

Accelerating change



Accelerating change

We see a lot of change everywhere. In this context, people are becoming quite rightly much more aware of what is sustainable and what that means to us.

In 2016, we achieved important sustainability milestones, which will allow us to accelerate our performance in the years ahead.




In a changing world, we need to be agile, focused and innovative. We are prepared to meet the challenges that lie ahead, but we are also confident that we can lead our industry into this exciting new era


Rupert Hogg
Chief Executive Officer

Performance highlights

Finance

 **HKD 92,751 million**
in revenue was generated by passengers that travelled with us in 2016, attributable loss of HKD 575 million.

 **202 aircraft**
Including 10 new A350-900s that were delivered to us in 2016.

 **78,830 flights**
were undertaken by Cathay Pacific and Cathay Dragon in 2016.



Environment

Biofuels


In 2016, our first Biofuel flight was the

 **world's longest**


Bringing our A350-900s home using a 10% blend of Biofuel.

Greenhouse gas emissions

In 2016, Cathay Pacific and Cathay Dragon emitted

 **17.2 million tonnes[^]**
of CO₂, an **increase of 0.8%** from 2015.

Our total fuel efficiency increased by


 **24.9 %**
in traffic carried* and by **16.8%[^]** in capacity** since 1998.


* Available tonne kilometre, ATK


** Revenue tonne kilometre, RTK


Inflight waste recycling

In 2016, we recycled

 **22,066 kg[^]**
aluminium cans.

 **20,242 kg[^]**
plastic bottles.

 **10,799 kg[^]**
plastic cups.

 **517,048 kg[^]**
wine bottles.

People

Our people



35,990

people around the world.



47 % male



53 % female

Communities

Over



1,400 hours

were donated by our volunteers in 2016.



HKD 165 million

raised by **Change for Good** for **UNICEF** in the past **25 years**, helping children in **more than 150 developing countries** around the world. Around **18 tonnes of coins** were received in 2016.

Safety

Recognition as a



Leader

in the 2016 Jet Airliner Crash Data Evaluation Centre (JACDEC) airline safety ranking.

Sustainable development recognition



FTSE4Good

A constituent of the FTSE4Good Index Series for the 6th consecutive year



Hang Seng Corporate Sustainability Index

A constituent of the Hang Seng Corporate Sustainability Index since index inauguration



Cathay Pacific and Cathay Dragon have been recognised as Caring Company for 15+ years and 10+ years respectively

KPI table

Economic value added

For the year ended 31 st December 2016	2016 HK\$M	2015 HK\$M	% Change
Directed economic value generated			
Turnover	92,751	102,342	-9.4%
Finance income	260	216	20.4%
Surplus on sales of investments	–	–	–
Gain on deemed disposal of an associate	–	–	–
Share of profits of associated companies	2,049	1,965	4.3%
	95,060	104,523	-9.1%
Economic value distributed			
Purchases of goods and services	63,844	68,481	-6.8%
Employee wages and benefits	19,770	18,990	4.1%
Payments to providers of capital	2,059	2,711	-24.1%
Payments to government	497	1,157	-57.0%
Community investments including charitable donation			
– Direct payment	12	12	–
– In the form of discounts on airline travel	8	10	-20.0%
	86,190	91,361	-5.7%
Economic value retained			
– Depreciation	8,035	8,387	-4.2%
– Profit after dividends	(772)	4,977	-115.5%
Retained for re-investment and future growth	7,263	13,364	-45.7%

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 profits of associated companies include our share of losses/profits of Air China and Air China Cargo. Please refer our 2016 Annual Report for details of our principal subsidiaries and associates.

Environmental indicators – aircraft operations

Aircraft Operations	Units	2016 [†]	2015 [†]	2014 [†]	2013 [†]	2012 [†]	2011 [†]	2010 [†]	2009 [†]	2008*	2007*	2006	2005	2004	2003	2002	2001	2000	1999
ATK	million	30,462	30,048	28,440	26,259	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
RTK	million	22,418	22,220	20,722	18,696	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
RPK	million	123,478	122,330	112,257	104,571	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
All Flights																			
Fuel Consumption	thousand tonnes	5,467	5,425	5,198	4,912	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
Fuel Efficiency	grammes/ATK improvement since 1998 %	▲179	▲181	▲183	187	190	191	197	198	187	189	183	187	195	194	201	206	209	208
	grammes/RTK improvement since 1998 %	244	244	251	263	265	261	249	262	261	262	249	260	269	276	271	296	281	291
Global CO ₂ emissions	thousand tonnes in CO ₂ e	17,222	17,087	16,374	15,472	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
	grammes/ATK improvement since 1998 %	565	569	576	589	600	601	620	623	590	597	575	590	614	611	635	647	658	656
	grammes/RTK improvement since 1998 %	768	769	790	828	836	821	783	826	823	825	784	817	846	871	854	934	885	918
Global NO _x emissions	tonnes	94,697	94,106	80,946	82,255	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
	grammes/ATK improvement since 1998 %	3	3	3	3	3	3	3	3	3	2	3	3	3	3	3	3	3	3
	grammes/RTK improvement since 1998 %	4	4	4	4	4	4	4	4	4	3	4	4	4	4	4	4	4	5
Global CO emissions	tonnes	14,005	14,059	12,186	13,620	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
Global HC emissions	tonnes	1,597	1,578	1,429	1,455	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
Passenger Flights Only⁽¹⁾																			
Fuel Consumption	thousand tonnes	4,571	4,496	4,313	4,112	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
	share of total fuel consumption %	83.6%	82.9%	83.0%	83.7%	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%
Fuel Efficiency	grammes/RTK improvement since 1998 %	37	37	38	39	40	39	38	39	40	39	39	41	42	46	42	46	44	47

* incorporates KA

† fuel consumption includes testing, and wet-lease flights

1 tonne of fuel = 3.15 tonne of CO₂

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

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

Environmental indicators table

Hong Kong and 100% owned Hong Kong-based subsidiaries	Units	2016	2015
Power/Fuel			
Electricity Consumption	mWh	130,135	129,740
Ground based activities fuel consumption	litre		
Mobile Combustion - Diesel		5,020,803	4,940,625
Mobile Combustion - Unleaded Petrol		386,844	390,203
Stationary Combustion - Diesel		2,281,306	1,151,643
Purchased Towngas	unit	4,967,623	5,475,070
Fuel dumped due to operational reqs	tonnes	306	411
Water			
Seawater consumption	m ³	8,859,600	9,100,100
Potable water consumption	m ³	916,786	845,701
Maintenance water consumption	m ³	118,314	80,502
Paper & Cardboard			
Paper consumed in offices	tonnes	2,503	2,412
Paper & cardboard recycled	tonnes	2,011	1,988
Recycled/Reused Materials			
Metal recycled	kg	42,661	39,968
Plastic recycled	kg	672,458	681,781
Glass recycled	kg	520,135	493,833
Food processing oil	litre	42,679	45,014
Hangers used	no.	2,414,141	1,913,988
% of hangers reused	%	65.3	57.2
Disposed Materials			
Non-Hazardous Waste	tonnes	13,793	13,457

Social indicators table

	Units	2016	2015
Total workforce	no.	35,990	33,301
by Location			
Hong Kong	%	80	80
Mainland China	%	3	3
Others	%	17	17
by Employment Type			
Flight Crew	%	11	11
Cabin Crew	%	35	37
Ground Staff	%	26	29
Subsidiary Staff	%	28	23
by Gender			
Female	%	53	56
Male	%	47	44
by Age Group			
Under 30 years old	%	26	27
30-50 years old	%	58	58
over 50 years old	%	16	15
by Contract Type			
Permanent terms	%	93	93
Fixed/temporary terms	%	3	3
Supervised employees	%	4	4
Permanent employees			
by Gender			
Female	%	56	56
Male	%	44	44
by Employment Type			
On full-time	%	98	98
On part-time	%	2	2
Fixed term & temporary contract employees			
by Gender			
Female	%	56	58
Male	%	44	42
Senior Management from Local Community ⁽¹⁾	%	80	79
Employee Yearly Turnover Rate ⁽²⁾			
by Location			
Hong Kong	%	10	10
Mainland China	%	12	10
Others	%	8	8
by Employment Type			
Flight Crew	%	5	3
Cabin Crew	%	4	4
Ground Staff	%	11	9
Subsidiary Staff	%	–	–

Accelerating change

KPI table

	Units	2016	2015
by Gender			
Female	%	8	10
Male	%	11	9
by Age Group			
Under 30 years old	%	17	18
30-50 years old	%	6	6
over 50 years old	%	11	11
Lost Time Injury Frequency Rate ⁽³⁾			
Cathay Pacific	rate		2.8
Cathay Dragon	rate		2.7
Combined Cathay Pacific and Cathay Dragon	rate	3.4	
Subsidiary Staff	rate	2.1	2.7
No. of fatalities due to CX Group operations			
CX Group Staff	no.	0	0
Contractors working within Cathay Pacific/ Cathay Dragon premises	no.	0	0
Passengers	no.	0	0
Average hours of training per year			
Top/Senior Management	hrs	3.1	2.3
Middle/Junior management & supervisory	hrs	14.2	14.3
Customer facing staff	hrs	26.8	43.7
Non-customer facing operational/technical staff	hrs	11.5	21.9
Others	hrs	1.0	1.3
New Employees			
by Age Group			
Under 30 years old	%	39	29
30-50 years old	%	7	4
over 50 years old	%	6	4
By Gender			
Female	%	17	11
Male	%	16	11
By Region			
Hong Kong	%	17	11
Mainland China	%	15	9
Others	%	13	10
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 ⁽⁶⁾	no.	0	0
Non-compliance cases on applicable laws and regulations ⁽⁷⁾	no.	0	0

(1) Includes Executive Directors only.

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

(3) LTIFR is computed as (# of injuries resulting in lost time/total workforce hours) x 200,000 (revised).

(4) Please refer to our Safety Factsheet of our Sustainable Development Report 2013.

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

(6) Includes anti-competition and corruption cases. For details on anti-competition cases, please refer to p. 92 of our Annual Report 2016.

5 ways we accelerated change in 2016

2016 provided a challenging operating environment, but it was also a year of great opportunities, expansion and progress. Dragonair made the transition to Cathay Dragon, we introduced new and exciting destinations to our ever-growing global network, we said goodbye to the iconic Boeing 747 (from the passenger fleet), and we welcomed in the Airbus A350-900 to our ultra-modern fleet. All of this played a part in allowing us to push ahead with significant sustainability efforts, which has laid the foundation for accelerated growth going forward.

1. New Airbus A350s will accelerate carbon efficiency

We began receiving our new next-generation aircraft – the Airbus A350-900 – in 2016. The A350 is an important aircraft. Not only does it provide superior inflight products – including Wi-Fi connectivity, upgraded seats in all classes and a better entertainment system – for our passengers, it delivers significantly enhanced environmental performance. Our A350s, combined with the retirement of some of our older aircraft, will allow us to accelerate our airline's fuel efficiency and reduce emissions going forward.



Want to find out more? Go to our video on the right.



Our video, **A Greener Flight with our Airbus A350s.**

Accelerating change

5 ways we accelerated change in 2016

2. First ever CX flights on biofuels

By partnering with TOTAL, Amyris and Airbus, we were able to fly all of our brand-new A350s from Toulouse to Hong Kong using a blend of biofuel and regular fuel. We are happy to report that these flights – all ten during 2016 – were the world's longest recorded flights using biofuel to date.



3. Supported landmark global aviation deal on carbon offset

2016 was a historic year for the global aviation industry, with 191 states passing a resolution at the International Civil Aviation Organization (ICAO) for carbon neutral growth from 2020 – something Cathay Pacific has been closely involved with since the discussions for a coordinated global scheme commenced in 2008.



Want to find out more? Go to our video on the right.



Our video, **Fuelling our Way to a Low Carbon Future.**

4. Signed the United for Wildlife Transport Taskforce Buckingham Palace Declaration

We were among 20 airlines from around the world that signed the United for Wildlife Declaration, a collaboration between seven of the largest international conservation organisations whose focus is to end illegal wildlife trade together.



5. Continued to improve inflight sustainability with sustainable products

If you have flown with us during 2016, you would have likely been in direct contact with some of our new sustainable products already. These included our comfortable inflight blankets (provided in all classes) – which are thoughtfully made from recycled plastic materials - and the napkins you are provided with at every meal. These are made from 70% sugarcane material.



Message from the CEO

2016 was a very difficult year for our core airline business, which reflected the testing times in which we operated. This has been influenced by many factors, including global economic uncertainty; adverse currency movements with a strong Hong Kong dollar; overcapacity and fierce competition, particularly in this region; weak premium travel; and political uncertainty – all of which have impacted our revenues and presented us with significant challenges.

Despite this, we still managed to achieve a great deal. We continued to expand our long-haul network with the launch of London Gatwick and Madrid – and increased frequencies to many other routes. We rebranded Dragonair to Cathay Dragon to provide a more seamless experience for our customers.

We retired our last Boeing 747-400 in 2016 after over 30 years of service. A sentimental affair for all those involved but an important milestone in our pledge to modernise and make our fleet more efficient. As we said goodbye to the 747's we welcomed our first Airbus A350-900. This was a big highlight of the year. These fuel efficient, technologically advanced aircraft will enhance the flying experience of our customers as well as offering a significant improvement in environmental performance by using less fuel and being quieter.

This marks the start of our new fleet strategy with the A350-1000s and B777-9X to be delivered over the next seven years. The net result of this will be a modern and efficient fleet that will drive up our overall fuel efficiency and reduce emissions.



In a changing world, we need to be agile, focused and innovative. We are prepared to meet the challenges that lie ahead, but we are also confident that we can lead our industry into this exciting new era



Rupert Hogg
Chief Executive Officer

Message from the CEO

Another important milestone in 2016 for us was the use of biofuels for the first time. All of our new A350s were delivered from Toulouse with a 10% blend of biofuel made from sustainable sugars. Biofuels is an important part of our long term climate strategy.

All these investments will be ever more important in light of the new International Civil Aviation Organisation (ICAO) Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) that was agreed by 191 states in October 2016. This was a truly landmark agreement that will effectively put a price on carbon and where our fuel efficiency improvements and biofuel use will help reduce our carbon offset costs.

Looking ahead, we will be fully implementing our corporate transformation over the next three years, a strategy that is centred on us being singularly focused on delivering our customers with a Life Well Travelled. Sustainability will be an important and integral part of this strategy, in order to enhance our brand and our proposition to our customers.

With these foundations in place, I'm confident we will see an accelerated delivery of our sustainability objectives in the years to come.



Want to find out more? Go to our video on the right.



Our video, **Message from the CEO**.

Safety



Safety matters

At Cathay Pacific, we believe in the importance of focusing on safety procedures. In order for us to pursue and maintain our commercial activities in a sustainable manner, we manage the risks to the operation to a level that is 'As Low As Reasonably Practicable' (ALARP). We are one of the first airlines to implement a Fatigue Risk Management System (FRMS).

Our Safety Policy, signed by the Chief Executive Officer, clearly articulates our commitment to managing the risks of our operation. The policy states 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 the "ultimate accountability rests with me as Chief Executive Officer. However, responsibility for safety lies with each and every one of us in the airline".

We strongly believe that our well-developed and deeply embedded proactive safety systems play a large role in delivering our desired results. In this past year, we have undergone developments that showcase our ability to meet our exacting standards. These efforts are ongoing as we continuously strive to improve and to build on what we have already achieved.

What our stakeholders think

Our stakeholders continue to view the safety of our operations, and health and safety of our customers and staff as priority issues. 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 at Cathay Pacific and feel that the company is able to communicate safety issues clearly and effectively.

Performance update



0 accidents

from 2013 onwards.



0 "high risk" incidents

in 2016.



34.3 million

passengers travelled with us in 2016.



0 fatalities

caused by operational incidents or accidents.



Recognition as a

Leader

in the 2016 Jet Airliner Crash Data Evaluation Centre (JACDEC) airline safety ranking.

Sections

1 Operational safety

2 Health and safety

Operational safety

At Cathay Pacific, we strive to maintain the highest levels of safety. We are committed to providing a safe and healthy work environment for all personnel, and we achieve this by adopting a risk-driven approach in identifying and eliminating hazardous conditions.

One of the safety goals of Cathay Pacific and Cathay Dragon is to achieve zero accidents and zero 'high-risk' incidents. As stated previously, there were no reports of any classified accidents or high-risk events in 2016. Reports also show a clean slate in regards to accidents in 2015, 2014 and 2013.

Safety policy

The following statement is the commitment made and signed in the Cathay Pacific Group Safety Policy by Cathay Pacific Chief Executive Officer, Rupert Hogg and Cathay Dragon Chief Executive Officer, Algernon Yau. This policy is prominently displayed around the operating network:

"Safety is our number-one priority at Cathay Pacific and Cathay Dragon, and we are fully committed to providing a safe operational and working environment. Ultimate accountability for safety rests with us as the Accountable Executives.

However, responsibility for safety lies with each and every one of us in the airlines. All our business partners, suppliers and contractors are all encouraged to share our primary safety goal, which is to have zero accidents or injuries.

This can be achieved by developing an organisational culture where safety comes first... a just culture where non-punitive reporting is encouraged... a reporting culture where all staff are encouraged to raise safety concerns... a learning culture ensuring that we learn from our own mistakes as well as those made by others... and an informed culture by applying appropriate quality and risk management systems and processes as part of our decision making.

We will establish, measure and review our safety objectives, safety performance indicators and targets regularly, to ensure that we continually improve our management system and safety performance.

Every individual within Cathay Pacific and Cathay Dragon is responsible for ensuring that safety comes first. You have our personal commitment and support to achieve this goal."

IATA Operational Safety Audit (IOSA)



In 2014, Cathay Pacific became one of the first airlines to pass the enhanced International Air Transport Association (IATA) Operational Safety Audit (IOSA) with no findings. The total accident rate for IOSA carriers in 2015 was significantly lower than the rate for non-IOSA operators. As such, IOSA has become a global standard. The enhanced audit ensures conformity through ongoing biennial audits, implementation of IOSA standards and reliability through the integrity of their internal quality assurance programmes against a highly standardised audit.

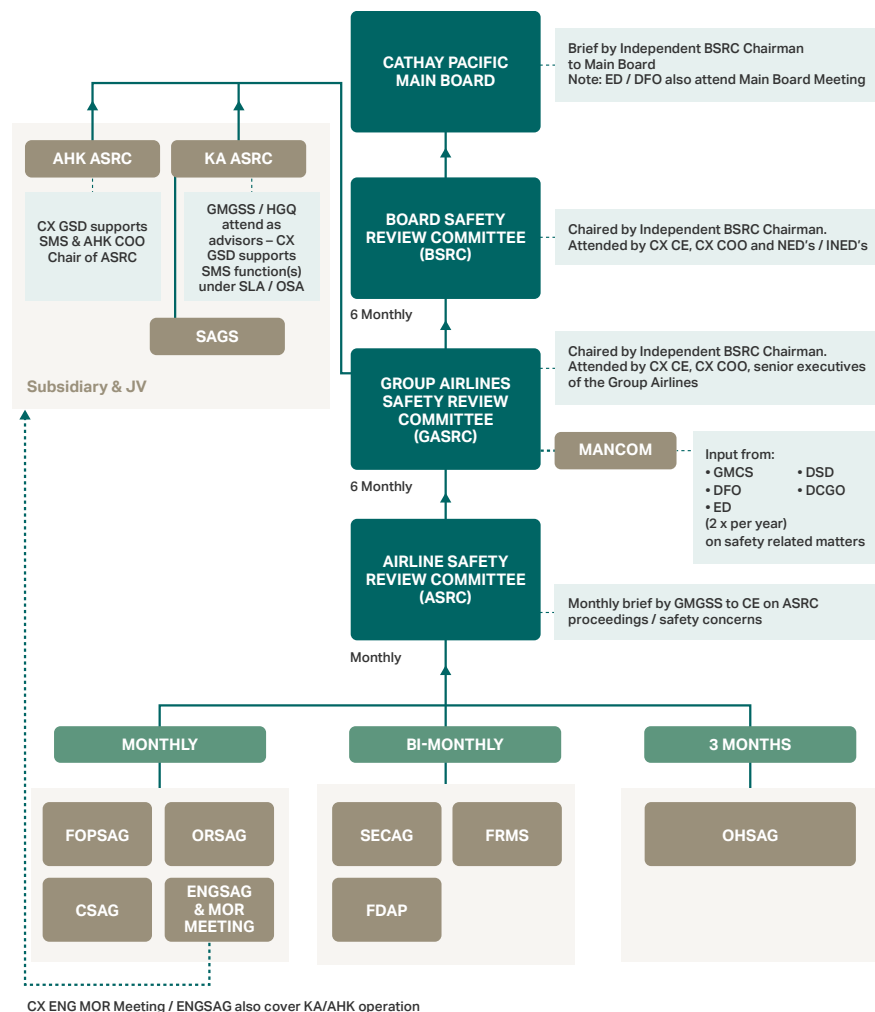
Both Cathay Pacific and Cathay Dragon successfully renewed their IOSA accreditations in 2016.

Safety risk management

The Cathay Pacific Group Safety Management System (SMS) ensures that we manage safety and risks using a combination of both reactive and proactive methods. Events and incidents are investigated thoroughly and safety performance indicators are actively monitored on a monthly basis by 'Safety Action Groups' (SAGs) and the Airline Safety Review Committees (ASRCs). All safety meetings are attended by subject matter experts from the respective disciplines. Risks are also addressed proactively by conducting cross-departmental risk assessments for any changes to the way the airlines operate, such as the commencement of a new route, the introduction of a new cabin service or changes to the organisational structure.

In addition, independent safety expert Dr. David King chairs the Group Airline Safety Review Committee (GASRC) and the Board Safety Review Committee (BSRC), both of which convene twice a year and report directly to the Cathay Pacific Board. Dr. King is a former Chief Inspector of Accidents at the UK's Air Accidents Investigation Branch (AAIB), a visiting professor at Cranfield University and a member of the United Kingdom Civil Aviation Authority (UK CAA) board. The following are a few examples of how the SMS addressed aviation safety risks in 2016.

SMS governance structure



Note: Whole process supported by Risk Based Safety Management System (SMS)

○ SMS governance structure

Cargo agent operation programme

Hong Kong's advantage in the air cargo market has been a result of the efficient consolidation of cargo by freight forwarders, particularly by allowing them to consolidate and build up cargo before tender for carriage. Whilst this model does occur in other ports, it is not on the same scale as in Hong Kong. As freight forwarders perform part of the airline's warehouse functions in Hong Kong, they are also integral to maintaining safe standards and quality services.



In 2016, Cathay Pacific Cargo introduced the Cargo Agent Operation Programme in Hong Kong in order to provide support and guidance to our customers in achieving a safe, consistent, and high-quality operating model.

This programme has brought:

- Standardisation by producing a Cargo Agent Manual that documents key operating processes for our freight forwarders.
- Qualification by providing training to ensure all requirements are well communicated and understood.
- Improvement opportunities through the application of quality control mechanisms to identify gaps in operating flows and formulate solutions to ensure conformity.
- Enhanced performance oversight through a more efficient and systematic approach to the handling of safety occurrences and identifying recurring issues through trend analysis.

Cathay Pacific Cargo continuously works on the programme implementation and reviews the processes on a regular basis to ensure the latest safety and industry requirements are incorporated in a practical way.



Want to find out more? Go to our video on the right.



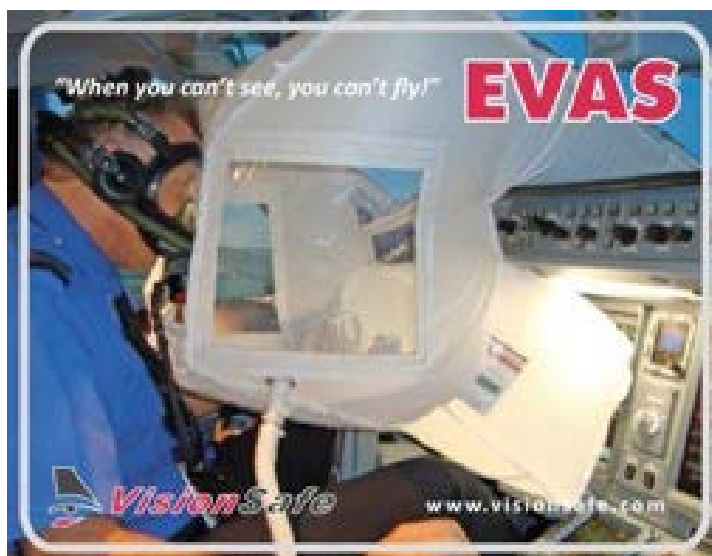
Our video, **Cargo Agent Operation Programme**.

Airbus A350-900 entry into service

Cathay Pacific proactively managed the operational and safety risks associated with the entry into service of this brand new aircraft type from 2014 to its use for the first flight in 2016. Cathay became the first airline to deploy its pilots to fly both the Airbus A330 and A350 under a single licence. A full safety risk assessment, approved by the Hong Kong Civil Aviation Department (HK CAD), was completed for this activity. As a brand new aircraft type to the operation, Cathay teams continue to monitor closely its safety and reliability.

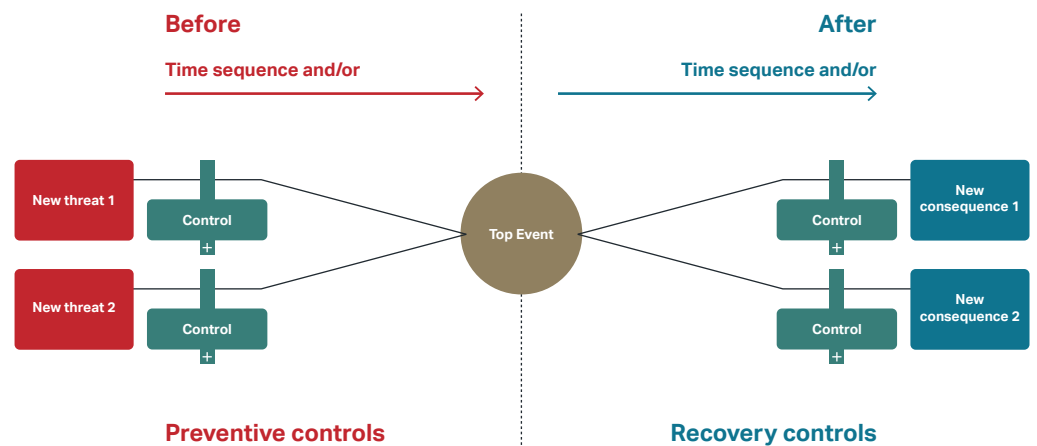
Emergency Vision Assurance System (EVAS) installed on freighter aircraft

Following a comprehensive safety risk assessment in 2014, a decision was taken to install EVAS on the flight deck of all Cathay Pacific freighter aircraft. EVAS is an additional mitigation in the ongoing task to protect our passengers, staff and aircraft against the risks of smoke, fire and fumes onboard, a prime source of which could be from the combustion of lithium batteries. EVAS works by shielding the instruments from smoke, which enables the pilots to maintain a clear vision in the event that the flight deck is filled with smoke.



Introduction of Bowtie risk modelling

The Cathay Pacific Group is always looking at new processes and tools that can help to make the management of safety risk more efficient and effective. In 2016, a new risk modelling technique, called 'Bowtie' (with reference to the shape of the model's structure), was introduced into the portfolio of tools available to the airline in order to manage safety risk. Bowtie is a tool which allows a multi-disciplinary team to produce carefully and systematically a scenario-based model that showcases detailed risk management. The methodology starts from identifying and describing the scenario and undesirable event first, then finding all of the possible direct causes and consequences of that event. Next, the model is enhanced by recognising the controls or barriers that play into causes leading to consequential events. The aim of this technique is to understand better how each control or barrier contributes to the management of safety risks so that more holistic and systematic improvements can be made.

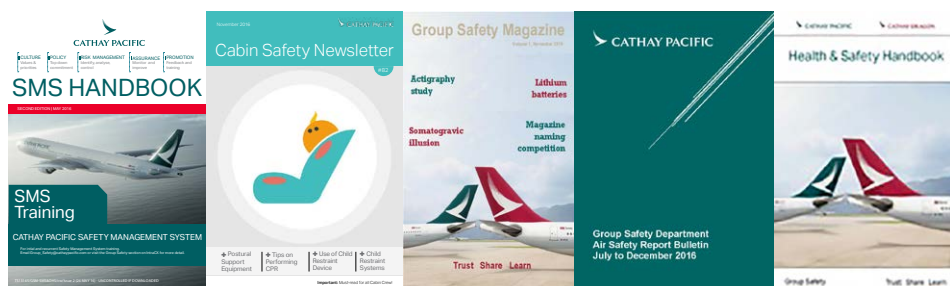


○ Basic structure of a bowtie risk model

Safety promotion

Cathay Pacific and Cathay Dragon continue to promote safety and a wider understanding of the safety management system (SMS) within the group. In order to maintain our strong stance with regards to safety awareness, information on incidents and initiatives are reported to our front line staff and management through various newsletters, magazines and bulletins.

All staff in safety-critical roles are required to complete training in SMS to a level of depth that is commensurate with their role in safety management. All new-joining operational staff receive a comprehensive, tailored SMS briefing. Cabin crew who have been promoted to Inflight Service Manager (ISM) and pilots who have been promoted to Captain also receive a further briefing prior to adopting their new roles.



Fatigue risk management system

The Cathay Pacific Group has a complex passenger and freighter route network with pilots based all over the world and living in vastly different time zones.

This has created a challenging task in pilot rostering and fatigue management. Consequently, managing pilot fatigue risk is an important component of the SMS. During 2016, we continued to develop and mature the Fatigue Risk Management System (FRMS), which was established in 2011.

The aim of the FRMS is to complement the existing HK CAD Approved Flight Time Limitations Scheme (AFTLS), a system that ensures that crew members have had an adequate amount of time to rest prior to commencing a duty period, and that the duration and timing of individual duty periods will enable them to operate safely and efficiently in all situations.

The FRMS complements the AFTLS by introducing an evidence-based, data-driven system with reactive, proactive and predictive elements that are used to continuously monitor and control fatigue-related safety risk to a level that is 'As Low As Reasonably Practicable' (ALARP).

At Cathay Pacific, we value our employees, thus we believe firmly in the FRMS. We understand the importance of taking the appropriate measures, supporting procedures and training to ensure that our crew are not subjected to unacceptable levels of work-related fatigue. Employees also have a personal obligation to minimise fatigue so that they are fit when reporting for duty. We disallow our employees to perform any duty if they consider their fatigue level to be unacceptable.

There are currently no HK CAD regulatory requirements for local aircraft operators to have this additional FRMS. Nevertheless, Cathay Pacific has implemented a system that far exceeds current HK CAD regulations pertaining to the management of pilot fatigue.

Fatigue Risk Management Initiatives in 2016

In 2016, studies were conducted to answer specific operational questions. There was also an increased internal communication as Cathay Pacific served on international fatigue forums and taskforces. The FRMS continues to mature and evolve.

Fatigue-related safety risks were identified via fatigue reporting (Air Safety Reports – Fatigue (ASR-Fs)), and extensive analysis using fatigue software (FAST). As a result, changes were made to rostering practices for both Cathay Pacific and Cathay Dragon to mitigate these risks. In addition to these routine processes, the FRMS conducted studies to answer specific operational questions. For example, a series of flight patterns were trialled and studied by the FRMS throughout 2016, one of which was approved for continued operation.

Tailored crew communications continued via the FRMS Bulletin, a regular newsletter to update crew on FRMS activities, for Cathay Pacific and Cathay Dragon. An FRMS article also appeared in the 2016 issue of the Group Safety Magazine regarding a study conducted in 2015 on the ability to assess fatigue levels using wrist-worn devices.

Cathay Pacific's FRMS experience is much sought after by industry groups. In 2016, the Group Safety Manager – FRMS continued to serve on the Management Committee of the International FRMS Forum and on the IATA FRMS Taskforce, including presenting on behalf of the IATA FRMS Task Force at the International Civil Aviation Organisation (ICAO) Symposium on Fatigue Management Approaches.

Cathay Pacific is one of the industry leaders in FRMS, and we will continue to develop and mature the FRMS throughout 2017 and beyond.

Emergency response system

The Cathay Pacific Crisis Response Centre is a wholly dedicated facility with logistical capabilities to manage a global response effort.

A regularly tested corporate emergency plan includes a centralised command protocol, customised local response teams, telephone enquiry and support centres, and biennially trained special assistance volunteers. All services can be activated by a 24/7 notification system in the event that a crisis response is required.

More than 1,200 airline staff members comprise the Care Team, which has a single focus on assisting passengers and their families during a crisis. For significant events, another 8,000 specially trained volunteers are available to supplement the Care Team through the airline's membership in the Family Assistance Foundation.

The 100 outports in our network participated in at least one emergency exercise simulation over the twelve-month period ending in 2016 in order to test our local teams' response capabilities.

An Incident Management protocol enables all incidents to be immediately classified and managed by the scalable Incident Management team.

Sections

1 Operational safety

2 Health and safety

Health and safety

Our philosophy is that we do not compromise safety whilst striving to achieve our business objectives. All operations are to be carried out in a manner that safeguards the health and safety of all employees, customers, contractors, and the wider community. In 2016, we added a new full-time resource to our safety team to address OHS issues.

Passenger safety

In 2016, Cathay Pacific and Cathay Dragon carried 34.3 million passengers. There were zero fatalities caused by operational incidents or accidents.



Inflight medical support

All Cathay Pacific and Cathay Dragon aircraft are able to call for aero-medical advisory assistance 24/7 through the use of the inflight phone system. This system ensures that, regardless of where the aircraft is flying, there is generally access to emergency medical specialists who can offer assistance with the diagnosis and treatment of any passenger or crew illnesses and injuries. All crew are trained in basic first aid and cardiopulmonary resuscitation, and we also carry automated external defibrillators (AEDs) on all of our Cathay Pacific passenger aircraft, which all crew are trained to use. In 2016, the decision was taken to also install AEDs on all Cathay Dragon aircraft, for which installation and crew training will take place in 2017.

Food safety

Cathay Pacific and Cathay Dragon strive to serve meals that meet high health standards. Caterers are charged to create well-balanced meals, minimise the use of trans-fats, and implement a policy of no monosodium glutamate. Our policies on food safety and hygiene are based on recognised standards, such as the World Food Safety Guidelines for Airline Catering. Our caterers must comply with our strict food safety requirements, which will be measured and monitored through the Cathay Pacific robust audit programme.

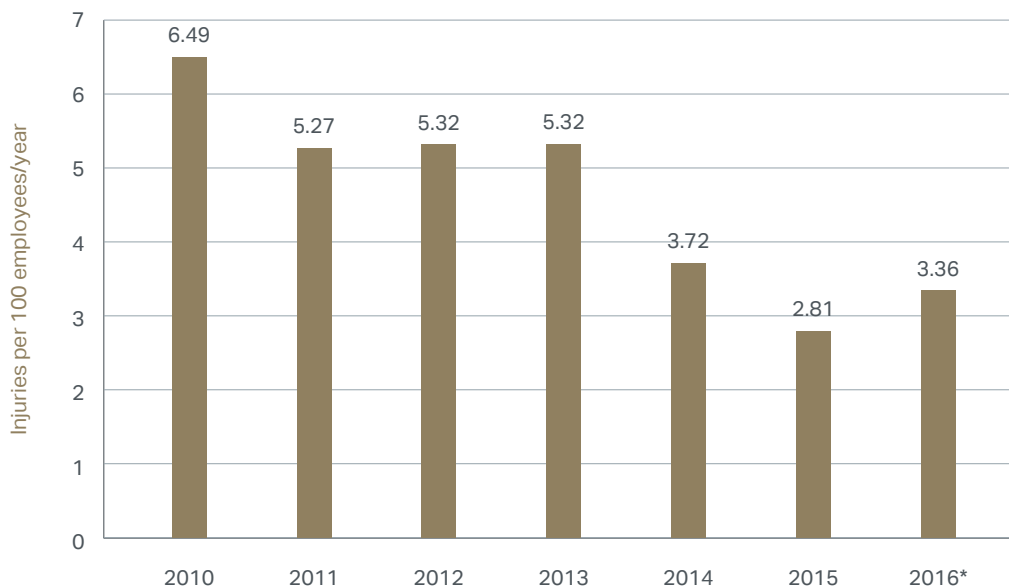
Cabin air quality

All passenger aircraft are fitted with high-efficiency particulate air filters that remove more than 99.7% of particulates, allergens and airborne microbes (bacteria and viruses). The filters are maintained and changed regularly according to the manufacturer’s guidelines. Air circulation within the cabin is continuous with outside air flowing into and out of the cabin. This replenishes the cabin air constantly, keeping carbon dioxide and other contaminants below standard limits, and keeps cabin air quality at comfortable levels for passengers as well as our cabin and flight crew onboard.

Staff safety

In 2016, there was no staff fatalities and zero serious work-related injuries. However, after the low number of accident events in 2015, there was a slight increase in the recorded Lost Time Injury Rate (LTIR) and Lost Day Rate (LDR) in 2016, which for the first time combined Cathay Pacific and Cathay Dragon data. We are working on improving LTIR and LDR reports by using manual handling experts Pristine Condition to help with the reduction of lifting, carrying, pushing and pulling injuries.

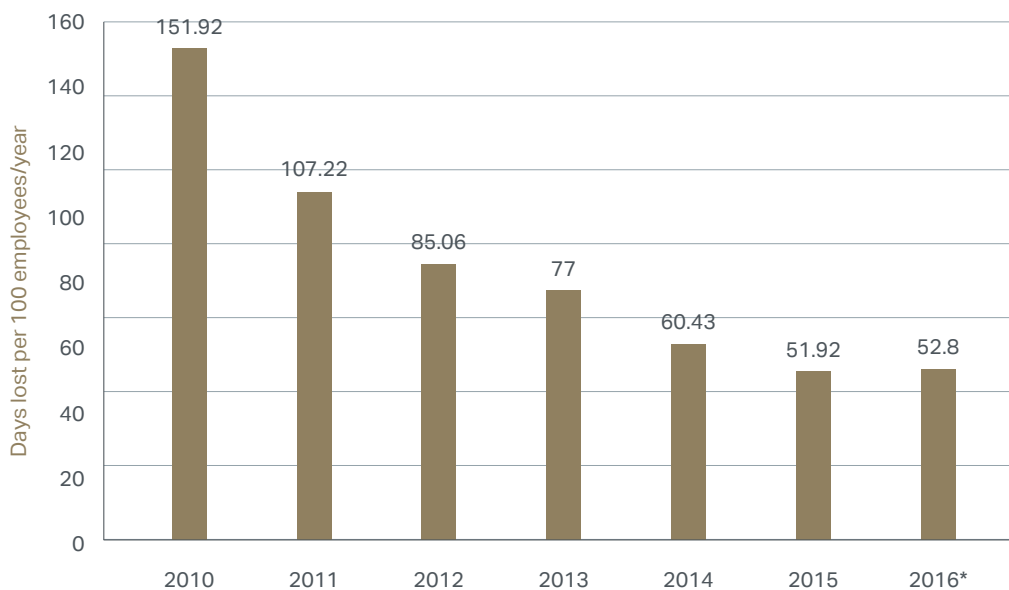
Lost time injury rate



* Combines Cathay Pacific and Cathay Dragon data for the first time

○ Lost Time Injury Rate = Total injuries multiplied by 200,000 and then divided by the total hours worked
 The factor 200,000 is annual hours worked by 100 employees, based on 40 hours per week for 50 weeks a year

Lost day rate



* Combines Cathay Pacific and Cathay Dragon data for the first time

○ Lost Day Rate = Total lost days multiplied by 200,000 and then divided by the total hours worked
 The factor 200,000 is annual hours worked by 100 employees, based on 40 hours per week for 50 weeks a year

Alcohol & other drugs policy

Cathay Pacific and Cathay Dragon are responsible for managing workplace safety to very high standards. We are aware that safety may be impacted by many factors, including the use of alcohol and psychoactive drugs. The aim of our Alcohol and Other Drugs Policy and Programme is to educate employees and managers on issues related to alcohol and other drug use, as well as to promote and maintain workplace safety. A balanced programme is one that creates a supportive environment for those in need of help, but also demands a workplace free from the influence of alcohol and other drugs, delivering benefits in terms of safety, productivity and morale. The implementation of the programme will help employees and managers recognise when they need to effectively deal and address a co-worker who is under the influence. It is important for managers and employees to pay attention to the signs of substance abuse amongst co-workers as this can affect the overall safety of the workplace, and may result in an accident or incident, damage the company’s reputation, or significantly affect employee health and work performance.

Indoor air quality

We spend more than 70% of our time at homes, in offices and other indoor environments. Poor indoor air quality can lead to discomfort, ill health (e.g. headache, itchy eyes, respiratory difficulties, skin irritation, nausea and fatigue), and in the workplace, absenteeism and lower productivity. Children, the elderly and those with existing respiratory or heart disease are more susceptible to the effects of poor indoor air quality. Good indoor air quality safeguards the health of the building occupants and contributes to their comfort and well-being. As a participant in the Hong Kong Clean Air Charter Certification Scheme, we conduct yearly indoor air quality monitoring of our headquarter buildings Cathay City and Cathay Dragon House. We have received a 'Good Class' rating since 2008.

Climate change



Climate change matters

We, at Cathay Pacific are committed to reducing our carbon emissions and mitigating the impact air travel has on climate change. The use of non-renewable fossil fuels is not only a major operating cost for us, but it also has a significant environmental impact.

There are increasing economic, environmental and social incentives for us to be a more sustainable airline. Our belief is that implementing sustainable solutions, such as fuel efficiency, new fleet and sustainable biofuels will help address our overall environmental impacts.

We agree with our stakeholders that climate change is one of the company's highest environmental challenge and we should address it as a priority. Therefore, we will continue to manage the long-term impacts of our carbon footprint in an innovative manner.

What our stakeholders think

Not surprisingly, climate change, carbon emissions and energy efficiency remain as the primary environmental focus for stakeholders. In particular, the volatility of fuel prices and supply is perceived to have a high impact on our business, along with increasing regulations such as the emergence of different Emissions Trading Schemes, and the development of a global market-based measure, the Carbon Offset Reduction Scheme for International Aviation (CORSIA).

In particular, biofuels will play a major role in helping us achieve our emissions goal. Climate change has been a material issue for us for a long time and stakeholders recognise our dedication in prioritising innovative ways to improve our environmental impact. However, at the same time, stakeholders expect us to adopt targets that exceed those of the industry, which we have since 2012 in terms of our efficiency improvement target.

There is an expectation for us to further enhance our approach to mitigating climate change effects, especially with staff. We understand the need for us to engage more proactively and publicly on this issue.

Performance update

Greenhouse gas emission

Scope 1 emissions

17.2 million tonnes[^]
(99.50%)

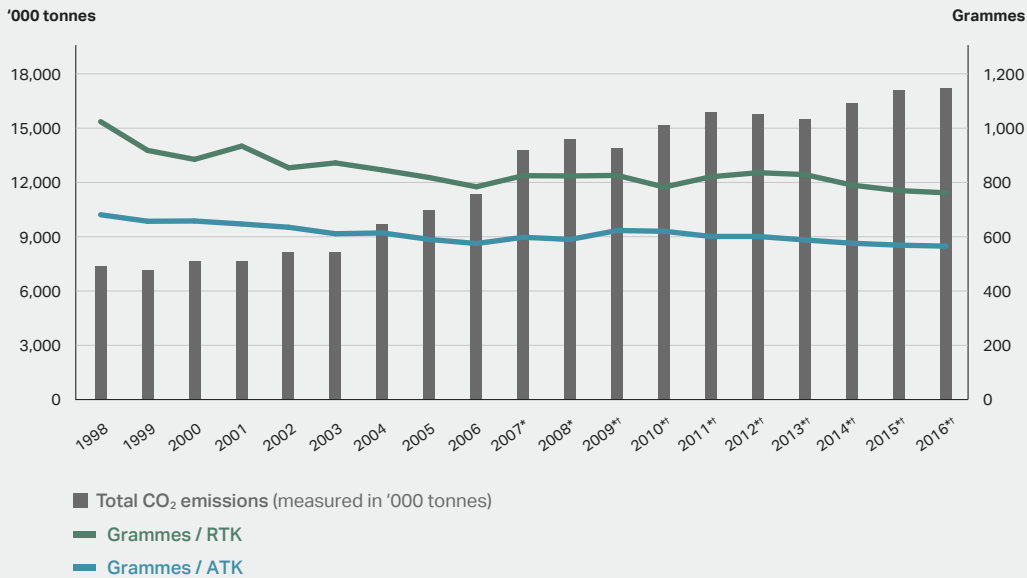
Aviation fuel, fuel combustion
and towngas

Scope 2 emissions

80,123 tonnes[^]
(0.50%)

Electricity and towngas

Global CO₂ emissions and fuel efficiency improvement – Cathay Pacific group fleet



* includes Cathay Dragon since 2007

† includes testing, training, and wet-lease flights since 2009

Fleet management



We have

202 aircraft

10 new A350-900s were delivered to us in 2016.



New generation aircraft are

20–25%

more fuel efficient than older models.



We retired 6 less efficient aircraft from the fleet in 2016.

3 Airbus **3 Boeing**
A340–300s **747–440s**



FLY greener



9 years ago, in 2007, we launched **FLY greener**.

14,100 tCO₂[^]

was offset in 2016. We offset all staff business travel.

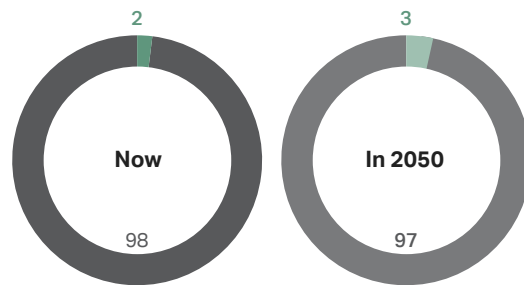
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- 2 Ground emissions management
- 3 Sustainable fuels
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Aircraft emissions

In 2009, according to the Intergovernmental Panel on Climate Change (IPCC) and the International Energy Agency (IEA), aviation accounted for 649 million tonnes of the global total of around 30 billion tonnes of CO₂, equivalent to 2% of global emissions from human activity. As aviation grows to meet increasing demand, the IPCC has forecasted that by 2050, the total of aviation emissions could rise to 3%. Whilst the forecast for 2050 is an estimation, it does highlight the challenge the aviation industry will face over the next 40 years.

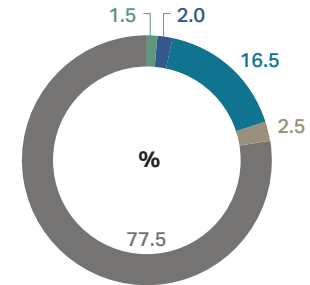
Global Man-Made GHG Emissions (%)



- Global emissions
- Aviation emissions

Source: IPCC, 2007 and IPCC – AIE2005

Comparison of Aviation CO₂ Emissions vs Other Forms of Transport (%)



- International aviation
- International marine
- Road transport
- Other transport
- Emissions from other sectors

Source of CO₂ data: IEA2010

Uncertainty remains within the scientific community regarding the full impact of other greenhouse gases (GHGs) in the upper atmosphere. In 2007, the IPCC estimated these effects to be two to four times greater than those of aviation's CO₂ emissions alone, and by 2050, aviation's total climate change contribution, including CO₂ and other effects, could rise to 5% (with a worst-case scenario of 15% of human emissions). However, the IPCC acknowledges that there is still uncertainty and the non-CO₂ impacts of aviation are the subject of intensive academic research.

Non-CO₂ Emissions from Aircraft

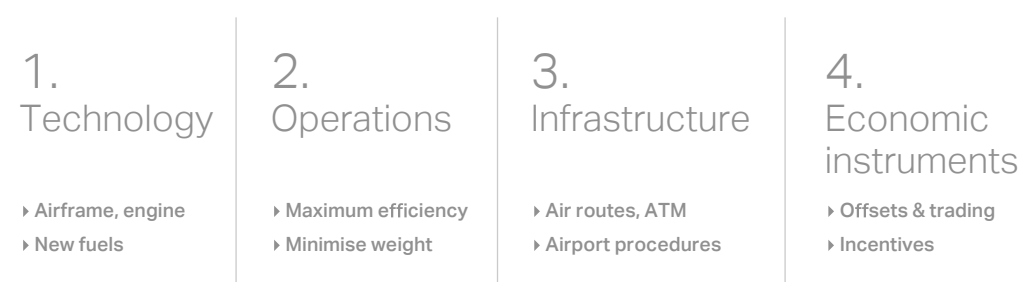
Non-CO ₂ Emissions	Nature of Impact
NO_x	Increases the GHG ozone: warming effect Destruction of methane: cooling effect
Water Vapour	Forms condensation trails: in exhaust air. Warming effects dependent on altitude, location and atmospheric conditions
Sulphate Aerosols	Reflect incoming solar radiation: cooling effects
Soot	Small warming effect

Source: IPCC

Fuel efficiency strategy

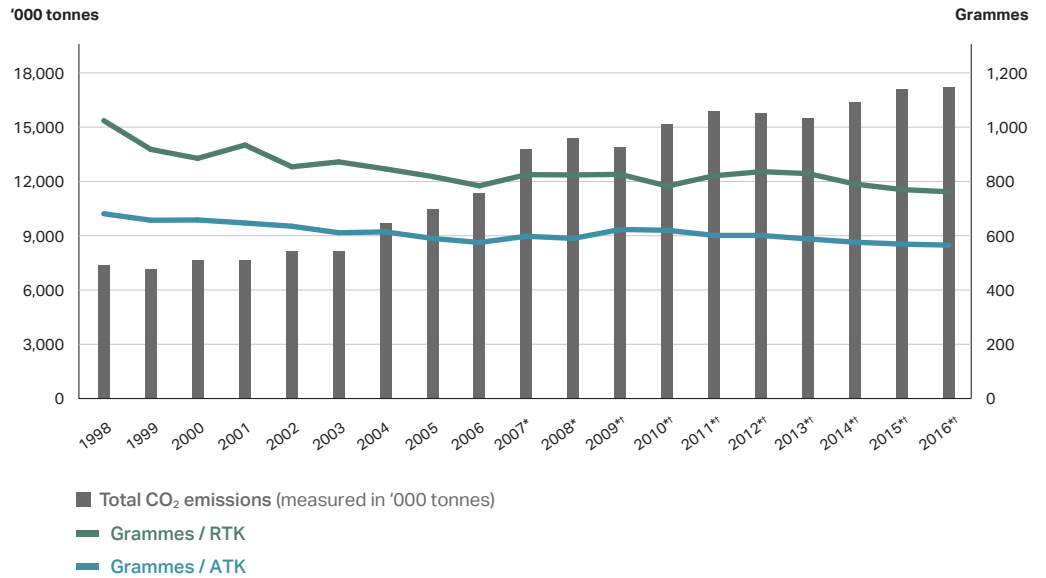
Being highly fuel efficient has long been an embedded culture in our standard operational procedures since our first non-stop long-haul flights from Hong Kong to London in 1980 and Hong Kong to Vancouver in 1983. When we reduced the weight onboard these two routes, it enabled us to offer a unique and competitive service to our customers. Over 35 years, various teams within Cathay Pacific and Cathay Dragon have worked on implementing innovative initiatives into the airline's standard operating procedures, such as a fuel monitoring system; use of engine core washing; introduction of lighter weight onboard equipment (for example food carts and cargo container boxes); and utilising flight techniques and flight planning systems that reduce the use of This has allowed us to operate our aircraft in a highly efficient manner, and to a certain extent, has played a part in helping to build resilience in the face of adverse conditions, such as additional carbon charges and rising fuel prices.

Our fuel efficiency initiatives in the past three decades reflect the IATA four-pillar strategy:



Cathay Pacific and Cathay Dragon performance

In 2016, Cathay Pacific and Cathay Dragon were collectively responsible for emitting 17.2 million tonnes[†] of carbon dioxide (CO₂) from jet fuel burn, an increase of 0.5% from 2015. Meanwhile, there was an increase of 0.8% for the amount of passengers and cargo carried on flight. Our fuel efficiency remained steady in relation to capacity (available tonne kilometre, ATK) and traffic carried (revenue tonne kilometre, RTK) respectively over 2015. Since 1988, our total fuel efficiency has improved by 16.8%[‡] and 24.9% per ATK and RTK respectively.



* includes Cathay Dragon since 2007

† includes testing, training, and wet-lease flights since 2009

New initiatives in 2016

Here is an overview of some of our new initiatives in improving our fuel efficiency.

First A350 delivered

In 2016, we took delivery of 10 Airbus A350-900XWB aircraft, which are equipped with our latest cabins, seat entertainment systems and inflight connectivity. The combination of advanced aerodynamics, lightweight composite materials and the latest Rolls-Royce Trent XWB engines resulted in a 25% reduction in fuel burn compared to existing wide-body aircraft. As well as reducing operating costs, the highly efficient A350 also benefits the environment, with a corresponding cut in CO₂ emissions, reduced NO_x emissions and a smaller external noise footprint.



Final flight for Boeing 747-400 "Queen of the Skies"

After more than 37 years of service, the iconic Boeing 747 flew its final journey between Hong Kong and Tokyo in October 2016. With its ability to carry more people for far greater distances than its predecessors, the aircraft enabled Cathay Pacific to rapidly expand its network significantly during the 1980s and early 1990s. Now, the more fuel-efficient Airbus A350s and Boeing 777-300ERs will fly in place of the Boeing 747. The Airbus A350s and Boeing 777-300ERs forms the primary backbone of our long-haul fleet.



In addition, we have continued to progress several initiatives to optimise our operations and infrastructure pillars of our climate change strategy.

eEnabled system updates

We continued with the eEnabled Aircraft Programme to facilitate seamless global aircraft connectivity and data sharing across our airlines. We began evaluating other technology solutions, which may reduce the complexity of deployment and enable us to roll out the programme sooner.

Flight efficiency working group

In order to better coordinate, manage and improve our fuel efficiency, we established the Flight Efficiency Working Group in 2014. The cross-departmental team focused on projects in the following areas:

- Aircraft operations
- Aircraft weight
- Aircraft performance
- Airspace efficiency

1. Reduced Engine Taxi-In (RETI)

Total reduced engine operation remained steady, which amounted to a saving of over 3,100 tonnes of fuel.

2. Lower cabin window blinds

When the window blinds are lowered during disembarkation, it helps to reduce the rate of temperature, which is beneficial during the heated summer months. A banner ad was introduced in our inflight entertainment system to promote the initiative with our passengers.

3. Aircraft data analytics

In partnership with Rolls-Royce, we collected various inflight data parameters across the Cathay Pacific and Cathay Dragon fleet. The result of the data analytics will help us identify areas where we can further improve our operational efficiency.

4. Engine core washing

We continued the regular washing of our engines, which removes airborne dust, grease, and other contaminants. A dirty engine reduces its efficiency, leading to more fuel burn and, in turn, more pollution and higher operating costs. Beginning in 2016, to further reduce fuel consumption and improve carbon emission, we have started increasing the frequency of engine washings from every 11 to 16 weeks, to 6 to 11 weeks. We have also begun to implement engine washing at certain outports to increase efficiency, utilising otherwise unused ground time.

Past initiatives

The following are some fuel efficiency improvements implemented in the past 10 years:

Examples of Cathay Pacific & Cathay Dragon initiatives on fuel efficiency	Emission savings
Reduced engine taxi-in (RETI) after landing	11,000 tCO ₂ /year
Weight reduction from inflight magazine paper grammage reduction	880 tCO ₂ /year
Modification of engines on our A330 fleet	11,000 tCO ₂ /year
Utilising and manually fine-tuning the flexitrack approach – use of real-time wind data to generate flexible flight tracks for flight planning	607 tCO ₂ on monitored flights in 2010
Using alternative base coat exterior paint	Depends on aircraft type e.g. 134 tCO ₂ on the A340 in 2008
Core washing engines	105,700 tCO ₂ since 2010
Weight reductions from catering and food equipment (e.g. lightweight cargo and baggage containers and food carts, cutlery, etc.)	78,460 tCO ₂ /year since 2004

The following are some route improvement initiatives implemented by Cathay Pacific and Cathay Dragon in the past 10 years:

Examples of Cathay Pacific & Cathay Dragon route improvements	Emission savings
Asia and Pacific Initiative to Reduce Emissions (ASPIRE) – demonstration flights in 2013	Up to 3,150 tCO ₂ /year
Flexible entry/exit points implementation in China for European flights (Y-1 route)	14,000 tCO ₂ /year
North Pacific route improvements	835 tCO ₂ /year
Flexible entry/exit points implementation in China for European flights (MORIT route)	0.6 to 0.9 tCO ₂ per flight
Re-design of flight paths over the Pearl River Delta	54,000 tCO ₂ /year
Further North Pacific route improvements (SFO-HKG)	792 tCO ₂ /year

Contributing to climate change science

In 2013, one of our Airbus A330-300 aircraft became the first of its type to be equipped with In-service Aircraft for a Global Observing System (IAGOS) scientific instruments. Since 2013, the aircraft has operated over 1,400 flights, primarily on Australian and Middle East routes from Hong Kong. The Airbus A330-300 is manufactured to complement other similar commercial aircrafts operating on other routes around the world, which will help build a better global picture of climate change. Data on ozone, carbon monoxide, water vapour, and clouds is recorded during take-off, cruising, and landing. The results are transmitted from the aircraft on a daily basis to the IAGOS central database for access by science and policy users, including the provision of useful real time data for weather prediction, air quality forecasting and climate models. The growing IAGOS database will continue to improve our understanding of cloud processes and their impact on climate.

More information can be found at www.iagos.org.

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Ground emissions management

We have been working tirelessly on our ground operations to reduce our carbon footprint, primarily from electricity consumption of our buildings, equipment stock and vehicular emissions.

We support the Airport Authority Hong Kong's new 10% reduction target for the next five-year period from 2016 to 2020, which is an extension of the original five-year period from 2010 to 2015. During this time, a 25.6% reduction in intensity per workload was achieved across the participating business partners against a 25% target.

2016 initiatives

Our headquarter buildings, Cathay Pacific City and Cathay Dragon House, are based at Chek Lap Kok, near Hong Kong International Airport. They cover a total floor area of 193,000 m² and mainly comprised offices, flight training centres and stores. Both premises are certified to the ISO14001 international environmental management standard. They are both equipped with a building management system. Cathay City also has automatic lighting, air-conditioning controls and motion sensors in conference rooms.

In 2016, the total electricity consumption at Cathay Pacific City and Cathay Dragon House was 34,917,670 kWh[^] and 7,133,624 kWh[^] respectively, representing a decrease of 1.5% and an increase of 1.3% respectively. We continued to invest in energy saving measures such as chilled water system optimisation and LED lighting replacements. The incremental increase in consumption at Cathay Dragon House was mainly due to increased training and recruitment activities. There is also a 500-room staff hotel, the Headland, adjacent to Cathay Pacific City.

In 2016, 14 electric vehicle chargers were installed at Cathay Pacific City and Cathay Dragon House, amounting to a total of 21.

Our subsidiaries

Hong Kong Airport Services Limited (HAS)

HAS serves 21 airlines at HKIA and operates the largest vehicle fleet in the Group. HAS is committed to reducing carbon emissions from its fleet. In 2011, HAS started the first term of a three-year Ground Support Equipment (GSE) Replacement Programme. In 2017, we will continue with our fleet renewal programme by placing an order for three fuel-efficient lower deck loaders and three light buses.

Our GPS tracking system allows us to efficiently manage our fuel consumption. This year there was a decrease of 2.7% in fuel consumption per flight in comparison to the previous year. We expect additional improvement in fuel efficiency as the GPS tracking system is expanded.

Cathay Pacific Catering Services Limited (CPCS)

CPCS serves 41 airlines and is one of the largest flight kitchens in the world. Through equipment replacement, maintenance and optimisation projects in 2016, 2,500 tonnes of CO₂ emissions have been reduced. Some of the initiatives included the installation of more than 2,000 pieces of LED lights, installing two water-cooled chillers to replace older and less efficient equipment. In addition to this, the insulation of chilled pipes, suction pipes, and air ducts has also been replaced in order to reduce lost energy, and optimise the cooling and ventilation demand of the air handling unit in order to avoid over consumption of electricity.

The newly built Phase II facility, which commenced operation in December 2016, is undergoing certification for BEAM Plus Silver for new buildings.

Cathay Pacific Services Limited (CPSL)

CPSL has been operating the Cathay Pacific Cargo Terminal since 2013. With design features to support sustainability, CPSL is committed to support green operations and engage our stakeholders via different initiatives and measures.

Electricity usage was 21.7 kWh per tonnage in 2016, representing a 0.5% decrease against 2015. Some of the energy efficiency initiatives implemented in 2016 included retrofitting over 1,200 lighting fixtures with more energy efficient ones, such as LED lights and induction lamps as well as increasing charging facilities to cope with the growth of electric vehicle use.

Vogue Laundry Services

Vogue Laundry Services employs over 560 staff and serves over 23 airlines, 17 hotels and has a daily output of 251,000 items, equivalent to 71 tonnes of laundry. It is the first laundry in Hong Kong to be certified to the ISO 14001 environmental management standard and the OHSAS 18001 occupational health and safety standard.

Over the past few years, Vogue has been actively exploring ways to reduce emissions through active carbon absorption in the dry cleaning machines and from perchloroethylene, which is a volatile organic compound (VOC) consumed in the dry cleaning process. Consumption of this solvent was decreased by 12% in 2016. Vogue also switched from diesel boiler to a dual-fuel boiler which utilises Towngas and ultra-low sulphur diesel at a 68:32 ratio which has helped to reduce CO₂ emissions.

Vogue runs a fleet of 23 vehicles for its collection and delivery services. In 2016, six Euro II trucks were replaced by two Euro V trucks. In 2017, four new Euro V trucks will be added to the fleet and three Euro III trucks will be disposed. Since March 2016, the use of B5 biodiesel has been trialled on one of the delivery routes.

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Sustainable fuels

In spite of the current comparatively low fuel price environment, Cathay Pacific remains committed to the biofuel agenda as part of our long-term strategy in reducing our total climate change impact. We work with relevant partners to identify sustainable biofuels, which meet or exceed the energy characteristics of kerosene and offer substantial improvement to emissions performance. However, we are well aware that such fuel must be produced in a sustainable way.

We are a member of various organisations, such as the Sustainable Aviation Fuel Users Group (SAFUG), Roundtable on Sustainable Biomaterials (RSB), the FAA Centre of Excellence for Alternative Jet Fuels, and the Commercial Alternative Aviation Fuels Initiative (CAAFI). We all share the common desire to accelerate the research, development, and commercialisation of sustainable aviation biofuels.

Sustainable fuel strategy

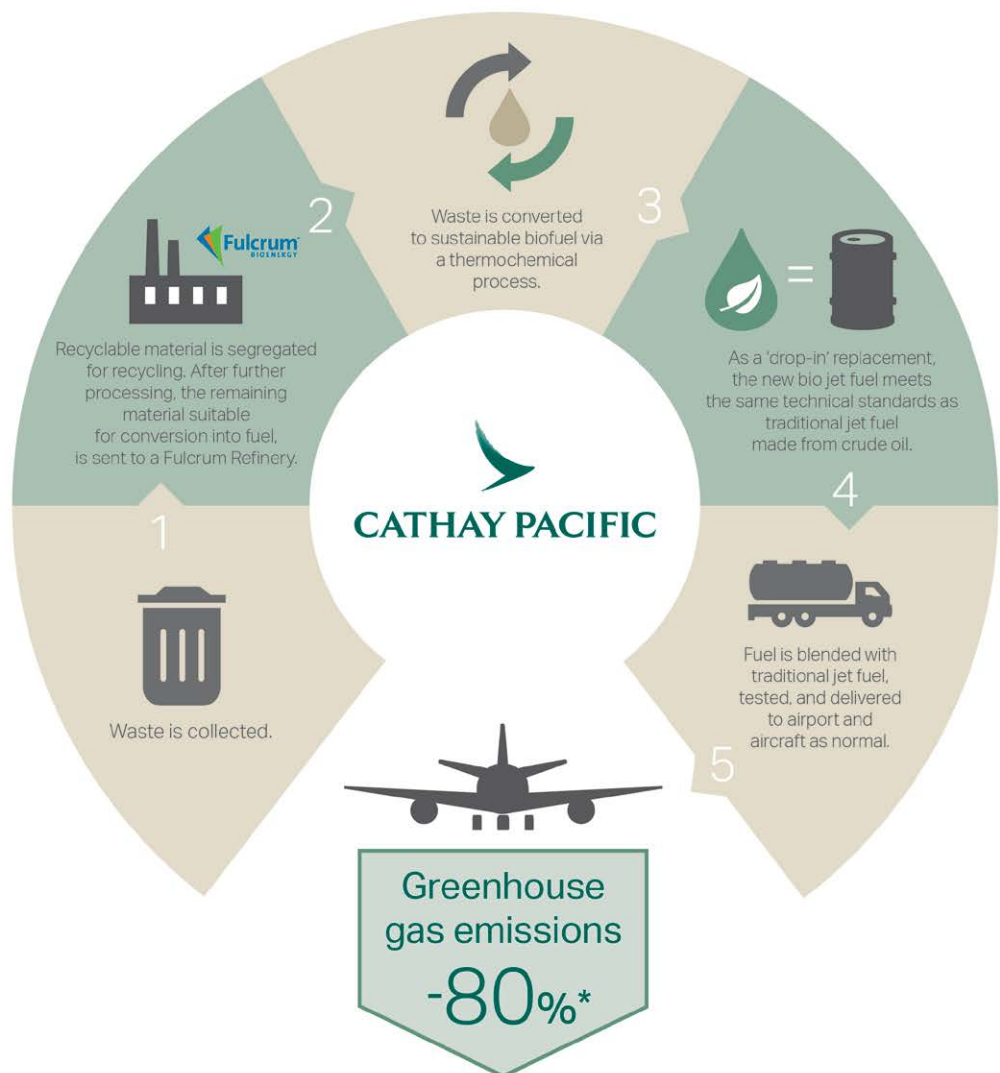
Since the appointment of a dedicated Cathay Pacific Biofuel Manager in 2011, we have had a robust sustainable aviation fuels strategy in place and are progressing several projects, a number of which focus on the use of waste and residues as a source of feedstock for the production of fuels.

Cathay Pacific is the first airline to have invested in a sustainable biofuel developer. We began our investment in the US-based Fulcrum BioEnergy Inc. in 2014. The investment will help us work towards achieving an industry target of carbon-neutral growth in 2020. Fulcrum is a world pioneer in the development and commercialisation of converting municipal solid waste into sustainable aviation fuel.

We have negotiated a long-term supply agreement with Fulcrum for an initial 375 million US gallons of sustainable aviation fuel over 10 years, which will meet all the airline's technical requirements, specifications and sustainability criteria.

From waste to wing

As an alternative to sending household waste to landfill, it can be converted to sustainable bio jet fuel. Cathay Pacific is an equity investor in Fulcrum BioEnergy, a biofuel developer pioneering the development and commercialisation of technology to convert waste to renewable transportation fuel.



* Compared to traditional jet fuel, sustainable biofuel can reduce life cycle greenhouse gas emissions by up to 80%.

First Cathay Pacific flight powered by biofuels

The first Cathay Pacific flight powered by biofuels arrived at HKIA in May. This flight was operated on a newly delivered Airbus A350-900 and was the world's longest biofuel flight to date. The following 21 delivery flights from Toulouse will also use a 10% blend of biofuel. This biofuel is made from sustainable sugars, using a process of fermentation whereby modified yeast produces hydrocarbons that can be processed into jet fuel. Not only does this fuel have a lower life cycle CO₂ than fossil fuel, but biofuel also burns cleaner. The intent of using biofuel on these flights is for Cathay to become accustomed to flying on renewable fuel as we move closer to larger volumes becoming available over the next three to five years.



The combination of a modern fuel-efficient aircraft and the use of biofuels will result in some of the lowest net CO₂ emissions for commercial aircraft in service today.

Jeff Ovens
Bio Fuel Procurement Manager



Want to find out more? Go to our video on the right.



Our video, **Fuelling our Way to a Low Carbon Future.**

Construction of Fulcrum BioEnergy Inc.

Construction of the initial phase of Fulcrum's first commercial scale plant was completed in May 2016. This feedstock pre-processing facility will sort and separate waste originally destined for landfill and process them into a form suitable for bio jet fuel production. With the capacity to process 50 tonnes per hour, the facility automatically removes recyclable items such as metal and plastic for onward recycling and shreds the remaining non-recyclable waste into small pieces. Construction of phase two comprising the fuel production facility is scheduled to begin in 2017.



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Climate Change Policy

Since 2008, Cathay Pacific, along with other industry players, has been calling for the regulation of aviation emissions from a global sectoral scheme, under the United Nation's International Civil Aviation Organization (ICAO). We believe a sectoral approach is more appropriate and effective for the global nature of the industry, rather than through regional schemes such as the EU ETS.

In 2014, ICAO began the development of a Global Market Based Measure (MBM) to address the growth of international aviation emissions.

In October 2016 at the ICAO 39th Assembly, global aviation industry reached a landmark climate agreement to put in place the world's first mandatory carbon offsetting scheme covering an entire industry. This is an important regulation that will require all international airlines to offset industry's growth in carbon emissions, which is set to commence in 2020. This will help towards achieving the industry target of carbon neutral growth (CNG) by 2020.



We are active members of several global groups, such as the Global Market-based Measure Technical Task Force (GMTF), which comprised representatives from ICAO member states, industry and NGOs. Cathay Pacific is continually and proactively engaging in dialogue revolving around the implementation of a global MBM for aviation emissions under ICAO. We are part of a small group of IATA carriers that are members of the expert groups looking at specific technical aspects of a global MBM through the ICAO Advisory Committee on Environmental Protection (CAEP), together with NGOs, states and academia. We are also part of IATA's advisory group that supports the industry's efforts in ICAO to develop a global MBM.

Significant progress was made in 2016 on the historic 39th Assembly Resolution and we will continue to involve ourselves closely in the process.

As an expanding and growing airline, we will likely need to offset a proportion of our emissions post 2020. However, our investment in biofuels and efficient aircraft such as the Airbus A350 and Boeing 777-9X will help reduce our emissions and offset obligations.

Global Efforts by the Aviation Industry in Reducing Emissions

2008	Cathay Pacific as a Founding member of the Aviation Global Deal Group
2009	The aviation industry committed to new and ambitious targets for emissions reductions through IATA
2010	Monitoring of CO ₂ data began in compliance with the EUETS
2011	Cathay Pacific appointed to IATA Climate Change Task Force
2012	CCTF completed extensive work around the implementation of CNG 2020
2013	The 38 th ICAO Assembly agreed to proceed with the development of a global market-based measure for international aviation industry emissions
2014/ 2015	GMTF and working group meetings to discuss details of the global MBM
2016	The 39 th ICAO Assembly agreed on a new global market-based measure (GMBM) to control CO ₂ emissions from international aviation

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FLY greener

In 2007, Cathay Pacific launched a carbon offset programme, FLY greener, which is the first by an Asian airline. The programme is part of our ongoing effort to engage with passengers on issues with regards to climate change.

Passengers can contribute to projects that reduce CO₂ emissions, and increase their awareness on climate change issues. More information on this programme including the projects we offer and our unique corporate carbon offset programme for corporate clients, can be found at www.cathaypacific.com/flygreener.

Based on carbon emissions calculated for the specified flights, the attributable monetary contributions go directly to fund third-party validated projects that help to offset the carbon dioxide generated by those flights. All of the projects we offer are certified under the Gold Standard to ensure that they are verifiable, credible and make a difference to local communities and the environment.

In 2016, 2,900 tCO₂[▲] were offset by our passengers, including several companies in Hong Kong. Cathay Pacific and Cathay Dragon also offset the CO₂ impacts of staff travelling on business, amounting to 11,200 tCO₂[▲] at an approximate cost of HK\$295,000 in 2016.

Clean and Efficient Cooking and Heating Project, China

Located in the rural areas of Shanxi Province, China, this fuel-switching project reduces greenhouse gases (GHGs) by replacing coal with renewable biomass on a household level. More than 7,000 inefficient coal burning stoves were replaced with highly efficient ones that use agricultural residue, which would have otherwise been burned in the fields as waste. The GHG reductions were approximately 82,000 tonnes per year. Another benefit was improved indoor air quality as less fumes were produced due to more efficient combustion. By using agricultural waste as a source of fuel, families also save on fuel spending, allowing for better use of family income.



InfraVest Changbin and Taichung bundled Wind Farms Project, Taiwan

Two wind farms consisting of 65 wind turbines along the west coast of Taiwan generated an annual clean electricity equivalent to 110,000 households' demand for a year. The project reduced GHG emissions by 370,000 tonnes per year and helped to improve local air quality, through reduced air pollutants such as sulphur dioxide and nitrogen oxides. This project created a number of employment opportunities in support of the operation of the wind farms. Increased public interest in the wind farms inspired local guided tours of the facility.



Want to find out more? Go to our video on the right.



Our video, **A Greener Flight with our Airbus A350s.**

Waste management



Waste management matters

The use of material resources such as paper, wood, plastic and food in our operations is inevitable. However, we recognise the impacts of using and disposing of these materials, particularly given the shortage of landfill space in Hong Kong. Therefore, we have medium to long-term programmes in place to minimise the impact of these materials to our environment. We also continuously examine options whereby we can reduce resource use and waste, all the while using materials from more sustainable sources.

Our staff are concerned about what they can do in the working environment. For example, flight and cabin crew want to see more being done to tackle inflight waste, while our ground staff want to see us take more proactive steps in offices and airports. This interest is important as many of our resource and waste management initiatives can only be achieved with the support of our staff, both inflight and on the ground.

What our stakeholders think

Over the recent years, the issue of waste has become a main concern amongst our stakeholders. With the shortage of landfill space in Hong Kong and the government's policy on waste charging on its way, waste is a critical issue locally.

A decade ago, we implemented inflight waste recycling; however we are still under pressure from our stakeholders to reduce waste onboard, specifically on disposable plastics and packaging. Increasingly, stakeholders are also concerned about our strategies and programmes in tackling food waste issues, in particular the wastage generated from inflight meal services. As such, we are committed to communicating our reuse and recycle practices and engage with our passengers, cabin crew and cleaning agents.

Performance update

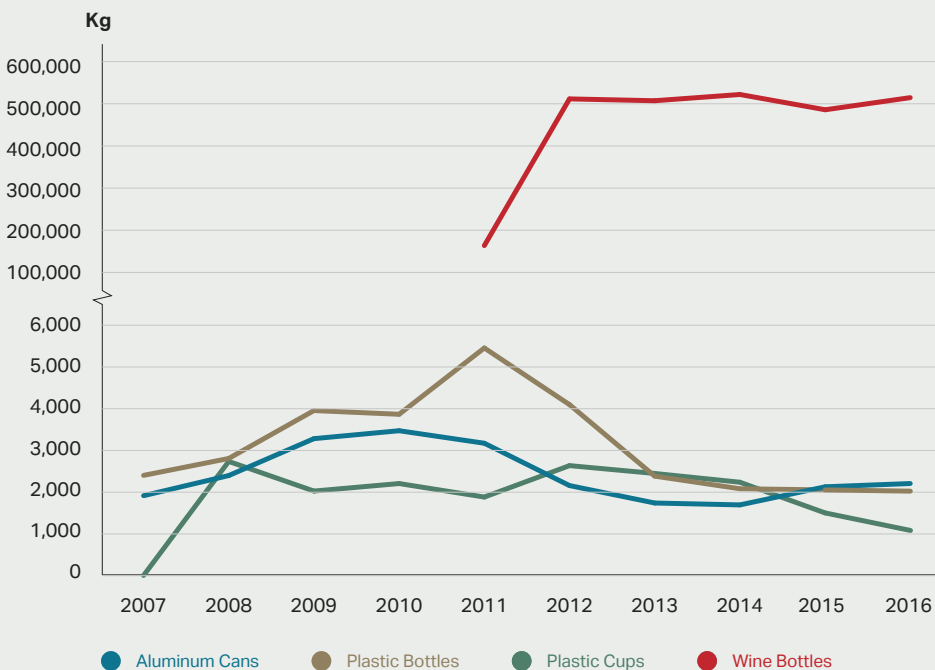
Up to **90%** of material in the eight retired A340s aircrafts were recycled since 2015.

A total of **234 tonnes** of surplus food donated to food bank.

Introduced an app-based **paperless** reporting platform for cabin crew. In the flight deck, eEnabled aircraft were introduced to reduce the use of paper manuals and charts.

In 2005, **11 years ago** we began recycling inflight waste.

Inflight waste recycling over the years



In 2016, **517,048 kg[▲]** wine bottles were recycled.

22,066 kg[▲] aluminium cans were recycled.

10,799 kg[▲] plastic cups were recycled.

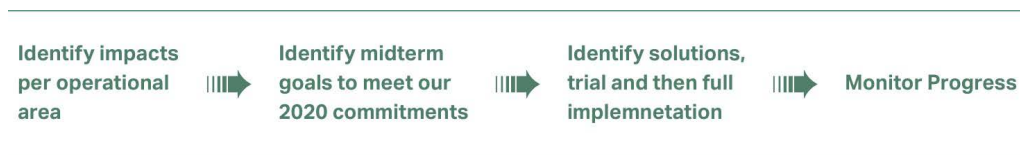
20,242 kg[▲] plastic bottles were recycled.

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| 1 Resources and waste management | 3 Food waste |
| 2 Recycling and reuse of waste materials | 4 Water |

Resources and waste management

Our strategy to resource use and waste management is as follows:



- Identify impacts per operational area: resource use and waste generated at all operational points, concentrating particularly in areas that are offered to customers where there is significant single-use waste generated.
- Identify mid-term goals: we have developed internal guidelines on resource use (for example on the use of paper and plastic) and simple comparative tools to help departments make decisions regarding which materials to choose. We will continue to work internally to develop guidelines for other resources.
- Identify solutions, trial and then full implementation: work with departments that are responsible for these items either individually or as part of a working committee. For example, most of our inflight measures are initiated by the Inflight Services Department Environmental Working Committee since 2005 (although there have been environmental-related projects in place since the mid-1990s).
- Monitor progress: we monitor all environmental, health and safety data through a robust sustainability management system, Resource Advisor (RA). The system is web-based and it facilitates the collecting, consolidating, analysing and reporting of our environmental, social and governance (ESG) performance across the Group's diverse businesses located in different jurisdictions. This helps to monitor our progress against our commitments in a more comprehensive and robust manner.

Paper and wood products

Since the 1990s, we have implemented paper recycling campaigns and encouraged the use of alternative paper sources in our operations, both inflight and in our offices. Migration to electronic means of communication to improve operational efficiency has also facilitated in the reduction of paper consumption in many areas since the 1990s, and many of our systems are moving towards electronic storage devices.

As a matter of policy, all marketing collaterals and office paper from Hong Kong are from sustainable and certified sources. We are working on implementing this policy throughout all our operations around the world over the next few years.

Use of Sustainable Paper Sources in the Cathay Pacific Group

	Sustainably sourced and certified paper	Recycled Paper
Ground-based	<ul style="list-style-type: none"> • CPCS customer newsletter "Food for Thought" (2010) • All paper marketing collaterals (2010) • Calendars and diaries (2010) • Cargo calendars (2014) • Sales marketing leaflets (2010) • Copying and printing paper at Cathay Pacific, Dragonair, CX Holidays, HAS and Vogue offices (2010-2011) • Hand towels in Cathay City toilets (2012) • Boarding passes (2014) • Maps of Hong Kong International Airport (2015) 	<ul style="list-style-type: none"> • Cathay Pacific monthly staff newsletter "CX World" • Dragonair monthly staff newsletter "Dragonews" • Cabin Crew Newsletter • Hand towels in Cathay City toilets (2012) • Toilet paper in Cathay City toilets – 80% recycled content (2012)
Inflight	<ul style="list-style-type: none"> • Meal tray cards (2010) • Safety cards on all aircraft (2011) • Cathay Pacific/Dragonair branded inflight magazines (2013) • Meal boxes on regional routes (2013) 	–

We incorporated the use of sustainable wood through refurbishments in our buildings, offices, and airport lounges in accordance with green building standards and principles. Procuring wood products for furniture from a sustainable source ensured they were from a forest that is responsibly managed.

Cathay Dragon introduced an app-based paperless reporting platform for its cabin crew for report submission in December 2016. Cabin crew can now submit a variety of previously paper-based reports through an e-reporting platform. The digitalisation of the reporting system not only aims to reduce overall paper consumption, but also considerably reduces the weight of documents that are brought onto the aircraft – a small but effective contribution in reducing carbon emission.

Plastics

Plastics are versatile, cost-effective, and lighter than most materials, and for these reasons we use them throughout our operations in different forms. However, plastics take a very long time to degrade and thus are responsible for a significant amount of waste, as well as for releasing toxins into the environment. Our efforts have been focused on tackling these single-use disposable items.

In recent years, we have received considerable attention for our use of plastics inflight. Opinions have been consistent amongst our different stakeholders, including passengers, staff and environmental organisations. Our recycling initiatives are described in later sections.

Waste management

Recycling and reuse of waste materials

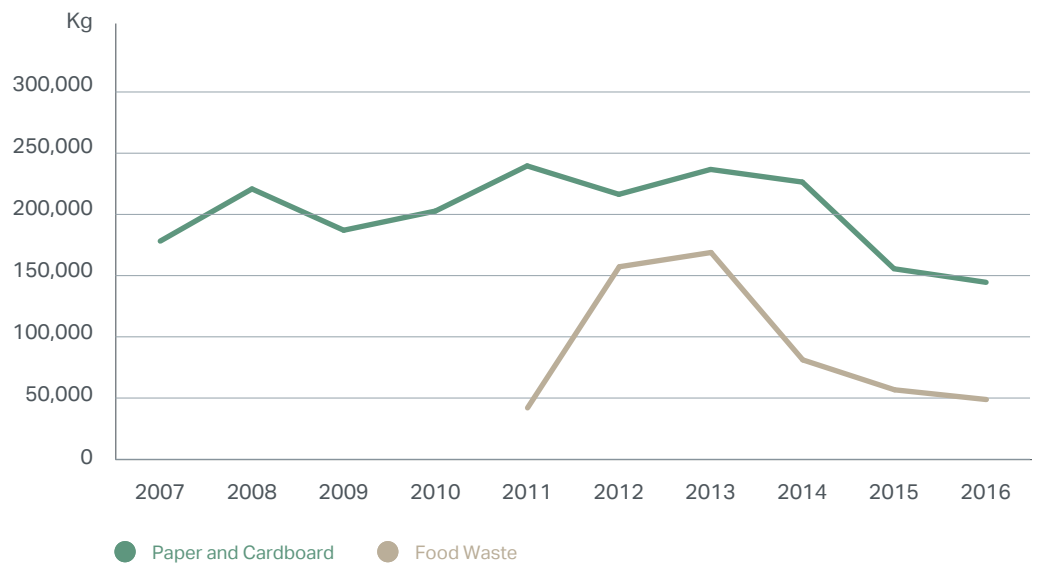
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Recycling and reuse of waste materials

The Cathay Pacific Group recycles a range of materials in its offices, including paper, plastic, metal, printer cartridges, waste lubrication oil and garment hangers. Further data can be found on our Environmental Indicators table.

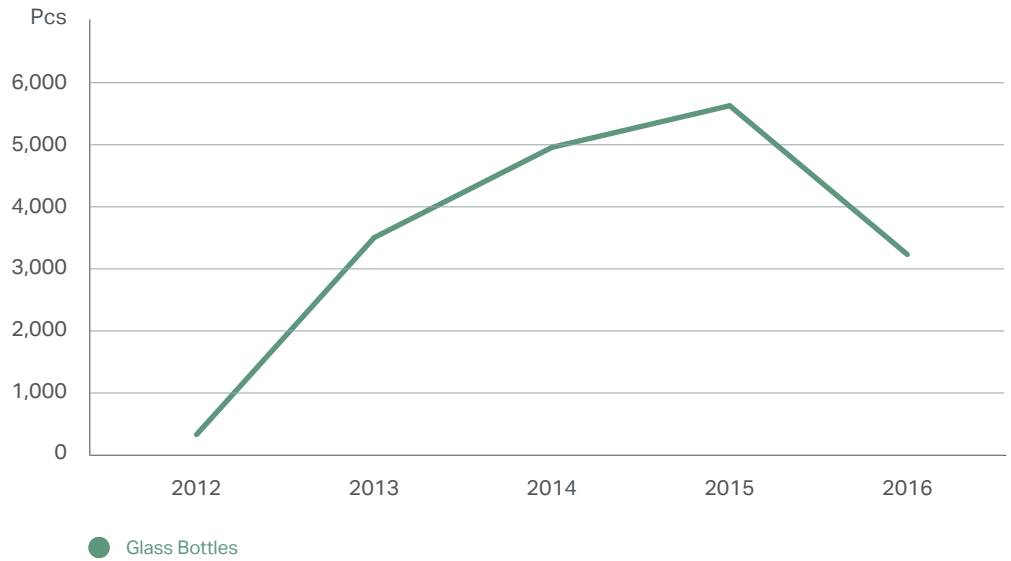
Cathay Pacific City recycling



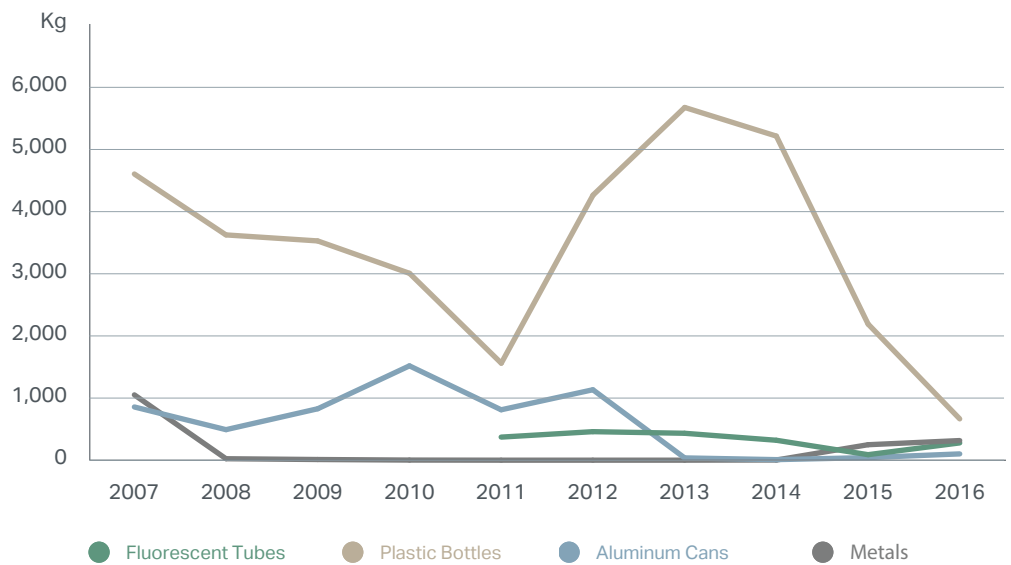
Waste management

Recycling and reuse of waste materials

Cathay Pacific City recycling – glass bottles (pieces)



Other recycled items at Cathay Pacific City (kg)



Cathay Dragon House recycling data (2016):

- Paper and cardboard: 5,415 kg[^]
- Metal: 73 kg[^]
- Plastic: 63 kg[^]

Vogue Laundry used 2.4 million garment hangers in 2016. We continue to reuse these hangers through our rebate programme with private and corporate customers who returned their hangers, which was at 65% in 2016. This is an increase from 57% in 2015.

Inflight waste and recycling

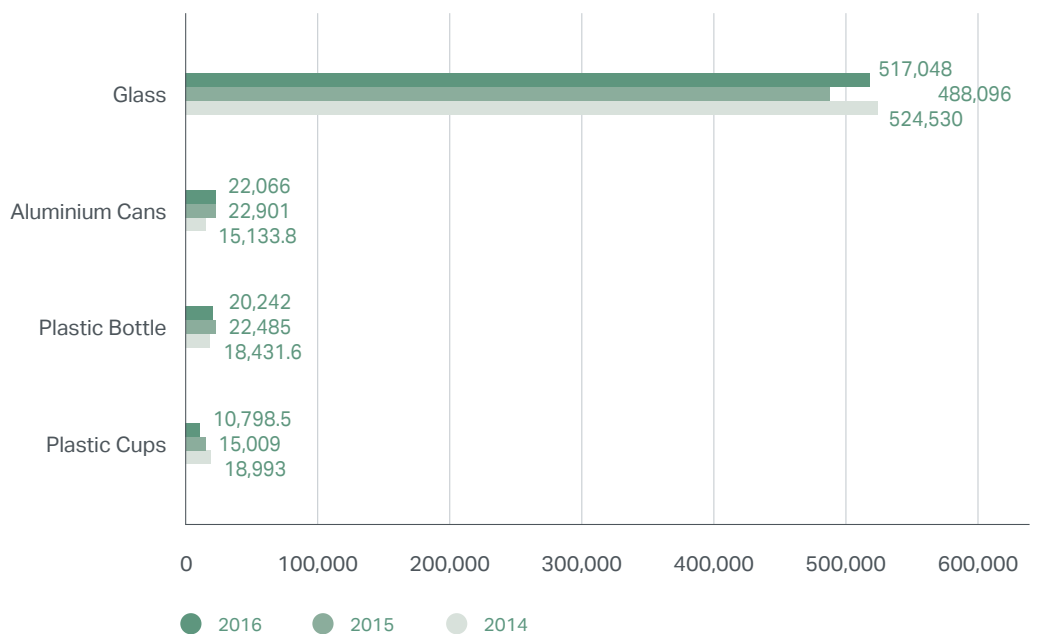
Since we started sorting, reusing and recycling inflight waste in 2006, our cabin crew have continued their efforts to reduce waste from our inflight operations. We continue to find ways to improve our inflight waste management by working around the various limitations onboard, such as storage space, tight flight schedules and procedures, and service quality. This is recognised as one of our customers' key concerns.

Currently our inflight recycling is only carried out on inbound flights to Hong Kong. We are constrained by regulations in our destination countries where the disposal of waste from international flights is prohibited, and we are unable to bring the waste back on return flights for hygiene and storage reasons. However, we continue to look for opportunities to work with local authorities and other carriers to examine ways of treating waste at these destinations.

At some of the ports, such as North America and Australia, there are very strict health and safety regulations on international waste in place, including those from international flights which require their 'deep burial and landfill', or incineration. We continue to monitor any regulatory changes in these countries which may facilitate inflight waste recycling. Cathay Pacific is part of the International Air Transport Association (IATA) Cabin Waste Working Group, which aims to address airline cabin waste management issues and where member airlines share best practices and updates.

In 2016, we recycled 10,799 kg[^] of plastic cups, 20,242 kg[^] of plastic bottles, and 22,066 kg[^] of aluminium cans on Cathay Pacific inbound flights to Hong Kong. Similarly, 3,826 kg of plastic bottles and 1,516 kg of aluminium cans were recycled on Cathay Dragon flights. 517,048 kg[^] of glass bottles were collected from Cathay Pacific inbound flights to Hong Kong for recycling.

Inflight waste recycling (kg)



Recycling retired aircraft

With our aggressive fleet modernisation plans, we continue to retire less efficient aircraft from the fleet. In 2016, we retired three Airbus A340-300s and the last three Boeing 747-400s. When an aircraft retires from our fleet, we work with aircraft manufacturers, the Aircraft Fleet Recycling Association (AFRA), accredited companies, and other companies specialised in end-of-life solutions for aircraft in order to find ways of salvaging spare parts, recycling or reusing aircraft parts and materials. A large proportion of the components can be re-certified and reused during maintenance – or alternatively sold to other users - through aircraft end-of-life programmes. Often, major components like the engines, auxiliary power units and various avionic and aircraft system components are removed to support the fleet.

Due to the planned retirement of 11 A340-300s by 2017, we began working in 2015 with a company specialising in end-of-life solution to recycle these aircraft. Under Airbus' PAMELA initiative (Process for Advanced Management of End-of-Life Aircraft), eight of our A340s, each weighing 125 tonnes, have been retired and transferred to a workshop in southern France to undergo a recycling process. Up to 90% of their components can be recycled, reused, or recovered. The remaining three A340s will be retired by 2017.



Aircraft Recycling Steps:

Step 1: Decommissioning

- Cleaning & decontaminating
- Emptying tanks (e.g. fuel, portable water, WC tanks)
- Safety procedures

Step 2: Disassembly

- Equipment & parts removed (e.g. engines, landing gears)
- Removed items are identified, inspected, and tagged
- Equipment & parts could be reuse

Step 3: Dismantling

- Hazardous materials sent to specialised waste handlers
- Fuselage is cut up, sorted, and sent to recyclers
- Unrecoverable waste to landfill (e.g. cabin lining, miscellaneous wastes)

Summary

For reuse upon conditions, such as:

- Engines + APU
- Landing Gears
- Movable parts

For recovery, such as:

- Fluids (Fuel, oils, hydraulic fluid)
- Tyres
- Textiles, Carpets

For land-filling, such as:

- Cabin & Cargo lining
- Polluted mix & wastes
- Miscellaneous

Benefits of Aircraft Recycling

- Increase recycling rate to 90%
- Reduce waste sent to landfills to <10%
- Save over 90% in energy from producing recycled aluminium relative to new aluminium

Cathay Pacific is committed to supporting aircraft manufacturers' efforts to improve end-of-life recycling in the next generation of aircraft we purchase. Our range of more recent aircraft, in particular the Boeing 747-8F freighters and Airbus A350 aircraft, are designed to ensure high rates (approximately 90 to 95%) of material and component recovery at the end of their useful service lives.

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Food waste

The Cathay Pacific Group, through Cathay Pacific, Cathay Dragon and Cathay Pacific Catering Services (CPCS), serves over 110,000 meals per day. We recognise that food waste is unavoidably created every day, and we have implemented a number of measures to reduce food waste, such as constantly reviewing food consumption on board, using leftovers and off-cuts for animal feed and reprocessing used cooking oil into vehicle biodiesel. However, we believe more can be done in order to assist with managing waste

In total, CPCS produces around 83,800 meals per day, of which an average of 61,000 meals are served on Cathay Pacific flights. Cathay Dragon serves around 29,000 meals per day.

We joined the Hong Kong Airport Authority's food waste recycling scheme in 2011, collecting and sorting food waste from our office canteens, restaurants, crew hotel and airport lounges.

In 2013, we began to donate surplus food from the canteens at Cathay Pacific City to the local charity Food Angel, who turn these remainders into hot meals to be consumed by underprivileged families in Hong Kong. Since the programme's inception, we have donated 3,655 kg of food. At most of our outports, due to very strict health and safety regulations on international food waste, inflight waste (including from food) is required to be either buried or incinerated.

Waste management

Food waste

Since 2015, we have been donating surplus food and beverages from inbound flights to a local food bank, Feeding Hong Kong. 234 tonnes^A were collected and donated in 2016.

In 2016, CPCS also collaborated with Food Angel to donate surplus bread.



Inevitably we upload more food and beverages onboard than needed, to ensure our passengers get sufficient choice. It's great for me to be able to help distribute salvaged items to the needy. When I am serving inflight, I will try to tidy up these items in a way that makes it easier for volunteers to sort them afterwards.

Jessie Chow

Flight Attendant and Cathay Pacific Volunteer

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Water

We are continuously looking for both conventional and innovative ways of conserving water. Due to various initiatives taken by the Group's companies, we have been able to reduce water consumption over the years.

Potable water consumed at Cathay Pacific City and Cathay Dragon House was 27,321 m³ and 9,871 m³ in 2016 respectively. This represents an overall decrease of 5.2% over 2015 consumption.

One of our more water-intensive operations, Vogue Laundry, consumed 299,500 m³ of water in 2016, representing a 10.6% increase from its 2015 level.

Water consumption at CPCS for 2016 was 501,610 m³ and 2015 was 461,782 m³, which was an increase of 8.6%.

In total, our potable water consumption for 2016 in Hong Kong was 916,786 m³, which was an increase of 8.4% over 2015.



Want to find out more? Go to our video on the right.



Our video, **Recycling Retired Aircraft**.

Sustainable sourcing



Sustainable sourcing matters

We work with over 1,000 suppliers globally, dealing with a vast range of purchases across the 189 destinations in which we serve, from aircraft and fuel to office supplies and uniforms. Working with our suppliers is key to delivering products and services to our customers in a sustainable fashion.

We recognise that the effort our suppliers put forward on integrating sustainable development principles and practices into their businesses plays an important role in our overall performance towards sustainability. This is closely related to our strengths within operational efficiency and aids us in managing our risks.

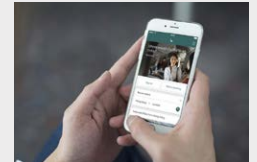
What do our stakeholders think

The sustainability of supply chains has grown in importance over the recent years, as businesses tend to look beyond the impacts and performances of their immediate day-to-day operations. In this business climate, stakeholders are increasingly looking for us to incorporate green purchasing guidelines into environmental and sustainability policies, and to show a more integrated view towards 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.

Performance update



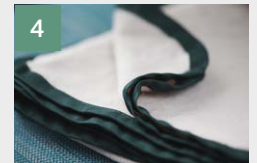
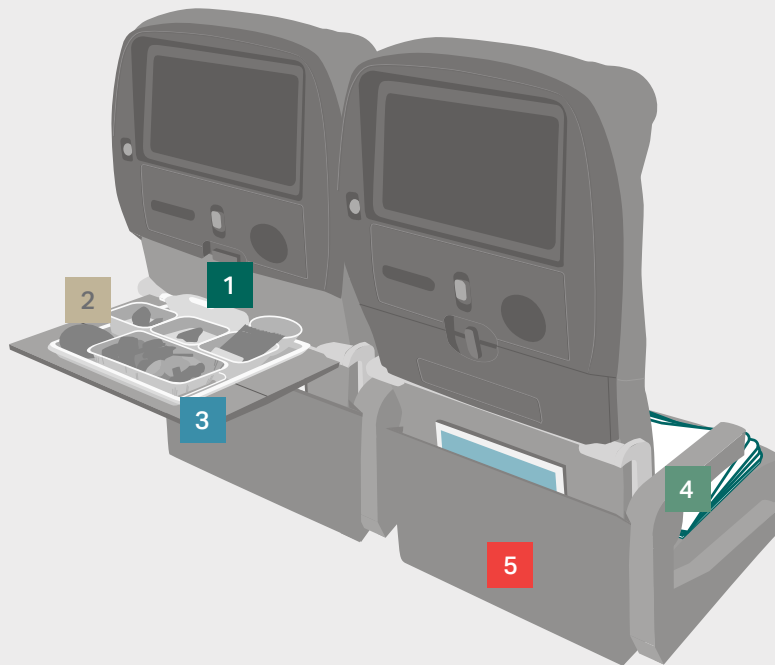
We introduced new napkins that are made from 70% sugarcane and 30% wood pulp



Mobile boarding pass saves time and enables a paperless experience for our passengers



Our cabin crew separate waste such as bottles, cans, and cups for recycling



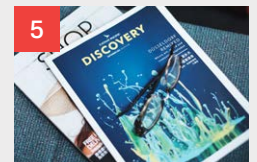
We use biodegradable plastic for blankets, earphones and magazine wraps and cutlery packs



Plastic cutlery, serveware, and tea cups are sorted, washed, and re-used



We serve sustainably sourced fish on selected flights



We use sustainably sourced paper for menus, safety cards, and magazines

Sections

1 Sustainable sourcing

2 Procurement policies and systems

Sustainable sourcing

Our purchasing practices are of the highest calibre of professional and ethical standards. Most of the purchasing requirements for both Cathay Pacific and Cathay Dragon are managed by the Procurement & Aircraft Trading Department.

Building on our efforts to establish sustainable sourcing guidelines allows us to continue to examine opportunities for using alternative materials with lower environmental impacts. We aim to encourage our suppliers to improve their sustainability practices through capacity building and by sharing knowledge on best practices as part of our approach towards sustainable procurement. Our purchasing teams understand the strong need to consider sustainable purchasing and responsible supply chain practices when making decisions towards buying. We require our suppliers to provide clear, accurate and appropriate reporting of their progress in order to achieve the objectives in our Supply Chain Sustainability Code of Conduct.

Successful applications in recent years

Blankets made from recycled plastic bottles

In 2016, Cathay Pacific introduced new blankets for our Economy Class passengers that are made entirely from recycled plastic bottles. Each year we use over 450,000 blankets, and therefore this initiative enables us to contribute significantly towards the reduction of plastic waste.

Napkins made from sugarcane

We introduced a new type of napkin that is more environmentally friendly, yet does not compromise on size, thickness and overall product quality. This new cocktail napkin, introduced to customers in November 2016, is made from 70% sugarcane and 30% wood pulp.



Sustainable inflight cocktail snacks and inflight catering:

Our sustainability procedures extend to our inflight services, which is highlighted through our transition towards a new supplier of roasted peanuts. The new selected supplier follows the requirements to use sustainably produced palm oil as stated in our tender. Developed by the Roundtable for Sustainable Palm Oil, Certified Sustainable Palm Oil must meet a set of environmental and social criteria to help minimise any negative impacts such as deforestation whilst protecting the rights of indigenous people.

Our team also works with suppliers who assist us in expanding our inflight catering. They offer sustainably sourced seafood on a greater number of routes. In the long term, we aim to utilise alternatives with sustainability attributes. In addition, we aim to expand our support of products that adhere to the relevant sustainability credentials by organisations such as the Fairtrade Foundation, the Forest Stewardship Council (FSC) and the Marine Stewardship Council (MSC).

Inflight carpets from waste material:

Our new Economy Class cabin, which was first introduced in 2012, features carpets produced from regenerated nylon waste materials, such as discarded fishing nets, fabric and carpets. These have been installed across Cathay Pacific and Cathay Dragon wide-bodied passenger aircraft, such as the Airbus A330 and Boeing 777.



Airport lounge

In 2014, Cathay Pacific's passenger lounge at Charles De Gaulle (CDG) Airport, Paris, was LEED® certified to the Silver level. This was highly consistent with our commitment to consider green standards for our new buildings and refurbishments. CDG was also the first airport lounge in the world to be LEED certified.

Through well thought-out new designs of the lounge, we were able to enhance energy efficiency by maximising the use of natural light. This was achieved through the use of used LED lighting and appliances, as well as the installation of movement sensors and meters, the incorporation of water efficient devices and the use of low-emitting materials.



Partnering with the local community

With financial support from the Hong Kong Government's Home Affairs Department, and in association with the Hong Kong Outlying Islands Women's Association Limited (OIWA Limited), our subsidiary CPCS collaborated with local community service centres in Tung Chung in 2009 to establish an inflight cutlery and semi-processing vegetable facility. The aims of this initiative are to support women's development, promote harmonious families and build inclusive communities. It provides training for full-time and part-time employment near these women's homes, enabling them also to look after their families. Feedback from the community has been highly positive, and in 2016, approximately 45 part-time housewives were hired to work at the facility. Involving local communities by leveraging on our operations on Lantau Island aligns with the suggestions raised by stakeholders during previous focus groups, as well as last year's focus group held with our suppliers.

Sections

1 Sustainable sourcing

2 Procurement policies and systems

Procurement policies and systems

We require the procurement of all goods to be undertaken with full compliance in regards to the applicable laws, tax regimes and regulations that govern the specific transaction, with full cognisance taken for our Anti-Bribery, Anti-Trust and Data Protection policies.

We have also improved our sustainable procurement policies and systems over the years. Since the launch of our Supply Chain Sustainability Code of Conduct in 2007, we published a revision in 2009 to include our standards for business ethics, which reflect our strong preference to work with suppliers who share our commitment towards honesty and integrity and who seek to integrate principles of sustainable development into all areas of their business. We further built our strength with our Code of Conduct to align the expectations that we have of our suppliers with our Sustainable Development Policy in 2012. This policy is available internally through our intranet and shared within our existing and potential suppliers, both locally and at our outposts.

Supplier Code of Conduct

Our aim is to enhance the sustainability of our supply chain through encouraging and applying ongoing compliance with our Supply Chain Sustainability Code of Conduct, and with continued engagement and collaboration with our suppliers. We manage our sustainable development risks related to our supply chain by actively working with suppliers who share our standards towards issues related to the environment, health and safety, human rights, labour practices, business ethics and harmony within the community.

The Code of Conduct covers items including:

- Legal and regulatory compliance
- Environmental management
- Intolerance for the 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

The Code of Conduct forms part of the supply tenders and contracts managed by our local offices. Suppliers, both new and existing, are expected to confirm their compliance with the standards described in our Code. Compliance with the Code of Conduct is included as a contractual requirement for all of our suppliers.

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 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 Code of Conduct to include <i>ethics</i>
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	The Corporate Social Responsibility Code of Conduct renamed as the Supply Chain Sustainability Code of Conduct
2013	Project Horizon commenced to modernise and improve procurement processes and activities
2015/ 2016	Becoming a member of SEDEX

SEDEX sustainable supply chain platform

As a founding member of **oneworld**, the **oneworld** Procurement Best Practises Working Group – CSR was established in 2015 to understand how each member airline currently manages sustainability risk in their supply chains and share best practices.

In 2016, we focused on expanding our SEDEX usage across the **oneworld** alliance membership group and will be leveraging the collaborative platform to gather valuable actionable corporate responsibility data from our supply chain in the near future.

Selecting more sustainable plastics

Following our study on plastic use back in 2012, we partnered with Business for Social Responsibility (BSR)'s Centre for Sustainable Procurement (CSP) in 2014. We worked with our Inflight, Product and Procurement teams to understand better how to procure more sustainable containers, cutlery and materials for our inflight meal service products, specifically for those items of single use. Our aim for this exercise was to create the tools and procedures that will help steer our procurement decisions towards plastics with a much lower environmental impact for our immediate future.

Biodiversity



Biodiversity matters

The conservation of habitats and species diversity is very important to Cathay Pacific. We recognise that we have an impact on the destinations in which we fly to and understand the importance of respecting the biodiversity existing in each ecosystem. We also recognise the importance of raising public awareness through educational activities and how airlines play a role. With this in mind, we continue to develop and incorporate several elements of biodiversity into our sustainable development strategy.

What our stakeholder thinks

In today's world, companies are expected to understand how their choices impact biodiversity around the globe. It is vital to uncover ways in which ecosystems can be protected. Thus, companies need to discuss and incorporate biodiversity as part of their business operations. This means that in addition to supporting habitat protection and animal welfare initiatives undertaken by third parties, we are also expected to take action to reduce the impact from our daily operations. Our positive efforts regarding sharks and shark-related products in particular have been viewed as a move in the right direction by stakeholders.

Performance update



Cathay Pacific supports the United for Wildlife Transport Taskforce Buckingham Palace Declaration to end wildlife trafficking. We are committed to **not knowingly facilitate or tolerate the carriage of wildlife products**, where trade in those products is contrary to the Convention on International Trade in Endangered Species of Wildlife Fauna and Flora (CITES), and as such is illegal under international and national laws.



All ivory and ivory products are now embargoed on our flights.



A full embargo on shark fins was implemented.

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- 1 Cargo policy
- 2 Sustainable food policy
- 3 Stakeholder collaborations

Cargo policy

In addition to adhering to the Convention on International Trade and Endangered Species (CITES) requirements regarding the transportation of endangered animals and plants listed under Appendices 1 and 2 of the Convention, we have been working with industry associations, conservation organisations and academia in regularly reviewing our cargo carriage policy.

Back in 2015, we placed an embargo on the transportation of a) hunting trophies (including ivory); and b) racing greyhounds (exporting from Australia to any destination and importing to Hong Kong from any place of origins). We have also implemented strict policies against the carrying of shark fin and ivory products since 2016.

United for Wildlife Declaration

Recognising the devastating impact from illegal and inhumane wildlife trade, Cathay Pacific signed the United for Wildlife Transport Taskforce Buckingham Palace Declaration in June 2016.

This industry-led declaration, which initially targeted the illegal trade of African elephants, rhinos, some big cats, and pangolins that originated from and transited through East Africa, was developed by the transport sector, intergovernmental organisations and conservation groups in order to ultimately put an end to illegal wildlife trade. United for Wildlife (UFW) is a joint collaboration between seven of the largest international conservation organisations, namely Conservation International, Fauna & Flora International, the International Union for Conservation of Nature (IUCN), The Nature Conservancy, Wildlife Conservation Society (WCS), WWF and the Zoological Society of London (ZSL). UFW aims to implement a global action plan whereby organisations and government partners can work in unison to finally end all wildlife related crimes.

As a signatory to the declaration, Cathay Pacific is committed to not facilitating or tolerating the carriage of wildlife products, where the trade is contrary to CITES and as such, is illegal under international and national laws.

The declaration contains commitments which focus on information sharing, staff training, technological improvements and resource sharing across companies and organisations worldwide. Cathay Pacific will be working closely with IATA and the International Taskforce on the Transportation of Illegal Wildlife Product to identify the role that the industry plays in the illegal wildlife trade, and to find ways that help break the chain between its suppliers and consumers.



As a reputable commercial airline, we cannot tolerate transporting illegal wildlife product in our aircrafts. As such, we have the responsibility to increase the awareness of our staff, customers and associates on the magnitude and implications of illegal wildlife trade.

Paul Loo
Chief Customer and Commercial Officer from Cathay Pacific

Shark's fin embargo

In keeping with our Sustainable Development Policy, in the later stages of 2012 we announced a restrictive carriage policy that led us to permit carrying only sustainably-sourced sharks and shark-related products. The decision was based upon independent science and research-based data, as well as deep dialogue within the expert community. We continued to engage with the global scientific community to further review and develop guidelines in implementing our restrictive cargo policy. In particular, we engaged with two highly-respected international shark conservation agencies: the International Union for Conservation of Nature's Shark Specialist Group (IUCN SSG) and TRAFFIC International - an NGO network that monitors wildlife trade.

In mid-2015, an acceptance procedure for sharks and shark-related products was issued to all Cathay Pacific and Cathay Dragon ports. Requests for the shipment of sharks or shark products were required for assessment by an external panel in accordance with the sustainability of the species before they could be considered for carriage. The instituted procedure screened out all shipment requests for any and all shark-related products. We understand the community's desire to promote responsible and sustainable marine sourcing practices, and this remains very important to Cathay Pacific's overall sustainable development goals. As such, effective from June 2016, shark's fin products were not accepted for carriage. We will continue to review this practice going forward, as we do all our sustainable development policies.

Ivory and ivory products embargo

In November 2016, we implemented an embargo on the transportation of all ivory and ivory-related products. The embargo is inclusive of raw ivory, worked ivory, carved ivory, ivory sculptures and decorative ivory.

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- 1 Cargo policy
- 2 Sustainable food policy
- 3 Stakeholder collaborations

Sustainable food policy

Cathay Pacific recognises the need for a policy to conserve certain species that are endangered due to the problem of overfishing. We will execute this by choosing to opt out of purchasing specific unsustainable food items and ask for information with regards to where the food was originally sourced.

It is Cathay Pacific and Cathay Dragon's corporate policy not to serve shark fin soup either inflight, at Cathay Pacific City, Cathay Dragon House or at any corporate events or meals which are organised or subsidised by the company.

Our internal Sustainable Food Policy was adopted in 2011.

Inflight initiatives

Inflight, Cathay Pacific's Catering Team has been working with our catering suppliers to support sustainable seafood and fisheries. Since 2010, in Economy Class on our flights from European ports, we have been serving fish from sustainable sources, such as those that are Marine Stewardship Council (MSC) certified. Whilst this may not be the most economical option in the short term, we believe that as the supply chain develops and matures, this will be the right way forward, and so we are therefore prepared to support it wherever possible.

We have been serving fish from sustainable sources since 2011 onboard for particular cabins on a number of route. We will continue to work with our catering suppliers to develop supply chains for sustainably sourced seafood for our flights where practicable.

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Stakeholder collaborations

Conservation has long been a topic of concern for Cathay Pacific. For many years, we have been sponsoring habitat-protection programmes within Asia, and working with NGOs from across the region.

For instance, through the inflight Change for Conservation on Cathay Dragon flights, we have raised nearly HK\$8 million for the Nature Conservancy since 2005, in order to support conservation initiatives in mainland China, including the protection of vital watershed areas, the development of sustainable fuel alternatives for local residents in Yunnan, and the monitoring of the Yunnan Golden Monkey Conservation Association. We have also worked with Friends of the Earth and the World Wide Fund (WWF), providing funding that resulted in the planting of 10,000 tree seedlings around Hong Kong and helped boost the conservation of migratory water birds, which included threatened species and the sustainable use of their wetland habitats in the East Asian–Australasian Flyway.

In recent years, through the partnership with the Kadoorie Farm and Botanical Gardens in Hong Kong, we have helped to reintroduce 609 endangered pig-nosed turtles to Indonesia by donating both cargo space and air tickets to the organisation. We delivered an endangered Sumatran rhino, Harapan, safely from the United States to his indigenous home in Indonesia. With fewer than 100 of these animals remaining in the wild, Harapan was transported back to the Sumatran Rhino Sanctuary for breeding and conservation purposes. Harapan was accompanied by a veteran animal keeper during the 16,000-kilometre journey. In preparation, the 816 kg rhino underwent medical checks and was trained to walk into, and voluntarily remain, in his crate. In addition, we assisted the Toronto Zoo by shipping boots and filtration equipment free of charge to rhino conservation rangers based in Indonesia.

Aligned with our efforts of marine conservation in the region, and supporting tourism resources at our destinations, we also support the work of Stop Fish Bombing, a non-profit organisation based in Hong Kong. The NGO incorporates a Silicon Valley-based technology company and a TV production company in Malaysia. By working with governments, local authorities, NGOs and the private sectors, Stop Fish Bombing focuses on developing underwater bomb detection technology and raising public awareness on stopping illegal activities (fish bombing), protecting reef habitats and developing sustainable aquaculture as an alternative livelihood for fishermen.

[Link](#) to Stop Fish Bombing video.

Since 2009, Cathay Pacific has engaged with shark conservation specialists and organisations in order to better understand the issue whilst exploring our role as a responsible business. We are proud to say that we are one of the first airlines in the world to raise awareness in regards to the unsustainability factors within the global shark trade. We will continue to contribute and direct our attention towards biodiversity conservation in order to give back to our community and invest in the future.

People



People matters

People are key to our success - from our staff that differentiate us from other airlines to the customers that fly with us and the communities we serve around the world. This is why we believe in empowering our staff to make a difference in the local communities across our global network. We understand the importance of prioritising people above all else.

What our stakeholders think

Our staff have shown an increased interest in our company's sustainability strategy and how it can be integrated into their daily work. They have emphasised the need for targeted communication that is proactive and ongoing. Sustainability messages of digestible content are expected to be communicated through various platforms that cater to different groups of people. In addition, staff would also like increased opportunities for two-way exchanges with management.

Performance update

Our people



35,990

people around the world.



47 % male



53 % female

We employed pilots from more than **48 different countries** and cabin crew representing **30 nationalities**.

We operate in **more than 50 countries** where local staff were employed.

Cabin crew nationality mix (%)



- 57% Hong Kong
- 5% Taiwan
- 5% Canada
- 4% Malaysia
- 4% Philippines
- 4% Japan
- 4% United States
- 4% United Kingdom
- 3% Korea
- 2% Singapore
- 2% Thailand
- 2% Indonesia
- 2% India
- 1% Australia
- <1% Others

Staff well-being

Over



13,500 employees

have joined our company Yammer network, giving our teams a new avenue to engage, interact and collaborate with each other. A dedicated "Sustainability" group was also established.



11,186 crew

attended the annual refresher training on Disability Awareness and Occupational Health and Safety in 2016. The sessions focused on education of manual handling, and protecting crew from injuries.

Communities

Over



1,400 hours

were donated by our volunteers in 2016.



HKD 165 million

raised by **Change for Good** for **UNICEF** in the past **25 years**, helping children in **more than 150 developing countries** around the world. Around **18 tonnes of coins** were received in 2016.

Sections

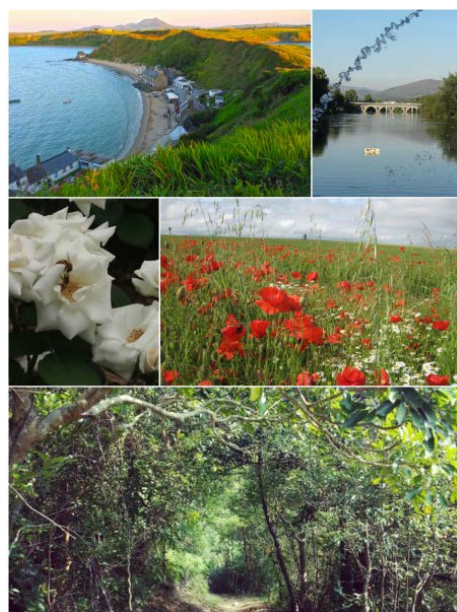
- 1 Employee relations and engagement
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Employee relations and engagement

We encourage our people to provide their views, ideas and feedback through a variety of channels including the intranet, structured surveys, focus groups, direct communication with line managers and other department-specific platforms.

New online platforms for social media and other crowdsourcing ideas were launched for Cathay Pacific and Cathay Dragon staff in 2015. The use of Yammer, an enterprise social media platform, was introduced to enable teams to communicate in a completely different way. Accessible through PCs and mobile apps, employees can join a wide variety of work and leisure groups to engage and interact with people across the company, within their departments or those who share similar interests. Overall, over 13,500 staff have since joined the company’s Yammer network. A sustainability group was set up and staff have been actively contributing posts on waste reduction, energy efficiency improvement and other environmental developments in the industry.

In 2016, we organised a series of lunch talks on the issues of conservation, biological resources, and food waste, and a photo competition was launched to encourage further engagement. These activities took place throughout the year, with a collective aim to raise awareness and encourage our staff to lead a more sustainable lifestyle.



○ The winning photos of our World Environment Day Photo Competition 2016

Engaging with our diverse, mobile workforce

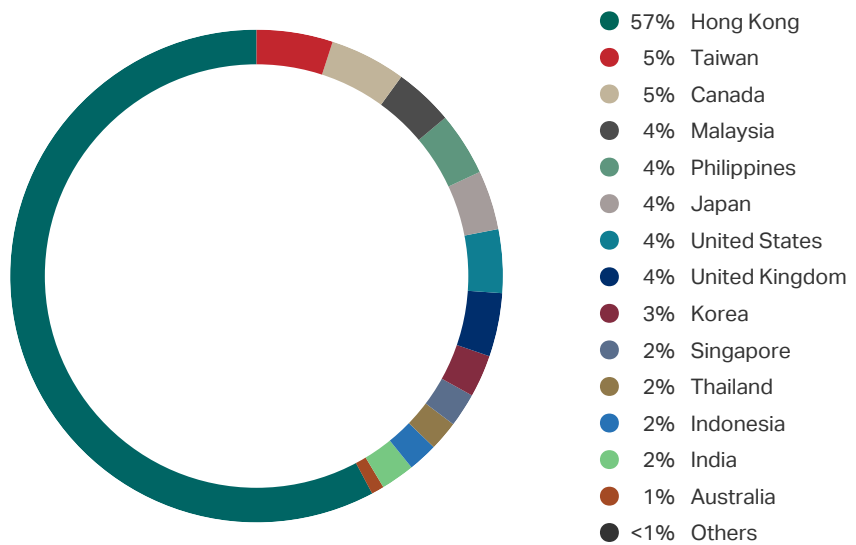
One of the factors that make our team so unique is that our staff are widely dispersed around the world, consisting of diverse cultures, background and languages. We work with multiple trade bodies based in different countries, each with specific union regulations. Yet, we uphold freedom of association for all of our staff. Industrial relations continue to be an important issue however, and we are actively working with the various groups to continue to enhance communication and consultation, in order to ensure that views are heard and acted upon appropriately.

Cultural diversity

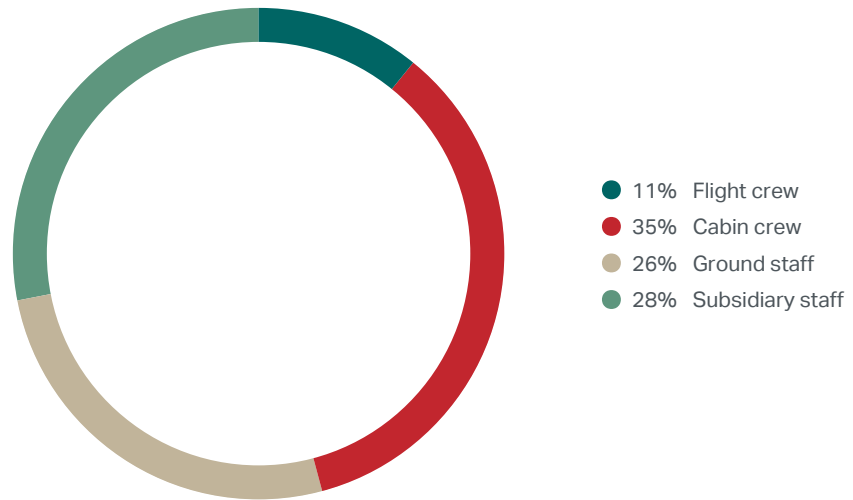
As a global business and one of the largest employers in Hong Kong we have a diverse, multicultural workforce. We appreciate the importance of leveraging the richness this diversity brings. Diversity brings us closer to our colleagues and customers, it enhances a Life Well Travelled for both our passengers and our people.

In 2016, we employed pilots from more than 48 different countries. Our cabin crew represents 30 different nationalities, and our local staff operate in more than 50 countries.

Cabin crew nationality mix (%)



Flight crew, cabin crew, HK ground staff and subsidiary staff (%)



We are committed to creating a more inclusive environment. We believe it is our corporate responsibility to be a role model in Hong Kong. Our aim is to create and sustain a fair, equitable and inclusive employee experience for all our staff across the CX Group that encourages them to be their authentic self at work.

Any type of discrimination based on background and culture orientation is viewed as a serious matter, one that we approach with an intolerance policy.

Ground staff

In 2016, the People Communications and Engagement team was formed to oversee the corporate-wide internal communications and engagement agenda for both Cathay Pacific and Cathay Dragon. The team is focused on how we can more effectively communicate and engage with all our people through existing and new communication channels, events, forums and recognition programmes.

Some of these include The Journey magazine, our intranets, social collaboration via Yammer, auditoriums and various employee events like our A350 aircraft experience, our final 747 flight and our 70th anniversary event of the Street.

The team also looks after our annual Niki and Betsy awards programme. Our annual Betsy Award has been celebrating our customer facing teams for over 10 years. And for the first time, the new Niki Award is focusing on all the great work being done behind-the-scenes that helps us operate smoothly, every day.

This team formation marks an important first step forward towards building an environment where our people better understand the company's strategic direction, and can feel more connected to the company and our brand.

HKIA service touches customers' hearts

The Heart Awards is a recognition programme that acknowledges our staff's outstanding services and other performances beyond the call of duty at Hong Kong International Airport (HKIA). In 2016, three presentation ceremonies were hosted and awards were given to more than 600 staff who received extraordinary praise from their superiors and passengers after demonstrating consistent service excellence. In addition, the HKIA team voted for both individual and team awards, recognising those who have shown great handling skills and support in assisting passengers, especially during times of operational disruption.



Engaging with the directors

Since 2012, a number of employee activities involving the airline's directors have been organised, allowing our people to engage directly with senior leaders in an informal and casual setting outside of the workplace. For example, around 40 staff participated in a hike with Chief Executive Ivan Chu in 2016.



Cathay City rooftop farm

Cathay Pacific's first-ever rooftop farm was launched in April 2016 with the aim of transforming a city building's rooftop into a vibrant green space. 130 volunteers from over 20 departments joined the newly-formed Farmer's Club to take part in this urban farming initiative. A farm-to-table event using fresh produce was organised in celebration of the first harvest. During the year, 25 varieties of herbs and vegetables were cultivated, yielding over 500 kg of fresh produce.



I have cooked for myself since I studied abroad, and over the years I discovered that besides cooking skills, the freshness of the ingredients can have a significant influence on the taste of dishes. One of the many advantages of growing your own food is that you can guarantee what you eat is safe, healthy and fresh.*

Sindy Lam

Assistant Manager, Revenue Management System
Member of Farmer's Club

Flight crew

Our teams across Cathay Pacific and Cathay Dragon support pilots on matters relating to their employment and wellbeing, including benefits, rostering, sickness and injury, in addition to technical and operational matters. On the communications and engagement side, we keep pilots updated on developments within the Flight Operations Department, and across Cathay Pacific. This is achieved through regular management updates, fleet and training news, fleet forums where pilots meet with managers and via our corporate social media platform. We also host regular social events for our senior pilots, giving them and their partners an opportunity to meet with the senior management team.

Cathay Pacific pilots based in Hong Kong, Europe, North America, Australia and New Zealand are represented by various associations. Our employee relations team strive to ensure that the workplace conditions negotiated with each of the associations are fair and work in the best interests of pilots and the sustainability of Cathay Pacific in the long term.

People

Employee relations and engagement

Engagement is further strengthened through the Cathay Dragon Pilots Association. Pilot representatives have worked closely with Cathay Dragon's management on different committees to provide feedback on various fronts, including meal selection, accommodation, rostering and scheduling. Communications with crew continue through twice-monthly fleet forums and 'town hall' meetings with the management. There are also regular bulletins from the Director Operations and other managers.

Our pilots continued to partner in the Cathay Dragon Aviation Certificate Programme (CDACP), a long-running corporate social responsibility initiative that has been at the core of the Cathay Dragon Youth Aviation Academy for the past ten years. Many graduates of the programme began their careers in different areas of the aviation industry.

Fly pink

In 2016, Fly Pink was established by our female pilots from Cathay Pacific, Cathay Dragon and Air Hong Kong to raise awareness and funds for The Hong Kong Breast Cancer Foundation (HKBCF). Since its establishment, over \$1,485,500 has been raised through charity sales and other fund raising events. For example, throughout the month of October in 2016, our pilots wore pink epaulettes, sold pink ribbon pins, held a charity luncheon, and bid a nostalgic farewell to our magnificent last Cathay Pacific Boeing 747-400 on her final passenger scenic flight over Hong Kong – all in aid of the HKBCF.



Fly Pink is a 100% charitable society. Our aim is to join hands to raise funds and awareness throughout our community, in our fight against breast cancer, and in support of those affected.

Antonia Zoya-Anton
Senior Captain and Chairperson, CX Fly Pink

Cabin crew



Communication and consultation

As part of our frontline team, the Cathay Pacific cabin crew provide invaluable input to the way we serve customers. Their views are important to us, and consultation and feedback are a key focus. We do this by strengthening existing crew forums, including yearly Inflight Service Managers (ISM) forums, consultative groups, the Premium Service Ambassadors, Economy Class Service Ambassadors, Cabin Quality Specialist groups and workshops tailored to the different categories of crew.

At Cathay Pacific, the Cabin Crew Consultation Group, comprised a diverse range of cabin crew led by the Cabin Crew Relations & Communications Section, has been holding monthly meetings since 2001. In addition to helping with Crew Forums, the group is also consulted on a regular basis for matters of interest and relevance to the crew community, and they also provide valuable input for the management of the Inflight Services Department (ISD).

To engage with the crew community on a regular basis, Cathay Dragon carried out monthly Rostering Focus Group meetings throughout 2016. These groups discuss various roster issues which prevail across the crew community and relay constructive ideas collected from other crew members. The focus group also provides fresh management insights to the diverse crew community.

Cathay Dragon's Cabin Crew Support Team (CCST) meets monthly to discuss operational issues and looks for ways to enable a more effective service and to improve occupational health and safety conditions in the cabin. To give crew a better understanding of other operational areas, the CCST acts as a channel to disseminate information about the decision and logistical processes involved in facilitating changes and improvements.

Newsletter and social network

Cathay Pacific produces bi-weekly cabin crew newsletters (CCNL) and monthly safety newsletters in both print and digital formats to ensure cabin crew are well informed. Cathay Dragon publishes its own CCNL on a monthly basis. Cathay Dragon also implements DragonTV, an initiative which is hosted by the General Manager of Inflight Services. This was shown on a monthly basis on Dragonet, iKA, at the Crew Lounge and on the KA Channel, along with a special edition on the Cathay Dragon rebranding in November.

A Yammer group has been created to encourage cabin crew to share views and suggestions with the company in an informal way. Our inflight management team has been actively engaged in constructive dialogue with our cabin crew on this platform.

Meeting the needs of our cabin crew

In recognition of our expanding inflight team and increasingly complex service environment, the following are some of the areas where initiatives are ongoing with the aim of meeting crew requirements and more effectively catering to their needs:

- **Lifestyle and rostering**

We work to provide roster flexibility to crew in order to meet their lifestyle needs. Throughout the years, we have launched different schemes to cater to the different needs of our cabin crew. These have included the High Density Scheme, the High Hours Scheme, the Route Specific Rosters Scheme and the Work-Life Enhancement Leave Scheme. These initiatives on flight request systems provide more flexibility on crew rosters.

- **On the job**

We endeavour to provide our cabin crew a safe and efficient working environment. In 2016, we launched special meal options for cabin crew. Similar to passengers, cabin crew may select special meals to meet their dietary needs. Our crew was also integral in the development and implementation of the defect-free cabin campaign. This has been an ongoing, long-term working group with Inflight Service Managers (ISM) and the Engineering and Cabin Quality & Standards teams to maintain the high standards of our cabins.

- **Recognition and support**

We increased interaction and engagement to recognise the efforts of our cabin crew through receptions, top performers' dinners, bi-monthly crew forums and ISM workshops to discuss ideas and issues. We also recruited a team of Performance Development Executives and Performance Development Assistants to strengthen the support for the Line Management Teams and bonding with crew. Jetset TV, launched in 2011, is a lifestyle magazine in a video format, where crew are responsible for developing story ideas, script-writing, producing and presenting topics that are of interest to them.

- **Cabin crew helpdesk**

Cathay Dragon Cabin Crew Help Desk in Hong Kong and Shanghai provide personalised care and support to the crew community. Manned by a group of senior cabin crew seven days a week, Help Desk handles enquiries, shares experiences and job knowledge, addresses crew sentiments and exercises 'Tender Loving Care' (TLC) to crew members who are affected by flight disruptions or work injuries. Similarly, the Cabin Crew Help Desk in Shanghai offers support to locally-based crew. Approximately 100 cases are handled by the helpdesk every week.

Flight Attendants' Union

Salary reviews are conducted every year, and any adjustments are made at the corporate level. Discussions between the Flight Attendants' Union and Cathay Pacific management took place at end of 2016 and an agreement was reached by both parties. The dialogue on mutually important matters continues on an ongoing basis.

Charitable work

Our cabin crew is active and enthusiastic in contributing to charitable causes, both locally and internationally. In 2016, Cathay Pacific cabin crew participated in different activities such as Pink Walk for Breast Health and Beat the Banana Run, raising funds for local charities. In December 2016, cabin crew from different countries came together to organise the International Food Fair in Cathay Pacific City. Cabin crew chefs prepared their signature dishes from their home countries and sold them to benefit the charity group Sunnyside Club. This event not only raised funds for those in need, but also celebrated diversity among the cabin crew community.

Internationally, cabin crew partner with Habitat for Humanity on charity trips. In 2016, around 30 crew members, together with the General Manager Cabin Crew (GMCC), travelled to developing countries to build houses for those in need.

In collaboration with Cathay Pacific and the Hong Kong Breast Cancer Foundation, Pink Ribbon pins were sold throughout the month of October to Cathay Dragon's cabin crew, who wore them inflight in support of the meaningful event. Members from the Hong Kong Breast Cancer Foundation visited Cathay Dragon House to conduct Breast Cancer Awareness talks to our cabin crew. The campaign was well-received, raising a total of HKD\$38,000 from our community of 1993 cabin crew.



Opening of Beijing base cabin crew

The grand opening ceremony of Cathay Dragon's Beijing-Based Cabin Crew Briefing Office took place on 11 November at the Beijing Capital International Airport. The ceremony was led by General Manager Inflight Services, along with members of the ISD Management in a simple ribbon and cake-cutting ceremony. The first batch of Beijing-based cabin crew were welcomed with a celebratory dinner.



Crew forum and annual dinners

To facilitate enhanced communication and engagement, Cathay Dragon hosts regular crew forums and appreciation dinners. In 2016, 12 crew forums were held in Hong Kong and one each in Shanghai and Hangzhou respectively, reaching out to more than 600 cabin crew. A variety of issues were raised in these forums, which were then followed up by the relevant departments. These issues included crew rostering, flight patterns, new destinations, policies, catering matters, hotel issues and travel benefits. In addition to the crew forums, many members of cabin crew across different ranks and nationalities also joined various annual dinners, crew gatherings and the annual Inflight Sales Fun Fair.



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Attracting talents

As a major employer which supports Hong Kong, we endeavour to demonstrate good corporate citizenship. We 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 have adopted formal mechanisms through which staff can make a complaint of discrimination or harassment in any form. The practice of undertaking local recruitment in the communities in which we operate has been in place for the past 25 years. 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 our staff, then to the local community, and then, finally, overseas. Most of our overseas hiring relate to skills or experience that are not readily available locally.

Brushwingers

The Brushwingers orientation programme was revamped to help new joiners learn more about our company in preparation for their first day. The unique name was chosen to give our new joiners an identity and to help them build a sense of belonging. A new interactive site has been set up providing Brushwingers access to information regarding the company, our values, culture, and profiles of other Brushwingers in different parts of the business.

The orientation programme was expanded to give Brushwingers an opportunity to obtain in-depth information on our company, such as through meeting managers from different departments and visits to our major subsidiaries and suppliers.



We all know that starting a new role in a new organisation can be daunting, even overwhelming. We are determined to ensure we help our Brushwingers feel a sense of belonging and are ready from day one.

Tony Reynolds
Head of Employee Experience

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Career development and training

We are passionate about promoting a culture of continuous learning, and we support staff that want to further develop their career. We have invested heavily in extensive formal training, online learning, seminars and forums. Managers conduct performance reviews for all staff as part of our performance development and management process. We also support ongoing vocational education and career breaks for staff members who wish to pursue external activities to further enhance their careers.

We offer specific programmes to build staff competencies and careers in the following areas:

Career Choices	Brief Description
<p><u>Management Trainee</u> (Part of John Swire & Sons Hong Kong, the majority shareholder of Swire Pacific Limited, also the majority shareholder of Cathay Pacific Limited)</p>	<ul style="list-style-type: none"> • Summer internships through the John Swire & Sons Hong Kong programme • Aims to nurture our next generation of business leaders • Three-year development programme, with classroom training, workshops, and attachments to different units of our business within and outside of Hong Kong
<p><u>Engineering Trainee Programme</u></p>	<ul style="list-style-type: none"> • A 30-month development programme, with classroom-based aircraft training alongside practical experience in postings to different engineering sections • Eight-week long engineering internships with two intakes during summer and winter
<p><u>Cadet Pilot</u></p>	<ul style="list-style-type: none"> • A 60-week development programme for becoming a commercial pilot • Residential course at a specialised facility in Australia
<p><u>Cabin Crew</u></p>	<ul style="list-style-type: none"> • A three-year contract to train as a safety officer, caring team player and ambassador for Hong Kong

Career Choices	Brief Description
<u>Customer Services Officer</u>	<ul style="list-style-type: none"> • A nine to 12-month development programme on customer service skills within airside duty, and technical check-in procedures training on landside
<u>IT Trainee Programme</u>	<ul style="list-style-type: none"> • A two year training programme • 10 trainees rotating through a range of programming and non-programming IT-based disciplines and business units • Opportunity to work their way up the career ladder depending on their performance and opportunities available • One-on-one mentoring and support to develop technical skills such as cloud computing, mobile apps, RFID tag technology and web-based activities
<u>Operational Leadership Programme</u>	<ul style="list-style-type: none"> • An eight-year programme • On-the-job experience provided within different operating divisions and departments in the Cathay Pacific Group • Opportunities to broaden and deepen technical, professional and soft skills • Opportunities to be supported and coached to develop management and leadership skills

People development

The 'People Development' team was set up to provide a greater focus on people development across the network. The team supports the company's leadership pipeline in the identification and development of staff who demonstrate high potential and performance, as well as identifying suitable career development opportunities. A formal leadership and management development curriculum has been delivered to relevant staff at all levels in both Hong Kong and outposts.

Learner's World – online training platform

Learner's World is our online training platform that allows staff to independently access training without the constraints of time and place. It offers both personal development opportunities and work-related training. It is also a key platform for our compliance-based training. An online learning course on cultural awareness has been available since 2006, covering issues such as taboos, social norms, languages, values amongst different religions, reflections on cultural sensitivity. The aim of this is to demonstrate the importance of respect and sensitivity to other cultures and to avoid any behaviour that some passengers might find offensive. Additionally, there are language courses which focus on the specific requirements that support various job functions. There are also a number of generic courses on effective communication available for all staff.

Equipping our airport teams

Our Airports Learning and Development (ALD) team is responsible for driving and enabling the development of skills and competencies required of airport teams worldwide. ALD works closely with local airport training coordinators, supervisors and managers to ensure training and development approaches, programmes (both technical and behavioural) and capabilities are optimised.

Cabin crew service and development

To enable the cabin crew team to provide the highest quality of service to our customers, a series of training procedures are put in place for our cabin crew. The overall approach we take is the development of individuals on the relevant knowledge, skills and attitude that set the foundation not only for delivering service, but also for continuous learning on the job. This helps them to adapt to the complex and evolving service environment.

Here are some of programmes undertaken by the cabin crews of the Cathay Pacific and Cathay Dragon.

Cathay Pacific:

- **Blended learning approach:** after new recruits have passed stringent emergency and first aid training, the Cathay Pacific Inflight Service Training and Development team provides a comprehensive training and development programme using a 'blended learning approach' that focuses on the service philosophy, business awareness, as well as service and interpersonal skills.
- **A variety of training:** includes induction and promotion training, on-the-job coaching and web-based learning and workshops. Annual refresher workshops are theme-based and aim to refresh and bring the crew up to date on relevant skills and knowledge. In 2016, induction training prepared 311 new recruits to join the cabin crew workforce. Another 1,177 crew completed progression and promotion training for various levels of supervisory and leadership positions. Throughout the year, over 11,168 crew attended the annual refresher training classes on disability awareness and occupational health and safety. The focus in 2016 was the reinforcement of the positively received manual handling guidelines introduced in 2015 from training provider, Pristine Condition of UK.
- **Service Leadership Forum:** a joint workshop for inflight service managers and other frontline team leaders from the Hong Kong and outport airport teams were held on over 30 occasions in 2016. The one-day workshop explored the business realities, challenges and ways frontline leaders can support the larger corporate on-time performance initiative.
- **A350 preparation:** an e-learning module was launched in late 2015 to prepare all crew for the arrival of the new Airbus A350 aircraft in 2016. To support further training requirements, a new approach to the cabin training mock-up is under development, due to be completed in 2017. Instead of the traditional aircraft cabin, the new flexible modular classroom design will enable flexibility in accommodating a wider variety of training needs.
- **Secondment programme:** a key aspect that contributes to the creation of a learning culture is the ability for cabin crew to participate in a secondment programme, for instance being seconded part-time as a service trainer. This kind of opportunity brings two types of benefits. Firstly, it allows experienced crew to share their knowledge and experience with the trainees. At the same time, it gives these more-experienced crew exposure and experience in other aspects of the business.

Cathay Dragon:

- **A variety of training:** the Cabin Crew Training and Development Centre conducted 213 classes of internal training covering an equivalent of 466 training days in 2016 in order to provide quality training programmes covering the knowledge, skills and qualities that help cabin crew become competent in their job and enable them to meet and exceed our passengers' expectations
- **Cathay Pacific/Cathay Dragon and Ground Service Leadership Forum (SLF):** co-hosted for the first time in 2016, the one-day forum addressed the issue of operational efficiency, and ground and cabin leaders gathered to share ideas on how to achieve on-time performance. The 'Crucial Conversion' between ground and air colleagues provided a platform for different teams to hear each other's perspectives, thus enhancing understanding and collaboration.
- **The Cabin Crew Mentorship Programme:** since its launch in 2012, two workshops are held annually by a group of mentors. In addition to mentoring the mindset and career skills, the workshop also provided techniques in overcoming stress and poor communication between different generations. The majority of the mentee groups reported feeling inspired by their mentor's dedication, which in turn helped to lead to a happier career in Cathay Dragon and an overall more enjoyable personal life. To recognise the dedication and passion of our group of mentors, a Best Mentor Award, nominated by their mentees, is awarded to two mentors every year.
- **Brandon Hall Excellence Bronze Award:** the induction eLearning program "Dragonair Food and Beverages in Economy Class" won the Brandon Hall Excellence Bronze Award 2015. This eLearning program is designed for all new joiners as part of their pre-training study. The course has been designed to arouse the trainees' learning interest through a number of interactive exercises and practices, and its accessibility via both iPad and tablets helps to enhance the learning flexibility for the trainees.
- **KA Cantonese App:** this new learning app was introduced in 2016 to help non-native speakers learn Cantonese. The new app focuses on Cantonese Pinyin pronunciation, and introduces inflight service language with vocabulary audio clips. This app is not only designed for non-Cantonese speakers but also for native speakers who are welcome to use it to improve their pronunciation and to provide assistance to those who are learning Cantonese.

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Staff welfare

We offer a comprehensive and flexible package of staff benefits. A dedicated onsite Benefits Services Centre caters to all Hong Kong-based staff, whilst our overseas staff can approach their local People Departments for benefits-related queries.

Flexible benefits: RightChoice

We were one of the first Hong Kong employers to offer a flexible benefits package which is tailored to meet our staff's personal circumstances. Our plan included medical and dental coverage, as well as insurance plans and retirement schemes. There is also an option to buy additional leave.

Staggered working hours

Staggered working hours have been put in place for all Hong Kong non-operational ground staff since 1996. Section heads and staff are encouraged to work out an arrangement that can be of mutual benefit without adversely affecting the work of the team.

Employee Assistance Programme

We provide an Employee Assistance Programme (EAP) in Hong Kong and outports, which staff and eligible dependents can access. It is free of charge, confidential and provides professional (including financial and legal) information and counselling on personal and work-related concerns such as relationships, parenting, emotional disturbances, substance dependency, coping with trauma, grief and preparing for retirement or job transitions.

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| 2 | Attracting talents | 5 | Our community |
| 3 | Career development and training | | |

Our community

We support and invest in the Hong Kong community of which we have been a part for the past seven decades. Our local staff are also actively involved in community initiatives at our outport destinations. They are provided with guidelines to help them choose the types of projects in which we are involved.

Over the years, we have had numerous meaningful community initiatives that have brought significant benefits to local communities. Our strategy is to leverage and align the resources of our company (including our staff and passengers) with the needs of the communities we serve. Our global community investment strategy focuses on two major areas: education and the environment.

Encouraging staff involvement

The Cathay Pacific Volunteers Team was set up in 2007, and by the end of 2016 had 1,500 participating staff. In 2016, our staff completed a total of more than 1,300 hours of volunteering. Further details of these initiatives and their impacts are described in the following sections.

Education

We support and nurture today's young people by providing them with aviation and travel-related education schemes that also support sound personal development. This section outlines our key programmes.

I Can Fly 2016

The I Can Fly programme for 2016 commenced in March with the aim to encourage around 300 young participants to reach for their dreams and enhance their sense of social responsibility. They were engaged in a series of aviation-related training and visits as well as in implementing their self-designed social service projects. During the summer, the top 100 participants visited overseas aviation facilities and gained cultural experience in Singapore and Adelaide, Australia. Over 3,700 students have benefited from this programme since its initial launch in 2003.



Hackathon 2016

The inaugural Cathay Pacific 24-hour Hackathon, a software development and design challenge, was held in October to allow more than 120 young and talented people to showcase their skills in technology and business development by creating innovative technological solutions to enhance the customer travel journey. As well as encouraging innovation, the Hackathon also aimed to inspire participants to join our industry.



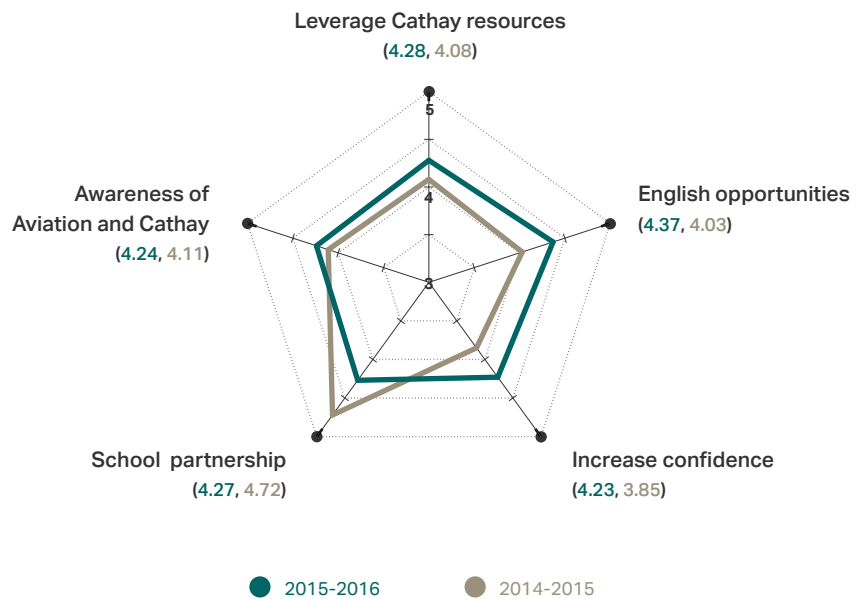
English on Air

Since 2007, Cathay Pacific has been organising the company’s flagship English on Air programme to provide English-speaking opportunities for the young people of Hong Kong. Two different programme activities were designed to cater for secondary school students of different age groups and needs: the Conversation Series and Mock Interviews. A total of 176[^] students from across six schools[^] in Tung Chung participated in the programme during the 2015/2016 academic year.

We continued to evaluate the outcome of our activities with reference to the London Benchmarking Group model through survey responses from 149 participating students and 15 English teachers involved in the programme’s activities.

During the 2015/2016 academic year, the programme continued to perform well against the goals set across five different aspects. Over 90% of students found the programme effective in encouraging them to practice their spoken English.

English on Air programme evaluation (2014-2016)



Cathay Dragon Aviation Certificate Programme

Launched in 2005, the Cathay Dragon Aviation Certificate Programme is jointly organised with the Hong Kong Air Cadet Corps and the Scout Association of Hong Kong. It is a one-on-one pilot mentorship programme conducted over a nine-month period which aims to inspire a new generation of aviators in Hong Kong. Forty graduates completed the programme in 2016.

In addition to having the opportunity to explore the world of aviation through a series of lectures, training sessions, briefings and a tour of our aviation facilities, each participant is mentored by a Cathay Dragon pilot. As of 2016, over 200 participants have graduated from the programme, with nearly half of them starting an aviation-related career.



Cathay Pacific City visits

Cathay Pacific's headquarters, Cathay Pacific City, is fully equipped with aviation and training facilities that are open to different non-profit organisations through a visitation programme. Nearly 10,000 visitors from schools and NGOs were welcomed at Cathay Pacific City in 2016.

Environment

Support to local and international environmental organisations

Cathay Pacific and Cathay Dragon consistently support both local and international environmental organisations in various ways.

Since 2004, Cathay Dragon has been running the “Change for Conservation” inflight fundraising campaign to raise awareness of the importance of nature conservation. Over HK\$9.7 million has been raised for projects in remote areas of China, such as protecting watersheds in northwest Yunnan, establishing national parks, introducing a green credit system to help preserve forests and developing economic opportunities for the locals, as well as promoting usage of alternative energy and protecting endangered species.

Contributing to the Hong Kong community

As the home carrier of Hong Kong, we are committed to serving the Hong Kong community. Cathay Pacific has leveraged on its strengths and invited close to 90 families on a tour of the skies above Hong Kong.

Community Flight 2016

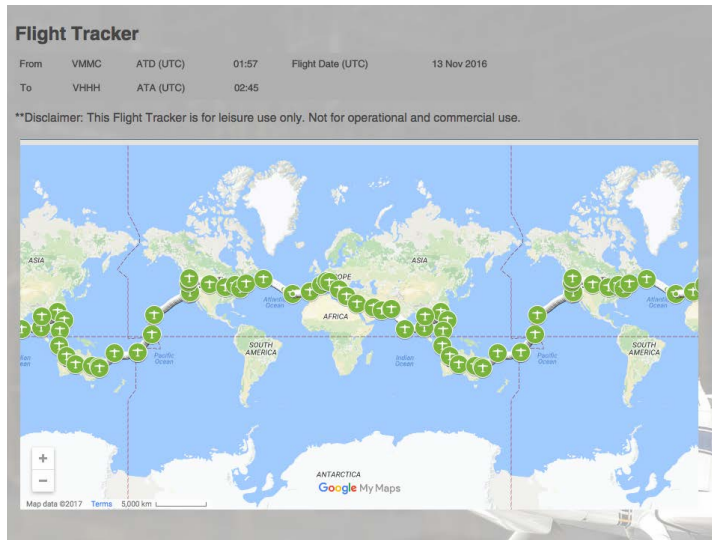
In January 2016, Hong Kong SAR Chief Executive CY Leung was guest of honour on a special community flight organised by Cathay Pacific as part of the Appreciate Hong Kong Campaign. The 90-minute flight on a Boeing 777-300 aircraft was a special treat for around 250 people from less-advantaged backgrounds. By flying together for the first time, they were able to spend quality time together and strengthen the family bond. A new element for this year’s flight was getting some of the participants involved in various duties during the flight, such as facilitating the boarding processes and making announcements. This echoed with the main theme of participating as a community by building their sense of awareness and empathy with others.



Inspiration

The successful inaugural flight of the first-ever homebuilt aircraft to fly under Hong Kong registration marked a new chapter in the history of Hong Kong aviation. Led by Cathay Pacific pilot Hank Cheng, and with support from the B-KOO "Inspiration" team, the aircraft completed a three-month around-the-world journey from August to November 2016. Starting and ending in Hong Kong, Inspiration's journey covered approximately 50,000 km across 20 countries, including Australia, the United States, France, Jordan, Oman, Sri Lanka and Thailand.

<http://www.inspiration.bkoo.hk/flight-tracker>



Engaging with our customers

We have been engaging our passengers via inflight fundraising programmes – such as Cathay Pacific’s “Change for Good” for UNICEF and Cathay Dragon’s “Change for Conservation” for The Nature Conservancy – as well as through Asia Miles.

Cathay Pacific/UNICEF Change for Good inflight fundraising programme

Since 1991, travellers on Cathay Pacific flights have been encouraged to donate any spare change of any currency to UNICEF. Cabin crew help distribute, collect and seal Change for Good envelopes inflight. Cathay Pacific staff members have participated in-field visits to witness first-hand how this spare change is used to improve the lives of children.

In August 2016, we announced that the airline’s passengers had contributed more than HK\$13.9 million in 2015 to help improve the lives of disadvantaged children around the world. Since the programme’s launch in 1991, more than HK\$165 million have been raised through Change for Good. The money collected is used to support UNICEF’s programmes, helping children in more than 150 developing countries around the world.

2016 marked the 25th Anniversary of the partnership between Cathay Pacific and UNICEF HK. Twenty-five newly designed donation envelopes, each representing a different country, were launched on 1 October 2016. Starting from 2016, 30% of the donations have been received by will be allocated to the Schools for Asia initiative, which aims to transform the lives of children through education in China and India.



Staff field trips to Nepal and China

In 2016, our staff from Cathay Pacific joined UNICEF field trips to Nepal and China in July and December respectively. They were able to see how funds from “Change for Good” have been put to good use in improving people’s lives, and were also able to learn more about the critical issues faced by local communities, such as post-earthquake recovery efforts in Nepal and early education needs in China.



I could see how the children are benefitting from the UNICEF projects. The project teams make a special effort to create space for the children to play and learn, devising exciting and ingenuitive ways to make learning more fun, while also helping to improve their living environment and hygiene standards.

Alex Cho
Flight Attendant

Cathay Pacific Wheelchair Bank

The Wheelchair Bank was set up in 1996 with the help of the Faculty of Medicine at the Chinese University of Hong Kong, the Hong Kong Polytechnic University and the Prince of Wales Hospital, in order to raise funds to purchase specially adapted wheelchairs for children with neuromuscular diseases.

Since 1999, with UNICEF’s support, an average of one month’s proceeds each year from Cathay Pacific’s Change for Good inflight fundraising programme has been donated to this cause. To date, more than HK\$16 million have been donated to the Cathay Pacific Wheelchair Bank, which has contributed to the aid of nearly 500 children.

Turn Miles into Good Deeds – Asia Miles Social Goods

Asia Miles Limited, a wholly owned subsidiary of Cathay Pacific Airways Limited, shows its strong commitment to the community and the environment through various charitable initiatives. The leading travel and lifestyle rewards programme in Asia serves as a platform for NGO partners to reach their potential donors while at the same time offering a number of charitable choices to its members. With the aim of delivering a Life Rewarded, the online platform connects Asia Miles (which has more than nine million members worldwide) with charity partners and other NGOs. Asia Miles converts miles into good causes that benefit the underprivileged across the globe.

In response to member feedback, Asia Miles greatly expanded the depth and breadth of social goods packages available at its online platform in 2016.

Social goods items included a birdcage oil burner, the proceeds of which were donated to Heep Hong Society - a leading education and rehabilitation organisation committed to helping children and youth with special needs. Other items included a Lotus 8 Print Silk Shawl from L plus H Fashion - a social enterprise which collaborated with the Arts with the Disabled Association Hong Kong to popularise the arts among people with disabilities. Another one was a mammogram service from [The Hong Kong Breast Cancer Foundation](#) for financially underprivileged women. Many other items are available on the [Asia Miles iRedeem](#) platform.



Oxfam Trailwalker and UNICEF Charity Run – Asia Miles

Asia Miles has been a long-standing sponsor of major charity sports events in Hong Kong, including the OXFAM Trailwalker (OTW) and the UNICEF Charity Run.

Asia Miles has been sponsoring OTW, the largest hiking fundraising event in Hong Kong, which was hosted by Oxfam Hong Kong. For the past 13 years, funds from the event have supported Oxfam's various poverty alleviation and emergency relief projects in Africa and Asia, including in Hong Kong, Macau and Mainland China. In 2016, the partnership expanded to offer Asia Miles members an opportunity to redeem social goods, such as a cow, a road, meals and a safe haven. Miles redeemed for these much-needed items and facilities supported the underprivileged in remote villages in their struggle for a better life.

For the 10th consecutive year, Asia Miles supported the UNICEF Charity Run, the second largest long-distance running event in Hong Kong, to raise funds for UNICEF's "Unite for Children, Unite against AIDS" global campaign. In 2016, members redeemed miles for participating in the charity run, while non-running members supported UNICEF by redeeming UNICEF HK Gift Packages. Gift Packages helped to eliminate mother-to-child transmissions of HIV in over 150 developing countries, while also protecting children from contagious diseases which could leave survivors with life-long disabilities, such as blindness, deafness and brain damage. Asia Miles members, staff and family took part in the charity run.



Social Enterprise Products Inflight

Since 2005, we have been offering products through our inflight sales shop that are managed by social enterprises and benefit the underprivileged. In 2013, a special section called "Shop for a Good Cause" was created in our inflight shop magazine, Discover the Shop, to support charitable products. The section has been further revamped to the current "Cathay Pacific Cares". Throughout 2016, our inflight sales programme continued to collaborate with different charities to offer various charitable items including:

- **SPCA – Foldable Bag & Giant Aeroplane Chess**
Established in 1921, the Society for the Prevention of Cruelty to Animals (SPCA) rescues thousands of animals each year and proactively carry out educational work on animal welfare.
- **Love + Hope – Handmade Traveller's Wallet and 'Mail of LOVE' Passport Holder**
Love + Hope is a social enterprise founded in 2008 to provide job opportunities to the locally-based, skilled but displaced textile artisans of Hong Kong. They offer products that combine the finest materials with artisan craftsmanship and revives Hong Kong's rich heritage of knitwear manufacturing. They take pride in their efforts to revitalise the label "Made in Hong Kong".
- **LEAP – Vivienne Tam X LEAP Tote Bag**
Life Education Activity Programme (LEAP) reaches out to young people in local and international schools in Hong Kong to promote drug prevention, and more than 90,000 students benefit from the programmes each year.

- Hong Kong Breast Cancer Foundation – The Pink Scarf
The Hong Kong Breast Cancer Foundation is a non-profit charitable organisation dedicated to mitigating the threat of breast cancer to the local community through education, advocacy, support and research.
- &Care – Hand Stitched Leather Stationery Set
&Care, working together with commercial enterprises, is devoted to promoting the spirit of caring in collaboration with social and commercial sectors through the 'Enterprise & Care' brand.

Further to the Cathay Pacific Cares Section, Discover the Shop collaborated with its key partner brands during Q4 2016 to support the Cancer Fund Pink Revolution campaign. \$10 was donated to the Hong Kong Cancer Fund for each of the selected items sold. Hong Kong Cancer Fund promotes the importance of early detection of breast cancer and provides free breast cancer support services in Hong Kong.

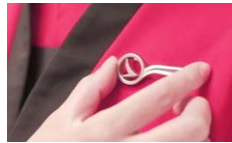


Want to find out more? Go to our video on the right.

Meet our staff from different positions and sections of the company, and hear them talk about what it is like working at Cathay Pacific



At Cathay Pacific, we offer you unique opportunities to let your passion for travel and aviation fly. Our vision to become the world's best airline would not be achievable without the commitment of our people. No matter where you are based, you'll be immersed in a friendly and supportive environment that thrives on teamwork.



At Cathay Dragon, together with Cathay Pacific, we offer you unique opportunities to let your passion for travel and aviation fly. Our vision to become the world's best regional airline serving China and beyond would not be achievable without the commitment of our people. As part of Cathay Pacific Group, no matter where you are based, you'll be immersed in a friendly and supportive environment that thrives on teamwork.



Our General Manager of Revenue Management, Patricia Hwang discusses how Cathay Pacific is always improving the "life well travelled" experience.



Our Airport Supervisor, Shigemi Miyaki shares her experience with a passenger and explains that passengers' expectation should always be surpassed.



Our IT Account Manager, Priya Menon describes the opportunities that have opened up to her at Cathay Pacific, and how everybody matters when it comes to ensuring a Life Well Travelled for our passengers.



Our First Officer, Kenneth Au talks about why Cathay Pacific has always been so memorable, and how he now plays a part in delivering the "life well travelled" experience to our passengers.

About this report

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Aim of reporting

Although our foundations of commitment to transparency and accountability has remained the same, our reporting has continued to evolve since the first year we launched our Environmental Report in 1996.

We publish our Sustainable Development Report yearly in order 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, how we learn how to overcome them, and how we are approaching them in our governance, environmental and societal practices.

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Independent assurance

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 is marked with a "▲".



羅兵咸永道

Independent practitioner's limited assurance report To the board of directors of Cathay Pacific Airways Limited

We have undertaken a limited assurance engagement in respect of the selected sustainability information of Cathay Pacific Airways Limited (the "Company") listed below and identified with a ▲ in the Company's sustainability report for the year ended 31 December 2016 ("the Sustainable Development Report 2016") (the "Identified Sustainability Information").

Identified Sustainability Information

The Identified Sustainability Information for the year ended 31 December 2016 is summarised below:

1) Greenhouse Gases ("GHG") emissions data

<u>Aircraft operations</u>	<u>Unit of measure</u>
• Carbon Dioxide (CO ₂)	Tonnes

<u>Other operations</u>	<u>Unit of measure</u>
• CO ₂ emission from electricity	Tonnes
• CO ₂ emission from ground vehicles	Tonnes
• CO ₂ emission from town gas	Tonnes

2) Selected quantitative data

- The mathematical accuracy of the grammes/ATK and grammes/RTK computation for 2016 (to be used by the Company to determine fuel efficiency).
- Outcome of the Fly greener programme in 2016:
 - (i) the total number of offsets for staff travelling on business, and
 - (ii) the total number of offsets bought by passengers.
- Weight of recycled material from inbound Hong Kong Cathay Pacific flights:
 - Aluminium cans (kg)
 - Plastic cups (kg)
 - Plastic bottles (kg)
 - Glass bottles (kg)
- Amount of recycled material from Cathay Pacific City and Dragonair House:
 - Paper and cardboard (kg)
 - Aluminium cans (kg)
 - Plastic (kg)
- Data regarding the English on Air ("EOA") programme during the 2015/2016 academic year: "A total of 176 students from six schools in Tung Chung participated in the English on Air programme during the 2015/2016 academic year."
- Data regarding the food donation programme during 2016: "Since 2015, we have been donating surplus food and beverages from inbound flights to a local food bank, Feeding Hong Kong. 234 tonnes were collected and donated in 2016."

Our assurance was with respect to the year ended 31 December 2016 information only and we have not performed any procedures with respect to earlier periods or any other elements included in the Sustainable Development Report 2016 and, therefore, do not express any conclusion thereon.

PricewaterhouseCoopers, 22/F Prince's Building, Central, Hong Kong
T: +852 2289 8888, F: +852 2810 9888, www.pwchk.com



Criteria

The criteria used by the Company to prepare the Identified Sustainability Information is set out under the heading "Reporting Methodology" in the section "About this Report" of the Sustainable Development Report 2016 at www.cathaypacific.com/sdreport (the "Criteria").

The Company's Responsibility for the Identified Sustainability Information

The Company is responsible for the preparation of the Identified Sustainability Information in accordance with the Criteria. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation of Identified Sustainability Information that is free from material misstatement, whether due to fraud or error.

Inherent limitations

The absence of a significant body of established practice on which to draw to evaluate and measure non-financial information allows for different, but acceptable, measures and measurement techniques and can affect comparability between entities. In addition, GHG quantification is subject to inherent uncertainty because of incomplete scientific knowledge used to determine emissions factors and the values needed to combine emissions of different gases.

Our Independence and Quality Control

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

Our firm applies International Standard on Quality Control 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our Responsibility

Our responsibility is to express a limited assurance conclusion on the Identified Sustainability Information based on the procedures we have performed and the evidence we have obtained. We conducted our limited assurance engagement in accordance with (i) International Standard on Assurance Engagements 3000 (Revised), *Assurance Engagements other than Audits or Reviews of Historical Financial Information, for selected quantitative data, and*, (ii) International Standard on Assurance Engagements 3410, *Assurance Engagements on Greenhouse Gas Statements*, for GHG emissions data, issued by the International Auditing and Assurance Standards Board. These standards require that we plan and perform this engagement to obtain limited assurance about whether the Identified Sustainability Information is free from material misstatement.

A limited assurance engagement involves assessing the suitability in the circumstances of the Company's use of the Criteria as the basis for the preparation of the Identified Sustainability Information, assessing the risks of material misstatement of the Identified Sustainability Information whether due to fraud or error, responding to the assessed risks as necessary in the circumstances, and evaluating the overall presentation of the Identified Sustainability Information. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks.



羅兵咸永道

The procedures we performed were based on our professional judgment and included inquiries, observation of processes performed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records.

Given the circumstances of the engagement, in performing the procedures listed above we:

- Made inquiries of relevant management of the Company;
- Understood the process for collecting and reporting the Identified Sustainability Information;
- Undertook analytical procedures over the Identified Sustainability Information;
- Performed limited substantive testing on a selective basis of the Identified Sustainability Information; and
- Considered the disclosure and presentation of the Identified Sustainability Information.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement. Accordingly, we do not express a reasonable assurance opinion about whether the Company's Identified Sustainability Information has been prepared, in all material respects, in accordance with the Criteria.

Limited Assurance Conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Company's Identified Sustainability Information for the year ended December 31, 2016 is not prepared, in all material respects, in accordance with the Criteria.

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

A handwritten signature in cursive script that reads "PricewaterhouseCoopers".

PricewaterhouseCoopers
Certified Public Accountants

Hong Kong, 23 June 2017

About this report

Global Reporting Initiative (GRI)

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Global Reporting Initiative (GRI)

Statement

The content and quality of the information in our report is guided by the Global Reporting Initiative (GRI) G4 'Core' option reporting guidelines, released in 2014.

GRI Content Index

The table [here](#) sets out the sections where the relevant information or data can be found in this SD Report. In preparation for improving future reporting and disclosure, comparable key performance indicators (KPIs) from the following have also been included for ease of reference:

- Indicators recommended under the Hong Kong Stock Exchange Environmental Social; and Governance (ESG) guidelines

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Reporting methodology

This report covers the 2016 calendar year.

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) G4 Guidelines and the AA1000 Accountability standard; and
- benchmarking against other airlines and international companies.

Measuring our performance

We continue to report on our progress against our 20 commitments under the Sustainable Development Strategy.

Reporting tools

To avoid ambiguity, definitions of each parameter are communicated across the Cathay Pacific Group to ensure the quality and consistency of reporting. The majority of data is collated via the Swire Group's sustainability management system Resource Advisor – a database for our operations in Hong Kong covering Cathay Pacific, Cathay Dragon, 100% owned and 60% owned Hong Kong-based subsidiaries. Cathay Holidays Limited and our 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

The Cathay Pacific Group reported the GHG emissions of each of its 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"):

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

Other principal subsidiaries and associates that are not included within the scope of this report, as outlined on pages 103 to 104 of the [Cathay Pacific Group 2016 Annual Report](#), will be considered for inclusion in the future.

Operational boundaries

The operational boundaries for the reporting of GHGs 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 between 1 January and 31 December 2016. The year 2009 has been used as the base year for comparing the emissions profile of our flights in line with our 20/20 commitments. However, we continue to provide information from 1998 to ensure consistency with our previous reporting. Please note there have been changes in organisational and operational boundaries over the years which may 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. Canteens operated by 3rd parties within our buildings are excluded. In Hong Kong, the CO₂ emission factors follow the guidelines published by the Environmental Protection Department (EPD) of the Hong Kong Special Administrative Region Government (HK SAR) in February 2010¹. For CO₂ emission factors for outport data, references have been made to the International Energy Agency (2010)².

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's³ recommended specific gravity of 0.80 kg/L to calculate the weight of fuel. We use the IPCC's emission factor of 3.15⁴ to determine CO₂ emissions from the combustion of aircraft fuel.

Scope 2 emissions

Scope 2 emissions include electricity consumption and Towngas production for our operations in Hong Kong covering Cathay Pacific and the subsidiaries. Canteens operated by 3rd parties within our buildings are excluded. 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 SFs are either not applicable or not material to our overall GHG reporting.

Towngas is used in the Cathay Pacific canteen. As this is operated by a third party and to be consistent with previous years, this has been excluded.

Methodologies used to calculate or measure emissions

Refer to Endnote References.

¹ 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

² International Energy Agency (2010). CO₂ Emissions from Fuel Combustion – Highlights. Summary Table: CO₂ emissions per kWh from electricity and heat. IEA.

³ 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.

⁴ IPCC. (1999). Aviation and the Global Atmosphere. Cambridge: Cambridge University Press.

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.

Social indicators

Operations in Hong Kong covering Cathay Pacific and the 100% and 60% owned subsidiaries are included on the Social Indicators table.

GRI Content Index

The GRI Content Index is prepared with reference to the GRI G4 Guidelines 'in accordance option' core. 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.

Other matters

FLY greener offsets

FLY *greener* offsets are calculated as the tonnes of CO₂ purchased by all passengers (including staff) who used either cash or Air Miles as a method of payment. One tonne of CO₂ had the cash price of HK\$25.51 in 2016. The average Air Miles price was 626 Air Miles per tonne of CO₂ during 2016. The total tonnage was computed based on the amount paid during the year. Cash received during the year was related only to flights taken in 2016.

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 2016 as the overall capacity 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 by multiplying the load tonnes from the carriage of passengers, excess baggage, cargo and mail on each sector by the sector distance.

The fuel consumption figure shown on the Environmental Indicators Table only includes those generated by Cathay Pacific and Cathay Dragon, for easier comparability with last year's report.

The ATK of 30,462 million and RTK of 22,418 million used in this calculation are taken from the Cathay Pacific Airways Limited Annual Report 2016.

Recycled materials

In 2016, materials recycled from inbound flights to Hong Kong included plastic cups; plastic bottles; aluminium cans; and glass bottles. Materials recycled by the Cathay Pacific Airways and 100% owned subsidiaries included 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 Cathay Dragon House. The amount of recycled materials refers to those recorded in either recycling vendor invoices or internal tracking records.

Food donation

In 2016, unconsumed food items such as unopened juices, cereals, and pre-packaged food from Cathay Pacific inbound flights to Hong Kong were collected for donation to a local food bank. The amount of donated food and beverages refers to those in the tracking records of the local food bank.

English on Air

English on Air is an educational programme which involves English-speaking Cathay Pacific staff volunteers from a wide range 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 by detailing the different inputs and then proceeding to establish the outputs and the impacts that these have achieved.

We evaluated the effectiveness of our English on Air activities run during the 2015/2016 academic year with reference to the London Benchmarking Group model. Using the areas indicated below, we developed questionnaires covering the areas indicated below and conducted surveys with the participating students and teachers. This allowed us to develop a scorecard providing insights for each of the following 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 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 have been engaging with third party consultants since 2006 to perform focus groups and interviews with selected groups of stakeholders that are chosen by Cathay Pacific and the third party consultants. Previously, the selected stakeholder groups provided comments and ratings on different areas, including

- emerging issues facing the airline industry;
- perceptions on the current corporate social responsibility (CSR) performance of Cathay Pacific and Cathay Dragon, and the expected response from Cathay Pacific;
- our reporting priorities;
- the stakeholder engagement approach taken by Cathay Pacific; and
- their views on Cathay Pacific's Sustainable Development Strategy.

With these comments and ratings, we summarised stakeholders' concerns into material issues. For each of the material issues, we evaluated the impact of the issue to Cathay Pacific and produced a materiality matrix, which helps to structure our Sustainable Development Report for the entirety of 2016.

Following the end of our five- year stakeholder engagement strategy in 2012, we carried out a comprehensive survey in 2013/2014. One of the objectives of this exercise was to create a baseline and a set of metrics on the following;

- measure stakeholder familiarity with Cathay Pacific initiatives and performance;
- assess stakeholder perceptions;
- identify material issues for Cathay Pacific;
- determine stakeholder expectations; and
- evaluate Cathay Pacific's strengths and weaknesses

The other objective was to develop actions based on these research findings.

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- 1 Aim of reporting
- 2 Independent assurance
- 3 Global Reporting Initiative (GRI)
- 4 Reporting methodology
- 5 **Abbreviations and glossary**
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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

Some Commonly Used Abbreviations in this Report

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
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

Some Commonly Used Abbreviations in this Report

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
MSQD	Engineering Reports on Maintenance, Safety, Quality and Defects
NASA	National Aeronautics and Space Administration
NED	Non-executive Director
NGO	Non-governmental Organisation
NO _x	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

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Acknowledgement

We wish to thank Sedgwick Richardson for their assistance in the development and preparation of this report.

Our principal 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.



CARBON DISCLOSURE PROJECT



Contact us

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Approach to sustainable development

Sections

- 1 Approach and strategy
- 2 Governance
- 3 Stakeholder engagement

Approach and strategy

For seven decades, Cathay Pacific’s approach to valuing customers via safety procedures, inflight services and sustainable practices has enabled passengers to travel well. We are committed to delivering to our customers premium services and products for years to come. This means that by using resources responsibly, increasing efficiency, and purposefully reducing the waste we produce –amongst other things – we are able to foster meaningful collaborations and be single-minded in fulfilling our commitments.

As part of the Swire Group, a statement released in 1989 by Honorary Life President and Former Chairman Sir Adrian Swire continues to inspire positive purpose in the company:



As a group, we should always seek to be ahead of legislation rather than reacting to it. If the environmentally ‘clean’ way of doing something is more expensive and therefore on the face of it uneconomic, we should always, regardless of mandatory legislation, still have a close look at the overall feasibility of adopting such a practice, considering both general public good and enlightened self-interest.

Sir Adrian Swire
Honorary life president and former Chairman

This approach defines what sustainable development means to us – it is about applying long-term thinking in the business and doing the right thing by the environment and our stakeholders, which results in continuing success and sustained existence.

Sustainable development targets

The Cathay Pacific Sustainable Development Strategy is designed to embed sustainability into the mainstream thinking of the company. Although goals and commitments are set across 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. As a result, the aim is to:

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

These three targets are looked into further below.

a) Reduce our overall emissions

Aviation currently accounts for 2% of global greenhouse gas emissions from human activity. As aviation grows to meet increasing demand, the IPCC has forecast that by 2050, the industry's greenhouse gas emissions could rise to 3%.

Within Cathay Pacific, aircraft emissions constitute 99% of our overall CO₂ emissions. Therefore, we are committed to managing our carbon emissions and contributing to global efforts to reduce the aviation industry's impact on the environment and climate change. We have therefore committed to improving our fuel efficiency by 2% year-on-year up until 2020, exceeding the IATA target of 1.5%, in line with ICAO's target for the industry. Simultaneously, we are actively managing the impact of energy and water use from our facilities, vehicle fleet and the equipment used across our subsidiaries.

To learn more about our performance on this target, refer to our [Climate Change](#) section.

b) Offer sustainably sourced products and minimise resource use

We continually examine options on how we can reduce resource use throughout our supply chain, and instead opt to use materials from sustainable sources (such as products certified by the Forestry Stewardship Council and Marine Stewardship Council, or recycled materials). We ensure our procurement team understands the requirements of our Supply Chain Sustainability Code of Conduct so they can, in turn, ensure our suppliers comply with our standards. We make a conscious effort to look for opportunities that allow us to improve recycling and waste management across different facets of our operations. These include products and services provided both inflight and at airport lounges, in back office operations and the maintenance, repair and overhaul (MRO) process of our aircraft.

To learn more about our performance on this target, refer to our [Waste Management](#), [Sustainable Sourcing](#) and [Biodiversity](#) sections.

c) Ensure the effectiveness and relevance of community programmes

We support and invest into Hong Kong's community, of which we have been a part for seven decades. Local staff members are also active in community initiatives in the outport countries where we have a presence.

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 in which we serve. Our main priority is to focus on the two areas of youth and education, and environmental conservation.

Apart from our work in Hong Kong, we strongly encourage our outport 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.

20/20 Sustainability commitments

In 2012, we launched our vision for how our strategy will be implemented through 20 commitments by defining what we intend to do and achieve by 2020. These commitments encompass the key operational areas of our business right across our flights, catering services, ground fleet, offices, suppliers and the communities we fly to. This is the result of years of engagement with our key stakeholders including our employees, passengers, investors, company management, community neighbours, subject experts and academics.

CX Commitments

Commitments by 2020	Section of the Report to which this issue relates to
<p>➤ 2% year-on-year improvement in fuel efficiency</p>	<p>Significant investment in our fleet renewal plan. We took delivery of 10 Airbus A350-900s in 2016. Six aircraft were retired during the period</p> <p>Continue to receive new aircraft and retire less efficient ones. Another 12 new aircraft are scheduled for delivery in 2017</p>
<p>✔ Develop a cost-effective strategy to incorporate sustainable aviation fuel into our operations</p>	<p>Appointed a dedicated Biofuel Manager in 2011. Invested in a U.S. -based waste-to-energy biofuel development facility in 2014</p> <p>The first Cathay Pacific flight using a biofuel blend was an A350 delivery flight that took place in 2016</p> <p>All our new A350-900s will continue to be delivered using a 10% biofuel blend</p> <p>The commercial production of biofuel from the US facility is expected to start in 2019</p> <p>Continue to explore the use of other feedstocks and partnerships</p>
<p>➤ Embed climate change adaptation into overall risk management</p>	<p>Reviewed international and local aviation climate change adaptation research</p> <p>Initial understanding of climate change related impacts and risks to our operations</p> <p>Identify and evaluate significant climate changed related impacts and risks to our operations, and develop an adaptation plan</p>
<p>➤ Reduce electricity use by 25%</p>	<p>Continual replacement of older equipment with more power-efficient ones (e.g. LED lighting, air-cooled chillers, heat pumps etc.)</p> <p>A detailed Energy Audit was carried out in 2016 to gain a better understand of the group's energy usage through analysing key influencing drivers such as weather and business operations</p> <p>Include green specifications in equipment requirements</p> <p>Conduct studies on incorporating the use of renewable energy in our facilities</p>

[Climate change](#)

Commitments by 2020		
<p>➤ Ground vehicles to use alternative fuels/power source</p>	<p>About 60% of HAS' motor vehicles and ground service equipment (GSE) are now electrically powered or comply with the latest emission standard that is Stage IIIA for GSE and Euro V for vehicles</p> <p>In 2016, 14 electric vehicle chargers were installed at Cathay Pacific City and Cathay Dragon House, amounting to a total of 21</p>	<p>Continue with progressive vehicle replacement and exploring performance improvement systems</p>
<p>✓ All Cathay Pacific Group-owned buildings, offices and lounges will consider green building standards or principles</p>	<p>Applied green guidelines and building certification (where applicable) for offices and passenger lounges</p> <p>The Cathay Pacific lounge at Charles De Gaulle Airport, Paris was LEED Silver certified in 2014</p> <p>CPCS newly built Phase II facility has achieved the BEAM Plus Silver standard in 2016</p>	<p>Develop bespoke guidelines suited to the construction and refurbishment of our specific facilities</p> <p>New buildings for Vogue Laundry to be designed to achieve the BEAM Plus GOLD standard</p>
<p>➤ Offer carbon offsetting as part of all ticket-related marketing and promotional activities</p>	<p>Offsets paid for free tickets given for marketing promotions and public relations activities</p> <p>For free tickets where the passenger covers taxes and surcharges, a reminder to offset is provided in the prize letter</p>	<p>Improve the interface of the FLY greener programme with the booking system</p>
<p>➤ Develop and implement a sustainable cargo policy</p>	<p>Engaged with local and international experts to identify and develop sustainability principles and criteria for acceptance of certain cargo items</p> <p>Implemented embargoes on hunting trophies, shark's fin and ivory products in 2016</p>	<p>Continue to work with different partners to review and develop guidelines on implementing a responsible cargo carriage policy</p>
<p>➤ All meals served inflight and on the ground will meet sustainability criteria</p>	<p>Develop a list and summary of all the standards on sustainable food sources</p>	<p>Work closely with our suppliers on our criteria and gradually apply them to our purchases</p>

[Climate change](#)

[Biodiversity](#)

Approach to sustainable development

Approach and strategy

Section of the Report
to which this issue
relates to

Commitments by 2020

<p>➤ Reduce the environmental impact of maintenance, repair and overhauls (MRO) carried out in Hong Kong by 50%</p>	<p>Identified the key MRO impacts with our maintenance service suppliers, HAESL and HAECO</p>	<p>Improve the efficiency of resource use by HAESL and HAECO under areas where savings can be achieved</p>
<p>➤ Reduce material usage and waste by 25%</p>	<p>Worked with charities to reduce the need for disposal by promoting donation</p> <p>Switched to electronic documents with eEnabled aircraft and used lighter material for inflight equipment</p>	<p>Identify and trial alternative products to reduce chemical, water and energy impacts</p> <p>Waste Management</p> <p>Identify resources where there is potential for improvement, and work with our suppliers and customers on these materials</p>
<p>✓ Increase recycling by 25%</p>	<p>Adjusted the replacement cycle of inflight magazine packs to reduce the amount of magazines and plastic bags used</p> <p>Carpets in our Economy Class cabin are produced from 100% waste nylon</p> <p>Blankets for our Economy Class are made entirely from recycled plastic bottles since 2016</p>	<p>Waste management</p>
<p>✓ Increase recycling by 25%</p>	<p>Introduced and increased recycling opportunities where available, e.g. glass bottles, both inflight and in our offices</p> <p>Systematically recycling our retired Airbus A340 aircraft</p>	<p>Raise staff awareness</p> <p>Conduct waste audit and identify opportunities for improving office recycling</p>

Approach to sustainable development

Approach and strategy

Section of the Report
to which this issue
relates to

Commitments by 2020

<p>➤ All Cathay Pacific Group-branded materials will be produced using sustainable materials</p>	<p>Adopted a paper, plastic and printing guidelines with a focus on Cathay Pacific branded products</p> <p>Amenity kits from Economy Class are produced from recycled PET bottles</p>	<p>Trial with more sustainable materials on different products</p>
<p>➤ All paper, paper products and textiles offered to customers or as part of the service offering will be made of sustainable materials</p>	<p>Adopted a paper, plastic and printing guidelines</p> <p>First-class sleep suits are made from organic cotton using green manufacturing principles</p> <p>Blankets for our Economy Class are made from recycled plastic bottles since 2016</p>	<p>Continue to explore alternative materials for our textiles products</p>
<p>➤ Engage with suppliers of inflight sales products on sustainability principles</p>	<p>In conjunction with suppliers, offered products that supported communities and the environment in the "Cathay Cares" and "Shop for a Good Cause" sections in the Cathay Pacific and Cathay Dragon inflight sales magazines, Discover The Shop and Emporium respectively</p>	<p>Further engage with different suppliers and offer products that have community, social or environmental benefits</p>
<p>✔ All suppliers will comply with our Supply Chain Code of Conduct</p>	<p>Developed checklists for the procurement teams to implement the Code effectively and consistently</p> <p>Mandated the Code to be part of all our contractual requirements</p> <p>Produced newsletters to facilitate exchanges with our suppliers</p>	<p>Develop reference material and organise learning events for the procurement teams</p> <p>Develop a process to effectively engage and manage suppliers on complying with the Code</p>

[Sustainable sourcing](#)

Approach to sustainable development

Approach and strategy

Commitments by 2020			Section of the Report to which this issue relates to
<p>➤ All meals served inflight and on the ground will meet sustainability criteria</p>	<p>Served fish and seafood from sustainable sources on flights from Europe, Australia and North America, where available</p> <p>Inflight cocktail snacks (roasted peanuts) are produced from RSPO-certified palm oil</p>	<p>Develop sustainable food guidelines</p> <p>Identify food items that can be sourced sustainably</p>	<p>Sustainable sourcing Biodiversity</p>
<p>➤ CX Holidays to offer at least five ecotourism packages</p>	<p>Conducted research and workshops to understand our role in 'ecotourism'</p> <p>Researched into our operators' green credentials</p>	<p>Identify ecotourism destinations and operators</p>	<p>Sustainable sourcing</p>
<p>➤ All holiday packages offered by CX Holidays will be verified for their sustainability impacts</p>	<p>Researched into the green certifications of the hotels and resorts that we partner with</p>	<p>Identify the relevant sustainability assessments for destinations and operators</p>	
<p>✔ Implement London Benchmarking Group (LBG) methodology to evaluate major company community projects</p>	<p>Implemented LBG methodology to evaluate major company community projects such as English on Air</p>	<p>Continue to review the impact of projects using LBG methodology</p>	<p>Sustainable development strategy</p>
<p>✔ Implement CX community investment guidelines by 2015</p>	<p>Developed guiding principles for community programmes in Hong Kong and outposts in 2015</p>	<p>Monitor and evaluate programmes</p>	

✔ Achieved ➤ On Plan ! Off Plan

Since the launch of our Sustainable Development strategy and commitments, we have made progress in some areas, and not so much in others. There have also been changes in the external environment, policies, societal expectations, as well as new developments in research and technology. It is therefore necessary to review and update our commitments, which will be reported on next year.

United Nations Sustainable Development Goals (SDGs)

In 2015, the United Nations General Assembly accepted a new set of 17 measurable goals to be achieved by 2030. These goals aim to end poverty, protect the planet, and ensure global prosperity as part of a new sustainable development agenda. Whilst not all 17 goals are applicable to aviation or our operations, the relevant SDGs will be regarded as guiding principles in shaping our SD strategy. The table below indicates where different sections of this report currently support the relevant SDGs.

SDGs	Descriptions	Section of the Report to which this issue relates to
 3 – Good Health and Well-Being	Ensure healthy lives and promote well-being for all ages	People Safety
 4 – Quality Education	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	People
 7 – Affordable and Clean Energy	Ensure access to affordable, reliable, sustainable and modern energy for all	Climate change
 8 – Decent Work and Economic Growth	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	People Safety
 9 – Industry, Innovation and Infrastructure	Build resilient infrastructure, promote sustainable industrialisation and foster innovation	Climate change
 12 – Responsible Consumption and Production	Ensure sustainable consumption and production patterns	Sustainable sourcing
 13 – Climate Action	Take urgent action to combat climate change and its impacts	Climate change
 14 – Life Below Water	Conserve and sustainably use the oceans, seas and marine resources for sustainable development	Biodiversity
 15 – Life on Land	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	Biodiversity Sustainable sourcing
 17 – Partnerships for the Goals	Revitalise the global partnership for sustainable development	Climate change Biodiversity

Selected awards for Cathay Pacific and Cathay Dragon 2016



Weekend Weekly 15th Best Travel Agency Awards

The Most Favourite Airlines Award

Jet Airliner Crash Data Evaluation Centre (JACDEC) Airline Safety Ranking 2016

The world's new leading airline in terms of its safety record

Jessica OL Favorite Brand Award 2016

Best Airline

Skytrax World Airline Awards

- **World's Best First Class Airline Lounge**
- **World's Best Airline Cabin Cleanliness**

27th Annual TTG Travel Awards

Best North Asian Airline

U Magazine Travel Awards 2016

- **My favourite service team in the skies**
- **My favourite inflight entertainment**
- **My favourite social media - airline**

2016 Business Traveller China Awards

Best Frequent Flyer Programme

IR Magazine Awards & Conference Greater China 2016

Certificate for Excellence in Investor Relations



Customer Service Excellence Awards 2015 by the Hong Kong Association for Customer Service Excellence (HKACE)

- **Team Award (Internal Support Service) – Gold**
- **Individual Award (Field & Special Service) – Gold**

Inflight Sales Person of the Year (ISPY) Awards 2016

- **Overall Inflight Sales Person of the Year Award - Bronze Medallist**
- **Sales as a Service PA Team Award – Gold Medallists**
- **Emotionally Intelligent Team Award – Silver Medallists**

2016 Business Traveller China Awards

Best Airline Economy Class

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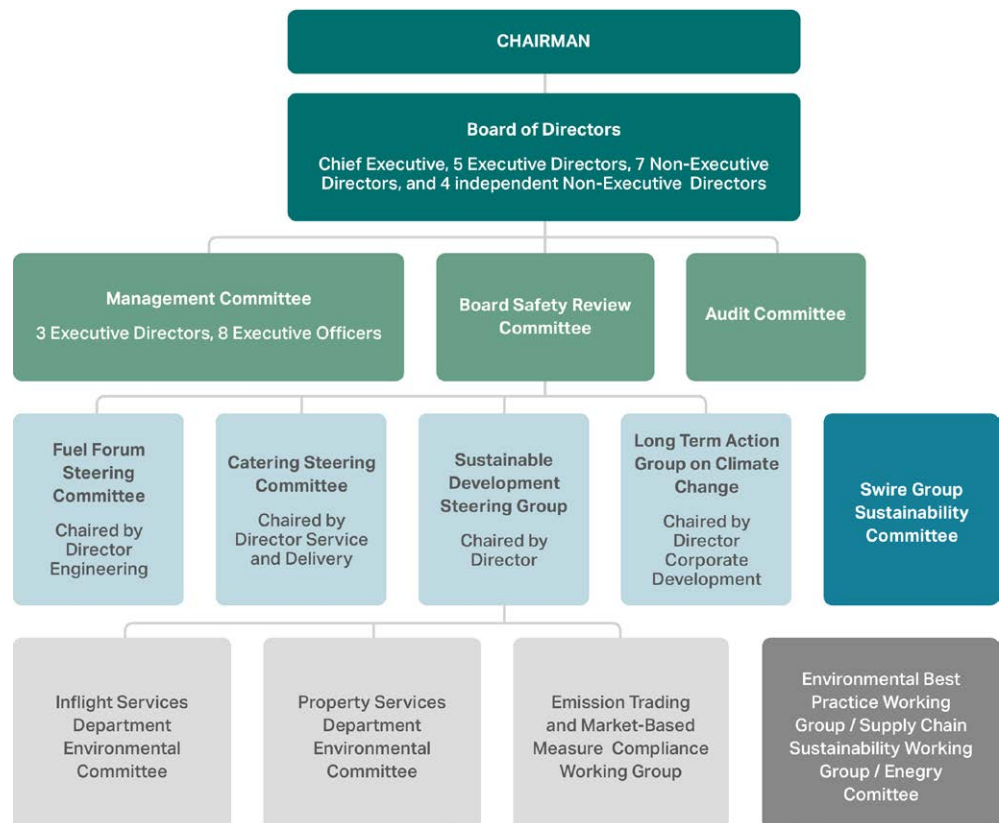
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Governance

Cathay Pacific remains committed to maintaining a high standard of corporate governance and devotes considerable effort to putting best practices in place in accordance with our [Code of Conduct on Corporate Governance](#).

Governance of sustainable development

The governance of sustainable development at Cathay Pacific is led by the Chairman, with the Chief Executive being accountable for the Sustainable Development Strategy. A key component of this strategy is to encourage staff to make better decisions with the intention of minimising the individual social and environmental impacts of their day-by-day routine. This enables us to address and integrate sustainability issues into our business and support our ability to deliver ‘economic value’ – i.e. profits for shareholders. The following diagram shows the reporting lines of various sustainability committees.



Further details of our governance structure can be found in the section below, as well as in the Corporate Governance section of our Annual Report 2016 (p. 46–56).

Corporate governance and risk management

The company's highest governance body is the Board of Directors, which is led by the Chairman and also comprises the Chief Executive and three additional Executive Directors. There are also 11 Non-Executive Directors, four of whom are independent. As well as dealing with our economic performance, the Board oversees the environmental and social initiatives undertaken in the company.

The Chief Executive is accountable for the Sustainable Development Policy, which outlines commitments including but not limited to regulatory compliance, effective environmental management throughout operations, staff education, stakeholder engagement and the target-setting process. This policy was developed to help create long-term value by embedding sustainable development principles and practices into the ways in which we govern the company, manage risk and seize opportunity. Our governance structures are linked to the Swire Group's Environment and Risk Management Committees for internal audit purposes.

The Sustainable Development Steering Group oversees, makes decisions and provides guidance on the company's Sustainable Development Strategy. They have a remit over a range of issues, including carbon management, supply chain management, procurement, food policies, sustainable biofuels, staff engagement and reporting, emissions trading schemes and carbon offsetting schemes - such as the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) and the European Union Emission Trading Scheme (EU ETS). The group is chaired by the Director of Corporate Affairs and comprises of General Managers and Heads of Departments representing a range of functions across the company.

Environmental management

The Environmental Affairs Department works with the operational teams to implement sustainability programmes. We participate in the Sustainable Development Steering Group, the Fuel Forum Steering Committee, and various other committees and working groups. This department reports directly to the Director of Corporate Affairs.

We also take part in sustainability committees and working groups within the Swire Group, including the Sustainability Committee, Energy Committee, Environmental Best Practice Working Group and the Supply Chain Sustainability Working Group.

An Environmental Management System (EMS) based on the ISO14001 standard has been in existence since 1997. Internal audits are undertaken twice a year and audited externally every year to monitor the design and implementation of the EMS against relevant environmental regulations and policies. Opportunities for continual improvement are also identified during the audits.

Safety management

Airline Safety Review Committees (ASRCs) individually dedicated to both Cathay Pacific and Cathay Dragon meet monthly to guide the management of safety in the two airlines. They are supported by departmental Safety Action Groups and Committees, of which the following four also meet monthly: Flight Operations, Engineering, Cabin and Ramp/Cargo. A Fatigue Risk Management System (FRMS) Committee meets bimonthly, and an Occupational Health & Safety (OHS) Action Group meets quarterly.

The ASRCs are made up of airline Directors and General Managers from key operational areas, as well as the heads of Quality, Medical and Security departments. The ASRC Chairmen report to their respective chief executives after each meeting. The outputs from both ASRCs are then brought together at a Group Airline Safety Review Committee (GASRC) and ultimately governed by the Board Safety Review Committee (BSRC). The GASRC and BSRC meet twice yearly and are both chaired by independent Safety Expert Dr. David King, who reports on safety performance to the main Cathay Pacific Board. David is a retired Chief Inspector of the UK's Air Accidents Investigation Branch (AAIB), Non-Executive Director at the United Kingdom Civil Aviation Authority and Visiting Professor at Cranfield University.

Sustainable procurement management

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

The teams in our Procurement Department understand the need to apply sustainable purchasing and responsible supply chain principles wherever practical. Suppliers to Cathay Pacific must provide clear, accurate and appropriate reporting of their progress towards achieving the objectives of our Supply Chain Sustainability Code of Conduct. This is highlighted regularly during internal purchasing conferences.

Human resources management

Human resources issues are managed by the respective departments in Cathay Pacific, Cathay Dragon and our subsidiaries. This is headed by the directors at Cathay Pacific and by the head of personnel at Cathay Dragon.

The Corporate Code of Conduct sets out our principles for acting responsibly in the course of achieving our commercial success. The code applies to all the staff employed under Cathay Pacific and its subsidiaries and includes issues related to business ethics, conflict of interest, procurement, insider trading, lobbying, bribery, environment, health and safety, and respect in the workplace. Comprehensive policies have been developed to support the following issues:

- Recognition of human rights
- Non-acceptance of child/forced labour
- Non-discrimination
- Freedom of association
- Public policy position
- Anti-corruption and bribery
- Competition and antitrust
- Labour and management relations
- Training and education
- Performance management
- Diversity and equal opportunity
- Compensation management
- Grievance and fair disciplinary procedures

We aim to ensure our employees are productive, competent, flexible, and operate within a healthy environment. This is achieved via a series of training and development programmes. We also strive to manage people in a way that recognises diversity.

Community investment management

Our commitment to communities is a core part of our Sustainable Development Strategy. Whilst we emphasise priority projects, we also have a flexible approach which enables us to respond to local needs and priorities. We also seek to engage our employees in all our community investment activities wherever possible.

Through ongoing dialogue with local communities, we can better understand and work to address the issues and concerns relevant to their needs. In Hong Kong, we partner with local community groups, NGOs and other institutions, such as neighbourhood councils, integrated service centres, district councils, universities and schools.

Our community investment must be measured by the impact we make for the local communities. We apply international best practices and appropriate management tools to help us measure the impact of these initiatives and to evaluate their outcomes.

Subsidiaries management

Our subsidiaries all adopt similar policies, committees and management responsibilities across all areas related to Cathay Pacific's sustainable development, including environmental management, human resources issues, customer service, product responsibility and community engagement. Depending on the level of impact, our subsidiaries are responsible for managing those issues relevant to their business. These issues might cover the development of goals, staff training and the monitoring of data through environmental, health and safety databases.

Risk management

The Risk and Control Team (under the Corporate Services Section of the Finance Department) coordinates risk register reviews and provides advice on a range of functions and activities for Cathay Pacific, Cathay Dragon and the wholly-owned subsidiaries from risk management perspectives. The internal Corporate Risk Register is reviewed and presented to the Audit Committee annually. Our risk management and processes were established based on the AS/NZS 4360: 2004 Risk Management Standards.

The current risk management framework covers all Cathay Pacific departments in Hong Kong and all regional outports, as well as having been introduced to all the wholly-owned subsidiaries. Advice is given to help departments and outports to understand, assess and respond to risks. Risks are scored, ranked and documented in the risk registers of the business units and fed into the Corporate Risk Register.

Ownership and governance

Specific risks identified in the Corporate Risk Register are owned by specific directors. Action plans to respond to the risks are then developed via discussion with the relevant departments, subsidiaries or outports, and with endorsement from the directors. Progress is monitored and reported to the Management Committee on a regular basis to reduce the risk exposure of Cathay Pacific.

Our strategy towards specific types of risks, such as financial reporting, internal control, sustainable development and operational safety are reviewed by specific committees. The Audit Committee reviews the completeness and accuracy of the company's accounts, as well as the adequacy and effectiveness of internal control and risk management systems. Sustainable development risks relating to commercial and operational delivery are assessed by the Sustainable Development Steering Committee. Airline operational safety risk is reviewed monthly by the Airline Safety Review Committee, which is chaired by the General Manager of Corporate Safety and comprises directors, the senior management of all operational departments as well as our operational partners.

Incorporating climate change risks

As awareness on sustainability grows, we recognise the importance of incorporating climate change issues into business plans. The Environmental Affairs Department works with all relevant departments to identify the key business units with risk exposure to climate change, which promotes awareness of these issues when the departmental risk registers are being reviewed.

Corporate compliance

It is the policy and intent of Cathay Pacific, Cathay Dragon and Hong Kong based 100% owned subsidiaries to operate in full compliance with all applicable laws and regulations at all times.

Following the introduction of the Hong Kong Competition Ordinance (the "Ordinance") in December 2015, we revised our existing Antitrust Policy and Guidelines for Cathay Pacific and Cathay Dragon and introduced new policies to Hong Kong based 100% owned subsidiary companies. To further facilitate the understanding of the Ordinance by all employees, we have also developed a Traditional Chinese version of the Antitrust Policy and Guidelines. To begin with, we successfully conducted briefings with senior management teams and implemented face-to-face training sessions with relevant staff for high-risk Cathay Pacific's business units, as well as Hong Kong based subsidiaries in 2015. Following on from this, we extended the face-to-face briefings and training sessions to all remaining Cathay Pacific business units. These briefings and training sessions were specifically tailored to take into account the risks faced by each business unit, in order to further minimise legal risk and ensure the company remains compliant with the Ordinance in all aspects of its business. As part of our commitment to ensure our employees understand the competition law, we will roll out a new Online Antitrust Training programme for all relevant staff including subsidiaries in 2017.

To support clear communication and ensure awareness of our Anti-bribery Policy and Guidelines, we hold ad-hoc face-to-face workshops for our employees and provide online training for new starters. In addition to this, we have extended our face-to-face workshops to a number of our outposts in the Southeast Asia region, focusing on the specific risks that they are faced with.

The General Data Protection Regulation comes into force in the EU in 2018. In order to ensure compliance with the new laws, we will conduct a global data privacy review in 2017. Following the review, we will also update our Personal Data (Privacy) Policy and Guidelines to ensure we are compliant with the data protection regimes for the countries/territories in which we conduct business.

In 2016, we introduced an Internal Whistle-blower Policy in Hong Kong. This policy serves as an umbrella policy to our already existing internal whistle-blowing/confidential reporting mechanisms. This is intended to encourage employees to report issues of suspected wrongdoing through the assurance of strict confidentiality. Prior to the rollout of the policy outside of Hong Kong, we have commenced a jurisdictional review of the policy to ensure that it is compliant with applicable local laws and regulations in other jurisdictions in which we operate.

Sections

- 1 Approach and strategy
- 2 Governance

- 3 Stakeholder engagement

Stakeholder engagement

Our stakeholders help us define our Sustainable Development Strategy, communication strategies, how and what we choose to report on.

Why we engage with stakeholders

It is essential that we understand the issues of concern to our key stakeholders so that our business priorities reflect theirs. Many people are interested in the way we incorporate sustainability into the business and how we plan to address certain issues. As a way to address material issues and meaningfully strengthen sustainable development performance at Cathay Pacific, we regularly and systematically meet with a range of stakeholders, including our customers, staff, sustainability thought-leaders, NGOs, analysts, investors, suppliers, business and community partners.

Approach to stakeholder engagement

We started our formal stakeholder engagement on sustainability issues in 2006. Between 2012 and 2014, the engagements were focused on gaining insights into stakeholders' perceptions of Cathay Pacific's performance, any existing and emerging material issues for us, as well as their expectations of the company and areas of improvement. The findings informed two core elements: Cathay Pacific's Sustainable Development Strategy and our sustainability reporting process.

The discussion groups and interviews were facilitated by an independent organisation, guaranteeing anonymity to ensure impartiality and encouraging respondents to speak frankly.

In addition to specific engagement related to our annual reporting process, we also proactively engaged with different stakeholders throughout the year so that engagement outcomes were effectively embedded into the way sustainability was managed.

In 2016, we continued to engage with key stakeholder groups (industry and sustainability influencers, investors, NGOs, local authorities, customers and employees) throughout the year on current and emerging issues. This approach allowed us to be more strategic in the way we connect with our stakeholders, and to respond more effectively to their issues of concern. We continued to monitor how material issues were trending and how stakeholders' views were evolving.

Approach to sustainable development

Stakeholder engagement

Carbon emissions and climate change remained the two most important sustainable development issues facing the airline industry. The well-being of animals is also an emerging issue amongst external stakeholders (particularly for NGOs).

The table below shows the most common issues raised by the key stakeholder groups over the years.

Stakeholder Group	How We Engage	Common Issues that are Important to this Stakeholder Group
Customers	<ul style="list-style-type: none"> • Reflex passenger survey • Online feedback • Comment cards and letters • Social media • Focus groups 	<ul style="list-style-type: none"> • Safety • Punctuality and service • Customer experience • Crisis handling and customer relations • Cost of tickets • Environmental issues • Customer education on sustainability • Caring for the environment • Collaborating with the community • Transparency with sustainability information
Employees	<ul style="list-style-type: none"> • Intranet • Newsletters and briefing notes • Consultative committees and staff forums • Focus groups • Organisational alignment survey • Staff sustainability survey • Sustainability workshops • Social networks (e.g. Yammer) 	<ul style="list-style-type: none"> • Employee relations and labour standards • Staff benefits • Training and development • Education on sustainability • Reduction of inflight waste • Sustainable sourcing of inflight meals • Volunteering and community involvement • Better engagement and alignment between Hong Kong and outports • Safety and fatigue management • Reduction of fuel burn • Moving from paper to electronic documents • Communicating environmental benefits of new fleet to the public • Adopting best international labour and contractual practices • OHS training • Enhance communication of sustainability information to improve knowledge • Be provided with channels to express thoughts and ideas

Approach to sustainable development

Stakeholder engagement

Stakeholder Group	How We Engage	Common Issues that are Important to this Stakeholder Group
NGOs and Academia	<ul style="list-style-type: none"> • Stakeholder review committee • Focus groups • Strategic discussions • Event participation 	<ul style="list-style-type: none"> • Climate change and use of sustainable fuel alternatives • Strategic engagement with NGOs • Better communication of sustainability initiatives to the general public • Stronger influence on customers with carbon offsetting • Target-setting for key performance areas, e.g. carbon goals, carbon trading, offsetting and cost of emissions • Biodiversity • Investing in the next generation • Training local personnel • Staff satisfaction, retention and training • Maintaining employee relations • Community engagement, including on disaster response, relief and programme involvement • Global approach to community investment • Customer service • Safety • Having a supply chain strategy • Promoting sustainable tourism • Embedding sustainability into the workplace • Industry leadership • Innovation
Investors and shareholders	<ul style="list-style-type: none"> • Annual Report • Focus groups and interviews 	<ul style="list-style-type: none"> • Improving transparency on environmental issues and supplier management • Contextual information on reported data to help stakeholder understanding • Focus on customer service and cost, rather than just the bottom line • Clearer reporting on community investment • Providing industry and peer data for easy comparisons • Direct engagement with investors • Embedding carbon information in flight booking menu • Sustainability performance

Approach to sustainable development

Stakeholder engagement

Stakeholder Group	How We Engage	Common Issues that are Important to this Stakeholder Group
Suppliers	<ul style="list-style-type: none"> • Supplier questionnaire • Sustainability newsletter • Focus groups 	<ul style="list-style-type: none"> • Commitment to climate change, offsetting and biofuels • Transparency around labour relations • Rising costs (e.g. fuel) and effects on the industry • Collaboration with local businesses and communities • More stringent supplier codes of conduct • Supplier training • Communication on responsible procurement plan • Top level governance for sustainability
Other businesses	<ul style="list-style-type: none"> • Annual Report • Focus groups • Business forums 	<ul style="list-style-type: none"> • Active communication on sustainability initiatives • Lead on climate change and resource efficiency issues • Highest governance level takes leadership position on sustainability issues imperative • Customer and staff safety • Staff welfare

A detailed assessment was conducted on the findings of past years' engagement exercises. In order to monitor current priorities and current issues, we relay back to our regular stakeholder engagement exercises. Although the importance of certain issues such as waste management, sustainable sourcing and biodiversity has increased over the years, some of the topics such as climate change have remained high as stakeholders' priorities over the years. The following top issues continue to form the framework of this year's Sustainable Development Report:

- [Safety](#)
- [Climate change](#)
- [Waste management](#)
- [Sustainable sourcing](#)
- [Biodiversity](#)
- [People](#)

Issues materiality

We have been incorporating sustainable development risks into the company's risk matrix to enable us to gain a more comprehensive perspective and to identify significant issues, risks or 'material' issues. We have also been developing a materiality matrix on sustainability issues since 2009. An issue is considered 'material' when it may substantially affect our long-term commercial and operational viability. This matrix combines the Swire Group's approach to identifying the risk concerns of our stakeholders and our own materiality-scoring methodology, which follows the principles outlined in the G4 Guidelines and the AA1000APS Social Standard.

Our ongoing stakeholder engagement research showed that all issues raised were important to stakeholders, albeit to differing degrees. The level of importance of an issue is relative to the others being discussed. A lower-scoring issue does not necessarily mean they are of 'low' priority to stakeholders. These views are reflected in the three-tiered structure.

Our assessment criteria of the identified risks are shown in the following tables:

Criteria to assessing materiality

Assessing 'Level of Concern to Cathay Pacific's Key External Stakeholders'

TIER 1	<p>The issue is understood to be of concern to key stakeholder groups at an international or national level and meets two or more of the following criteria:</p> <ul style="list-style-type: none"> • Has a high impact on society or the environment • Is known to be of high priority to stakeholders • Is strongly related to the activities of Cathay Pacific and others in the sector • Is particularly important in enabling judgments to be formed about Cathay Pacific's CR performance
TIER 2	<p>The issue is understood to be of concern to key stakeholder groups at a national level and meets one or more of the following criteria:</p> <ul style="list-style-type: none"> • Has a moderate impact on society or the environment • Is known to be of moderate priority to stakeholders • Is related to the activities of Cathay Pacific but also many other industry sectors • Is fairly important in enabling judgments to be formed about Cathay Pacific's CR performance
TIER 3	<p>The issue is understood to be of concern to key stakeholder groups at a national or local level and meets one or more of the following criteria:</p> <ul style="list-style-type: none"> • Has a low impact on society or the environment • Is known to be of low priority to stakeholders • Is only indirectly related to the activities of Cathay Pacific • Is not very important in enabling judgments to be formed about Cathay Pacific's CR performance

Assessing 'Current or Potential Impact on Cathay Pacific'

TIER 1	<ul style="list-style-type: none"> • High current or future financial impact • Potential for some impact (positive or negative) on brand, reputation and key stakeholder relationships and international media attention • Some potential for legal non-compliance and fines • Some potential for positive or negative impact on operations and customer orders • Is part of stated strategy, policy or voluntary commitment
TIER 2	<ul style="list-style-type: none"> • Limited current or future financial impact • Potential for some impact (positive or negative) on brand, reputation and key stakeholder relationships and national media attention • Low potential for legal non-compliance and fines • Low potential for positive or negative impact on operations and customer orders • Is part of stated strategy, policy or voluntary commitment
TIER 3	<ul style="list-style-type: none"> • No or low current or future financial impact • Potential for positive or negative local media attention, with no impact on brand, reputation and key stakeholder relationships • No potential for legal non-compliance and fines • No potential for positive or negative impact on operations and customer orders

Approach to sustainable development

Stakeholder engagement

The graphic below is a summary of ongoing work in developing material issues for the Sustainable Development Strategy. The majority of the identified issues are consistent with the main concerns of our stakeholders and has subsequently been reflected in our reporting. Please refer to our [GRI content index](#) for more information on our material aspects.

External Stakeholders	Cathay Pacific	Overall	Issues	Section of the Report to which this issue relates to
Economic				
●	●	●	Customer Safety	Safety
●	●	●	Governance	Approach to sustainable development
●	●	●	Communications with stakeholders	Approach to sustainable development
●	●	●	Disclosure and transparent	Approach to sustainable development
●	●	●	Sustainability performance	Throughout the report
●	●	●	Sustainability features and products and services provide	Climate change Waste management Sustainable sourcing
Environment				
●	●	●	Emission/climate change/ alternative fuels	Climate change
●	●	●	Biodiversity and animal welfare	Biodiversity
●	●	●	Resource use	Waste management Sustainable sourcing
●	●	●	Material sourcing	Sustainable sourcing
●	●	●	Air quality	Climate change
●	●	●	Noise	Not considered a material issue
People (employees and communities)				
●	●	●	Occupational Health and Safety	People
●	●	●	Staff welfare	People
●	●	●	Communication and engagement	People
●	●	●	Training and development opportunity	People
●	●	●	Community investment	People
●	●	●	Staff volunteering	People

● Tier 1 ● Tier 2 ● Tier 3

Stakeholder review panel

Since 2010, Cathay Pacific has invited different multi-stakeholder committees to provide external input in regards to our stated performance against our Sustainable Development Strategy. We also ask our multi-stakeholder committees to review and assess the balance, completeness and responsiveness of our Sustainable Development Reports.

In 2016, we have taken the opportunity to engage a new committee to provide their views on our performance and strategy.

The committee members were selected based on their range of expertise, which we believe can provide invaluable input for us to improve our report. Their advice will also help to shape our future sustainable development approach and programmes. This year, the panel consisted of:

- Robert Wood – Head of Sustainability, Virgin Australia
- Christoph Ganswindt – Executive Director, Information Technology and Sustainability, Hong Kong Jockey Club
- Daisy Chee – Assistant Manager, Group Sustainability, CLP

The Stakeholder Review Committee convened twice in-person and via a conference call focus group meeting to review draft report content, as well as to provide advice on our Sustainable Development Strategy.

The committee considered the following topics:

- The appropriate coverage of issues and the materiality of those issues (existing and emerging) 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 current and future reports, as well as in overall communications and engagement around sustainable development.

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

The Committee Statement:

We welcome Cathay Pacific's invitation to be involved in this year's Stakeholder Review Committee. This exercise demonstrates the organisation's commitment to multi-stakeholder engagement and obtaining external input around the organisation's reporting, performance and communications related to its Sustainable Development strategy.

Overall, the Committee acknowledges Cathay Pacific's efforts to take a leadership role in the sustainable development of the aviation industry. This is supported by Cathay Pacific's focus on alternative fuel investment and research in sustainable energy, its integrated approach in identifying and addressing material issues, and its transparent approach to reporting. It is also supported by Cathay Pacific's engagement in various industry associations such as IATA's Environment Committee and the ICAO's Global Market-based Measure Technical Task Force for the Carbon Offsetting and Reduction Scheme for International Aviation (CORSA) scheme.

The Committee welcomes the streamlined format of the online report; and commends the structure and readability of the report.

Looking ahead, we would like to encourage Cathay Pacific to consider:

- undergoing a comprehensive discussion on the 20/20 commitments and future sustainable development strategy in the Report;
- enhancing the communication around sustainability throughout the customer journey, using new and innovative channels such as social media, inflight entertainment, and mobile apps;
- sharing its best practices and strategies internally with other department as well as externally with other organizations across the sector; and
- broadening the scope of stakeholder communications by pragmatic discussion of the various challenges being faced in sustainable development.

We commend Cathay Pacific for its continued commitment to sustainable development reporting and stakeholder engagement, which demonstrate transparency and integrity.

Stakeholder Review Committee