

# WWF-UK Environmental Report

2008-09

# Introduction

WWF's mission is to stop the degradation of the planet's natural environment and build a future in which humans live in harmony with nature. To achieve this on a global scale it is inevitable that we have an impact on the environment. However, we are dedicated to reducing this impact to a minimum.

To help us accomplish this, WWF-UK has an environmental policy and an environmental management system (EMS). In particular, we monitor energy consumption, water, waste, staff business travel and purchasing.

This report outlines our environmental performance in these areas during the 12 months from 1 July 2008 to 30 June 2009. To minimise the environmental and financial costs associated with printing, our Environmental Report is only available online. To track our performance against previous years, view our earlier Environmental Reports.

<u>1999/2000</u> | <u>2000/01</u> | <u>2001/02</u> | <u>2002/03</u> | <u>2003/04</u> | <u>2004/05</u> | <u>2005/06</u> | <u>2006/07</u> | <u>2007/08</u>

If you have any comments about this report, or suggestions on how we could improve our environmental reporting, please e-mail us at ems@wwf.org.uk.

An overview of WWF-UK's work during the reporting period can be found in our <u>Annual Review 2009</u>.

Our director of resources is responsible for running our EMS, to make sure we stick to our environmental policy and that we set an example to others by finding innovative ways to reduce our impact on the environment. We have to balance this against the need for site visits to our overseas field work, and for meetings with stakeholders to ensure projects progress as effectively as possible.

As well as striving to improve our own performance, we help other organisations to reduce their environmental impact. During the year, we were asked for advice and assistance from, among others, ChemTrust, NLG Ltd, the Office of Government Commerce, WaterAid and WWF's European Programme Office. We offer advice on reducing carbon emissions from a variety of sources, especially travel, recycling and energy use, as well as carbon offsetting and practical advice on how to implement an environmental management system.

# Overview

WWF-UK operates in five locations: our head office in Godalming, Surrey (Panda House), and offices in Belfast, Cardiff, central London and Dunkeld (Scotland). During the year we closed one office, in Caernarfon, Wales. The average number of employees calculated on a full-time basis during the year was 315, up from 287 in the previous year.

# Overall results

Having achieved accreditation to ISO14001 in 2008, our operation was re-certified in June 2009. ISO14001 is the internationally recognised environmental standard which requires an ongoing commitment to reducing an organisation's environmental impact.

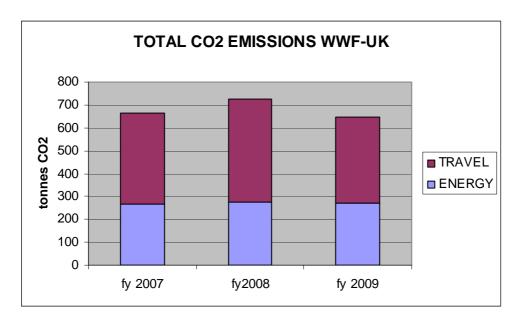
WWF-UK's trustees have agreed that we should move from our current headquarters to a new purpose-built office. We intend that the new building will be an exemplar in terms of its environmental excellence. In the meantime, we remain committed to reducing to the minimum any negative environmental impact resulting from our existing premises.

Our overall efforts to reduce our environmental footprint are recorded below. We continue to set ourselves very challenging targets, which seek to improve from baselines that reflected very good practice when they were set.

The overall results this year were good, meeting or beating our targets in most areas. We measure our impact in terms of overall environmental impacts, using CO<sub>2</sub> emissions as the proxy wherever possible.

This year we emitted a total of 651 tonnes of CO<sub>2</sub>. This figure was composed of 376 tonnes from all travel activities and the balance of 275 tonnes from energy consumption. This was an overall reduction of 48 tonnes on the previous year.

The equivalent figures in FY08 were 448 tonnes from travel and 251 tonnes from energy consumption.



# **Energy**

Our environmental management system includes the commitment to minimise our CO<sub>2</sub> emissions. During the year we cut our emissions from energy use for electricity by 2 tonnes, to 173 tonnes.<sup>1</sup> However, the result for gas use, at 99 tonnes, was a 30% increase compared with the previous year.

### **Electricity**

Our overall electricity consumption was 325,076kWh (of which 302,631 were used at Panda House). Our move from Carrickfergus to a more modern office in Belfast, with gas heating, helped us make substantial savings in electricity consumption.

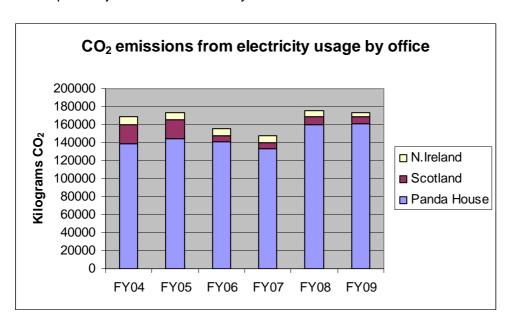
We replaced the combination of paper towels and energy-hungry electric hot air driers in the washrooms at our head office, and installed <u>Bio Driers</u> instead. This followed an extensive study of all available options (cotton roller towels, hot air hand driers, paper towels and high-speed air hand driers). As a result, we've achieved our desired objective of reducing both the amount of paper waste we generate, and the electricity we use.

We experimented with trying to switch off the on-demand water boilers in the kitchens each evening and back on again in the mornings but this proved ineffective, so we upgraded to units with automatic on-off timers.

This figure is calculated using Defra guidance from June 2008 which can be seen at <a href="https://www.defra.gov.uk/environment/business/reporting/pdf/ghg-cf-guidelines2008.pdf">www.defra.gov.uk/environment/business/reporting/pdf/ghg-cf-guidelines2008.pdf</a>. Our rented offices in Cardiff and London do not have separate electricity meters and we are unable to report separately on their consumption.

Our IT department adopted additional technologies to further reduce the power consumed by our server farm, despite the increase in computing capacity.

We installed energy-efficient, multi-function printer/copier machines during the year in centralised locations. These eliminated a larger number of departmental and personal printers. The new printers require users to be present before they can print their materials. And unprinted jobs are automatically deleted after 24 hours.



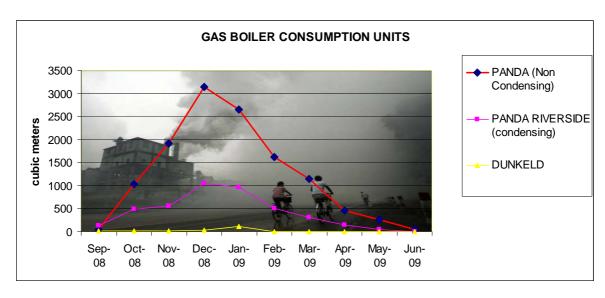
Target for FY09	Performance against target	Comments
5% reduction in CO <sub>2</sub> emissions from electricity use.	1.23% reduction  – missed target	<ul> <li>Due to cost and complexity, we postponed our objective to introduce software on all PCs that will put them in sleep mode when they are left unattended.</li> <li>The move to new premises in Belfast helped us significantly reduce our electricity use.</li> <li>Our IT team swapped servers for lower power 'blade' devices both in Panda House and our London hosting centre. We also installed new uninterruptible power supplies that use less power and monitor the server power use.</li> </ul>

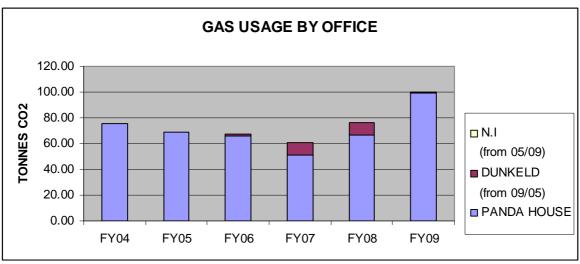
Target for FY10	Action plan to achieve target			
<b>5% reduction</b> in CO <sub>2</sub> emissions from electricity use – from the FY09 budget figure of 312,635kWh.	<ul> <li>Upgrade IT software to shut down servers at night.</li> <li>Replace old IT data storage systems with a new storage array that consumes about 50% less power.</li> <li>Convert a database server to be virtual – to eliminate an old power-hungry physical server.</li> </ul>			

#### Gas

There was good news and bad news in relation to our gas consumption this year. The installation of a wood-pellet burning boiler in our Scottish office achieved the desired result: gas use has been minimal – one tenth that of the previous year. However, one of the newer condensing boilers in Panda House failed at the beginning of the worst winter for many years. This meant we had to rely on older, inefficient boilers and the remaining condensing boiler to try and maintain a working temperature in the office. The result was a serious increase in the amount of gas we used while the system was being repaired and upgraded.

We are unwilling to invest large amounts of money in a complete new system with an upcoming move to new premises. However, since the repairs have been carried out, gas consumption has returned to normal. As part of this process we have removed header tanks and replaced them with a pressurised system. We anticipate that the redesigned system will show further improvements in efficiency.





Target for FY09	Performance	Comments
	against target	
0% increase	30% increase	The failure of one of the condensing boilers
in gas use, while	<ul><li>missed</li></ul>	at the start of the coldest winter in a decade
maintaining a	target.	resulted in the remaining inefficient boilers
workable temperature		working excessively hard (see above).
in the office.		

Target for FY10	Action plan to achieve target			
30% reduction	Regular boiler maintenance.			
in gas consumption at Panda	Working with Trend Controls to optimise boiler			
House (to below 70 tonnes).	efficiency.			
	<ul> <li>Experiment with most effective settings and timings to achieve optimum temperature in the office.</li> <li>Pressurisation of water feed to condensing boilers.</li> <li>In the event of another long cold winter this target</li> </ul>			
	may not be achievable.			

#### **Biomass**

Our Scottish office now almost exclusively uses wood-chip pellets derived from biomass (waste from the pine forestry industry) to heat the office. This has proved extremely successful in the first year, cutting gas use to one-tenth of previous levels. We used 11 tonnes of wood-chip pellets during the year, which emitted 2.97 tonnes of CO<sub>2</sub>, as against last year's emissions of 10 tonnes of CO<sub>2</sub> from gas.

Case study: wood pellets fuel our Scottish office





The original motivation behind our wood-pellet fuelled boiler was to reduce the amount of  $CO_2$  emitted from the existing natural gas boiler. We initially planned to fuel the boiler with biomass wood chips. However, we adopted the pellet system because the pellets are cleaner. And being a uniform size, the pellets avoid feed problems associated with chips. The pellets also have a calorific value four times that of wood chips, meaning four times fewer deliveries. This is important because it reduces  $CO_2$  emissions from deliveries fourfold, and has a much lower impact on our neighbours.

The attraction of wood chips was their availability from local forestry activity. We sourced the wood pellets from the Balcas (www.brites.eu) plant in Enniskillen, which was set up to supply the whole of Europe. The plant is certified to the ISO 14001 environmental standard. Balcas now plans to build a facility in Invergordon, just a few miles north of Dunkeld, to meet the burgeoning local demand which has to some extent been precipitated by a group of local architects, boiler installers and plumbers. As a result of WWF's successful experience, the group has made a commitment to offer wood pellets as an alternative to conventionally fuelled boilers. Key to the success has been the availability of a steady local supply of fuel, along with the wide range of available boilers from Austria, Scandinavia and Finland. Our Scottish office is now a reference site, and the growth in demand has generated jobs and has encouraged existing heating engineers to gain new skills.

The boiler is almost silent in its operation and there are no discernable emissions from the chimney. Despite providing heating and hot water to the whole office and the tenanted flat above, the amount of waste bi-product is negligible. The ash hopper only needs emptying once a month during peak periods of use. The fine ash goes on the garden as a source of potash nutrient.

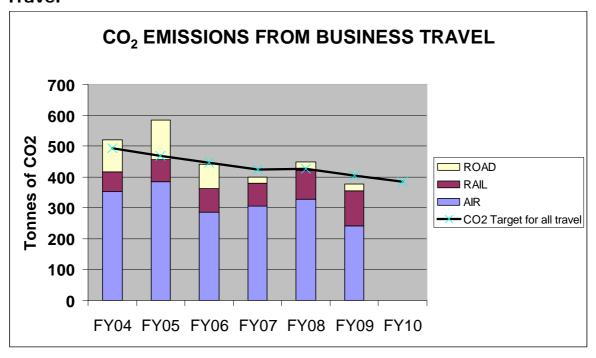
#### Water

We continue to take steps to reduce our water consumption at Panda House. The invoices we receive from the supplier are often estimates, so it's difficult to measure whether our efforts are being rewarded. This year the estimated bill indicated a 6.0% increase in per capita usage, after last year's reduction. We have now placed Hippo water savers in the toilet cisterns in a further attempt to reduce consumption. The figure recommended by Thames Water for larger office usage with catering, such as our headquarters, is 8.3 cubic metres per person per year. So our usage at 7.0 cubic metres per person per year continues to be well within the recommended range.

Target for FY09	Performance against	Comments			
	target				
Maintain or reduce	Missed target	Placing Hippo water savers in our			
water consumption	<ul> <li>but the increase of</li> </ul>	toilet cisterns should reduce water			
per capita.	6% is based on	use in the coming year.			
	estimated data.	٥			

Target for FY10	Action plan to achieve target		
Reduce our per capita usage of water to FY08 levels or better.	Assess more efficient sensor taps.		

#### **Travel**



#### Air travel

We rigorously enforced departmental travel targets, which helped us reverse the upward trend in air travel emissions highlighted in last year's report. We reduced our total  $CO_2$  emissions from air travel to 242.31 tonnes, against a target of 263 tonnes – a reduction of 26% over the previous year. This was mirrored by a reduction in the number of flights we took – from 326 to 225.

In July 2009, we'll launch our <u>One in Five Challenge</u>. It's designed to help companies fly less, by promoting alternative ways of meeting – such as videoconferencing. And we'll show how this is good for business and for the planet. The One in Five Challenge aims to galvanise a growing desire among businesses to fly less. We'll provide guidance to companies on ways to reduce their business flying, and help to ensure buy-in at the

boardroom level. Boosting organisations' commitment to greener business travel is vital if the UK is to meet commitments in the Climate Change Act to cut carbon emissions.

#### Road travel

Our bus travel increased this year but taxi use reduced, giving a combined output of 2.17 tonnes of  $CO_2$ , down from an estimated 2.3 tonnes in the previous year. There was also a satisfactory drop in  $CO_2$  emissions from cars (pool and private) – from 25 tonnes to 20 tonnes of  $CO_2$ . We reduced the distance travelled in private cars by 17,000km. Staff seem to have switched from using private car to rail, as shown below. With the exception of the Toyota Prius results, which are based on actual miles driven, the other figures are estimates, based on expenditure and figures from the Office for National Statistics for these modes of transport.

#### Rail travel

Based on expenditure, our staff travelled an estimated 1.85 million kilometres by train on business during the year. This translates to an estimated 112 tonnes of  $CO_2$  – up from 92 tonnes last year. This is mainly explained by our transport policy, which encourages staff to use rail and tube as preferred modes of transport, as an alternative to flying.

# Videoconferencing

Use of the PC-based videoconferencing facility, Webex, in the WWF network continues to grow. WWF-UK now makes over 150 conference calls a month using Webex. We are continuing to develop our IT systems to promote opportunities for our remote and devolved workers to work collaboratively in this way.

Targets for FY09	Performance against	Comments
	targets	
20% reduction in CO <sub>2</sub> from air travel – from 328 tonnes to 263 tonnes or less. 11% reduction on previous year's	26% reduction  – met and beat target.  We reduced our total air travel emissions to 242 tonnes.  16% reduction  – met and beat target.	<ul> <li>Most divisions met their CO<sub>2</sub> targets for air travel. We cut the number of trips to our international headquarters near Geneva from 68 to 35, including 20 trips (up from 7) being undertaken by rail.</li> <li>Last year's problem, where several</li> </ul>
figure (of 448 tonnes) for all travel. Cut overall CO <sub>2</sub> from travel to 400 tonnes or less.	Our total travel emissions were 377 tonnes. This was also an 11% reduction on our FY08 target figure of 422 tonnes.	flights were booked without approval, has been rectified.  The trend to use rail within Europe continued, with Barcelona, Madrid, Freiberg, Bonn, Poznan and Amsterdam among the destinations.
Encourage greater use of rail over air for European destinations.	Target achieved Many colleagues now travel by train to European destinations.	All our journeys to Paris and Brussels were by train.

Targets for FY10	Action plan to achieve targets		
5% reduction in CO <sub>2</sub> from air travel, measured against last year's target figure of 263 tonnes. This will meet our five-year goal.	<ul> <li>Strict application of carbon budgets for each division.</li> <li>This air travel target will be tough to meet, but there is a strong will from staff to minimise our CO<sub>2</sub> emissions. In the autumn, we'll implement a new videoconference system in all WWF-UK offices. This will provide a reliable and high quality alternative to travel for staff wishing to work collaboratively with colleagues both in the UK and across the WWF network.</li> </ul>		
Keep the number of flights we take at 225 or fewer. This is our final target figure, which will ensure we meet our One in Five Challenge.	<ul> <li>Encourage further use of new conferencing technology and rail to eliminate short-haul flights.</li> </ul>		
<b>0% rise</b> against our previous target to keep overall CO <sub>2</sub> emissions from travel at 400 tonnes or less.	<ul> <li>We'll update our guidance to staff, to extend the range within which rail is the default option. And we'll reiterate that alternatives to travel should be sought wherever possible.</li> </ul>		

## Waste and recycling

We continue to reduce, reuse and recycle. This year we achieved significant improvements in our performance, which led to a large reduction in the amount of waste paper and landfill waste we generated. We also increased the percentage of our waste that's recycled. In June, we changed to a new waste contractor, Grundon, which segregates its waste streams – thus improving the recycling performance. This also prevents mixed recyclates from becoming contaminated and incinerated (energy from waste). Grundon also recycles the three most common grades of plastic at its materials recycling facility.

We hope that these changes will reduce the amount of our waste going to landfill even further. Our previous contractor improved its overall recycling ratio during the year by 5%, to 69%. However, a detailed review of its results indicates that the vast majority of the improvement was from recycling concrete, building wastes and paper — materials we didn't send to the contractor. Our total figure for all waste was our lowest in five years — 17 tonnes.

At 13.09 tonnes, the amount of waste paper that we sent to recycling also fell significantly. This was probably a result of our new printing systems. It's our lowest figure for five years, and down nearly 30% on the previous year.

Staff at our Dunkeld (Scotland) office achieved some notable reductions in the amount of waste and recycling they generated. They cut their landfill waste and cardboard for recycling by half, and the weight of paper they sent to recycling by a third.

Targets for FY09 Performance		Comments			
	against targets				
Reduce the proportion of	7.6% of our				
waste going to landfill to	waste went				
no more than 5% of our	to landfill				
total waste.	<ul> <li>missed target.</li> </ul>				
Find a replacement	Achieved	The new contractor's recycling			
recycling contractor with a	We appointed a	performance is superior, and offers			
significantly better	new contractor in	flexible solutions to waste handling.			
recycling performance.	May.	-			
Reduce our food waste by	Not achieved	<ul> <li>Hygiene issues caused this to be</li> </ul>			
appropriate means (e.g.		postponed. It is now a target for			
composting).		FY10.			
25% reduction	30% reduction	The amount of paper being wasted			
in the amount of waste	<ul> <li>met and beat</li> </ul>	by in-house printers has been			
paper we produce – to	target.	significantly reduced without			
less than FY07 levels		impacting on the service to users.			
(16.5 tonnes).		-			

Target for FY10	Action plan to achieve target		
20% reduction in the volume of landfill waste we generate.	<ul> <li>Introducing Bio Driers in our washrooms will eliminate our paper towel waste.</li> </ul>		
Reduce our food waste by appropriate means.	Introduce food composting.		

#### **Procurement**

We have strict purchasing policies, and where appropriate we require suppliers to complete environmental and ethical questionnaires before we issue an order. When we're considering whether or not to include goods in our <u>gift catalogue</u>, we extend our selection process to a detailed analysis of the product, its manufacture, the raw materials involved and the logistics of getting it to the customer. This year, our environmental department reviewed more than 250 submissions about products being considered for our gift catalogue.

We collated and submitted our third report to WWF's Global Forest & Trade Network (GFTN), on all timber-based products purchased during the calendar year 2008. A summary of information in the report is given below. For details of the various categories and the aims and objectives of the GFTN, please visit <a href="www.panda.org/gftn">www.panda.org/gftn</a>.

A recent change in the GFTN's structure and the way it's governed means WWF-UK and other WWF offices are now shareholders in the GFTN. As a result, WWF-UK will no longer be a formal member of the GFTN, but we remain committed to acting as if we were a member – complying with all membership requirements and submitting annual returns.

The total volume of timber products we used was 550 tonnes, of which the vast majority (94%) was FSC recycled post-consumer waste. Regrettably, we did not totally eliminate our use of Category 1 'unknown or unwanted' timber (see below). However, we reduced the proportion of products falling under this category from 2.6% to 0.54%. Our GFTN colleagues have initiated a retraining programme to ensure we eliminate Category 1, 2 and 3 sources next year.

CERTIFIED SCHEME	CATEGORY
FSC recycled	Rii: Recycled post-consumer
No certification scheme	Ri: Recycled pre-consumer
No certification scheme	1: Unknown or unwanted
FSC	5: Credibly certified
PEFC	2 and 3: Known or licensed source

In tonnes			FTN category				
	Rii: Post-	Ri: Recycled Pre- consumer	Cat 1: Unknown	Cat 5: FSC	Cat 2: Known source	Cat 3: Licensed basic legal	Cat 4: Progressing
Trading	1.20				0.04		
Biofuel wood pellets				5.00			
Roofing Ply PEFC CoC 0069						0.70	
Roofing WBP Brazilian hardwood 1220x2440x18	mm invoice	1&2	0.77				
Roofing batten 25x50x1980mm green treated Sc	andinavian i	nvoice 3	0.34				
Toilet door FSC TT 1805				0.05			
Etrinsic print paper	309.75	6.72	1.88	7.28	0.00	0.00	
Stationery and supplies	10.11						
Totals in tonnes	321.05	208.95	2.99	16.61	0.04	0.70	0.00

Our relationship with our print management company, Etrinsic, continues to provide cost savings and ensures we don't print on anything other than paper and board that meet WWF's procurement policy. We only use printers that meet our exacting criteria (ISO 14001 or equivalent, waterless or alcohol-free, vegetable ink and recycled paper expertise, and ideally FSC chain of custody holders).

Targets for FY09	Performance	Comments
	against targets	
Ensure our office paper supply has the lowest possible impact.	30% reduction in the volume of paper we used.	<ul> <li>It remains impossible to source a locally manufactured 100% post- consumer waste recycled office paper. This may change when the economy improves.</li> </ul>
Report to the GFTN the elimination of all 'unidentified or unwanted' timber sources from our purchasing stream.	Not achieved (see above).	0.54% of our total use was still Category 1 'unwanted and unknown'.
Reduce our in-house paper use.	30% reduction – achieved target.	Our new printer-copiers and software have reduced our levels of unwanted printing.

Targets for FY10	Action plan to achieve targets
To maintain or further reduce our paper and timber consumption.	
Eliminate Category 1 from our GFTN reporting.	Retrain those involved in sourcing timber products.

#### ISO14001

Target for FY09	Performance against target
To retain ISO14001 certification	Achieved target in June.
and to demonstrate a process of	
'continual improvement'.	

Target for FY10	Action plan to achieve target	
Our environmental manager to qualify as an ISO14001 lead auditor.	Environmental manager to go on a training course.	

#### **Carbon offsets**

This is the fourth year that WWF-UK has offset carbon emissions by purchasing Gold Standard offsets from Climatefriendly in Australia. Since Climatefriendly calculates emissions from air travel using a 2.7 times 'forcing factor' multiplier, its figures for emissions from this sector are higher than ours. For the sake of consistency, we've decided to retain our existing method of calculating CO<sub>2</sub> from aircraft flights until 2010.

Before seeking 'carbon neutrality' by buying offsets, we strive to reduce our carbon emissions to the irreducible minimum. All the activities detailed in this Environmental Report show our commitment and resolve to achieve this.

Targets for FY09	Performance against targets
10% reduction	7% reduction
in our total carbon emissions, from 699	Missed target. We reduced our total emissions
tonnes to 629 tonnes.	by 48 tonnes, to 651 tonnes.
Offset all FY09 emissions in a Gold	Achieved target
Standard offset scheme.	

Target for FY10	Action plan to achieve target
0% increase against our FY09 total carbon emissions target. Ensure we do not exceed 629 tonnes, unless we undertake significant new, unplanned activities.	The combination of all action plans outlined in this Environmental Report.



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# for a living planet®

The mission of WWF is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by

- · conserving the world's biological diversity
- ensuring that the use of renewable natural resources is sustainable
- reducing pollution and wasteful consumption

wwf.org.uk