British Airways has a corporate policy for environmental management. All managers and employees are responsible for ensuring the goals of the environmental policy are achieved by:

- identifying significant aspects and impacts of our activities on the environment – including the noise and emissions from aircraft and ground vehicles - and developing programmes to address these issues
- implementing environmental management and review systems to: mitigate significant environmental risks; ensure environmental aspects are taken into account in our business decisions and commercial activities; and monitor, audit and review our performance, striving for continual improvement
- setting clearly defined objectives and targets addressing improvements in performance on environmental issues, and reporting against them
- meeting or exceeding requirements of relevant rules and regulations
- using natural resources efficiently, minimising waste and harmful releases to the environment
- providing support, advice and training to staff on matters relating to our environmental performance, and raising awareness of environmental issues

This report provides a review of progress in meeting these policy objectives over the last year.

T5
Getting ‘Fit for Five’ is a key part of our current business plan. This includes ensuring BA’s facilities and operating practices within T5 help us improve our environmental performance. BA is responsible for the design, build and operation of its lounges, staff accommodation and support facilities such as ground fleet maintenance, de-icing and engineering maintenance.

In particular we seek to make progress in three areas: reducing noise and emissions; exploiting innovative design for energy, water and waste management; and maximising the use of sustainable resources. Action plans are being drawn up to identify the significant environmental aspects and impacts of each project, and develop initiatives to minimise those impacts and meet our environmental targets.

These plans include:

- designing waste management systems to meet our recovery and recycling targets;
- procurement of water efficient showers, toilets and hand basins;
- reviewing our lighting systems for energy efficiency;
- adhering to our materials strategy, which eliminates the use of non-sustainable wood, PVC and specified refrigerants;
• assessing ways to consolidate deliveries to site to reduce vehicle emissions.

At the same time we are reviewing current operational processes, to challenge and identify opportunities for environmental improvement. These include:
• assessing better ways of managing hazardous waste produced from engineering maintenance on the ramp;
• greater segregation of aircraft cabin waste;
• reviewing APU running times to improve emissions.

On the ramp we are preparing to use pre-conditioned air (PCA) in addition to fixed electrical ground power. The introduction of PCA is expected to reduce the need for running aircraft auxiliary power units (APU) with an associated reduction in local emissions.

LOCAL TO AIRPORTS

NOISE
Our objective is to minimise the noise impact of our operations on the community and in other sensitive areas such as ground operations and cabin interiors. We recognise that noise continues to be a major source of the social and environmental impact of the aviation industry, and is still seen by many residents living close to the airport as the most important socio-environmental issue. The airport most affected by our aircraft operations is our main base at Heathrow followed by Gatwick, and New York (JFK). Together these three airports receive about half of the total noise impact that we create world-wide.

<table>
<thead>
<tr>
<th>Airport</th>
<th>Percentage of British Airways global noise 2004/05</th>
<th>Percentage of British Airways global noise 2005/06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heathrow</td>
<td>36.5</td>
<td>37.4%</td>
</tr>
<tr>
<td>Gatwick</td>
<td>10.4</td>
<td>10.1%</td>
</tr>
<tr>
<td>New York (JFK)</td>
<td>2.5</td>
<td>2.4%</td>
</tr>
<tr>
<td>Singapore</td>
<td>1.7</td>
<td>1.7%</td>
</tr>
<tr>
<td>Manchester</td>
<td>1.8</td>
<td>1.5%</td>
</tr>
<tr>
<td>TOTAL (top five)</td>
<td>52.9</td>
<td>53.1%</td>
</tr>
</tbody>
</table>

Table showing the % of our total noise generated at the top five airports for calendar year 2005.

Noise management
We continue to support the International Civil Aviation Organisation’s (ICAO) “Balanced Approach” to noise management. This comprises four elements: noise at source, operating procedures, land use planning and management and operating restrictions. The whole process is centred on providing the most efficient options for noise reduction at the lowest cost.

Noise at source:
Our main contribution is to the first two elements of this approach through our investment in newer, quieter aircraft technology. This year we have taken delivery of an extra new A321-231 aircraft to augment our short-haul fleet. This has been used to increase the number of flights we operate, and along with the increase in fleet utilisation, is the reason our global noise indicator shows a slight increase this year. The average noise level per movement for last year’s operations remained below 1.0 on the government’s quota count measuring system at an average of 0.96, with an average quota count for departure of 1.09, and arrival of 0.82.
Operating procedures
We are also constantly reviewing our operating practices. This year, following flight simulator trials and an investigation into the safety and training aspects, we have identified a change to the final landing flap setting on our Boeing 777 aircraft which has the effect of reducing noise on the approach. Currently this technique is only in use at Heathrow and Gatwick but is being gradually rolled out to other airports after all safety checks have been completed.

We continue to be involved in the Arrivals Code of Practice working group. Using Continuous Descent Approach (CDA) is one means of reducing noise from arriving aircraft, and since it also produces less emissions, is also helpful for air quality and fuel efficiency goals. We continue to achieve a high standard at the airports where CDA is allowed. At Heathrow airport, last year we recorded an achievement of 94% of arrivals using CDA and 88% at Gatwick. Both of these are approximately 10% above the average for all airport operations. Improved CDA advice will be found in the second version of the “Code” at [www.caa.co.uk](http://www.caa.co.uk).

Aircraft departure noise routings are another area where our operational performance is important. We continue to maintain our target of 95% on track at Heathrow, Gatwick and Manchester airports, where our current performance is 95.7% on track at Heathrow, 98.5% at Gatwick, and 97.5% on track (98.2% including BA CitiExpress) at Manchester Airport.

Land use planning and management
An essential component of noise management around airports is land use planning and management. Over the last 40 years, land-use planning guidance around airports has had virtually no impact in limiting residential growth in areas close to airports in the UK. This 'encroachment' is unfortunately negating the benefits from using quieter engines and cannot be allowed to continue unchecked.

We continue to recommend substantial strengthening and simplification of guidance and regulation for airport land-use planning and management. In this respect we look forward to the promised, more proactive, guidance of the Government’s Planning Policy Statement Note 24 (PPS 24).

Operating restrictions
Operational restrictions include the constraints on night flights. At the three designated London airports (Heathrow, Gatwick and Stansted), the Secretary of State retains overall responsibility for the noise restrictions regime in place. The UK Government is amending the Civil Aviation Bill which includes the plan to remove the night movements limit at the London airports, relying on the noise quota alone to control night noise. Although originally passed by MP’s the House of Lords have rejected this, and it remains to be seen whether or not MP’s will seek to retain the amendment. Currently there are about 16 movements in the Night Quota period, of which we operate about half. British Airways has always made it clear that we would not seek an increase in night flights if daytime capacity can be expanded.
Noise research and next steps:
We will continue to work towards promoting the use of good practise, identifying ways of reducing the noise from aircraft operations and promoting an understanding of operational issues relating to aircraft noise to key groups. This includes the ANASE study looking at attitudes to aircraft noise; working with BAA and other groups to develop a Code of Practice for Departures; participating in the Cambridge University/MIT Silent Aircraft Initiative.

LOCAL AIR QUALITY
Concentrations of ground and low level emissions of the oxides of nitrogen (NOx) continue to be a subject of great interest within local communities and amongst airport employees. The airport most affected by NOx from our aircraft operations is our main base at Heathrow airport, followed by Gatwick, and New York (JFK). Together these three airports receive nearly half of our total low level NOx emissions.

<table>
<thead>
<tr>
<th>Airport</th>
<th>Percentage of British Airways global LTO NOx 2004 %</th>
<th>Percentage of British Airways global LTO NOx 2005 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heathrow</td>
<td>39.5</td>
<td>40.5</td>
</tr>
<tr>
<td>Gatwick</td>
<td>6.7</td>
<td>6.5</td>
</tr>
<tr>
<td>New York (JFK)</td>
<td>2.6</td>
<td>2.6</td>
</tr>
<tr>
<td>Singapore</td>
<td>1.5</td>
<td>1.6</td>
</tr>
<tr>
<td>Manchester</td>
<td>1.4</td>
<td>1.5</td>
</tr>
<tr>
<td>TOTAL (top five)</td>
<td>52.0</td>
<td>52.7</td>
</tr>
</tbody>
</table>

Table showing Landing and Take-Off (LTO) NOx emissions of British Airways’ operations for the top five airports for calendar year 2005

Air quality management
This year saw the Government’s Project for the Sustainable Development of Heathrow (PSDH) take an in-depth look at how the assessment of air quality at Heathrow Airport could be more comprehensive. (This research is also applicable to airports worldwide.) The final report is due to be approved and published in the spring of 2006.

We continue to believe that an approach to emissions management (similar to the ICAO “Balanced Approach” for noise) could be used to manage local air quality although this would be more complex because emissions from aircraft only make up a part of the total airport emissions. Major contributions to air quality around the airport come from local road and motorway traffic emissions as well as a relatively high level of background concentrations.

<table>
<thead>
<tr>
<th>Mainline subsonic fleet conforming to international standards (per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
</tr>
<tr>
<td>Not certificated</td>
</tr>
<tr>
<td>0%</td>
</tr>
</tbody>
</table>

Table showing that 76% of our aircraft comply with the most recent NOx standards for emissions
(NB: This year we have not produced the “NOx to 1,000 ft” indicator, as we have always felt that the methodology was somewhat crude. With the publication of the PSDH methodology report later this spring, a peer-reviewed method will become available, and we will commit to using this method for reporting this indicator in future years.)

We continue to optimise our procedures to reduce our NOx emissions, and in this context, vigorously apply the maximum take-off thrust reduction consistent with a safe operation whenever we are allowed. The significant reductions in NOx emissions due to this technique have been confirmed by research undertaken both for PSDH and ICAO.

Airport vehicles and ground service equipment
T5 gives us the opportunity to use fewer vehicles with improved fuel efficiency and reduced emissions. We still await technological developments that will deliver environmental improvements with proven reliability and operational flexibility but in the meantime have trialled various electric and hybrid powered vehicles. We also signed up to the BAAs Clean Vehicles Programme (CVP) at Heathrow which identifies and delivers practical improvements in the environmental performance of vehicle fleets. Since joining the CVP, British Airways has delivered improvements across a wide range of initiatives and when reassessed in September 2005 were awarded the diamond award – the highest level of recognition.

Surface access
Road traffic is a major cause of air quality problems around Heathrow Airport, so we continue to look for opportunities to promote alternative modes of transport for our employees such as car sharing and public transport.

We published our second company travel plan ‘Towards T5’ in June 2005. This travel plan is a key element of our ‘Fit for 5’ training programme which includes a session outlining the staff commuting options available.

WASTE AND RESOURCES
Waste minimisation remains a key environmental priority. Our objective for managing waste and conserving resources is simple: “to reduce waste, recycle more and manage resources responsibly.”

Last year we launched a waste initiative and set ourselves the following waste reduction targets:

- reduce waste per passenger (calculated by total waste minus cabin waste divided by the number of passengers) by 2% per annum from 2004
- increase our recycling rate to 20% from 2005 and by 40% by 2010*
- reduce total amount of waste sent to landfill

(* The waste reduction and recycling recovery rate targets apply to all waste at Heathrow and Gatwick,

Members of the Airport Commuter Centre are on hand to provide a personalised travel planning service, identifying the public transport options based on an individual’s home address.

We actively campaigned against the proposed later start times of tube trains at weekends because this would have prevented staff on shifts and many passengers from using tube services. We are also pushing for long operating hours for services to T5 in order to maximise the ability of shift workers to use public transport.

We continue to push for improved rail links to Heathrow. The Heathrow Connect service (a stopping service from West London, connecting Ealing, Hanwell, Southall and Hayes directly to the Heathrow terminals) began operation in June 2005. We also actively support AirTrack (a new rail link from T5 to the west and south of Heathrow) and Crossrail (which will provide better links to central London) provided a solution can be found which enhances services for airport users.

Local Air Quality Research and next steps
This year, we have been involved with research similar to that of the PSDH, with the aim of providing guidance on air quality modelling around airports. It was initiated at ICAO’s Committee on Aviation Environmental Protection (CAEP) and will form the international level modelling guidance that can be applied to any airport. This year too, we have worked at Heathrow with Manchester University and BAA in investigating the initial dispersion of the engine exhaust plume. The results are currently being analysed along with another set of data taken from measurements at Manchester Airport.

Nitrogen dioxide
We have continued to carry out NO2 diffusion tube monitoring for a fourth year along a transect north of Heathrow Airport. The report of the analysis is now available and has been published on the “Heathrow air watch” website - www.heathrowairwatch.org.uk
excluding cabin waste which is handled by the airport company. Our recycling rate for 2005 was 16% - the 2010 target remains.)

Our scope for achieving this objective is determined in large part by the level of control or influence we have over the waste stream. Hence, our greatest scope is at Heathrow and Gatwick where we own and operate many of our own facilities and at JFK airport, New York where we own and operate our own terminal. For these locations we now have reliable waste data and sufficient control to allow us to set realistic targets for improvement and to report on performance. Elsewhere in the world, much of our waste is handled by airport authorities where we have less influence on, for example, the scope for recycling and from whom reliable waste data is not always available. In these cases we aim as a minimum to be assured of responsible handling and disposal of our waste in compliance with local regulations. To this end, we include a requirement to meet environmental regulations in our contracts.

In 2005 we produced 28,456 tonnes of waste from ground activities including catering at Heathrow and Gatwick, an increase of 3.7% on the previous year. However, this is against a similar increase in passenger numbers year-on-year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Waste (tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003-04</td>
<td>26,800</td>
</tr>
<tr>
<td>2004-05</td>
<td>27,000</td>
</tr>
<tr>
<td>2005</td>
<td>27,400</td>
</tr>
</tbody>
</table>

Waste at Heathrow and Gatwick (tonnes)

Waste per passenger was 0.83 kg per passenger, an increase of 1.2% compared to the previous year. This can be explained by increases in the amount of return catering (both sectors of a route provided for by Heathrow or Gatwick catering units).

There was a 9.7% improvement in the amount of segregated recycling at Heathrow and Gatwick. This was mainly due to an increase in recycling of hazardous waste, such as oil cans, aerosols, batteries and electrical equipment.

The proportion of waste at Heathrow and Gatwick disposed to landfill has fallen by 3% in the last year.
We continue to develop waste minimising and recycling initiatives. These include:

- disposal of redundant aircraft seats (eventually stripped down with most parts either being reused or recycled)
- reducing packaging in catering logistics (in partnership with Envirowise - a government-sponsored organisation);
- working with our restaurant and lounge caterers to improve recycling (including glass, aluminium cans and cooking oils).

We consumed 286,000 m$^3$ of water at Heathrow and 42,000 m$^3$ at Gatwick in 2005. This represents a reduction of 0.7% at Heathrow and an increase of 7.8% at Gatwick compared to the previous year. Overall the combined consumption at both airports was similar year-on-year.

**Halon**

We no longer use Halon gas in mobile or fixed fire protection systems on the ground. However, both Halon 1301 (fixed system) and 1211 (portable extinguishers) are required to provide fire protection onboard aircraft. These substances are categorised as having both ozone-depleting and global-warming potentials. Date expired and redundant material is sent for reprocessing and reuse.

**Biodiversity**

We continue to actively manage the Biodiversity of Harmondsworth Moor, the area surrounding our headquarters, Waterside. In recognition of this we have retained the "Biodiversity Benchmark" award from the Wildlife Trusts, and have been actively engaged in the training of their assessors for a new scheme which will take over in August 2006. In recognition of our commitment in this area, we have again been granted another "Green Flag" award, and have now held this prestigious award for five consecutive years.

**INTERNATIONAL**

**CLIMATE CHANGE**

Our climate change objective is "to be efficient in our use of fuel and energy and to promote an international framework to limit the contribution of aviation to climate change based on emissions trading."

We support a long-term approach to limit aviation's effect on climate change based on robust science, sound economics and well-developed policy instruments. We are working with UK, European and worldwide industry partners to develop this approach.

Aviation contributes to climate change through its carbon dioxide (CO$_2$) emissions and other effects in the upper atmosphere. Although the effect of CO$_2$ is well quantified the contribution of effects related to ozone, methane and cloud formation is less clear. Globally, air transport contributes around 2% to man-made carbon dioxide emissions. The 1999 Intergovernmental Panel on Climate Change projected that this could grow to between 2% and 11% of total emissions by 2050, with a central estimate of 3%.

In 2005, British Airways global emissions of carbon dioxide from core flight operations were 16.1 million tonnes, representing 3% of total air transport CO$_2$ emissions.
Non-CO2 atmospheric effects

Whilst research has provided a robust understanding of the scale and climate impacts of aircraft CO₂, there is less scientific consensus of the extent of climatic effects of NOₓ (ozone creation and methane reduction) and contrails during cruise. Improvements in technology and associated international standards are appropriate mechanisms for limiting the effects of NOₓ. However, research into atmospheric composition and the non-CO₂ effects of aviation should be prioritised. British Airways is committed to this research and is a partner in the EU project – IAGOS – to directly measure atmospheric composition.

Priorities and targets

Our priorities and targets for pursuing activities that will limit aviation’s impact on climate change in the coming years are set out below:
**Objective**

**Targets and actions**

| Improving our performance - fuel and energy efficiency | • target: 30% improvement in core aircraft fuel efficiency by 2010 on 1990 baseline: actual for year 2005 was 27% *
• target: 2% reduction in ground energy consumption per annum
• development of ground energy efficiency programme |

| Influencing the policy debate | • rejection of tax and support for well designed, cost effective emissions trading
• influencing sensible design proposals for aviation in EU emissions trading scheme
• industry coordination - UK Sustainable Aviation, AEA and IATA climate change groups
• seek appropriate mechanisms for addressing non-CO2 atmospheric effects |

| Supporting research | • support atmospheric research through IAGOS aircraft measurement project
• environmental requirements included in discussions with aircraft and engine manufacturers |

| Communication and customer engagement | • demonstrate responsible climate change strategy
• CO2 calculator and passenger offset option on ba.com |

| Table showing key elements of our climate change programme |
*/ Excludes BA Connect and any leased aircraft.*

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**Performance in the air:**
We remain on course to meet our target for a 30% improvement in our aircraft fuel efficiency in 2010 compared to a 1990 baseline. British Airways’ fuel efficiency has improved by 27% since 1990, equivalent to a cumulative saving of 55 million tonnes of carbon dioxide.

**Performance on the ground:**
Over the last five years British Airways has made significant progress in consolidating its property portfolio in order to contribute to cost reduction targets. This was achieved by disposal; lease surrender and mothballing of buildings, together with improved utilisation of the remaining buildings.

A combination of portfolio rationalisation and active energy management has resulted in declining CO₂ emissions from properties, despite recent growth in our air transport activity. Property emissions of CO₂ reported in the UK emissions trading scheme for 2005 were 124,947 a reduction of 22% compared to the baseline of 1998-2000 (see table of UK emissions trading data).

Looking forward, we have appointed a consultant working through the Carbon Trust to carry out a scoping study of the potential for further energy savings in our UK properties. We will continue to develop our energy efficiency programme, including further assessment of targets and indicators.

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**Chart showing aircraft fuel efficiency (% improvement relative to 1990)**

**Emissions trading**
There is growing consensus among policy makers and the aviation industry that emissions trading is the most effective policy mechanism for addressing air...
transport CO\textsubscript{2} emissions. The European Commission is developing plans for including air transport CO\textsubscript{2} into the EU Emissions Trading Scheme (ETS) in the near future, with strong support from the UK government.

The detailed design of emissions trading can have significant implications for cost, competitiveness and complexity. To ensure that emissions trading can be introduced for European air transport without distorting international competition or imposing unreasonable cost burdens on airlines, a practical and pragmatic approach to the scheme design is needed. In particular we advocate the following design elements:

- emissions allowances should be distributed without cost to avoid high financial burden, giving credit for early investment in technology.
- allocation and target setting should be harmonised at EU level to avoid competitive distortion.

coverage should initially focus on emissions from intra-EU air services to avoid international disputes and competitive distortion.
- an international solution to integrate air transport into global policy action on climate change should be sought.

At the international level, we are supporting the continuation of discussions within the UN International Civil Aviation Organisation to establish guidance for the involvement of aviation in emissions trading worldwide, through participation in the ICAO Emissions Trading Task Force.

We have participated in the voluntary UK ETS since 2002 which covers emissions from our domestic air services and UK properties. For 2005, the fourth year of compliance, we reported an 18% reduction in our contribution to the UK CO\textsubscript{2} inventory, compared to the 1998-2000 baseline. Participation in this trial scheme has been a valuable learning experience in preparation for future trading schemes at EU and global level.

<table>
<thead>
<tr>
<th>Compliance year</th>
<th>Aircraft CO\textsubscript{2} (tonnes)</th>
<th>Property CO\textsubscript{2} (tonnes)</th>
<th>Total CO\textsubscript{2} (tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original baseline (average of 1998, 1999 and 2000)</td>
<td>853,523</td>
<td>159,262</td>
<td>1,011,785</td>
</tr>
<tr>
<td>2002</td>
<td>709,993</td>
<td>140,455</td>
<td>850,448</td>
</tr>
<tr>
<td>2003</td>
<td>695,815</td>
<td>142,603</td>
<td>838,418</td>
</tr>
<tr>
<td>2004</td>
<td>653,332</td>
<td>127,922</td>
<td>781,254</td>
</tr>
<tr>
<td>2005</td>
<td>704,335</td>
<td>124,947</td>
<td>829,282</td>
</tr>
</tbody>
</table>

Table showing carbon dioxide emissions in UK Emissions Trading Scheme (ETS)

Customer engagement

There is increasing interest among both private and corporate customers in the climate change impact of air travel. We are in discussion with a number of those corporate customers to provide information and carbon offset approaches that meet their needs.

In September 2005 we introduced an additional, online scheme for all customers through ba.com.

The aim of this initiative is to provide customers with information about the impact of their flight and the opportunity to offset that impact if they choose to. We have recorded almost 13,000 visits to our climate change web pages. It is important that carbon offsetting is not seen as an alternative to policy action. The carbon offsetting initiatives are intended to inform passengers and to complement our broader approach to climate change.