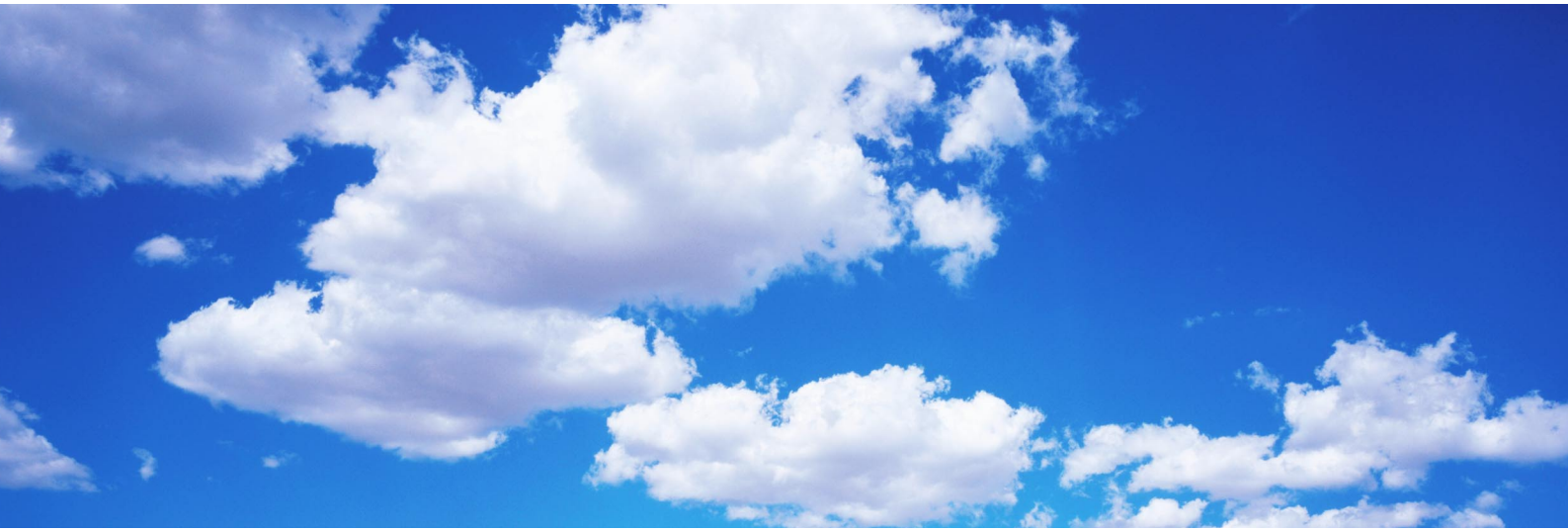
CATHAY PACIFIC

progress against commitments



CATHAY PACIFIC AIRWAYS LIMITED

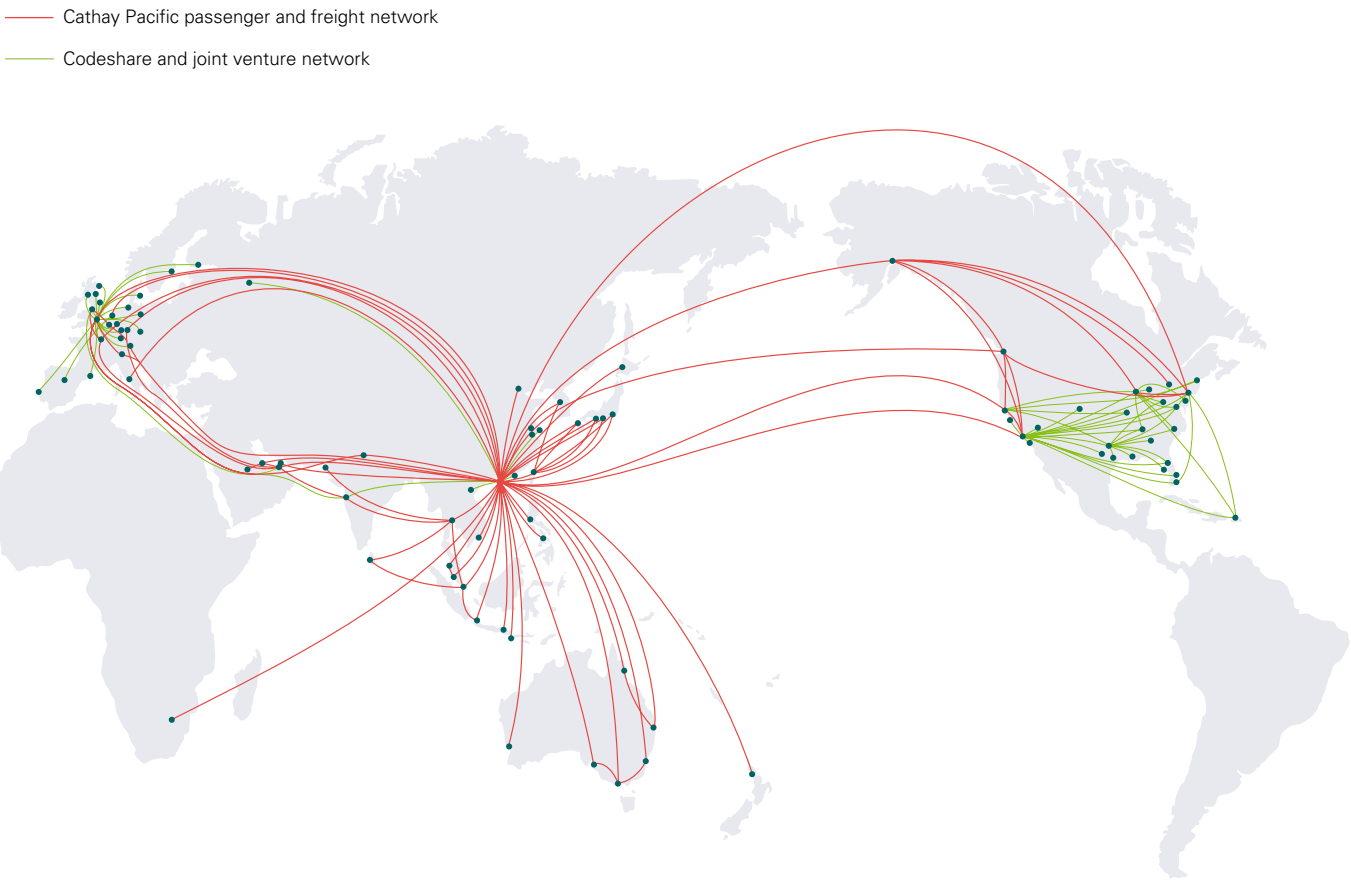
Environmental Report 2004

Cathay Pacific Airways

As an international airline registered and based in Hong Kong, Cathay Pacific Airways provides directly operated scheduled passenger and cargo services to 47 destinations around the world.

We are deeply committed to Hong Kong, where the Company was founded in 1946. We continue to make substantial investments to develop Hong Kong's aviation industry and enhance Hong Kong's position as a premier global aviation hub. In addition to our fleet of wide-bodied aircraft, these investments include catering, laundry, aircraft maintenance and ground handling companies as well as our corporate headquarters at Hong Kong International Airport. We are a founding member of the **one**world global airline alliance whose combined network serves over 600 destinations worldwide. A detailed review of our operations can be found in our Annual Report 2004.

Our two major shareholders are Swire Pacific Limited (46.14%) and CITIC Pacific Limited (25.74%). Both are Hong Kong companies listed on the Hong Kong Stock Exchange, as is Cathay Pacific itself. We are a shareholder in Hong Kong Dragon Airlines Limited and Air China Limited. We are also the major shareholder in AHK Air Hong Kong Limited, an all cargo carrier that offers scheduled services in the Asian region. In addition, we wholly or partially own a number of Hong Kong-based subsidiaries and associates.



Published in May 2005

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Scope of the report

This report describes Cathay Pacific's environmental performance and progress against commitments in 2004 and presents environmental actions for 2005. Data for calendar year 2004 are presented as absolute figures and as metrics in terms of capacity, revenue and passengers. Data are for Cathay Pacific's mainline fleet, i.e. aircraft owned and operated by Cathay Pacific. It is to be noted that data in the Cathay Pacific Annual Report also includes joint venture and code sharing flights.

The *Global Reporting Initiative (GRI) Guidelines*, which assist organisations preparing sustainability reports, were referred to during development of the report. Nine of the sixteen GRI Environmental Performance Indicators are included in this report. In due course, Cathay Pacific expects its report to be in accordance with the GRI Guidelines.

Published in May 2005

Chairman's Statement

Following on from our first comprehensive environmental report last year, it is my pleasure to introduce the Cathay Pacific Environmental Report 2004.

The high fuel prices experienced by a wide range of industries have helped focus efforts to reduce consumption and to utilise other energy sources. However, aviation, unlike other industries, has no feasible alternatives to kerosene and as such is constrained to a considerable extent. With Cathay Pacific's fuel consumption accounting for almost 24% of total operating costs in 2004, there are very clear commercial incentives to reduce fuel consumption and associated environmental impacts, such as climate change and local air quality.

Further reducing fuel consumption in an already highly competitive sector is not straightforward. This report presents selected initiatives and describes the complex array of factors which influence fuel consumption. These include over-flight charges, differential fuel prices and air traffic management requirements. Such issues cannot be solved by unilateral action but require

joint and sustained efforts across the industry. To this end, Cathay Pacific actively supports initiatives which benefit the environment and support our commercial requirements.

David Turnbull
Chairman
May 2005

Published in May 2005

Vision, Strategy and Environmental Governance

Our growth and our goals for reduced operating costs must be achieved at the same time as improved environmental performance.

VISION

Cathay Pacific will continue to expand the airline, to strengthen Hong Kong's position as a premier global aviation hub and to deliver superior service and value to our customers. We are integrating our environmental responsibilities within our overall business strategy. This will strengthen our corporate reputation and reconcile the growing demand for passenger travel and air cargo with the impact of our activities on the environment. To support the responsible growth of commercial aviation, we will work with industry and other stakeholders, including our subsidiaries, to identify and implement best environmental practices.

STRATEGY

Volatile fuel prices and the steady emergence of low cost carriers within the region will place further pressure on us to improve productivity and reduce unit costs.

However, the growth we plan and our goals for reduced operating costs must be achieved at the same time as improved environmental performance.

In the context of upward pressure on fuel costs, we must seek to improve further our fuel efficiency and minimise fuel wastage. This will reduce the consumption of non-renewable resources and manage the emissions that contribute to climate change and affect local air quality. We also need to understand how evolving environmental issues, such as climate change and aircraft noise, may affect our future operating costs and influence operational procedures and fleet mix.

As part of our continued efforts to manage waste responsibly, we will complete the development and commence implementation of a comprehensive waste management strategy for flying and ground related operations in 2005.

To encourage and ensure our existing and potential suppliers are environmentally conscious, we have included environment as a key consideration in the supplier selection and management process.

ENVIRONMENTAL GOVERNANCE

Our Environmental Report 2003 described the structure and mechanisms for environmental governance at Cathay Pacific.

Over the past year, we have continued to review our significant environmental impacts and identify data requirements by carefully considering our operations and those of our key service providers. As our data management systems have become more robust, we have been able to develop focused actions, which are presented throughout this report.

Published in May 2005

Key Environmental Issues

Aviation is presented with a dynamic set of environmental challenges with the potential to affect materially the industry. Most notably these include fuel, climate change, local air quality, aircraft noise and waste.

The key environmental issues associated with our activities and those of our key service providers were described in last year's report. The key issues specifically for Cathay Pacific are presented below.

Cathay Pacific Airways	Resource Input	Environmental Impact
Flight Operations	▸ Jet fuel ▸ Engine oil ▸ Aircraft and parts	▸ Fuel consumption / efficiency ▸ Climate change ▸ Local air quality ▸ Fuel tankering ▸ Aircraft noise ▸ Cabin air quality ▸ Tourism
In-flight Services	▸ Food and beverages ▸ Disposable items ▸ Catering packaging and equipment ▸ In-flight reading materials ▸ Menu cards	▸ Resource consumption ▸ Waste management
Cathay Pacific City	▸ Energy ▸ Office supplies ▸ Maintenance materials ▸ Food and beverage ▸ Vehicle fuel ▸ Water	▸ Energy and water conservation ▸ Waste management ▸ Waste water ▸ Air emissions from ground vehicle fleet ▸ Indoor air quality

Published in May 2005

Progress Summary

In last year's report, we made a series of environmental commitments, which together with progress are summarised below.

Commitment	Progress
Our long-term objective is to mitigate the environmental impact of our operations in absolute terms and improve our environmental performance per unit of capacity operated and traffic carried.	**Carbon dioxide (CO_2) emissions.** Total CO_2 emissions have increased by 32% since 1998. CO_2 emissions per ATK and RTK have decreased by 8.7% and 17.7% respectively over the same period. **Nitrogen oxide (NOx) emissions.** Total NOx emissions have increased by 12% since 1998. NOx emissions per ATK and RTK have decreased by 22.3% and 29.9% respectively over the same period. **Compliance with International Civil Aviation Organisation (ICAO) noise certification standards.** All Cathay Pacific aircraft are certified to the international noise standards established by ICAO. **Flight Management Systems (FMS).** All passenger aircraft in our fleet are fitted with a computerised FMS, which ensures accurate track keeping on noise preferential routes. FMS installation in the remaining B747-200 freighter fleet commenced in November 2004. **Aircraft noise related complaints.** We supported and assisted the Hong Kong Civil Aviation Department (CAD) in revising night-time departures and routings to reduce aircraft noise. Cathay Pacific did not receive any noise-related complaints from the CAD in 2004.
Integrate our environmental responsibilities within our overall business strategy. *Understand how environmental issues may affect our future operating costs and influence decisions for purchasing major items such as aircraft and engines.*	**Maintain and operate the fleet.** We maintain and operate our fleet to a high standard, ensuring maximum efficiency and reducing gaseous emissions and aircraft noise. The fuel efficiency of our mainline fleet has improved by 9.0%, 18.2% and 14.3% per ATK, RTK and RPK respectively since 1998. **Reduce additional fuel uplift.** We consistently support rigorous route planning and development of optimal flight plans to help reduce fuel consumption. Arrival fuel levels are monitored for every flight to allow for tracking and improvement. **Contribute to the Pearl River Delta Project led by the CAD.** We fully support the CAD-led project on improved routings in the region. The project has the potential to reduce our fuel consumption by 25 thousand tonnes of fuel per year. **Seek practical opportunities for environmental friendly alternatives.** We are investigating the technical feasibility of and practical opportunities for purchasing environmental friendly catering equipment. Environment is now a standard consideration in the supplier selection and performance management process, with environmental requirements included in all requests for proposals and quotations.
We are responsible for engaging our service providers on environmental issues and can exert considerable influence over our wholly owned subsidiaries and those in which we have a significant shareholding.	**Engage service providers.** During 2004, we undertook environmental reviews of our key service providers. Cathay Pacific is an active member of the Swire Group Environmental Committee, which also includes a number of our key service providers.
Develop a comprehensive waste management strategy for both our flying and ground related operations.	**Waste Management Strategy.** We made considerable progress in the development of an overall Waste Management Strategy, which supports the principles of 'replace, reduce, reuse and recycle'.
Develop a series of goals over the next year after further careful consideration of our operations and those of our associated companies and refinement of our data management systems.	**Environmental Improvement Framework 2005.** We have identified data requirements and further refined our data management systems. We have set ourselves environmental objectives and focused environmental improvement actions for 2005.
Continuing the development of the environmental awareness of our staff.	**Staff Awareness.** As part of our internal capacity building, we have further raised awareness and understanding of environmental issues amongst our employees.

Published in May 2005

Flight Operations

In 2004, Cathay Pacific's mainline fleet consumed over 3 million tonnes of aviation fuel. The reduction of fuel wastage and atmospheric emissions remain priorities and considerable effort is expended on route selection and flight planning.

FUEL CONSERVATION

Fuel is a significant part of an airline's operations. In 2004, fuel accounted for 23.9% of our total operating costs, up from 19.8% in 2003. As such, fuel is our largest operating expense after labour. Persistently high fuel prices along with greater regional and long haul commercial competition will further encourage us to improve productivity and reduce unit costs.

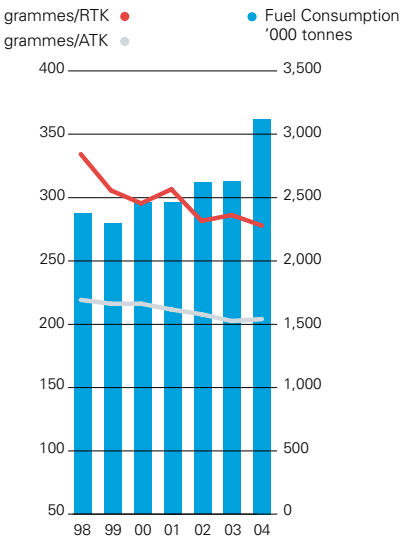
Since 1998, our fuel consumption per ATK, RTK and RPK has reduced by 9.0%, 18.2% and 14.3% respectively. Fuel efficiency is determined by a combination of factors, including composition and age of the fleet, load factors, delays caused by congestion, and indirect routings arising from differences in air traffic systems and over-flight charges. Our efforts in achieving optimal loading have helped ensure that fuel efficiency on a load basis has improved.

ROUTE OPTIMISATION

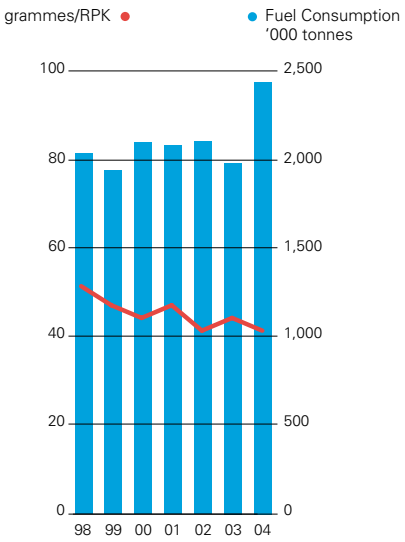
We have consistently supported the development by national civil aviation authorities of optimal flight routes to minimise fuel consumption. This has been greatly assisted by authorities in China who have authorised flexible flight planning for three entry points into Chinese airspace to support polar routes.

Aircraft Fuel Consumption and Efficiency

Total Flights



Passenger Flights



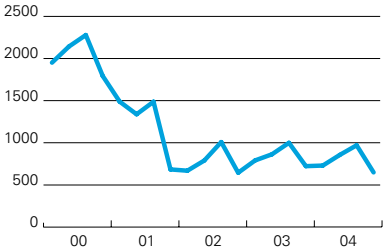
Like other airlines, our flight planning is constrained on certain routes by cost prohibitive over-flight charges for what are often more direct routings. As far as commercially practical, we use more direct routings and re-align others to reduce fuel requirements.

FUEL UPLIFT

Fuel uplift is a critical factor for payload and fuel efficiency especially for long haul flights. At Cathay Pacific, we reduce additional fuel uplift through a robust and transparent fuel policy. The fuel uptake of each Cathay Pacific flight continues to be closely monitored by our Flight Operations Department to allow refinements, while ensuring compliance with all applicable regulations. Company fuel policy uplift ensures sufficient flexibility to meet the needs of airports and air traffic control. This proactive approach has resulted in a reduction in the extra fuel carried by our aircraft.

Average Extra Fuel Carried Per Flight (2000-2004)

kilogrammes



Published in May 2005

Flight Operations (continued)

We will continue with our efforts to reduce fuel consumption and to assess the risks and opportunities presented by climate change.

FUEL TANKERING

Presently, there are significant differentials in the price of aviation fuel across our network. This is due to a number of reasons including monopolistic behaviour and inflated transfer fees between oil company business units.

Whilst we strive to minimise unnecessary fuel uplift, the differential in fuel prices makes fuel tankering (i.e. carrying additional fuel for onward or return flights) a commercially attractive option for some flights. For a major carrier, there is a significant cost involved in the adoption of a 'No Tankering' policy, equating to millions of dollars per year. It is estimated that for every hour of flight, about 4% of the tankered fuel is being burnt due to its additional weight.

With the cooperation of industry stakeholders, we support the development of government-led initiatives to reduce and eliminate price differentials.

FUEL

Objective:

To reduce fuel wastage and minimise fuel consumption through optimum flight routings and flight planning.

Actions for 2005:

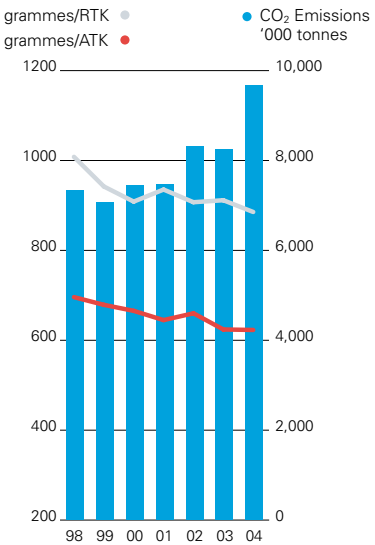
- Continue to devote considerable time to rigorous route planning.
- Continue to optimise fuel uptake.
- Increase engagement with regulators and other airlines to reduce fuel wastage.

CLIMATE CHANGE

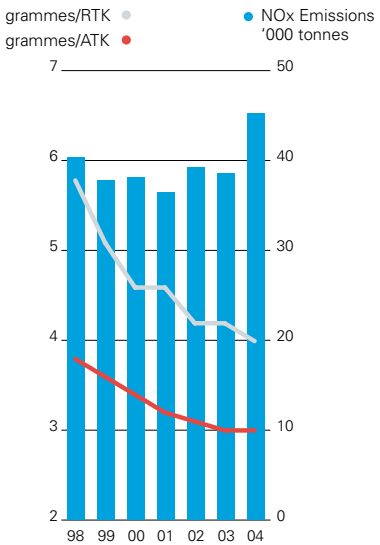
The aviation industry contributes to climate change through CO_2 emissions from aircraft and ground vehicles, together with effects in the upper atmosphere linked to emissions of NOx and water vapour. The Intergovernmental Panel on Climate Change estimates that aviation accounted for 3.5% of anthropogenic climate change emissions in 1990 and that this will grow to 5% by 2050 under a mid-growth scenario.

Internationally, the development of mechanisms to directly reduce the climate change effects from aviation is at an early stage but developing rapidly. Emissions trading is emerging as a potential instrument for airlines operating flights within the European Union. In Asia, the climate change debate and related mechanisms are less advanced, but momentum has increased since the Kyoto Protocol came into legal effect in February 2005.

CO_2 Emissions from Cathay Pacific Aircraft



NOx Emissions from Cathay Pacific Aircraft



Published in May 2005

Flight Operations (continued)

We will establish a formal system for collating information on NOx charges and notifications and will further develop Cathay Pacific's role in improving Hong Kong's air quality.

CLIMATE CHANGE *(continued)*

At Cathay Pacific, we are committed to reducing our contribution to climate change by increasing fuel efficiency through maintaining and operating our fleet to high standards. In 2004, CO_2 emissions from Cathay Pacific's mainline fleet were 17% higher than in 2003. The increase in total CO_2 emissions is a direct reflection of the increase in fuel consumption. In examining the emissions data per RTK and ATK between 1998 and 2004, the downward trend on a load factor basis is due to factors such as the drive towards optimal payload and flight capacity.

CLIMATE CHANGE

Objective:

To reduce our contribution to climate change.

Actions for 2005:

- Understand the climate change agenda and raise awareness internally.
- Establish a Climate Change Task Group.

LOCAL AIR QUALITY

NOx emissions from flight operations, especially during landing and take-off, can affect local air quality. In 2004, NOx emissions from Cathay Pacific's mainline fleet during landing and take-off at Hong Kong International Airport (HKIA) were estimated to be 1,238 tonnes, compared to 1,040 tonnes in 2003, based on emissions data provided by ICAO. This reflects an increase in the number of aircraft movements in 2004. In terms of total NOx emissions, efficiency continues to improve with reductions of 22.3% per ATK and 29.9% per RTK since 1998.

Elsewhere, a number of different mechanisms have been developed by airport authorities to address local air quality concerns. In Europe, a number of airports to which Cathay Pacific flies have introduced NOx charging systems.

At our home base, it is in Cathay Pacific's best interests to ensure that Hong Kong remains a major visitor destination. As such, we are committed to supporting educational and awareness initiatives.

LOCAL AIR QUALITY

Objective:

To reduce the air quality impact of our operations.

Actions for 2005:

- Develop a system for collating information on NOx charges and notifications.
- Review how business units are considering NOx emissions during procurement.
- Define and develop Cathay Pacific's role in improving Hong Kong's air quality.
- Enhance staff awareness of how to reduce energy consumption at work and home.

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Flight Operations (continued)

We will review how business units are considering noise issues for purchase of major items.

AIRCRAFT NOISE

Cathay Pacific is committed to tackling the issue of aircraft noise. We are developing cost-effective solutions to ensure residential and sensitive developments in the vicinity of airports and under flight paths are not disturbed by our operations. The extent of noise impacts from aircraft during landing and take-off is determined by factors including the number of aircraft movements, population patterns, flight paths and the aircraft type. All Cathay Pacific aircraft meet international noise certification standards established by ICAO. Our existing passenger fleet also meets the most stringent Chapter 4 ICAO noise standards to be introduced for all new commercial aircraft after 2006. All the passenger aircraft in our fleet are fitted with a computerised FMS, allowing for accurate track keeping on landing and take-off. By the end 2005, we will have installed the computerised FMS to the remaining B747-200 freighter fleet.

Internationally, some of the major hubs that are served by Cathay Pacific have introduced operational noise restrictions.

At London Heathrow, we adopted a revised night time take-off procedure in 2003 and adhere to all ICAO recommended procedures. Notwithstanding this, Cathay Pacific paid a total of £3,000 in noise charges for five incidents during 2004, compared to £3,000 for four incidents in 2003.

At Brussels airport where a notification system is in place, our air cargo fleet received 81 noise notifications in 2004, 17 of which may lead to fines. The aircraft noise restrictions and potential financial implications to airlines operating at Brussels are a serious concern and are currently subject to a number of legal enquiries.

At Manchester airport we received two fines for noise infringements in 2004. The fines totalled £1,300.

At Frankfurt airport, we received four notifications of track violations associated with a noise complaint in 2004. This compares to twelve such notifications in 2003.

In Hong Kong, we continue to adopt the continuous descent approach (CDA) as our standard landing procedure. CDA was introduced by the CAD as an important mechanism to reduce aircraft noise through operational procedures. If there is a noise complaint, CAD will investigate the routing of the aircraft and raise the issue with the relevant airline if this corresponds with a track deviation. CAD did not raise any noise notifications on track deviations with Cathay Pacific in 2004.

AIRCRAFT NOISE

Objective:

To reduce the noise impact of our operations.

Actions for 2005:

- Continue to liaise with the CAD on reducing noise impact of aircraft operations.
- Complete FMS installation in the B747-200 freighter fleet.
- Develop a system for collating information on noise-related incidents.
- Review how business units are considering noise issues during procurement.

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Inflight Services

At Cathay Pacific, managing our catering and in-flight waste is and will continue to be a key priority.

In 2004, we made good process in the development of an overall Waste Management Strategy. This initiative also fulfils our Environmental Policy, which endorses the principles of 'replace, reduce, reuse, and recycle'. Our Waste Management Strategy ensures the systematic identification of the best methods for management of waste from both flight and ground operations and identifies areas for improvement.

As part of our continuing efforts, we seek to adopt new and improved methods for reducing, reusing and recycling waste throughout our operations and especially in Hong Kong. We are making efforts to ensure that caterers are complying with legal requirements and that we are supporting local recycling industries. For some destinations, local laws may require in-flight waste to be incinerated and sterilised before disposal as regular waste.

We will continue to investigate waste recycling opportunities at flight destinations worldwide.

We are developing a formalised waste management plan and supporting actions for the recycling of aluminium cans and plastic water bottles on inbound flights to Hong Kong. Due to logistical difficulties of sorting and storing in-flight, we currently do not recycle these items but will develop towards a practical system for implementation in 2005.

For outbound flights, we are in the process of identifying potential recycling opportunities in the context of varying hygiene legislation in different countries.

To further strengthen our waste management efforts, we are investigating the technical feasibility of and the practical opportunities for purchasing environmental friendly alternatives for in-flight services.

This will be one of our ongoing service development initiatives, and we have been actively examining a wide range of measures to use environmentally friendly designs and products while ensuring world-class service to our passengers. One of our focus areas is to study the possible replacement of traditional plastic in-flight materials with degradable or biodegradable alternatives.

As part of our capacity building, we recognise the need to raise awareness of environmental issues with our employees. An environmental coordination group has been established within the Inflight Services Department to analyse specific environmental issues, to discuss the feasibility of options and to implement selected initiatives.

In 2005, we will implement a system for recycling in-flight aluminium cans and plastic water bottles.

Published in May 2005

Cathay Pacific City

We seek to reduce and manage waste arising not only from our operations and activities, but also those from key service providers.

Waste management is a central issue at Cathay Pacific City. In 2004, 40% of office waste was collected for recycling, comparable with the level achieved in 2003. To help ensure we deliver on our waste management commitments, we established a Waste Management Task Group in 2004. The Task Group is chaired by the Environment Office and comprises members from key departments and service providers. The Task Group is responsible for undertaking regular reviews of the Waste Management Strategy to ensure that it continually reflects our underlying waste management philosophy and objectives.

As part of our Waste Management Strategy, we will implement the following initiatives for the whole of Cathay Pacific in 2005:

- *Systematic identification to enable a full understanding of waste arising directly from all our operations and activities, and indirectly from our key service providers.*
- *Establishment of Waste Management Action Plans to prioritise waste types based on factors including ease of improvement, anticipated level of improvement, public perception and cost implication.*
- *Education and internal training for employees to promote personal responsibility for waste management, particularly with relevance to practices arising from the Action Plans.*
- *Monitoring and review of the Action Plans by dedicated representatives / Task Group on a regular basis.*

WASTE

Objective:

To manage waste responsibly and reduce volume sent to landfill.

Actions for 2005:

- Complete development of comprehensive waste management strategy.
- Ensure waste is disposed of in accordance with applicable regulations.
- Develop a system for measuring in-flight wastes.
- Implement a system for recycling in-flight aluminium cans and plastic water bottles.
- Improve the collection of recyclable plastics at Cathay Pacific City.

Published in May 2005

Aircraft Maintenance

We are a heavily outsourced airline company, with many of our aircraft support services being outsourced to Cathay Pacific subsidiaries and Swire group companies.

These include aircraft maintenance by Hong Kong Aircraft Engineering Company Limited (HAECO), engine maintenance by Hong Kong Aero Engine Services Limited (HAESL), in-flight catering by Cathay Pacific Catering Services (CPCS), ramp handling services by Hong Kong Airport Services Limited (HAS) and laundry facilities by Vogue Laundry Service.

At Cathay Pacific, we engage our service providers, especially those in the Swire group, on environmental issues and exert considerable influence through environmental visits and inclusion of some providers on the Waste Management Task Group and the Swire Group Environmental Committee. This has been and will continue to be a core element of our environmental management approach to ensure compliance with relevant environmental legislation and encourage best practice. During 2004, we conducted environmental reviews of HAECO, HAESL, CPCS, HAS and Vogue, the aim of which was to identify key environmental issues and opportunities for continued improvement in environmental performance.

Currently, some of our service providers produce their own corporate environmental reports on a regular basis. Over the past year, we have actively encouraged others to follow suit. Key issues include regulatory compliance, waste handling/storage, wastewater disposal, air emissions and water and energy efficiency. It is intended that those key service providers which are part of Swire group will produce their own environmental report by 2006.

By 2006, we expect that our key service providers will publish their own environmental reports.

Published in May 2005

Passenger and Staff Well-Being

At Cathay Pacific, staff are our most critical and valuable resource. We will continue to implement a comprehensive range of health and safety measures to ensure their well-being.

HEALTH AND WELL-BEING

In providing a safe, healthy and productive workplace for our staff we undertake numerous health promotional activities. These include on-site fitness programmes, health promotion talks and an Employee Assistance Programme (EAP) that offers free confidential counselling services and work injury prevention.

We are currently undertaking a comprehensive review of our data capture and monitoring systems for work related injuries, especially those amongst cabin crew. This challenging task will involve the input and support of all key operational departments including Inflight Services, Corporate Medical, Corporate Safety, Flight Operations and Engineering. The methodology and standards will be reviewed by the Cabin Safety Review Committee and will be in place by the third quarter of 2005.

AIR QUALITY

We have an ongoing in-flight air monitoring programme to ensure that cabin air is safe, healthy and comfortable for both passengers and crew.

Regular monitoring is also undertaken in our offices, training facilities and passenger lounges at Hong Kong International Airport. Having fully met the requirements of the Hong Kong Government Certification Scheme for 'Good' air quality at Cathay Pacific City, we were awarded the Indoor Air Quality certificate at the end of 2004.

INFECTION CONTROL

To minimise the potential harmful effects of infectious diseases onboard, including Severe Acute Respiratory Syndrome (SARS) and avian flu, our front line staff are trained to evaluate passengers' fitness to fly. We offer a 24-hour aero-medical advisory service to assist with both ground and in-flight medical assessments. Cabin crew are trained in bloodborne pathogen prevention and use of personal protective equipment, including respiratory masks, gloves and aprons. We adhere closely to recommendations and guidelines issued by the International Air Transport Association, the Hong Kong Department of Health, the World Health Organisation and the Centre for Disease Control.

COSMIC RADIATION

Working in close conjunction with CAD, Cathay Pacific continues to monitor the exposure level of its aircrew and to provide education on the effects of cosmic radiation through a programme that commenced in 2002.

To date, the annual cosmic radiation dosages of Cathay Pacific aircrew have been well below the guideline limits established by the European Union Euratom Directive. Our crew are encouraged to monitor their yearly cumulative exposure levels through a special programme on our internal website. To provide additional safety, Cathay Pacific uses a lower internal action limit to monitor crew exposure. As crew are given the flexibility of roster swaps, this provides additional reassurance. Notification is immediately given to any crew who triggers this limit and the roster is adjusted to ensure that the 12-month exposure remains below the recommended guidelines.

Published in May 2005

Data Summary

Fuel Consumption / Efficiency and Air Emissions

Aircraft operations	Units	2004	2003	2002	2001	2000	1999	1998
Operating Statistics								
ATK	*million*	**15,244**	12,976	12,493	11,452	11,121	10,379	10,544
RTK	*million*	**11,182**	9,114	9,256	7,947	8,275	7,431	6,974
RPK	*million*	**57,167**	44,006	49,661	44,466	47,042	41,247	40,594
All Flights								
Fuel Consumption	*thousand tonnes*	**3,077**	2,590	2,583	2,431	2,429	2,263	2,343
Fuel Efficiency	*grammes/ATK*	**202**	200	207	212	218	218	222
improvement since 1998	*%*	**9.0**	9.9	6.8	4.5	1.8	1.8	0.0
Fuel Efficiency	*grammes/RTK*	**275**	284	279	306	294	305	336
improvement since 1998	*%*	**18.2**	15.5	17.0	8.9	12.5	9.2	0.0
Passenger Flights Only								
Fuel Consumption	*thousand tonnes*	**2,404**	1,953	2,074	2,050	2,068	1,912	2,007
Fuel Efficiency	*grammes/RPK*	**42**	44	42	46	44	46	49
improvement since 1998	*%*	**14.3**	10.2	14.3	6.1	10.2	6.1	0.0
Global CO_2 emissions	*thousand tonnes*	**9,700**	8,242	8,308	7,472	7,445	7,064	7,326
CO_2 emissions	*grammes/ATK*	**634.3**	635.2	665.0	652.5	669.5	680.6	694.8
	grammes/RTK	**864.7**	904.3	897.6	940.3	899.7	950.7	1,050.5
Global CO emissions	*tonnes*	**10,056**	8,873	8,268	8,062	8,751	9,827	13,982
Global NOx emissions	*tonnes*	**45,271**	38,537	39,213	36,402	38,061	37,800	40,294
NOx emissions	*grammes/ATK*	**3.0**	3.0	3.1	3.2	3.4	3.6	3.8
	grammes/RTK	**4.0**	4.2	4.2	4.6	4.6	5.1	5.8
Global HC emissions	*tonnes*	**2,228**	2,112	1,885	2,090	2,560	3,401	5,736
NOx emissions during landing and take-off cycle at HKIA	*tonnes*	**1,238**	1,040	–	–	–	–	–

The above data supersedes those presented in the 2003 Environmental Report.

Cathay Pacific City

Issue	Units	2004	2003	2002	2001	2000	1999	1998
Electricity consumption	*kWh*	**29,948,236**	29,884,704	32,324,647	31,317,795	33,044,825	29,107,318	–
Seawater consumption	*m^3*	**5,599,000**	6,846,000	7,698,000	7,081,000	8,903,000	8,756,000	–
Potable water consumption	*m^3*	**11,113**	11,482	11,460	14,571	17,942	12,277	2,956
Paper recycled	*tonnes*	**236**	233	279	276	171	187	154
Aluminum cans recycled	*kg*	**734**	721	701	488	479	202	–
Plastic recycled	*kg*	**18,157**	17,070	8,400	–	–	–	–
Printer cartridges recycled	*pcs*	**1,447**	1,888	1,295	855	1363	1103	905
Office waste disposed of	*kg*	**387,500**	380,570	388,450	–	–	–	–
Food waste disposed of	*kg*	**169,370**	171,691	171,130	–	–	–	–

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Global Reporting Initiatives

This year, we have included nine of the sixteen GRI Environmental Performance Indicators in our environmental report.

Ref	GRI Environmental Performance Indicator	Inclusion*
EN1	Material use other than water	◎
EN2	Consumption of externally recycled materials	○
EN3	Direct energy use segmented by primary source	◎
EN4	Indirect energy used	○
EN5	Total water use	◎
EN6	Location and area of land owned, leased and managed of high biodiversity	○
EN7	Major terrestrial and marine ecological impacts	◎
EN8	Greenhouse gas emissions	◎
EN9	Use and emission of ozone depleting substances	○
EN10	Significant air emissions by type	●
EN11	Total amount of waste by type and destination	◎
EN12	Significant discharges to water	○
EN13	Total number and volume of significant spills of chemicals, oils and fuels	○
EN14	Key and significant environmental impacts	●
EN15	Planned and actual weight of product reclaimed	○
EN16	Incidences and fines for environmental regulatory non-compliance	◎

* Extent of inclusion in Environmental Report 2004

● Full ◎ Partial ○ Not included

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Glossary

ATK Available Tonne Kilometers
Overall capacity, measured in tonnes available for the carriage of passengers, excess baggage, cargo and mail on each sector multiplied by the sector distance.

CAD Hong Kong Civil Aviation Department

CO Carbon Monoxide

CO_2 Carbon Dioxide

CDA Continuous Descent Approach

FMS Flight Management System

GRI Global Reporting Initiative

HC Hydrocarbons

HKIA Hong Kong International Airport

ICAO International Civil Aviation Organisation

NOx Nitrogen Oxides

RPK Revenue Passenger Kilometers
Number of passengers carried on each sector multiplied by the sector distance.

RTK Revenue Tonne Kilometers
Traffic volume, measured in load tonnes from the carriage of passengers, excess baggage, cargo and mail on each sector multiplied by the sector distance.

CONTACT US

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