



Joint Message from the Chairman and Chief Executive



Christopher Pratt, Chairman

John Slosar, Chief Executive

“ We realise that only by operating in a sustainable way... can we hope to run the business successfully in the long-term. ”

Embedding Sustainability in the Long-term

The aviation industry has always been a highly volatile operating environment. In 2012, Cathay Pacific's core business was significantly affected by the persistently high price of fuel, pressure on passenger yields and weak air cargo demand. Our business performance will always be subject to factors beyond our control, but we will continue to take measures to protect business resilience and manage short-term difficulties, while remaining committed to our long-term vision for sustainable development.

Cathay Pacific continues with our ambitious fleet modernisation programme, which will enable us to reduce carbon dioxide emissions, fuel usage and noise pollution.

We acknowledge the positive move made by the European Union (EU) in November to 'stop the clock' on extending the EU Emissions Trading Scheme (ETS) to international aviation. The industry as a whole must now quickly reach agreement on a coordinated, fair and equitable global solution to reducing aviation emissions to enable us to meet our obligations on Carbon Neutral Growth (CNG) from 2020, and support the initiatives of the [International Civil Aviation Organization \(ICAO\)](#) in this respect. Cathay Pacific has played an important role in this ongoing conversation with the [International Air Transport Association \(IATA\)](#) and the international aviation community.

During 2012, Cathay Pacific Airways announced its decision to carry only sustainably sourced sharks and shark-related products. This decision was not taken lightly, because it conflicted with our ethos of customer service and also raised the possibility of a negative impact on revenue. Nevertheless, based on a considerable weight of independent science and research-based data, we concluded that overfishing poses a real threat to shark species, and management decided that tangible action must be taken, in line with our commitment to sustainable development.

20/20 – Our Sustainable Development Commitments


We introduced our Sustainable Development Strategy during 2009/2010. The Strategy was based on our corporate vision, “to be the world’s best airline”, which drives us to excel in everything we do. Our Strategy acknowledges that only by operating in a sustainable way can we hope to run the business successfully in the long-term. Operating sustainably means consistently supporting our people; contributing to the communities we serve, and seeking to improve our environmental performance.

To substantiate this vision and enable us to monitor our progress, we are excited this year to introduce a set of 20 key commitments that we intend to achieve by 2020. These commitments will also contribute toward the Swire group’s overall commitment to Net Zero Impact.

Communication is Key

This is our fourth year of sustainable development reporting. This year, the focus of our reporting process is on communication. We want to better understand which issues our stakeholders care about most strongly and how each stakeholder group would like information about these issues communicated.

During recent stakeholder engagement meetings, representatives from different stakeholder groups – including employees, customers, investors and NGOs – expressed common interest in certain sustainability topics. These included: Safety, Climate Change, Waste Management, Sustainable Sourcing, Biodiversity and Staff. As a result, instead of arranging our report under operational headings, this year we have used topics that are important to both the company and our stakeholders. For example, in the Climate Change section, the report discusses the role of fuel efficiency, fleet upgrades and biofuels in helping to mitigate Cathay Pacific’s environmental impact from emissions. In the Waste Management section, readers can learn about how we deal with paper, plastic and food waste. Mirroring stakeholders’ growing interest in supply chain management, this year’s report looks at how we are working with over 1,000 suppliers globally to make sure that all purchasing decisions are governed by the highest sustainability standards.

At the same time, our stakeholders have called for better communication of our sustainability efforts across different media. We have therefore used an enhanced and interactive approach this year to communicate initiatives to staff, customers and other interested parties through social, electronic and traditional media. Since May 2012, passengers on Cathay Pacific flights have been able to watch a new inflight movie, entitled “[Working Towards a Sustainable Future](#)” . It highlights the measures we have undertaken both in the air and on the ground to underscore our commitment to being a socially and environmentally responsible company.



Our video, **Working Towards a Sustainable Future**, highlights what Cathay Pacific is doing to make aviation more sustainable.

Individuals Make a Difference

Cathay Pacific's sustainable development initiatives are driven and implemented by the company's operational divisions. The achievements of the past four years have been made possible by managers and staff members who have embraced the sustainability ethos. This year's Sustainable Development Report highlights some of the employees who have made a positive impact along our journey towards a sustainable future. We hope their stories will inspire other staff members to introduce sustainable development initiatives in their own areas of work.

The commitment and can-do spirit of individuals is essential in the realisation of our Strategy, because every employee can play a part in achieving sustainability, in the same way that every employee can contribute by embracing a positive safety culture. As with safety, it is individuals taking responsibility that make a difference. So in announcing our 20/20 commitments, Cathay Pacific has developed a road map that empowers every employee to incorporate sustainability into their workplace, everyday.

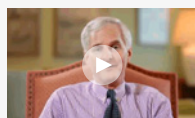
Our commitment to doing the right thing by our staff, stakeholders, the wider community and our environment will continue to be a guiding principle in Cathay Pacific's long-term business strategy. Not only do we have a duty of care to our stakeholders to reduce consumption and waste and lessen our impact on the environment, these initiatives will also help drive better returns for our investors. We believe our people are vital to ensuring a sustainable future for our business.



Christopher Pratt
Chairman



John Slosar
Chief Executive



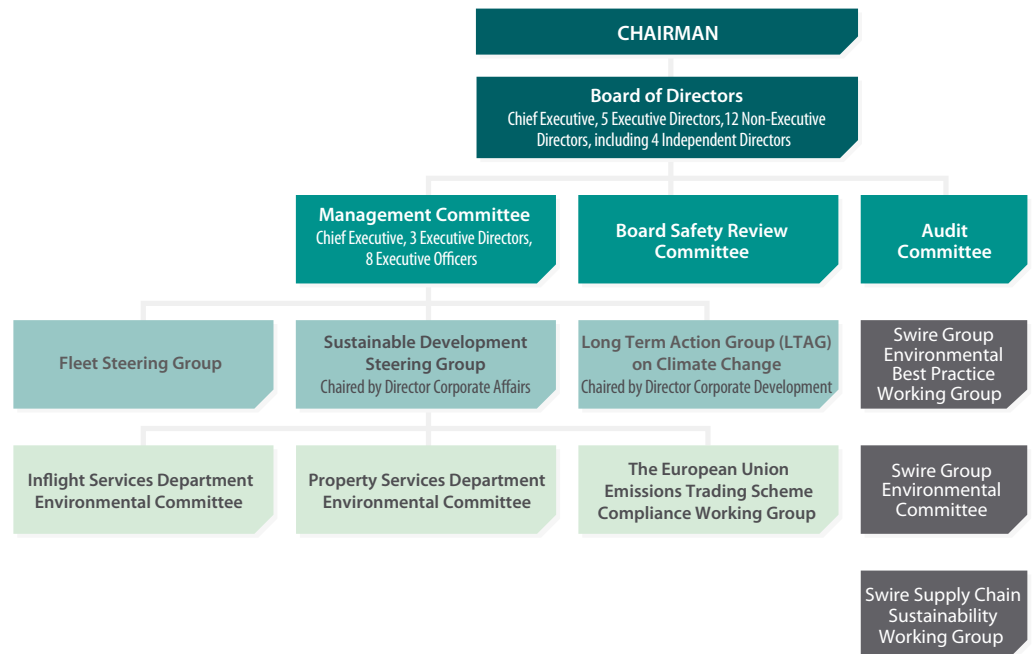
John Slosar, Chief Executive,
talks about the latest Sustainable Development Report in this video.



Our video, **Working Towards a Sustainable Future**, highlights what Cathay Pacific is doing to make aviation more sustainable.

Approach to Sustainable Development

Cathay Pacific is committed to maintaining a high standard of corporate governance and devotes considerable effort to putting in place best practices in accordance with our [Code of Conduct on Corporate Governance](#). The structure for governing sustainable development within the Cathay Pacific Group is shown in this diagram:



The functions of these committees and working groups, as well as how we manage risks and ensure corporate compliance, are described in the [Sustainability Governance factsheet](#) and the [Corporate Governance](#) section of the Cathay Pacific Airways Annual Report 2012 p.39-49.

Sustainable Development Strategy

The Cathay Pacific Sustainable Development Strategy is designed to embed sustainability into mainstream thinking of the company and in everything we do.

The development of the Strategy in 2009 resulted in five “priority areas” against which different departments, business units and subsidiaries of Cathay Pacific have been implementing sustainable development initiatives. These five priority areas enable us to set specific targets and move purposefully toward our goal which resulted in our 20 commitments launched to this report. They also encompass the key components of who we are and how we work.



Our Sustainable Development Targets

Although the 20 commitments are implemented by different business functions, and, in turn, address different stakeholder priorities, they all promote Cathay Pacific's sustainable development targets which cut across the group's activities and aim to:

- a) Reduce our overall emissions;
- b) Offer sustainably sourced products and services to our customers; and
- c) Ensure our community programmes are relevant and effective to the beneficiaries.

This is what the above three targets mean to us:

a) Reducing Emissions

According to the [Intergovernmental Panel on Climate Change \(IPCC\)](#) and the [International Energy Agency \(IEA\)](#), aviation currently accounts for 2% of global greenhouse gas emissions from human activity. As aviation grows to meet increasing demand, the IPCC has forecasted that, by 2050, the industry's greenhouse gas emissions could rise to 3%. While forecasts for 2050 can vary significantly, they highlight a challenge that the aviation industry will face over the next 40 years.

Projected increases in our emissions cannot be left unchecked, and that is why we are firmly committed to reducing our impacts. The industry has directed significant investment towards addressing the challenge, introducing new technology, better operating procedures and sustainable biofuels.

Within Cathay Pacific, aircraft emissions constitute 99% of our overall CO₂ emissions. Therefore we have committed to manage our carbon emissions and contribute to global efforts to reduce aviation's impact on the environment and climate change. At the same time, we are actively managing the energy and water impacts of our facilities, vehicle fleet and the equipment we use across our subsidiaries.



“ We have committed to reducing our CO₂ impacts by 31% by 2020. ”

Mark Watson

Head of Environmental Affairs, on how Cathay Pacific is tackling the challenges of climate change by reducing our emissions.

b) Offering Sustainably Sourced Products and Minimising Resource Use

It is important to manage the procurement of the materials we use regularly to mitigate the impact of our operations. We continually examine options to reduce resource use along our supply chain and to use materials from sustainable sources (such as Forestry Stewardship Council and Marine Stewardship Council-certified products, or recycled materials). We ensure our procurement staff understand the requirements of our Supply Chain Sustainability Code of Conduct, so they can, in turn, ensure our suppliers comply with our standards. We also look for opportunities to improve recycling and waste management across all facets of our operations. These include products and services provided inflight and at airport lounges, back office operations, and the maintenance, repair and overhaul (MRO) process of our aircraft.



“ We aim to provide sustainably-sourced products to... our passengers. ”

Michael Pratt

Manager Purchasing, talks about our approach to sustainable sourcing.

c) Ensuring the Effectiveness of Community Programmes

We recognise the importance of contributing to the communities in the locations where we operate. We support and invest in the Hong Kong community, of which we have been a part for more than six decades. Local staff members are also active in community initiatives in the outport countries where we have a presence.

CX COMMITMENTS

Community investment is one of the priority areas in our Sustainable Development Strategy, and there are two commitments that will improve our performance in this area. They are:

- Implement the London Benchmarking Group (LBG) methodology to evaluate the value and return on investment of major community projects.
- Implement CX community investment guidelines by 2015.

In 2011, we began making reference to the internationally-recognised LBG methodology in evaluating one of our flagship projects, English On Air. English On Air provides English-speaking opportunities for young Hong Kong residents. Most students come from schools in the neighbourhood of the Hong Kong International Airport.

The LBG methodology involves devising a scorecard to evaluate the outcome of our English On Air activities, which takes into account the views of the teachers, students and our volunteers, and assesses the value of this project. It also assesses how company goals for this programme align with beneficiaries' needs and expectations. We aim to gradually extend the use of this methodology to our other major community investment projects.

Our global community investment strategy is to leverage the resources of our company and to motivate our staff and passengers to address the needs of the communities we serve, focusing mainly on three areas: youth and education, medical care and environmental conservation.

We encourage our outpost staff to get involved in their local communities and to proactively identify appropriate NGO partners with a view to exploring cooperation opportunities that will benefit the local community extensively. To assist the efforts of our outpost staff, by 2015, we will provide a set of community investment guidelines for the development of corporate social responsibility programmes that will, in turn, help reinforce Cathay Pacific's commitment to the community.



“ We have a responsibility to the communities where we have a presence. ”

Chitty Cheung

Director Corporate Affairs, talks about how we ensure our community programmes are of value to the communities being served, and benefiting the company and staff at the same time.

To learn more about how Cathay Pacific has been investing in the communities, go to our [Community Investment factsheet](#) .

Our 20/20 Sustainability Commitments

To support our Sustainable Development Strategy, a set of 20 commitments have been developed to help us reach our goal of embedding sustainability into the way we do business. These commitments and related issues are discussed throughout this year's report in accordance with the specific stakeholder concerns that they address. We are pleased to launch these commitments, and expect future reports to discuss their progress. Where a reduction or improvement percentage is indicated, it will be compared to the 2009 level.

CX COMMITMENTS

Commitments by 2020	Section of the Report to which this issue relates to
Achieve 31% reduction in CO ₂ emissions per RTK	Climate Change
Develop a cost-effective strategy to incorporate sustainable aviation fuel into our operations	Climate Change
Embed climate change adaptation into overall risk management	Climate Change
Reduce electricity use by 25%	Climate Change
Ground vehicles to use alternative fuels/power source	Climate Change
All CX Group-owned buildings, offices and lounges will consider green building standards or principles	Climate Change
Offer carbon offsetting as part of all ticket-related marketing and promotional activities	Climate Change
Develop and implement a sustainable cargo policy	Biodiversity
Reduce the environmental impact of maintenance, repair and overhauls carried out in Hong Kong by 50%	Waste Management
Reduce material usage and waste by 25%	Waste Management
Increase recycling by 25%	Waste Management
All CX Group-branded materials will be produced using sustainable materials	Sustainable Sourcing
All paper, paper products and textiles offered to customers or as part of the service offering will be made of sustainable materials	Sustainable Sourcing
Engage with suppliers of inflight sales products on sustainability principles	Sustainable Sourcing
All holiday packages offered by CX Holidays will be verified for their sustainability impacts	Sustainable Sourcing
CX Holidays to offer at least five more ecotourism packages by 2015	Sustainable Sourcing
All meals served inflight and on the ground will meet sustainability criteria	Sustainable Sourcing Biodiversity
All suppliers will comply with our Supply Chain Code of Conduct	Sustainable Sourcing
Implement London Benchmarking Group (LBG) methodology to evaluate major company community projects	Sustainability Matters
Implement CX community investment guidelines by 2015	Sustainability Matters

A Stakeholder Issue-Focused Report

Our previous sustainable development reports were framed around the five priority areas, which mirror the structure of our operations. However, our stakeholders are increasingly looking for sustainable development reports to place more emphasis on the issues that concern them, so as to facilitate understanding of these issues and how they are being addressed. This aligns directly with our need to communicate those issues that impact and/or are highly relevant to our company.

Therefore our reporting perspective has evolved from an operation-oriented approach to a stakeholder-focused one. To confirm stakeholders' priorities, a detailed assessment was conducted on the findings of past years' engagement exercises. Although the importance of certain issues, such as waste management and biodiversity, has increased over the years, most of the topics that stakeholders view as significant have remained consistent. These top issues form the framework of this year's Sustainable Development Report:

1. **Safety**
2. **Climate Change**
3. **Waste Management**
4. **Sustainable Sourcing**
5. **Biodiversity**
6. **Our People**



Overview of 2012

The Cathay Pacific Group announced an attributable profit of HK\$916 million in 2012, an 83.3% fall compared to 2011, in the midst of the extremely challenging operating environment we faced throughout the whole year. These challenges – high fuel prices, weaker passenger yields and a weak air cargo market – were consistent throughout the year.

We took measures to restore some balance back to our business, which helped put us in a better position for the coming year. These included the accelerated retirement of the less fuel-efficient Boeing 747-400 passenger aircraft; the withdrawal from service of four Boeing 747-400BCF converted freighters; and an adjustment of schedules and reduced capacity on some long-haul routes.

We also kept a clear focus on the key strategic goals: developing our network and our Hong Kong base; maintaining and enhancing the quality of our services; strengthening our relationship with Air China; and maintaining a prudent approach to financial risk management.

Financial and Operational

HK\$916 million attributable profit

Fuel accounted for **41.1%** of total operating costs

29 million passengers for CX and KA

New cargo terminal in operation

New cabin products Premium Economy Class; Long-haul Economy Class seat; Regional Business Class seat launched

Lounges Refurbishment of The Wing at HKIA; new CX lounge in Paris

19 new aircraft delivered and received

New orders for:

- six Airbus A350-900 aircraft
- 10 Airbus A350-1000 aircraft + order conversion to 16 Airbus A350-1000 aircraft
- three Boeing 747-8F freighter aircraft, with cancelled agreement to purchase eight Boeing 777-200F freighters

Economic Value Added Table

Economic Value Added For the year ended 31 st December 2012	2012 HK\$M	2011 HK\$M	% Change
Directed Economic Value generated			
Turnover	99,376	98,406	1.0%
Finance income	745	982	-24.1%
Surplus on sales of investments	-	-	-
Gain on deemed disposal of an associate	-	-	-
Share of profits / (losses) of associated companies	641	1,717	-62.7%
	100,762	101,105	-0.3%
Economic Value distributed			
Purchases of goods and services	75,634	71,948	5.1%
Employee wages and benefits	16,073	14,772	8.8%
Payments to providers of capital	2,156	3,941	-45.3%
Payments to / (from) government	417	803	-48.1%
Community investments including charitable donation			
– Direct payment	14	17	-17.6%
– In the form of discounts on airline travel	7	6	16.7%
	94,301	91,487	3.1%
Economic Value retained			
– Depreciation	6,617	6,127	8.0%
– Profit / (loss) after dividends	601	3,455	-82.6%
Retained for re-investment and future growth	7,218	9,582	-24.7%

Note:

The above table summarises the distribution of the economic value generated from the Group which includes Cathay Pacific and all its subsidiary companies including Dragonair and Air Hong Kong. Share of losses/profits of associated companies include our share of losses/profits of Air China and HAECO. Please refer our 2012 Annual Report for details of our principal subsidiaries and associates.

Cathay Pacific Group Fleet Profile as of 31 December 2012

Cathay Pacific Fleet profile										
Aircraft Type	BOEING							AIRBUS		Total
	777-200	777-300	777-300ER	747-400	747-400F	747-400ERF	747-8F	A330-300	A340-300	
No of Operating A/C in Subfleet	5	12	29	18	12	6	8	37	11	138
Average Age of Operating Subfleet (years)	15.57	11.62	2.91	20.45	15.70	4.02	0.77	8.92	15.52	10.1
Passenger	X	X	X	X				X	X	
Freighter					X	X	X			
Total	5	12	29	18	12	6	8	37	11	138
Dragonair Fleet profile					Air Hong Kong Fleet profile					
Aircraft Type	AIRBUS			Total	Aircraft Type	AIRBUS	BOEING	Total		
	A320-200	A321-200	A330-300			A300-600F	747-400BCF			
No of Operating A/C in Subfleet	15	6	17	38	No of Operating A/C in Subfleet	8	3	11		
Average Age of Operating Subfleet (years)	8.04	12.06	11.19	10.1	Average Age of Operating Subfleet (years)	7.72	22.15	11.7		
Passenger	X	X	X		Passenger					
Freighter					Freighter	X	X			
Total	15	6	17	38	Total	8	3	11		

Environmental

15,738 thousand tonnes CO₂ emitted from CX Group fleet

SCOPE 1

▲ **16,013,724 (99.65%)**

Aviation Fuel, Fuel
Combustion and Towngas

SCOPE 2

▲ **56,086 (0.35%)**

Electricity and Towngas

11.8% Available tonne kilometre (ATK) improvement since 1998

18.3% Revenue tonne kilometre (RTK) improvement since 1998

Aircraft are **75%** more fuel efficient now than those in the 1960s

12,000 tCO₂ offset in 2012 by staff and passengers

Environmental Indicators Table

Aircraft Operations	Units	2012 ^(*)	2011 ^(*)	2010 ^(*)	2009 ^(*)	2008 ^(*)	2007 ^(*)	2006	2005	2004	2003	2002	2001	2000	1999	1998
ATK	million	26,250	26,384	24,461	22,249	24,410	23,077	19,684	17,751	15,794	13,355	12,820	11,827	11,630	10,867	10,857
RTK	million	18,819	19,309	19,373	16,775	17,499	16,680	14,452	12,813	11,459	9,371	9,522	8,201	8,650	7,768	7,213
RPK	million	103,837	101,535	96,588	89,440	90,975	81,801	72,939	65,110	57,283	42,774	49,041	44,792	47,153	41,502	40,679
All Flights																
Fuel Consumption	thousand tonnes	4,996	5,032	4,818	4,397	4,569	4,371	3,596	3,325	3,077	2,590	2,583	2,431	2,429	2,263	2,343
Fuel Efficiency	grammes /ATK	190 [▲]	191	197	198	187	189	183	187	195	194	201	206	209	208	216
	improvement since 1998 %	11.8%	11.6%	8.7%	8.4%	13.3%	12.2%	15.3%	13.2%	9.7%	10.1%	6.6%	4.8%	3.2%	3.5%	0.0%
	grammes/RTK	265.48 [▲]	260.62	248.67	262.15	261	262	249	260	269	276	271	296	281	291	325
	improvement since 1998 %	18.3%	19.8%	23.4%	19.3%	19.6%	19.3%	23.4%	20.1%	17.3%	14.9%	16.5%	8.7%	13.6%	10.3%	0.0%
Global CO ₂ emissions	thousand tonnes in CO ₂ e	15,738 [▲]	15,851	15,175	13,852	14,393	13,769	11,327	10,474	9,693	8,159	8,136	7,658	7,651	7,128	7,380
	grammes/ATK	600	601	620	623	590	597	575	590	614	611	635	647	658	656	680
	improvement since 1998 %	11.8%	11.6%	8.7%	8.4%	13.3%	12.2%	15.3%	13.2%	9.7%	10.1%	6.6%	4.8%	3.2%	3.5%	0.0%
	grammes/RTK	836	821	783	826	823	825	784	817	846	871	854	934	885	918	1,023
	improvement since 1998 %	18.3%	19.8%	23.4%	19.3%	19.6%	19.3%	23.4%	20.1%	17.3%	14.9%	16.5%	8.7%	13.6%	10.3%	0.0%
Global NOx emissions	tonnes	79,089	77,044	72,632	65,358	70,546	55,951	52,542	48,566	45,271	38,537	39,213	36,402	38,061	37,800	40,294
	grammes/ATK	3	3	3	3	3	2	3	3	3	3	3	3	3	3	4
	improvement since 1998 %	18.8%	21.3%	20.0%	20.8%	22.1%	34.7%	28.1%	26.3%	22.8%	22.2%	17.6%	17.1%	11.8%	6.3%	0.0%
	grammes/RTK	4	4	4	4	4	3	4	4	4	4	4	4	4	5	6
	improvement since 1998 %	24.8%	28.6%	32.9%	30.3%	27.8%	40.0%	34.9%	32.1%	29.3%	26.4%	26.3%	20.5%	21.2%	12.9%	0.0%
Global CO emissions	tonnes	13,304	12,972	12,204	11,422	13,436	13,077	10,959	10,190	10,056	8,873	8,268	8,062	8,751	9,827	13,982
Global HC emissions	tonnes	1,445	1,392	1,297	1,344	2,107	2,271	2,233	2,171	2,228	2,112	1,885	2,090	2,560	3,401	5,736
Passenger Flights Only⁽¹⁾																
Fuel Consumption	thousand tonnes	4,113	3,968	3,650	3,476	3,627	3,217	2,825	2,646	2,404	1,953	2,074	2,050	2,068	1,953	2,007
	share of total fuel consumption %	82.3%	78.9%	75.8%	79.0%	79.4%	73.6%	78.6%	79.6%	78.1%	75.4%	80.3%	84.3%	85.1%	86.3%	85.7%
Fuel Efficiency	grammes/RTK	39.612	39.083	37.793	38.863	40	39	39	41	42	46	42	46	44	47	49
	improvement since 1998 %	19.7%	20.8%	23.4%	21.2%	19.2%	20.3%	21.5%	17.6%	14.9%	7.5%	14.3%	7.2%	11.1%	4.6%	0.0%

(*) incorporates KA

(¹) Fuel consumption includes testing, training, and wet-lease flights

1 tonne of fuel = 3.15 tonne of CO₂

GWP of CO₂ is 1; assumes that all other GHG gases are negligible as these impacts still uncertain.

(1) Fuel consumption for our passenger flights includes the carriage of baggage and belly space cargo.

Other Environmental Indicators	Units	2012	2011
Hong Kong and 100% owned Hong Kong-based subsidiaries			
Power/Fuel			
Electricity Consumption	mWh	97,502	95,442
Ground based activities fuel consumption	litre		
Mobile Combustion – Diesel		4,080,926	3,874,344
Mobile Combustion – Unleaded Petrol		295,707	275,962
Stationary Combustion – Diesel		1,707,199	4,272,706
Purchased Towngas	unit	5,706,804	3,545,071
Fuel dumped due to operational reqs	tonnes	620	832
% of fuel dumped	%	0.12	0.02
Water			
Seawater consumption	m ³	7,863,000	7,577,000
Potable water consumption	m ³	798,348	741,814
Maintenance water consumption	m ³	102,357	98,583
Paper & Cardboard			
Paper consumed in offices	tonnes	2,216	1,837
Paper & cardboard recycled ⁽¹⁾	tonnes	2,219	1,826
Printer Cartridges			
Printer cartridges purchased	no.	3,637	4,070
Printer cartridges refilled	no.	578	722
Printer cartridges recycled	no.	2,489	1,969
Refrigerants containing HFCs ⁽²⁾	kg	n/r	n/r
Recycled/Reused Materials			
Aluminium cans recycled	kg	67,925	77,678
Plastic recycled	kg	146,013	89,737
Glass recycled	kg	514,024	164,024
Waste lubrication oil recycled	litre	995	4,000
Hangers used*	no.	2,400,780	2,564,304
% of hangers reused*	%	79.0	61.4
Disposed Materials			
Office waste disposed of	tonnes	2,308	2,346
Food waste disposed of	tonnes	687	923

Other Environmental Indicators	Units	2012	2011
Outports			
Power/Fuel ⁽³⁾			
Electricity Consumption	mWh	1,306	1,273
Ground based activities fuel consumption			
Mobile Combustion – Diesel	litre	10,539	10,984
Mobile Combustion – Unleaded Petrol	litre	55,315	51,073
Stationary Combustion – Natural Gas	therms	544	668
Paper & Cardboard ⁽⁴⁾			
Paper consumed in offices	tonnes	10	9
Printer Cartridges ⁽⁴⁾			
Printer cartridges purchased	no.	372	281
Potable water consumption	m ³	24	19

* Covers Vogue Laundry only

- (1) CPCS receives significant amount of cardbox from its procurement that are recycled.
(2) We are unable to provide an auditable number this year. We will report on this in the medium term.
(3) Covers our offices in Auckland, Manila, San Francisco, and Taipei.
(4) Covers our offices in Frankfurt, Karachi, Kuala Lumpur, Paris, and Sydney.

Want to find out more? Go to our graphs on:

- 2012 GHG Emissions (tCO₂e) – Cathay Pacific Group
- Global CO₂ Emissions – Cathay Pacific Group Fleet
- Safety Incidents
- Lost Time Injury Frequency Rate (%)
- Cabin Crew Nationality Mix (%)

Social

Over 1,000 suppliers globally for CX and KA

28,861 group staff worldwide

3,300 volunteer hours by Hong Kong staff

321 student participants in English On Air

14,000 visitors to CX City

Social Indicators Table

Issue	Units	2012	2011
Total CX Group workforce	no.	28,861	28,158
by Location			
Hong Kong	no.	22,469	21,784
China	no.	786	825
Outports	no.	5,606	5,549
by Employment Type			
Flight Crew	no.	3,349	3,133
Cabin Crew	no.	10,872	10,520
Ground Staff	no.	8,720	8,603
Subsidiary Staff	no.	5,920	5,902
by Gender			
Female	%	56	57
Male	%	44	43
by Age Group			
Under 30 years old	%	28	27
30-50 years old	%	58	59
over 50 years old	%	14	14
Senior Management from Local Community ⁽⁵⁾	%	80	80
Employee Yearly Turnover Rate ⁽⁶⁾			
by Location			
Hong Kong	%	13 ⁽¹⁾	14 ⁽³⁾
China	%	10 ⁽¹⁾	9 ⁽³⁾
Outports	%	7 ⁽¹⁾	6 ⁽³⁾
by Employment Type			
Flight Crew	%	3	7
Cabin Crew	%	4	4
Ground Staff	%	8	8
Subsidiary Staff	%	36 ⁽⁴⁾	31 ⁽²⁾
by Gender			
Female	%	12 ⁽³⁾	11 ⁽³⁾
Male	%	12 ⁽³⁾	12 ⁽³⁾
by Age Group			
Under 30 years old	%	21 ⁽³⁾	19 ⁽³⁾
30-50 years old	%	7 ⁽³⁾	8 ⁽³⁾
over 50 years old	%	10 ⁽³⁾	11 ⁽³⁾

Issue	Units	2012	2011
Employees on Permanent Terms			
Cathay Pacific	%	98	n/r
Dragonair	%	100	n/r
Subsidiary Staff	%	81	n/r
Lost time Injury Frequency Rate ⁽⁷⁾			
Cathay Pacific	rate	26.4⁽⁸⁾	26.4 ⁽⁸⁾
Dragonair	rate	21.0	25.2
Subsidiary Staff	rate	24.7	20.6
No of fatalities due to CX Group operations			
CX Group Staff	no.	0	0
Contractors working within Cathay Pacific/Dragonair premises	no.	0	0
Passengers	no.	0	0
Average hours of training per year			
Flight Crew	hrs	47	44
Cabin Crew	hrs	44	62
Airport Staff	hrs	31	32
Engineering Staff	hrs	130	264
Subsidiary Staff	hrs	29	21
Total online learning enrollments	no.	237,765	268,359
Employees covered under collective bargaining agreement ⁽⁹⁾	%	3.2	2.0
Employees receiving performance reviews	%	100	100
Human rights screening in investment and procurement practices	%	100	100
Reported incidents of discrimination	no.	0	0
Non-compliance cases on product responsibility issues ⁽¹⁰⁾	no.	0	0
Non-compliance cases on applicable laws and regulations ⁽¹¹⁾	no.	0	0

Covers, CX, KA, 100% owned Hong Kong-based subsidiaries, and Air Hong Kong

(1) Includes CX, KA, AHK, CPCS, HAS, VLS

(2) Includes CPCS, HAS, VLS

(3) Includes CX, KA, CPCS, HAS, VLS

(4) Includes AHK, CPCS, HAS, VLS

(5) Includes Executive Directors only

(6) Employee Turnover Rate computed as # of leavers/# of staff for each month and averaged on a yearly basis.

(7) LTIFR is computed as (# of injuries resulting in lost time/total workforce hours) x 1,000,000.

(8) This year, we include data from outports to better report on this indicator. The previous year's LTIFR rate has been revised to allow comparison.

(9) % of employees under collective bargaining agreements are reported where it is applicable and in accordance with local legislation. We only have data for Australian, Canadian, and UK outports.

(10) Includes cabin product, marketing and customer privacy.

(11) Includes anti-competition and corruption cases. For details on anti-competition cases, please refer to pg. 81-82 of our Annual Report 2012.

Note:

CX: Cathay Pacific Airways

CHL: Cathay Holidays

HAS: Hong Kong Airport Services

KA: Hong Kong Dragon Airlines

CPCS: Cathay Pacific Catering Services

VLS: Vogue Laundry

AHK: Air Hong Kong

Selected Awards for Cathay Pacific and Dragonair 2012

CATHAY PACIFIC

- Best Frequent Flyer Programme
Business Traveller Asia-Pacific Travel Awards
- Best Airline First Class
Business Traveller Asia-Pacific Travel Awards
- World's Best Business Class
Skytrax World Airline Awards
- Best International Business Class
Australian Business Traveller Awards 2012
- Best International Lounges
Australian Business Traveller Awards 2012
- Best Airline – Food and Wine
Frequent Business Traveller Globe Runner Awards
- Airline Business Technology Award
2012 Airline Business Strategy Awards
- Top Service Award, Airline Category
Top Service Awards 2012, Next Magazine
- Outstanding Brand Award, Airlines Category
The Outstanding Brand Awards 2012, Economic Digest
- Best Airline
National Luxury and Lifestyle Awards (UK)
- 10th Consecutive Years Caring Company
Hong Kong Council of Social Services

DRAGONAIR

- Best Regional Airline
23rd Annual TTG Travel Awards 2012
- Best Inflight Catering
2011 China Shanghai Tourism Awards
- Most Liked Airline
Ren Ren Like 2011 Online Campaign
- Yahoo! Emotive Brand Award – Airline Category
Yahoo! Emotive Brand Award 2011 – 2012



Safety Matters

Sustainability is one of the goals of safety management. As a business support function, our goal is to manage the risks of the operation to As Low As Reasonably Practical (ALARP) in order to allow the company to pursue and maintain its commercial activities in a sustainable way.

At Cathay Pacific, we have a longstanding and embedded focus on safety. We strive to maintain the highest levels of safety and always put safety first.

Our Safety Policy, signed by the Chief Executive, clearly articulates this commitment by stating that “safety is our number-one priority” and that we are “fully committed to providing a safe operational and working environment” for all our passengers and staff. It goes on to state that “ultimate accountability rests with me as Chief Executive. However, responsibility for safety lies with each and every one of us in the airline”.

We have well-developed and deeply-embedded proactive safety systems to ensure that we can deliver the results. Developments made in 2012 will ensure that we live up to these exacting standards.



“ If we don’t know where the risks lie, we can’t mitigate them effectively. ”

Richard Howell
General Manager Corporate Safety

Updates for 2012

During 2012, we continued to develop and improve our risk-based Safety Management System (SMS) by introducing a new Safety Performance Indicator (SPI) and Risk Index Score (RIS) methodology. These are shown in the [Safety Key Performance Indicators \(KPI\) table](#). Where possible these safety metrics are benchmarked against other airlines, industry performance and best practices.

At Cathay Pacific, we continued to develop and mature the Fatigue Risk Management System (FRMS) by deploying additional resources, improved documentation, increased training, enhanced use of our fatigue modelling software and increased internal and external communication. Dragonair also implemented an FRMS in March 2012.

As a result of the comprehensive, in-depth safety review conducted by leading Queen's Counsel and safety systems expert, Sir Charles Haddon-Cave, Q.C., in 2011, the Head of Corporate Safety was upgraded to General Manager Corporate Safety on 1 January 2012 to reflect the importance of safety within the airline. During the review, Sir Charles found many areas where Cathay's existing safety procedures were world-class, and that there is a great deal that we do well or very well. So far, 82% of the seventy action points recommended by the Haddon-Cave report have been actioned and closed. Work will continue until all 100% have been addressed.

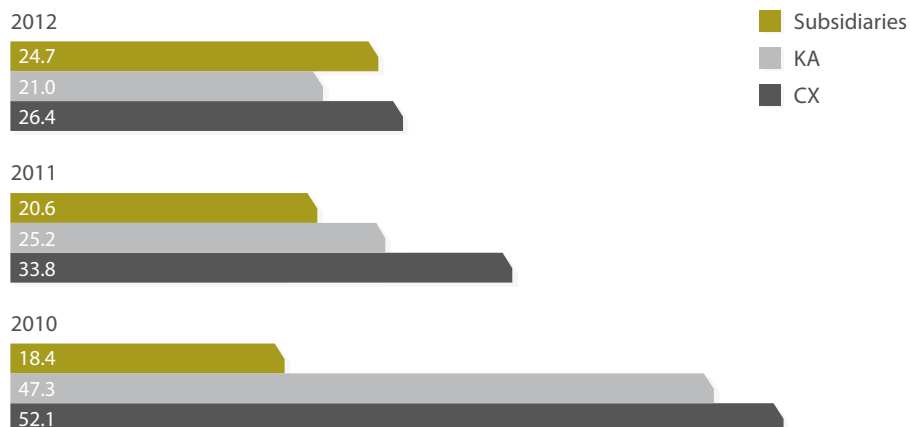
In 2012, there were no events classified as accidents, there was one 'high risk' safety incident, and 81 'moderate risk' safety incidents, many related to cargo and ground events. This increase was largely due to a request for enhanced reporting by staff so as to identify and focus on implementing pro-active mitigations.

Safety Incidents



There was zero passenger and staff fatalities or serious work-related injuries as a result of our operations in 2012. As a result of the extensive work undertaken in 2011 and 2012 to improve occupational health and safety and reduce crew and staff injury, the overall Lost Time Injury Frequency Rate (LTIFR) reduced slightly. At Dragonair, the overall LTI rate reduced by 17% between 2011 and 2012.

Lost Time Injury Frequency Rate (%)



A new Incident Management protocol was added in 2012 enabling all incidents to be classified and responded to with the same, scalable Incident Management Team.

In terms of service disruption, we have increased our Customer & Commercial Control (CCC) handling capabilities by:

- adding an interface between the CCC team and operating cabin crew to facilitate more effective decision-making on the carriage of persons with disabilities; and
- increasing the size of the CCC team to more effectively enable continuous improvement efforts in disruption handling and management at the central and port levels.

In addition, we have continued our efforts on improving our capabilities for on-the-spot, proactive service recovery.

What Our Stakeholders Think

The consistent message we have been receiving over the years is that both staff and passengers regard Cathay Pacific as having good safety performance, records and contingency plans, with strong emphasis on passenger and staff safety. In particular, staff are proud of the safety culture, and feel that the company is able to communicate effectively on safety issues. Cathay Pacific is also one of the first airlines to implement a Fatigue Risk Management System. This work is on-going and we will continue to build on what we have achieved. This year, surveyed staff highlighted that they would like to see strengthened training in staff occupational health & safety.

Our Safety Commitments

CX COMMITMENTS




Below presents our achievements against our key safety performance targets and indicators for 2012:

	Target	Actual
Accidents	Zero	Zero
High Risk or Severe Incidents	Zero	1
Moderate Risk Incidents	Below 1/1000 sectors	0.72/1000
IATA Operational Safety Audit (IOSA)	Maintain 100% conformance	IOSA renewed in Nov 2012
Regulatory Report Rates	Below 4/1000 flights	4.0/1000
Line Operational Safety Audit (LOSA)	Every 4 Years	Next LOSA planned May/June 2013
Simulate an Aircraft Accident & Emergency Response	Each Port Every 24 Months	Yes



Regina Cheung, Assistant Airline Safety Manager, introducing the animated flight software as part of CX's comprehensive Safety Management System.

Want to find out more? Go to our [Safety Factsheet](#) 



Climate Change Matters

Our use of non-renewable fossil fuels is not only our biggest cost, but also our most significant environmental impact. More than ever, we have both the economic and environmental incentives to implement more sustainable solutions such as fuel efficiency, new fleet and sustainable biofuels.

We agree with our stakeholders that climate change is the company's highest environmental priority and challenge. We recognised this in the 1990s, when we released our first environmental report, and reinforced that position in 2006 when we launched our [Climate Change Position](#), one of the first airlines to have done so publicly.

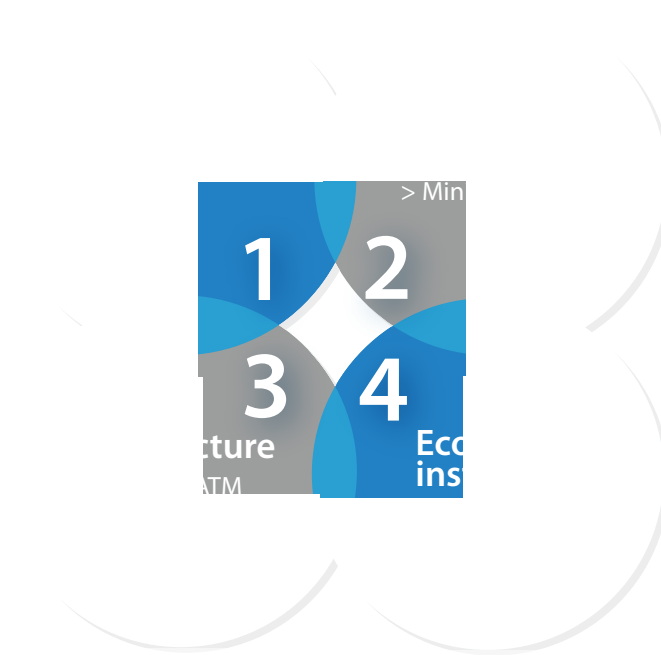
Timeline on some of the Key CX Climate Change Initiatives from the 1980s to Current		
1980	Early 1980s	Aircraft Weight Reduction Task Force*
	1989	Supports the Swire Group Environmental Policy
1990	1996	First environmental report including CO ₂ emissions
	1997	Received ISO 14001 certification
2000	2005	Established the Long Term Climate Change Task Force Initiated engine core washing
	2006	Launched CX's Climate Change Position
	2007	Launched carbon offset programme – FLY greener
	2008	Joined Climate Change Business Forum (CCBF) Founded the Aviation Global Deal (AGD)
2009	2009	Joined the Sustainable Aviation Fuel Users Group (SAFUG) Supported IATA's climate change commitments
2011	2011	Developed a sustainable biofuels strategy Supports climate change science monitoring with IAGOS
2012	2012	Committed to a CX CO ₂ target
* Introduced: Fuel monitoring system Lighter weight equipment Flight planning systems Route improvements		

INDUSTRY COMMITMENTS

We fully support IATA's climate change commitments:

- 2010** An average improvement of fuel efficiency of 1.5% per year
- 2020** A cap on aviation CO₂ emissions from 2020 (carbon neutral growth)
- 2050** Aspiration for 50% reduction in net CO₂ emissions over 2005 levels

Our strategy for achieving this follows the IATA four-pillar strategy:



This year, we have committed ourselves to a target of a 31% reduction of CO₂ emissions per passenger and cargo we carry (known as "revenue tonne kilometre", or RTK) by 2020, based on 2009 level.

This exceeds the IATA industry target and contributes to our majority shareholder, Swire Pacific's ambition of net zero impact.

Updates for 2012

2012 GHG Emissions (tCO₂e) – Cathay Pacific Group

SCOPE 1	SCOPE 2
▲ 16,013,724 (99.65%) Aviation Fuel, Fuel Combustion and Towngas	▲ 56,086 (0.35%) Electricity and Towngas

Emissions and Fuel Efficiency

15.7
million tonnes
CO₂ emissions from
fuel burn

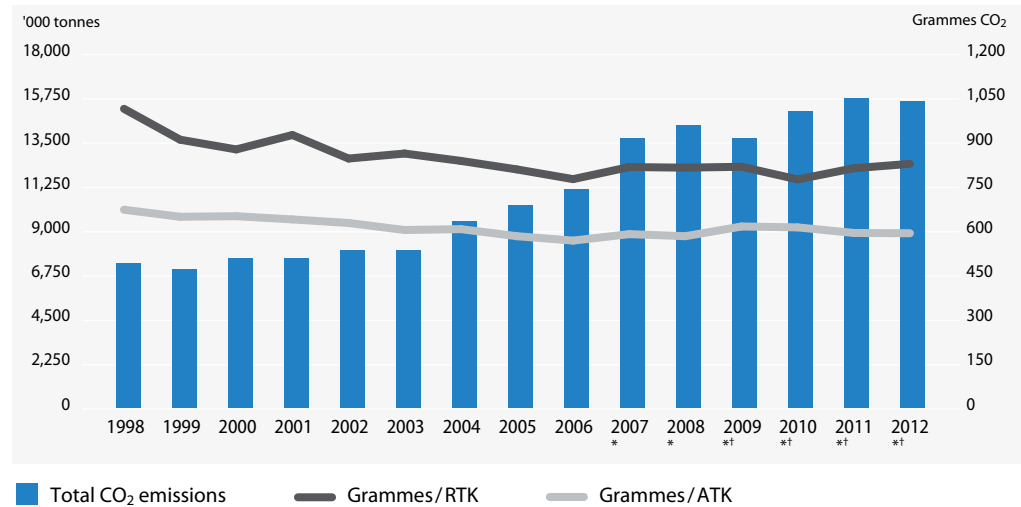
In 2012, our CO₂ emissions from fuel burn remained steady at 15.7 million tonnes. A reduction in CO₂ emissions was recorded in relation to capacity (ATK – available tonne kilometre), whilst CO₂ emissions in relation to traffic volume carried (RTK – revenue tonne kilometre) increased, due to aircraft that were less full. In the second half of the year, we adjusted the schedule of our transpacific services to enable the fuel-efficient Boeing 777-300ER to operate on routes served by the less-efficient passenger Boeing 747-400 aircraft. This allowed us to accelerate the retirement of the latter. Overall, in 2012, our absolute CO₂ emissions have decreased by 0.7%, or 0.11 million tCO₂.

Fuel efficiency achievements in 2012 included:

- Fleet modernisation by taking delivery of six A330-300s; five Boeing 777-300ERs, four Boeing 747-8Fs, and four Airbus A320-200s, and retiring three Boeing 747-400 aircraft.
- Flight route improvements via the Indian Ocean Strategy Partnership to Reduce Emissions (INSPIRE) User Preferred Route initiative. A total of 19,557 kg of fuel, or 62 tCO₂, were saved over 69 of our flights between Hong Kong and Johannesburg.
- As part of the larger e-Enabled aircraft programme, we signed an agreement with Navtech to develop a paperless cockpit environment with the e-charts implementation, which will lead to a reduction in weight on board, fuel used and CO₂ emissions.



Global CO₂ Emissions – Cathay Pacific Group Fleet



* includes Dragonair
† includes testing, training, and wet lease flights

Biofuels

With a sustainable aviation fuels strategy in place, we are looking to embark on several new biofuels projects starting in 2013. These will range from local initiatives based in Hong Kong, to global projects further afield, and will lay the foundation for a consistent, sustainable alternative biofuel source for the future.

European Union Emissions Trading Scheme

In November 2012, we welcomed the European Union (EU)'s decision to 'stop the clock' on extending the EU Emissions Trading Scheme (ETS) to international aviation for a year. This will allow space for the International Civil Aviation Organization (ICAO) to make progress on a global approach. On this front, Cathay Pacific continues to be actively involved with the IATA Climate Change Task Force (CCTF) in leading the industry's work to develop airlines' commitment to Carbon Neutral Growth (CNG) for 2020, and in developing proposals for a fair and equitable global agreement on emissions under ICAO's leadership.

Fly greener Carbon Offset

Passengers continued to offset the emissions from their flights via **FLY greener**, Cathay Pacific's carbon offset programme. This amounted to 2,600 tCO₂^{*} in 2012. Cathay Pacific and Dragonair also offset the CO₂ impacts of staff travelling on business, totalling 9,400 tCO₂^{*} at an approximate cost of HK\$360,000. The portfolio was updated in 2012 to include the following projects:

Lankou 26MW Hydropower Project

Pearl River Delta, Guangdong
Feeds into the Southern China Power Grid

Chaonan Shalong Wind Power Project

Shantou, Guangdong
Feeds into Southern China Power Grid



Lankou Hydropower Project



Wind turbines at the Chaonan Shalong Wind Project

Climate Adaptation

In addressing climate risk and adaption, in 2012, we worked with different departments around the company to identify issues and events related to climate change that could affect our business. We are exploring the use of scenario planning tools and methodologies to assist us in developing our understanding of how our business can better adapt to climate change.

Airport Expansion

In March, we welcomed the Hong Kong Government's approval for the Airport Authority Hong Kong (AAHK) to proceed with the Environmental Impact Assessment (EIA) for the three runway option for the Hong Kong International Airport expansion. We fully support the AAHK's efforts in developing a comprehensive EIA that fully complies with Hong Kong's regulations, responds to stakeholder concerns, proposes relevant and appropriate mitigation measures and is guided by international best practice. Cathay Pacific has provided relevant input to AAHK's consultants that will form the basis of the EIA study, and has participated in the EIA technical briefing groups. It is also expected that AAHK will ensure the construction of a third runway be undertaken with the least impact to the environment, and that the mitigation measures proposed will be fully implemented.

Ground Operations

On the ground, there has been a slight increase in the total electricity consumption of our buildings, Cathay Pacific City and Dragonair House (1.2% and 0.2% respectively). This was mainly due to the installation of an additional simulator, increased activities from training, and higher demand on the facilities from the adjacent cargo terminal work site. As part of making our buildings more energy efficient, a detailed energy audit was commissioned and commenced in 2012.

Our subsidiary businesses, including HAS, Vogue Laundry and Cathay Pacific Catering Services (CPCS), have been replacing existing equipment with newer, more efficient and lower emission models. In 2012, HAS spent HK\$38 million in replacing ground support equipment and vehicles, including the purchase of three Nissan Leaf electric vehicles and three dual power loaders. Vogue added two Euro V trucks and two Euro V vans to the fleet. CPCS continued to change the air-cooled condensers in the blast chillers to more energy-efficient water-cooled condensers, and switched the kitchen boilers to Towngas.



Cathay Pacific City



Dragonair House

What Our Stakeholders Think

Not surprisingly, climate change, fuel and energy efficiency and carbon emissions are the primary environmental issues of focus for stakeholders due to their perceived high impact on our business – rising fuel costs, increasing regulations such as the emergence of different Emissions Trading Schemes, and impact on the environment. Climate change has been a material issue for us for a long time, and stakeholders recognise that we have been addressing this as a priority, but at the same time, expect us to adopt targets that exceed the industry ones.

There is an expectation for us to further enhance transparency and communication around our climate change approach, especially with staff, and for us to engage more proactively and publicly on this issue. Stakeholders also want to better understand the implications of regulatory controls on the industry.

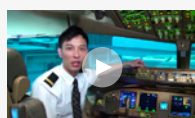
Our Climate Change Commitments

CX COMMITMENTS




In 2012, we launched our commitments under our [Sustainable Development Strategy](#). We committed ourselves to a number of actions that are related to *reducing our overall carbon emissions (in the air and on the ground) and adapting to the impacts of climate change*:

- Achieve 31% reduction in CO₂ emissions per RTK
- Develop a cost-effective strategy to incorporate sustainable aviation fuel into our operations
- Embed climate change adaptation into overall risk management
- Reduce electricity use by 25%
- Ground vehicles to use alternative fuels/power source
- All CX Group-owned buildings, offices and lounges will consider green building standards or principles
- Offer carbon offsetting as part of all ticket-related marketing and promotional activities



Nelson Chang, Second Officer, takes the viewer through the benefits of new aircraft types in terms of fuel efficiency, carbon efficiency and air quality.

Want to find out more? Go to our [Climate Change Factsheet](#) 



WASTE MANAGEMENT

Waste Management Matters

We recognise the impacts of using material resources such as paper, plastic and food in our operations and have long-term programmes in place to minimise these impacts. While we were seen by our stakeholders as having improved in this area, they expect to continue to see urgent action.

In particular, our staff are concerned about what they can do in the working environment, for example flight and cabin crew wanted to see more being done on inflight waste, while our ground staff wanted to see more done in the offices and airports. This is a positive sign, as we are seeing our staff more willing to be involved in reducing our use of resources and increasing recycling and re-using where we can. This is encouraging as a lot of our resource and waste management initiatives can only be achieved with the support of our staff both inflight and on the ground.

This year, we received much attention on our use of plastics inflight – this was consistent amongst our different stakeholders – from passengers, staff and environmental organisations. We have provided a detailed section in [our factsheet](#) on our plastic use.

Our strategy on resource use and waste management is implemented through this process:



Updates for 2012

In the past few years, we have initiated a number of resource use and waste management initiatives, a full list of which is detailed in the [Waste Management factsheet](#).

We are constantly examining options whereby we can reduce resource use and waste, or use materials from more sustainable sources. Below are a few initiatives progressed in 2012:

- Using Forestry Stewardship Council (FSC) certified or recycled paper for hand towels and toilet paper in our offices;
- Using lighter weight paper for our inflight magazines, which also helped to lower overall onboard weight, and hence, emissions;
- Launching electronic initiatives, such as introducing mobile boarding passes at 20 Cathay Pacific and Dragonair ports, and electronic versions of customer magazines, staff newsletters and staff travel tickets;
- Rolling out the electronic airway bill (e-AWB) on more outport cargo flights;
- Developing a paperless cockpit environment by implementing “e-charts”;
- Donating First Class sleep suits left behind by our passengers to charity; and
- Working on recycling our collected old cabin crew uniforms into new yarn.

Recycling

We continue with recycling initiatives inflight and in the offices. Having started recycling glass bottles in our flights in 2011, we extended this collection to our headquarter building. To find out whether our inflight wastes going to our outports are sorted and recycled, and if so, to what extent, we initiated a survey amongst these outports. We will continue to monitor regulatory changes in our destination countries which may facilitate further inflight waste recycling. Dragonair will also explore the possibility of working with outport caterers to collect used plastic bottles and aluminium cans inflight for recycling.

Recycling from inbound CX flights (2012):

- Aluminium cans: 19,383 kg [^]
- Plastic bottles: 27,569 kg [^]
- Plastic cups: 26,350 kg [^]
- Glass bottles: 514,024 kg [^]



Catherine Sin,
Assistant Manager
Product, and her team
worked with the
suppliers in coming
up with the idea of
creating our new
trendy Premium
Economy amenity
bags from recycled
plastic bottles, which
are offered on our
long-haul flights.

Sourcing

We are aware that plastics take a very long time to degrade, and we realise that it contributes to a significant amount of waste as well as releasing toxins into the environment. Working with our suppliers, we have successfully made our new Premium Economy amenity bags from recycled plastic bottles. We have also switched to biodegradable bags that hold our inflight magazines. In 2012, we began a study looking at our use of plastic materials throughout the Cathay Pacific Group operations, including that of our subsidiaries. We decided to focus our efforts first on single use disposable items and will report in more detail on this next year.

Food Waste

The Cathay Pacific Group, through Cathay Pacific, Dragonair and Cathay Pacific Catering Services, serves around 92,077 meals per day. We recognise that food waste is unavoidably created every day. We have therefore implemented a number of measures to reduce food waste where we can, including working with charities and the Hong Kong Airport Authority on reusing food offcuts, recycling used cooking oil, and better flight meal planning.

What Our Stakeholders Think

Waste is a locally critical issue in Hong Kong with the shortage of landfill space. It is also a very tangible aspect of our operations to our customers and staff. This is a common thread that has been highlighted in our stakeholder groups. There are positive perceptions about Cathay Pacific's performance in this area overall, but we are expected to continue to reduce waste on board, such as tackling the use of plastic packaging; paper use in our offices; and communicating on our reuse and recycling practices, especially engaging with our passengers, cabin crew and cleaning agents. Some have also made a link between reducing inflight waste, use of material resource and fuel use, in terms of weight reduction.

Our Waste Management Commitments

CX COMMITMENTS

In 2012, we launched our commitments under our [Sustainable Development Strategy](#). We committed ourselves to a number of actions that are related to *reducing our resource use and improving waste management*:

- Reduce the environmental impact of maintenance, repair and overhauls carried out in Hong Kong by 50%
- Reduce material usage and waste by 25%
- Increase recycling by 25%



Joyce Lau and Valentio Febrio, Flight Attendants, show how inflight recycling is done behind the scenes.

Want to find out more? Go to our [Waste Management Factsheet](#) 



Sustainable Sourcing Matters

Cathay Pacific Airways and Dragonair work with over 1,000 suppliers globally. We are working with them on a supply chain sustainability compliance process as part of our risk management process.

Many of our suppliers are companies who also report publicly on their sustainability performance and hold similar values towards corporate responsibility as ourselves.

Our Airline Purchasing and Engineering Procurement departments are responsible for purchasing the range of goods and services that the airline needs, from the largest spend items such as aircraft and fuel, to the smallest such as office supplies and marketing memorabilia.

Sustainable Purchasing

We aim to ensure that all purchasing practices are governed by the highest professional and ethical standards. Our Airline Purchasing and Aircraft Trading Department manages most of the purchasing requirements for both Cathay Pacific, and our Purchasing Ethics Policy outlines our expectations from our purchasing staff, including compliance with anti-bribery regulations. Our approach to sustainable procurement has been to encourage our suppliers to improve on their sustainability practices through capacity building and sharing knowledge on best practices.

The teams in our Purchasing Department understand the need to use sustainable purchasing and responsible supply chain practices, wherever practical. Suppliers to Cathay Pacific must provide clear, accurate and appropriate reporting of their progress towards achieving our Supply Chain Sustainability Code of Conduct objectives.

Supply Chain Sustainability Code of Conduct

Since the launch of our Supply Chain Sustainability Code of Conduct in 2007, suppliers to Cathay Pacific must provide clear, accurate and appropriate reporting of their progress toward achieving our objectives contained in this Code. These include:

- Legal and regulatory compliance
- Environmental management
- No use of forced and child labour
- Appropriate compensation and working hours
- Health and safety in the workplace
- No discrimination against employees
- Upholding human rights in the workplace
- Having high ethical standards
- Extending social responsibility to their subcontractors and service providers
- Maintaining documentation and permitting our inspection

In developing and revising the Code, we took account of the International Labour Organization's core conventions and other applicable and recognised labour standards, referred and benchmarked against the United Nations Global Compact.

Timeline for Working with Our Supply Chain	
2006	Identified the need for a more coordinated approach to sustainability in our supply chain
2007	Developed and launched our Supplier Corporate, Social and Environmental Responsibility Code of Conduct First questionnaires sent to Hong Kong-based suppliers
2008	Launched online tool for suppliers to complete questionnaire regarding their compliance with our Code. New suppliers are contractually committed to meeting our Code of Conduct
2009	Revised the Code of Conduct to include ethics
2010	First publication of the Supply Chain Sustainability Newsletter distributed to local and outport suppliers Outport-based suppliers asked to complete questionnaire for the first time
2011	Development of a framework for supply chain compliance checking
2012	Revised and renamed the Code as Supply Chain Sustainability Code of Conduct

Sustainable Sourcing

We are working to establish sustainable sourcing practices across all our operations. The process began by understanding resource utilisation at different business units. Part of this work included identifying items commonly procured and assessing areas where a reduction in our sustainability impact could be achieved. Examples can be found in the [Waste Management](#) section of our report.

Updates for 2012

In 2012, we completed a public search of our top 200 suppliers based on total contract value in 2011. What we wanted to understand was how many of our suppliers actually make public statements as to their own standards for sustainability. What we found was quite surprising. A high number of suppliers do not make any reference to sustainability or Corporate Social Responsibility on their websites, and only two suppliers had a published Code of Conduct that matched perfectly with our own Code.

Based on the findings of this study and on our existing risk process, we will re-assess our suppliers and identify those that are considered high-risk and recommend that they undergo a detailed compliance check.

In 2012, we also developed two detailed checklists for our Purchasing Managers to use as a supplement when assessing whether there are any sustainability risks associated with a particular supplier or the purchase of an item. We will roll-this out fully in 2013 and will report about outcomes then.

Proposed New Supply Chain Sustainability Compliance Process



What Our Stakeholders Think

The sustainability of supply chains has gained in importance in the last few years, as businesses look beyond the impacts and performance of their immediate operations. Stakeholders are increasingly looking for us to incorporate green purchasing guidelines into environmental and sustainability policies, and show a more integrated view of environmental and sustainable development management across the business value chain. We are also expected to train employees to use these sustainable procurement guidelines, and gain a deeper understanding of supplier practices.

Our Supply Chain and Procurement Commitments

CX COMMITMENTS



In 2012, we launched our commitments under our [Sustainable Development Strategy](#). We committed ourselves to a number of actions that are related to *working with our supply chain*:

- All CX Group-branded materials will be produced using sustainable materials
- All paper, paper products and textiles offered to customers or as part of the service offering will be made of sustainable materials
- Engage with suppliers of inflight sales products on sustainability principles
- All holiday packages offered by CX Holidays will be verified for their sustainability impacts
- CX Holidays to offer at least 5 more ecotourism packages by 2015
- All meals served inflight and on the ground will meet sustainability criteria
- All suppliers will comply with our Supply Chain Code of Conduct



Catherine Sin, Assistant Manager Product, and her team worked with the suppliers in coming up with the idea of creating our new trendy Premium Economy amenity bags from recycled plastic bottles, which are offered on our long-haul flights.

Want to find out more? Go to our [Sustainable Sourcing Factsheet](#) 




Biodiversity Matters

The conservation of habitats and species diversity is important to Cathay Pacific. We recognize that we have an impact on the destinations to which we fly, and hence we continue to develop and incorporate biodiversity elements into our sustainable development strategy.

Conservation has long been a topic of concern for Cathay Pacific. For many years, we have been sponsoring habitat-protection programs within Asia, and working with NGOs from across the region. For instance, working with Friends of the Earth, we provided funding that resulted in the planting of 10,000 tree seedlings around Hong Kong. We also raised nearly HK\$8 million from passengers to support conservation initiatives in mainland China through The Nature Conservancy. Partnering with the Kadoorie Farm and Botanic Gardens in Hong Kong, we helped reintroduce 609 endangered pig-nosed turtles to Indonesia by donating cargo space and air tickets to the organisation. Cathay Pacific will continue to direct investments in biodiversity conservation as a way to give back to the community.

It is important that our inflight meals are sustainably sourced as well. On average, Cathay Pacific and Dragonair serve 75,000 inflight meals everyday to our passengers. Therefore, by adhering to international sustainability standards, we can have a substantial positive impact on the diversity of a wide variety of ecosystems. We have already adopted a Sustainable Food Policy that does not allow the serving of a number of unsustainably produced food items, including shark fin soup, both inflight or at company-paid functions. Since 2011, we have been serving fish from sustainable sources, such as those that are Marine Stewardship Council certified, in Economy Class on all our flights departing from Europe. We follow a similar policy for fish served in Economy Class on flights from Australian and North American ports.

To learn more about what the Cathay Pacific Group has been doing to support habitat-protection programs and our strategy that incorporates biodiversity considerations into our daily operations, go to the [Biodiversity factsheet](#) .

Updates for 2012

Cathay Pacific's inflight catering team has been working with suppliers to support sustainable seafood and fisheries. Since early 2011, we have been serving fish from sustainable sources in Economy class, initially, from our European ports, and subsequently from our Australian ports. In 2012, this was extended to include flights from North American ports.

In line with our Sustainable Development Policy, Cathay Pacific announced in 2012 the decision to implement a restrictive carriage policy that will lead to us only carrying sustainably sourced sharks and shark related products. In addition to the considerable weight of independent science and research-based data which supported our decision, we believe this is the right thing to do for a company that is committed to sustainability.

What Our Stakeholders Think

Today, companies are increasingly expected to understand their biodiversity impact and to determine ways to protect and enhance biodiversity as part of their business operations. This means that in addition to supporting habitat-protection initiatives undertaken by third parties, we are expected to take action to reduce the impact from our daily operations.

Our Biodiversity Commitments

CX COMMITMENTS




Based on the input of our stakeholders and our strong support for reducing the negative impact of our daily operations on biodiversity, we are committed to the following actions:

- Develop and implement a sustainable cargo policy
- All meals served inflight and on the ground will meet sustainability criteria



Brendan Duffy, Catering Manager, was instrumental in bringing sustainably sourced seafood to our inflight menus. In this video, he explains why this is important to Cathay Pacific.

Want to find out more? Go to our Biodiversity Factsheet 



Our People Matter

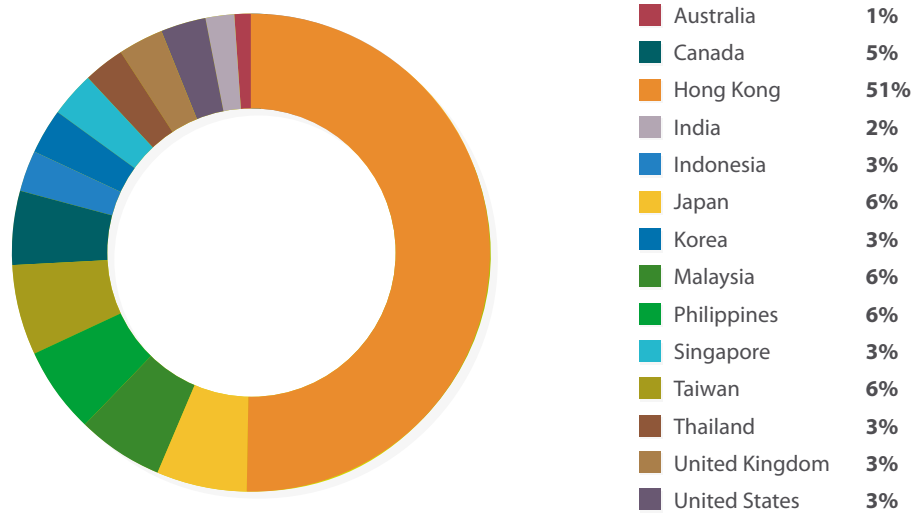
Our dynamic, professional, friendly and intuitive team is one of our greatest strengths and assets. We are proud of the high quality service of our staff, and are committed to providing the best possible working and career environment for them, in order to attract, develop and retain the best talent.

Priority on People and Continual Drive to Develop a Winning Team

We aim to ensure our staff is productive, competent and flexible, and that they operate within a healthy environment. We want to provide rewarding career opportunities by investing in our staff's professional and personal development. We do our best to show our appreciation of their highly-regarded professionalism and hardwork.

Our aim is to provide equal opportunities to individuals regardless of gender, race, national or ethnic origin, religion, cultural background, social group, disability, marital status, family status, sexual orientation, age or political opinion. We strive to manage people in a way that recognises diversity. We have also adopted formal mechanisms through which employees can make a complaint of discrimination or harassment in any form.

Cabin Crew Nationality Mix (%)



The following countries have fewer than 10 staff and are not shown on the graph above:

Austria	France	Italy	Spain
Belgium	Germany	Netherlands	Sri Lanka
China	Greece	New Zealand	Sweden
Denmark	Ireland	Portugal	Switzerland

Our team is unique in that it is widely dispersed around the world and consists of highly diverse cultures, background and languages. We work with multiple trade bodies based in different countries with specific union regulations, and we uphold freedom of association for our staff. Industrial relations continue to be challenging, however we are actively working with the various groups to continue to enhance communication and consultation to ensure views are heard and acted upon appropriately.

As a major employer supporting Hong Kong, it has been our long-standing practice to support local recruitment. If the required skills are available locally, we will give priority to the local labour market before searching internationally. Vacancies are first opened internally to the company, then to the local community, and only then, overseas. Most of our overseas hiring relates to skills or experience that is not readily available in the local labour market, such as engineering and flight crew – which is why we have extensive local engineering and flight crew training to help build these skills in Hong Kong.

To find out more about different aspects of staff relations and engagement, recruitment, training and career development, go to the [Our People factsheet](#) .

Updates for 2012

Engagement and Communication

Many different engagement programmes were run throughout the year. Below are some highlights from 2012:

All Staff

We launched a special edition of We Suggest, an annual campaign where staff organise themselves in teams and make creative suggestions on what the company can do to become more innovative and successful. In 2012, the theme was on sustainability and we asked our staff to suggest ways we could make the company more sustainable. We received around 100 suggestions from teams around the network. Five suggestions were shortlisted, with the team-building offsite session and final presentations to Directors to take place in 2013.

Flight Crew

We maintain a number of communication channels with our pilots to provide both technical and personal support, as well as information dissemination. These included forums and auditorium sessions.

In order to support our flight crew on medical issues, Dragonair hired an Occupational Health Specialist.

The Human Intervention and Motivation System (HIMS) programme was successfully introduced in both Cathay Pacific and Dragonair. HIMS provides a confidential environment to recognise and facilitate the recovery of a pilot from the illness of chemical dependency (alcohol and other drugs).

Cabin Crew

As part of our frontline team, cabin crew provide invaluable input to the way we serve customers, especially inflight. Their views are important to us, and consultation and feedback are a key focus. At Cathay Pacific, we do this by strengthening existing crew forums, consultative groups, the Premium Service Ambassadors, Economy Class Service Ambassadors, and Cabin Quality Specialist groups. We have also utilised new channels such as a new crew website and mobile applications. Through different initiatives, we aim to meet crew requirements and to better cater for their needs. Cathay Pacific's Work-Life Enhancement Leave (WEL) scheme, and Dragonair's Cabin Crew Helpdesk and Cabin Crew Support Team are examples from 2012.

Recruitment

We recruited a total of 1,159 flight crew, cabin crew and ground staff in both Cathay Pacific and Dragonair to support the expansion of our business.

Training and Development

We promote a culture of continuous learning. Our staff are responsible for their own professional and career development, and the company supports this by investing heavily in extensive formal training, online learning, seminars and forums. A strong emphasis is also placed on personal development. The Cathay Pacific Flight Purser's workshops were rolled out in 2012 focused on aspects such as developing key life skills, taking up new roles in life, and exploring ways to achieve better work-life balance. Dragonair piloted the Cabin Crew Mentorship Programme to develop crew mentors which has helped enhance the professionalism and service quality of our crew.

Stakeholder Views

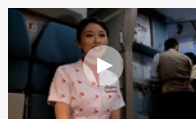
Our staff have emphasised the need for targeted, proactive and ongoing communication with them. Sustainability messages should be integrated into this communication, utilising training platforms for different staff groups. Staff would also like a stronger connection and opportunities for a two-way exchange with management.



Cathay Pacific not only cares about its employees but also their families. Our video, **Jetset TV Kids**, shows kids of our cabin crew learning about what their parents really do at work.




Martin Ng, Engineer Trainee, talks about how Cathay puts an emphasis on training and development as well as promoting diversity in the workplace.



Grace Hui, Flight Attendant, takes us along her flight from Hong Kong to Sydney, where she works in-flight with her team to deliver world class services to passengers.



Sammy Yeung, Supervisor, shows us how she and her colleagues make passengers' journeys a little smoother and easier.

Want to find out more? Go to our [Our People Factsheet](#) 

ABOUT THIS REPORT

Overview

Welcome to our 4th Sustainable Development Report, which covers our sustainability performance – both achievements and challenges in 2012. Recognising that we have a range of interested stakeholders, this year we have structured the report to cater for different levels of engagement. There is a concise overview for each of the section, a more enhanced factsheet for those who would like more in-depth information, and convenient links to relevant investor relations materials. We have also included an interactive element – video content for each material topic.

A summary leaflet in both English and Chinese has been published together with this online report. These are downloadable from the website.

Why Do We Report?

Our reporting has evolved since 1996, the first year we launched our Environmental Report, but our commitment to transparency and accountability remains unchanged.

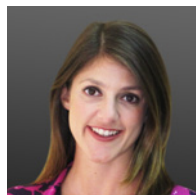
We publish our Sustainable Development Report yearly to:

- Disclose our sustainability performance in a transparent, accountable and clear manner;
- Engage with our stakeholders on sustainability issues that are material to our business so we can address them effectively and appropriately; and
- Discuss the challenges and setbacks we face as a company in progressing along this sustainable journey, learn how to overcome them, and how we are approaching them in our governance, environmental and societal practices.

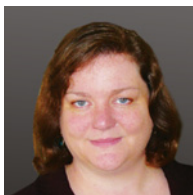
Stakeholder Review Committee

Views on Our Report

Since 2010, we have been inviting a multi-stakeholder committee to review and assess the balance, completeness and responsiveness of our Sustainable Development Reports. This year, the Committee comprises:



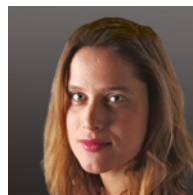
Ms Robin Bishop
Director Corporate
Responsibility,
Community Business



Ms Kay O'Regan
Operations Manager,
Earthwatch ¹



Mr James Goodman
Deputy Director,
Systems Innovations,
Forum for the Future ²



Ms Ivana Gazibara
Head, SE Asia,
Forum for the Future ³



Dr Jeanne Ng
Director, Group
Environmental Affairs
CLP Holdings

The Stakeholder Review Committee convened twice by meeting or conference call at different stages of the reporting process, once to review a detailed framework of the report, and again during a draft of the full report content.

For the detailed report framework, the Committee considered:

- The appropriate coverage of issues and the materiality of those issues for Cathay Pacific and its stakeholders;
- The responsiveness of the report in terms of addressing stakeholder concerns; and
- Improvements that Cathay Pacific could make in this and future reports.

Subsequently, the Committee provided feedback on the draft of the 2012 report. It reviewed the report content and style, and provided feedback on the strengths, weaknesses and omissions in each section of the report.

We would like to express our appreciation to the Committee for their time and invaluable feedback on our report.

¹ The first Stakeholder Review Committee meeting was attended by Adele Chiu, Corporate Engagement Officer, Earthwatch (Hong Kong).

² Attended the first Stakeholder Review Committee meeting.

³ Attended the second Stakeholder Review Committee meeting.

STATEMENT

We welcome the consultative and participative process through which Cathay Pacific is developing its report. Involving a Stakeholder Review Committee is a demonstration of a mature approach to the sustainability reporting process and Cathay Pacific is commended for initiating the process.

Cathay Pacific has been proactive in addressing Committee views and concerns, and we saw improvement in the document from the first to the second review. We expect Cathay Pacific will continue to enhance this process in future years, ensuring Committee comments are utilised to improve the quality of the reporting process.

The report demonstrates openness and reflects a willingness to engage stakeholders. Overall, we are positive on the new reporting approach to target different audiences and leveraging new communication tools such as videos. The emphasis on materiality and the details on the stakeholder engagement process also contribute to a report that seeks to respond to stakeholder concerns. We do not expect companies to have all the answers to the concerns of their stakeholders, but we do expect them to acknowledge the issues objectively and constructively, to state their beliefs and their strategy, and maintain consistency within the report. In our view Cathay Pacific has achieved these objectives.

Cathay Pacific's commitment to embed sustainability in the long-term is particularly notable. Specifically, we commend the adoption of 20 key commitments that Cathay Pacific intends to achieve by 2020, in line with its sustainability strategy. For the future it will be important to contextualise Cathay Pacific's sustainability strategy more effectively within the company's core business strategy, beyond stakeholder concerns. A clear description of the sustainability business case should support improved reporting, specifically on the links between sustainability impacts and business performance.

The Committee would also like to see further information in future relating to:

- The approach for achieving a 31% reduction of CO₂ emissions per passenger and cargo by 2020 and more details of a sustainable biofuels strategy.
- Supplier management and, specifically, details on how Cathay Pacific audits its supply chains, and what the outcomes and benefits to the company and the suppliers are.
- The company's community investment vision and its approach to impact measurement and continuous improvement of community programmes.
- Biodiversity in general and the measurement of Cathay Pacific's biodiversity impact in particular.
- Educating and engaging staff and consumers on sustainability.
- Clarify more on its materiality identification process further to the launch of the GRI's G4 Guidelines and increasing international trends towards 'integrated reporting'.

Overall, the Committee is of the view that Cathay Pacific is to be congratulated for going through a process of stakeholder engagement during the writing of the report.

The views expressed here are based on individual perceptions and do not necessarily represent those of their respective organisations.

Independent Assurance Statement

We have engaged PricewaterhouseCoopers Limited to perform an independent limited assurance of the report. The assurance scope and statement is provided below. Selected subject matter that has been verified are marked with a "Δ" throughout the report.



羅兵咸永道

Independent assurance report

What we found

Based on the work described below, nothing has come to our attention that causes us to believe that the selected subject matter for the year ended 31 December 2012 has not been prepared, in all material respects, in accordance with the Reporting Criteria.

To the board of directors of Cathay Pacific Airways Limited

What we did

Cathay Pacific Airways Limited engaged us to perform a limited assurance engagement on the selected subject matter within the Cathay Pacific Airways Limited 2012 Sustainable Development Report ("SD Report") for the year ended 31 December 2012.

Selected subject matter

The selected subject matter is listed below and marked with a Δ in the SD Report:

- Scope 1 and scope 2 carbon dioxide emissions (tCO₂ e).
- CO₂ emissions from Cathay Pacific and Dragonair flights (tCO₂ e).
- Fuel efficiency (grammes/ATK and grammes/RTK).
- The total number of offsets for staff travel and the total number of offsets bought by passengers of the Flygreener programme.
- Amount of recycled materials from inbound Cathay Pacific flights, from Cathay Pacific City and from Dragonair House.
- The two qualitative statements made in the section "Community Investment Factsheet – Youth and Education" and "Sustainable Sourcing Factsheet – Applying the Supplier Code of Conduct" which is marked with a Δ.

Reporting criteria

The selected subject matter above have been assessed against the definitions and approaches presented under the heading *Reporting Methodology* in the section "About this Report" of the 2012 Online Sustainability Report at <http://www.cathaypacific.com/sdreport> (the "Reporting Criteria").

Responsibilities

PricewaterhouseCoopers

Our responsibility is to express a conclusion based on the work we performed.

Cathay Pacific Airways Limited

Cathay Pacific Airways Limited management is responsible for the preparation and presentation of the selected subject matter in accordance with the Reporting Criteria. This responsibility includes designing, implementing and maintaining internal controls relevant to the preparation and presentation of the subject matter and applying an appropriate basis of preparation; and making estimates that are reasonable in the circumstances.

What our work involved

We conducted our work in accordance with the "International Standard on Assurance Engagements 3000 (Revised): Assurance Engagements Other than Audits or Reviews of Historical Financial Information". This Standard requires that we comply with independence and ethical requirements and plan and perform the assurance engagement to obtain limited assurance as to whether the selected subject matter is prepared, in all material respects, in accordance with the Reporting Criteria.

Main procedures performed

The procedures selected depend on the independent accountants' judgement. Within the scope of our work we performed amongst others the following procedures:

- Making enquiries of relevant management of Cathay Pacific Airways Limited and its subsidiaries as appropriate.
- Evaluating the design of the key processes and controls for managing and reporting the selected subject matter.
- Undertaking analytical procedures over the selected subject matter.
- Reviewing a sample of relevant management information and documentation supporting assertions made in the selected subject matter.



PricewaterhouseCoopers
Certified Public Accountants
Hong Kong

22 August 2013

Inherent limitations

Inherent limitations exist in all assurance engagements due to the selective testing of the information being examined. Therefore fraud, error or non-compliance may occur and not be detected. Additionally, non-financial data may be subject to more inherent limitations than financial data, given both its nature and the methods used for determining, calculating and estimating such data.

Restriction on use

Our report has been prepared for and only for the board of directors of Cathay Pacific Airways Limited and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report.

Limited assurance

This engagement is aimed at obtaining limited assurance for our conclusions. As a limited assurance engagement is restricted primarily to enquiries and analytical procedures and the work is substantially less detailed than that undertaken for a reasonable assurance engagement, the level of assurance is lower than would be obtained in a reasonable assurance engagement.

Global Reporting Initiative

Statement

The content and quality of the information in our report is guided by the Global Reporting Initiative (GRI) G3.1 reporting guidelines, which were released in 2011. The report application level is A+, as checked by the GRI.



Statement GRI Application Level Check

GRI hereby states that **Cathay Pacific Airways Limited** has presented its report "CX Group Sustainable Development Report 2012" to GRI's Report Services which have concluded that the report fulfills the requirement of Application Level A+.

GRI Application Levels communicate the extent to which the content of the G3.1 Guidelines has been used in the submitted sustainability reporting. The Check confirms that the required set and number of disclosures for that Application Level have been addressed in the reporting and that the GRI Content Index demonstrates a valid representation of the required disclosures, as described in the GRI G3.1 Guidelines. For methodology, see www.globalreporting.org/SiteCollectionDocuments/ALC-Methodology.pdf

Application Levels do not provide an opinion on the sustainability performance of the reporter nor the quality of the information in the report.

Amsterdam, 8 August 2013



Nelmar Arbex
Deputy Chief Executive
Global Reporting Initiative



The "+" has been added to this Application Level because Cathay Pacific Airways Limited has submitted (part of) this report for external assurance. GRI accepts the reporter's own criteria for choosing the relevant assurance provider.

The Global Reporting Initiative (GRI) is a network-based organization that has pioneered the development of the world's most widely used sustainability reporting framework and is committed to its continuous improvement and application worldwide. The GRI Guidelines set out the principles and indicators that organizations can use to measure and report their economic, environmental, and social performance. www.globalreporting.org

Disclaimer: Where the relevant sustainability reporting includes external links, including to audio visual material, this statement only concerns material submitted to GRI at the time of the Check on 29 July 2013. GRI explicitly excludes the statement being applied to any later changes to such material.

GRI Table

Please [click here](#) to download the GRI Table which sets out the locations of where the relevant information or data can be found in this Sustainable Development Report. In preparation of improving our reporting and disclosure, as well as in anticipation of future requirements, comparable key performance indicators (KPIs) from the following have also been included for ease of reference:

- Core indicators under the GRI G4 guidelines; and
- Indicators recommended under the Hong Kong Stock Exchange Environmental Social and Governance (ESG) guidelines.

Reporting Methodology

This report covers the 2012 calendar year.

How We Report

The content of this report has been defined by a process of:

- internal and external stakeholder engagement led by an external, independent facilitator;
- identification of priority areas set out by aviation industry associations and the use of a materiality matrix;
- reference to the Global Reporting Initiative (GRI) reporting framework versions 3.1 and draft version 4.0 and the AA1000 Accountability standard; and
- benchmarking against other airlines and international companies.

Measuring Our Performance

Our 20 commitments under the Sustainable Development Strategy are discussed in this year's report for the first time. We expect to report on progress on our performance on these commitments in future reports.

Reporting Tools

To avoid ambiguity, definitions of each parameter are communicated across the Cathay Pacific Group to ensure the quality and consistency of reporting. Data is collated via Swire's Environment, Health, and Safety (EHS) Database for our operations in Hong Kong covering Cathay Pacific, Dragonair, 100% owned and 60% owned Hong Kong-based subsidiaries. Cathay Holidays Limited and outports reported separately via questionnaires.

GHG Emissions Accounting and Reporting Policies

The inventory of our greenhouse gas ("GHG") emissions is reported in accordance with the World Resources Institute and World Business Council on Sustainable Development's Greenhouse Gas Protocol (2004, Revised Editions).

Organisational Boundaries

Cathay Pacific Group reported the greenhouse gas emissions of each of the subsidiaries below in proportion to their ownership percentage. The organisational boundaries for the reporting of greenhouse gas emissions include Cathay Pacific Airways and the following 100% and 60% owned Hong Kong-based companies (the "subsidiaries"):

- Hong Kong Dragon Airlines Limited (KA)
- Cathay Holidays Limited (CHL)
- Cathay Pacific Catering Services (H.K.) Limited (CPCS)
- Hong Kong Airport Services Limited (HAS)
- Vogue Laundry Service Limited (VLS)
- AHK Air Hong Kong Limited (AHK) (60% owned)

Other principal subsidiaries, as outlined on pages 92 to 93 of the Cathay Pacific Group 2012 Annual Report that are not included within the scope of this report, will be considered for inclusion in the future, where relevant.

Operational Boundaries

The operational boundaries for the reporting of greenhouse gas emissions are as follows:

- Scope 1 – Direct GHG emission, including global CO₂ emissions from flights, ground vehicles and Towngas combustion
- Scope 2 – Electricity and Towngas (production) indirect GHG emissions

The reporting period of the GHG data is the twelve-month period of 1 January to 31 December 2012. Consistent with our 2011 Report, the 2012 Report uses 1998 as the base year for comparing the emissions profile of our flights over time. Please note there have been changes in organisation and operational boundaries over the years which will impact comparability.

Scope 1 Emissions

Scope 1 emissions include fuel and Towngas usage from ground-based activities in Hong Kong covering Cathay Pacific and the subsidiaries. In Hong Kong, the CO₂ emission factors used follow the guidelines published by the Environmental Protection Department (EPD) of the Hong Kong Special Administrative Region (HK SAR) Government in February 2010ⁱ. For CO₂ emission factors for outport data, references have been made to the International Energy Agency (2010)ⁱⁱ.

In respect of our GHG emissions from aircraft fuel consumption, our scope includes all flight activities, including testing, training flights, dry lease and wet lease. As fuel density varies according to a number of factors, we use the Joint Inspection Group'sⁱⁱⁱ recommended specific gravity of 0.80 kg/L to calculate the weight of fuel. We use the IPCC's emission factor of 3.15^{iv} to determine CO₂ emissions from the combustion of aircraft fuel.

Scope 2 Emissions

Our scope includes electricity consumption and Towngas production for our operations in Hong Kong covering Cathay Pacific and the subsidiaries. Emission factors used in our scope follow the guidelines published by the EPD of the HK SAR Government in February 2010 and the International Energy Agency (2010).

For GHGs, other than CO₂, others including CH₄, N₂O, PFCs and SF₆ are either not applicable or not material to the overall GHG reporting.

Towngas is also used in the Cathay Pacific canteen. As this is operated by a third party, consistent with the previous year, it is specifically excluded.

Methodologies Used to Calculate or Measure Emissions

Refer to Endnote References.

Other Indicators

Environmental Indicators

The scope of this year's reported resource usage includes operations in Hong Kong covering Cathay Pacific, the 100% and 60% owned subsidiaries, energy consumption and greenhouse gas data from four outports (Auckland, Taipei, Manila and San Francisco) and non-GHG data from five outports (Frankfurt, Paris, Karachi, Kuala Lumpur and Sydney) which were able to provide auditable numbers. We will continue to work on increasing the scope to cover all major outports in future reports.

Social Indicators

Operations in Hong Kong covering Cathay Pacific and the 100% subsidiaries are included on the Social Indicators table.

GRI Content Index

The GRI Content Index is prepared with reference to the applicable presentation requirements to meet the GRI G3 Guidelines V.3.1 A+ application level. The GRI content index does not reflect actual implementation of CX's sustainable development initiatives nor the value or quality of the report and its content.

Reference was also made to the recently adopted version G4.

Other Matters

FLY greener Offsets

FLY greener offsets are calculated as the tonnes of CO₂ purchased by all passengers (including staff), using either cash or Air Miles as a method of payment. One tonne of CO₂ had a cash price of HK\$54.04 from January to July 2012, and HK\$24.71 from August to December 2012. The average Air Miles price was 1,685.1 Air Miles per tonne of CO₂ during the year ended 31 December 2012. The total tonnage was computed based on the amount paid during the year. Cash received during the year related to flights taken in 2011 to 2012.

Fuel Efficiency

Fuel efficiency is calculated as fuel usage per available tonne kilometre (ATK). ATK is defined in the Cathay Pacific Airways Limited Annual Report 2012 as overall capacity, measured in tonnes available for the carriage of passengers, excess baggage, cargo and mail on each sector multiplied by the sector distance.

RTK is defined as traffic volume, measured in load tonnes from the carriage of passengers, excess baggage, cargo and mail on each sector multiplied by the sector distance.

The fuel consumption figure shown on the Environmental Indicators Table only includes Cathay Pacific and Dragonair for comparability with last year's report.

ATK of 26,250 million and RTK of 18,819 million used in this calculation are taken from the Cathay Pacific Airways Limited Annual Report 2012.

Recycled Materials

In 2012, materials recycled from inbound flights to Hong Kong include plastic cups; plastic bottles; aluminium cans; and glass bottles. Materials recycled by the Cathay Pacific Airways and 100% owned subsidiaries include paper and cardboard, plastics, aluminium cans, waste lubrication oil, glass bottles and printer cartridges from Cathay Pacific City; and paper and cardboard, aluminium cans, plastic and printer cartridges from Dragonair House. The amount of recycled materials refers to those recorded in either recycling vendor invoices or internal tracking records.

English on Air

English on Air is an educational programme which involves English-speaking Cathay Pacific staff volunteers from a wide variety of nationalities and backgrounds who encourage local students to speak English. Participating students are invited to Cathay Pacific City to meet and chat with volunteers during English-speaking sessions.

London Benchmarking Group

The London Benchmarking Group model is used by companies to assess and report on the value and achievements of their corporate community investment. It takes the form of a matrix that helps to summarise, and quantify, the achievements of a community activity. It breaks down the elements of the activity, detailing the different inputs, then going on to establish the outputs and, eventually, the impacts that these have achieved.

We evaluated the effectiveness of our English on Air activities run during the academic year 2011/2012 with reference to the London Benchmarking Group model. We developed questionnaires covering the areas indicated below and conducted surveys with the participating students and teachers in order to develop a scorecard of these areas.

- Leverage company resources
- English opportunities
- Increase confidence
- School partnership
- Awareness of aviation and Cathay Pacific Airways

Materiality Matrix

The materiality matrix plots our corporate social responsibilities issues in terms of two dimensions: the importance of the issue to our stakeholders and the impact of the issue to Cathay Pacific. In order to develop this we engaged with a third party consultant to perform focus groups and interviews on the selected group of stakeholders, chosen by Cathay Pacific and the third party consultant. The selected stakeholder groups provided comments on the six areas listed below and rated how their comments are important to them.

- Emerging issues facing the airline industry in the future
- Perceptions on the current corporate social responsibility (CSR) performance of CX and Dragonair, including the seven aspects: environment, airline safety, customer satisfaction, supply chain management, employee welfare, community development, and corporate governance
- Expected responses from CX
- Reporting priorities
- Stakeholder engagement approach taken by CX
- Views on the five areas of CX's sustainable development strategy

With the comments and rating, we summarised stakeholders' concerns into material issues. For each of the material issues, we evaluated the impact of the issue to CX and produced a materiality matrix, which helps to structure our Sustainable Development Report for the year ended 31 December 2012.

ⁱ Environmental Protection Department. (2010, February). Guidelines To Account For And Report On Greenhouse Gas Emissions And Removals For Buildings In Hong Kong. Retrieved from http://www.epd.gov.hk/epd/english/climate_change/ca_guidelines.html.

ⁱⁱ International Energy Agency (2010). CO₂ Emissions from Fuel Combustion – Highlights. Summary Table: CO₂ emissions per kWh from electricity and heat. IEA.

ⁱⁱⁱ Formed by international oil companies, the Joint Inspection Group performs regular inspections of their airport facilities to ensure that they are operated in accordance with their procedures for handling aviation fuel at airports and upstream aviation fuel facilities.

^{iv} IPCC. (1999). Aviation and the Global Atmosphere. Cambridge: Cambridge University Press.

Abbreviations and Glossary

Some Commonly Used Abbreviations in this Report	
AAHK	Airport Authority Hong Kong
AAIB	Air Accidents Investigation Branch
AFRA	Aircraft Fleet Recycling Association
AFTLS	Approved Flight Time Limitations Scheme
AHK	Air Hong Kong
ALARP	As Low As Reasonably Practical
ANSP	Air Navigation Service Providers
AOA	Aircrew Officers Association
ASRC	Airline Safety Review Committee
ASR-F	Air Safety Report – Fatigue
ATDC	Airports Training and Development Centre
ATK	Available Tonne Kilometre
BAQ	Better Air Quality
BSRC	Board Safety Review Committee
CAD	Civil Aviation Department
CCBF	Climate Change Business Forum
CCC	Customer & Commercial Control
CCF	Cathay Pacific Charitable Fund
CCNL	Cabin Crew Newsletters
CCST	Cabin Crew Support Team
CCTF	Climate Change Task Force
CE	Chief Executive
CEPIC	Cathay Emergency Passengers Information Centre
CLG	The Prince of Wales's Corporate Leaders Group on Climate Change
CNG	Carbon Neutral Growth
CO ₂	Carbon Dioxide
COO	Chief Operating Officer
CPCS	Cathay Pacific Catering Services
CPSL	Cathay Pacific Services Limited
CSAG	Cabin Safety Action Group
CSD	Corporate Safety Department
CSR	Cabin Safety Reports
CSR	Corporate Social Responsibility
CX	Cathay Pacific
CX City	Cathay Pacific City
DCGO	Director Cargo
DFO	Director of Flight Operations
DLR	German Aerospace Centre
DPA	Dragonair Pilots Association
DSD	Director Service Delivery

Some Commonly Used Abbreviations in this Report	
EAP	Employee Assistant Programme
e-AWB	Electronic airway bill
EIA	Environmental Impact Assessment
EMS	Environmental Management System
ENG	Engineering
EPFL	Swiss Federal Institute of Technology in Lausanne
EU ETS	European Union Emissions Trading Scheme
EU	European Union
FAU	Flight Attendants' Union
FDAP	Flight Data Analysis Program
FOP	Flight Operations
FRMS	Fatigue Risk Management System
FSC	Forestry Stewardship Council
FTE	Full Time Equivalents
GHG	Greenhouse Gas
GISS	Goddard Institute of Space Studies
GMCS	General Manager Corporate Safety
GRI	Global Reporting Initiative
GSE	Ground Support Equipment
GSR	Ground Safety Reports
HAS	Hong Kong Airport Services
HIMS	Human Intervention and Motivation System
HKIA	Hong Kong International Airport
IAGOS	In-service Aircraft for a Global Observing System
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IEA	International Energy Agency
IMT	Information Management and Technology
INED	Independent Non-executive Director
INSPIRE	Indian Ocean Strategy Partnership to Reduce Emissions
IOC	Integrated Operations Centre
IPCC	Intergovernmental Panel on Climate Change
IRF	Injury Report Form
ISD	Inflight Services Department
ISM	Inflight Service Manager
KA	Dragonair
KPI	Key Performance Indicators
LBG	London Benchmarking Group
LEED	Leadership in Energy and Environmental Design
LOSA	Line Operational Safety Audit
LTIFR	Lost Time Injury Frequency Rate
MANCOM	Management Committee
MRO	Maintenance, Repair and Overhaul Process
MSC	Marine Stewardship Council
MSQDR	Engineering Reports on Maintenance, Safety, Quality and Defects

Some Commonly Used Abbreviations in this Report

NASA	National Aeronautics and Space Administration
NED	Non-executive Director
NGO	Non-governmental Organisation
NOx	Oxides of Nitrogen
OHS	Occupational Health & Safety
OIWA	Outlying Islands Women's Association
ORSAG	Operations Ramp Safety Action Group
RIS	Risk Index Score
RSB	Roundtable for Sustainable Biofuels
RTK	Revenue Tonne Kilometre
RVSM	Reduced Vertical Separation Minimum
SAFUG	Sustainable Aviation Fuel Users Group
SAG	Safety Action Groups
SD	Sustainable Development
SMS	Safety Management System
SPI	Safety Performance Indicator
UNICEF	United Nations International Children's Emergency Fund
VCS	Voluntary Carbon Standard
VLS	Vogue Laundry Services Limited
WBCSD	World Business Council on Sustainable Development
WEL	Work-Life Enhancement Leave
WWF	World Wildlife Fund for Nature

Glossary of Terms	
Available Tonne Kilometre	Overall capacity, measured in tonnes available for the carriage of passengers, excess baggage, cargo and mail on each sector multiplied by the sector distance.
Carbon Neutral Growth	A cap on aviation CO ₂ emissions from 2020.
Carbon Offset	Purchase of carbon credits generated by emissions reduction projects that reduce the emission of greenhouse gases to offset emissions generated elsewhere (i.e. air travel).
LTIFR	Computed as: (Number of injuries resulting in lost time / total workforce hours) × 1,000,000.
Materiality Matrix	Ranks the degree in which various sustainable development issues have on our long term commercial and operational viability. Each sustainable development issue is assessed by its relative importance to stakeholders and the impact to our business. The result is used to define the breadth and depth of coverage in our Report.
Materiality	Determining the relevance and significance of an issue to an organisation and its stakeholders. A material issue is an issue that will influence the decisions, actions and performance of an organisation or its stakeholders. ¹
Outport	Our overseas destinations/offices outside of Hong Kong.
Regulatory Report Rate	The number of safety reports (air, ground etc.) that are reported to the Hong Kong Civil Aviation Department as Mandatory Occurrence Reports as classified by the CAD382 [The Mandatory Occurrence Reporting Scheme] guidelines.
Responsiveness	An organisation's response to stakeholder issues that affects its sustainability performance and is realised through decisions, actions and performance, as well as communication with stakeholders. ²
Revenue Passenger Kilometre	Number of passengers carried on each sector multiplied by the sector distance.
Revenue Tonne Kilometre	Traffic volume, measured in load tonnes from the carriage of passengers, excess baggage, cargo and mail on each sector multiplied by the sector distance.
Stakeholder Engagement	Using a combination of focus groups and interviews conducted by an independent facilitator to assist us in understanding the reasonable expectations and interests of stakeholders on but not limited to environmental and social issues. This can provide useful inputs for decision on reporting, drive change within our organisation, and improve upon accountability.
Stakeholder Review Committee	A select group of key stakeholders from various stakeholder groups convened to gather feedback on the materiality, balance and responsiveness of our Report.
Sustainability	The ability to continue and grow our business viably in the long term.
Sustainable Biofuels	Second generation biofuels produced from renewable biological resources such as plant material that do not compete with water/food supplies, protect areas of high conservation value, and bring socioeconomic benefits to the local community where plant sources are grown.
Sustainable Development	Our commitment to sustaining economic growth without harming the planet or exhausting its resources, while improving the quality of life of current and future generations.
Sustainable Sourcing	Our commitment to work with our supply chain to ensure that products or goods that are being procured have no or a limited negative impact on the communities and environment that they are sourced from.
Transparency	The disclosure of information on the topics and indicators required to reflect our performance and impacts, and enabling stakeholders to make decisions. ³

Notes:

1. AccountAbility. AA1000 Accountability Principles Standard. 2008, p.12.
2. AccountAbility. AA1000 Accountability Principles Standard. 2008, p.14.
3. AccountAbility. AA1000 Accountability Principles Standard. 2008, p.6.

Acknowledgements

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Our Principle Subsidiaries Based in Hong Kong



air Hongkong

60% owned by Cathay Pacific



FTSE Group confirms that Cathay Pacific Airways Limited has been independently assessed according to the FTSE4Good criteria, and has satisfied the requirements to become a constituent of the FTSE4Good Index Series. Created by the global index company FTSE Group, FTSE4Good is an equity index series that is designed to facilitate investment in companies that meet globally recognised corporate responsibility standards. Companies in the FTSE4Good Index Series have met stringent social and environmental criteria, and are positioned to capitalise on the benefits of responsible business practice.

The leaflet accompanying this Report is printed on FSC paper using soy ink.

Contact Us

If you have any comments or feedback on this report or its contents, please contact our team at:

environment@cathaypacific.com

Environmental Affairs Department

Cathay Pacific City

8 Scenic Road

Hong Kong International Airport

Lantau

Hong Kong

Environmental Affairs Department



Mark Watson

Head of Environmental Affairs



Janice Lao

Environmental Manager



Evelyn Chan

Environmental Projects Manager



Priam Chan

Assistant Environmental Manager



Carol Cheung

Environmental Coordinator



SWIRE



MEDIA CORNER

Video Gallery

Sustainability Matters

Cathay Pacific is driving towards becoming a sustainable airline by empowering our staff to integrate sustainability into their everyday work.



John Slosar, Chief Executive: To run the business in the long term, we know that we need to operate in a sustainable way. John, talks about the significance of embedding sustainability into the company's everyday operation, and how each individual staff across our network can make a difference.



Our video, **Working Towards a Sustainable Future**, highlights what Cathay Pacific is doing to make aviation more sustainable.

Executive Views

Three executives explain Cathay Pacific's three sustainable development targets in these videos:

TARGET: To reduce our overall emissions



Mark Watson, Head of Environmental Affairs: Emissions is one of the biggest environmental challenges the airline industry is facing. Mark discusses the two-pronged approach Cathay Pacific has taken to address our emissions i.e. "in the air" and "on the ground", including our ambitious commitments to be achieved by the year 2020.

TARGET: To offer sustainably sourced products and services to our customers



Michael Pratt, Manager Purchasing: Cathay Pacific works with over 1,000 suppliers worldwide. Michael explains why this target is important and how it is achieved by minimizing Cathay's impacts along the whole value chain of its business.

TARGET: To ensure our community programmes are effective and relevant to the beneficiaries



Chitty Cheung, Director Corporate Affairs: Cathay Pacific's operations touch communities in Hong Kong and around the world. Chitty talks about our community investment strategy and how this target is achieved, highlighting the application of the London Benchmarking Group methodology and community investment guidelines as examples.

Stories from Our People

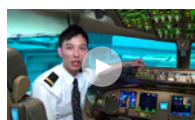
The videos below are stories told by Cathay Pacific people on the personal steps they have taken towards sustainability.

SAFETY



Regina Cheung, Assistant Airline Safety Manager: Regina talks about how the flight data and software she manages is used for incident investigations, engineering troubleshooting and forms part of CX's comprehensive safety management programme.

CLIMATE CHANGE



Nelson Chang, Second Officer: Nelson takes the viewer through the benefits of new aircraft types in terms of fuel efficiency, carbon efficiency and air quality.

WASTE MANAGEMENT



Joyce Lau and Valentio Febrio, Flight Attendants: Our cabin crew is central to the success of our inflight recycling effort. Joyce and Valentio show how this is done behind the scenes.

SUSTAINABLE SOURCING



Catherine Sin, Assistant Manager Product: Catherine and her team worked with the suppliers in coming up with the idea of creating our new trendy Premium Economy amenity bags from recycled plastic bottles, which are offered on our long-haul flights.

For details of our Premium Economy Class product, please click here http://www.cathaypacific.com/cx/en_HK/travel-information/inflight/travel-classes/premium-economy-class/premium-economy-class.html.

BIODIVERSITY



Brendan Duffy, Catering Manager: Brendan was instrumental in bringing sustainably sourced seafood to our inflight menus. In this video, he explains why this is important to Cathay Pacific.

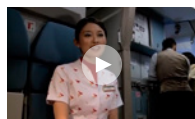
OUR PEOPLE



Jetset TV Kids: Cathay Pacific not only cares about its employees but also their families. This video shows kids of our cabin crew learning about what their parents really do at work.



Martin Ng, Engineer Trainee: Engineer Trainee Martin talks about how Cathay puts an emphasis on training and development as well as promoting diversity in the workplace.



Grace Hui, Flight Attendant: Behind every flight is the effort of a winning team. Our flight attendant Grace takes us along her flight from Hong Kong to Sydney, where she works in-flight with her team to deliver world class services to passengers.



Sammy Yeung, Supervisor: Behind every flight is the effort of a winning team. Our airport-based staff Sammy shows us how she and her colleagues make passengers' journeys a little smoother and easier.

PDF Downloads

Sections of the Sustainable Development Report can be downloaded in PDF format here.

Sustainable Development Report 2012

The Sustainable Development Report (Main Text only) in brochure format in [English](#) and [Chinese](#).

[GRI Table](#)

Factsheets

[Governance of Sustainability](#)

[Stakeholder Engagement and Issues Materiality](#)

[Community Investment](#)

[Safety](#)

[Climate Change](#)

[Waste Management](#)

[Sustainable Sourcing](#)

[Biodiversity](#)

[Our People](#)

Report + Factsheets

Click here to download a package that contains both the [Sustainable Development Report Main text and the Factsheets](#).

Investor Relations Materials

This section provides quick links to the materials in the Report that are of particular interest to the investment community.

Performance Tables and Graphs

- [2012 GHG Emissions \(tCO₂e\) Scope 1 and Scope 2 Table](#)
- [2012 Global CO₂ Emissions – Cathay Pacific Group Fleet](#)
- [Environmental Indicators Table](#)
- [Social Indicators Table](#)
- [Economic Value Added Table](#)
- [Group Fleet Profile](#)

Governance and the CX Group

- [Governance of Sustainability Factsheet](#)
- [CX Annual Report 2012](#)

GRI Statement and Table

- [GRI Statement](#)
- [GRI Table](#)