Business road travel</b>	42,931,096 kms		
<b>Water consumption</b>			
(excludes Airwave, O2 Germany and Manx Telecom)	121,247 m <sup>3</sup>		
<b>Waste management and recycling</b>			
	<b>Total kg</b>	<b>Recycled kg</b>	
General waste <sup>d</sup> from offices and call centres	2,827,445	1,366,291 (48.3%)	

a) Factors used to convert kWh electricity to tonnes CO<sub>2</sub>: 0.00043 (UK, Defra 2004); 0.00049 (Germany, IEA 2002); 0.00067 (Ireland, IEA 2002). Natural Gas 0.00019 (Defra 2004).

b) Electricity and gas consumption are reported for all premises and operations where O2 is the direct customer. Some rented premises may be excluded.

c) A sim card is a tiny rectangular card found in all mobile phones that acts as an ID card for the phone. If the card is taken out, the handset stops working. The number of active sims is a good measure of the output of our phone network. At the end of 2004/05 we had approximately 24.0 million active sims.

d) General waste means all waste generated, excluding hazardous waste and electrical/IT waste.

e) There were 25,548 base stations at the end of FY 2004/05 (vs 19,581 last year).

## Transport emissions

The main areas of transport emissions occur through network maintenance, retail distribution – both undertaken by contractors – and business travel. To understand the true impact of our operations on the environment, we managed in 2004/05 to capture some of the energy consumption by our main contractors, see Table 3.

We have conducted a green travel survey within O2 UK and the resultant recommendations led to the roll-out of an employee car-share scheme in Leeds. The scheme is now being considered in our other UK locations. We remain committed to using effective technologies – like audio and video conferencing – to cut down the amount of business travel for O2 employees.

## Environmental procurement

We continue to work with our main suppliers (by value) to understand how they are managing their own environmental impacts in line with our environmental policies.

Our worldwide procurement, valued at around £2.2 billion a year, makes this an important part of O2's environmental commitment.

We publish our policies on our procurement website and aim to communicate the standards we expect of our suppliers when we draw up contracts. We encourage suppliers to spread best practices to the companies they buy from. In 2004/05 we issued self-assessment questionnaires to some 20 of our key suppliers to check their environmental management practices.

We will use the results of these assessments in working with those suppliers to help them overcome any environmental risks they may face. Our environmental procurement policy guided us in the negotiations for a printing management provider to ensure that all paper came from sustainable resources. For more details on this and our approach to labour standards in the supply chain, see page 17.

[www.o2.com/cr/report2005](http://www.o2.com/cr/report2005)

## Ozone-depleting refrigerant gases

We use refrigerant gases in our air conditioning. We have increased the use of these gases by 15 per cent during 2004/05 due to the roll-out of new communications networks. However, we have made a clear shift away from ozone-depleting HCFC gases to HFC gases that have no ozone-depleting potential, although they are still greenhouse gases. As part of our refrigerant replacement programme we have reduced HCFC gases from 68 per cent of the total to 26 per cent. We are also considering the feasibility of refrigerant-free air conditioning, such as forced-air systems.

## Local pollution risk

We achieved our target of installing 100 per cent secondary protection of diesel tanks at our fixed installations by March 2005. In January 2005, approximately 1,000 litres of oil was leaked to the ground in Ireland. A thorough clean-up operation took place of the contaminated land.

There were no environmental fines or enforcement actions against our operating businesses last year. We went on to achieve our target of 100 per cent secondary protection of diesel tanks at our fixed installations by March 2005.

**TABLE 3:** Impact of O2 UK third-party contractors

Travel by contractors maintaining the network of base stations	Distance travelled (kms)	Estimated fuel consumption <sup>a</sup> (litre)
Diesel vehicles	1,065,451	95,890
Dual fuel/LPG vehicles	70,566	6,350

## Travel by contractors distributing products to shops

Diesel heavy goods vehicles	1,193,790	326,023
TOTAL	2,329,807	

<sup>a</sup> Fuel consumption numbers have been estimated using data from the UK Vehicle Certification Agency and Defra

**TABLE 4:** Refrigerant gas use<sup>a</sup>

	2003/04 kg	2004/05 kg	Annual change kg (%)
HCFC	8,267	3,653	-4,614 (-56%)
HFC	3,874	10,340	+ 6,466 (+167%)
TOTAL	12,141	13,993	+ 1,852 (+15%)

<sup>a</sup> Excludes O2 Germany and Airwave

**We continue to work with our suppliers to ensure that they are managing their own environmental impacts in line with our policies.**