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TRANSFORMATION

We have embarked on a three-year corporate transformation programme to make our business more productive, customer-centric and insight-driven.



NEW AIRCRAFT

We took delivery of 12 Airbus A350-900 new aircraft in 2017 and placed order for 32 Airbus A321neo for delivery from 2020 onwards.



BIOFUEL

Delivery flights of all our A350-900 aircraft were operated with blended biofuel. In 2017, 159 tonnes of biofuel were consumed.



CORSIA

We are on track for the implementation of CORSIA, aiming to achieve carbon neutral growth from 2020.



CARGO

We published our first Sustainable Development Cargo Carriage Policy, which showed our commitment to conserving species diversity.



OUR PEOPLE

We enhanced our people strategies to develop our talents with greater accountability and productivity by improving our employee experience.



COMMUNITY

We raised over HK\$ 13 million in our inflight donation program and continued our long-term community initiatives.



RECOGNITIONS

Continue to be recognised as a constituent in the Hang Seng Corporate Sustainability Index and FTSE4Good Index Series.

Sustainability is a matter close to my heart. It has never been more important that we find ways of growing our business in a truly sustainable way, that we minimise our impacts in consumption, emissions and waste whilst we grow a sustainable and profitable business; one that provides employment and rewarding careers to our people.

Ever since Cathay Pacific started 72 years ago, Hong Kong has been our base and we remain as committed as ever to the people of Hong Kong and to playing our part to ensure that the environment, in all its diversity, is preserved and improved so that Hong Kong can continue to develop as a vibrant and successful city and a great place to live.

Business outlook – our transformation is on track

2017 was a unique but challenging year for all of us at Cathay Pacific. Structural changes and a difficult operating environment required us to start a three-year transformation journey aimed at ensuring that our business model is competitive and that our airlines would not just survive but thrive in a continuously changing environment. I am pleased with the progress so far, there is much to do but our transformation programme is on track and you can find more business updates in our annual report. Whilst the change programme has had our undivided attention, it does not mean we have forgotten our environmental and social commitments and aspirations - far from it. Sustainability is a 'must' for our business and for our people.

Reducing our carbon footprint

The reduction of greenhouse gas emissions is important. We have been involved in, and supportive of CORSIA, the industry-wide emissions reduction scheme. Preparations are in place for the implementation of this joint worldwide aviation initiative. We continue to work on other programmes to reduce our carbon footprint and this report highlights the work done to protect biodiversity and to embed sustainable practices across our operations from point of sourcing to the recycling of waste and obsolescent equipment.

Care for our people and community

Airlines are very much 'people' businesses. Following the restructure of any company, it is natural for people to feel unsettled. Whilst we made sure colleagues to whom we said goodbye to were taken care of fairly and treated with dignity, we also paid attention to reassuring colleagues who stayed with us. A series of employee surveys have and will be conducted so that we can identify and address the needs of our people. Concrete follow-up plans aimed at enhancing engagement have been drawn up and are being implemented.

We continue to support the communities we serve in the form of volunteering work, community programmes, charitable donations and flight sponsorships. I would invite you to take a look at the 'Community' section of this report to see the differences, both big and small, that we are making.



Sustainability is a matter close to my heart. It has never been more important that we find ways of growing our business in a truly sustainable way, that we minimise our impacts in consumption, emissions and waste whilst we grow a sustainable and profitable business; one that provides employment and rewarding careers to our people.

A handwritten signature in black ink, appearing to read 'Rupert Hogg'. The signature is stylized and fluid.

Rupert Hogg
Chief Executive Officer, Cathay Pacific





Our approach



Commitment to sustainable development

Our commitment to leadership in sustainability is deeply embedded in our corporate values. As the biggest shareholder of Cathay Pacific for many years, Swire Group’s Honorary Life President and Former Chairman Sir Adrian Swire, made the following statement in 1989:



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, Swire Group

Sustainable development policy

In 2015, we set out our Sustainable Development Policy, which embeds sustainable development principles and practices throughout our business. In practice, our commitment to sustainable development means paying due heed to environmental, social and economic considerations in all business decisions. We ensure that we meet or exceed all regulatory requirements in the jurisdictions where we do business.

The following six key areas – addressing the most material environmental and social issues for our business and our stakeholders – make up the basis of our Sustainable Development Policy:

Focus areas	Sustainable development policy
Safety	Put safety first and provide a safe and healthy environment for our stakeholders.
Climate change	Lead the industry, and contribute to global efforts to reduce aviation’s impact on climate change by enforcing fuel efficiency practices.
Sustainability in operations	Reduce waste and improve recycling. Minimise our consumption of natural resources. Work with suppliers to implement policies and practices to reduce their environmental impact.
Biodiversity	Support community efforts promoting the conservation of natural resources.
Our people	Respect our people and provide an environment in which they can realise their potential, making us a first-choice employer.
Community	Support the communities we serve, respect cultures, and enhance the overall quality of life. Ensure our suppliers protect and respect their workers’ welfare.

Our sustainable development policy can be found here:
<https://www.cathaypacific.com/content/dam/cx/about-us/environment/PDF/CX-SD-Policy-detailed-EN.pdf>

United Nations Sustainable Development Goals (SDGs)

In 2015, the United Nations General Assembly adopted 17 measurable goals to be achieved by 2030. These goals aim to

ensure global prosperity as part of a new sustainable development agenda. While not all these goals are applicable to our operations, we refer to the United Nations Sustainable Development Goals that are relevant to us as guiding principles in shaping our sustainable development strategy.

SDGs		Descriptions	Relevant section of the Report
	5 – Gender Equality	Achieve gender equality and empower all women and girls.	Our people Community
	8 – Decent Work and Economic Growth	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.	Our people Community Safety
	12 – Responsible Consumption and Production	Ensure sustainable consumption and production patterns.	Sustainability in operations
	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 Sustainability in operations
	15 – Life on Land	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss.	Biodiversity Sustainability in operations

Corporate governance

The Cathay Pacific Group is committed to ensuring that its affairs are conducted in accordance with high ethical standards. This reflects its belief that, in the achievement of its long-term objectives, it is imperative to act with probity, transparency and accountability.

Corporate governance is the process by which the Board instructs management of the Group to conduct its affairs with a view to ensuring that its objectives are met. The Board is committed to maintaining and developing robust corporate governance practices that are intended to ensure that:

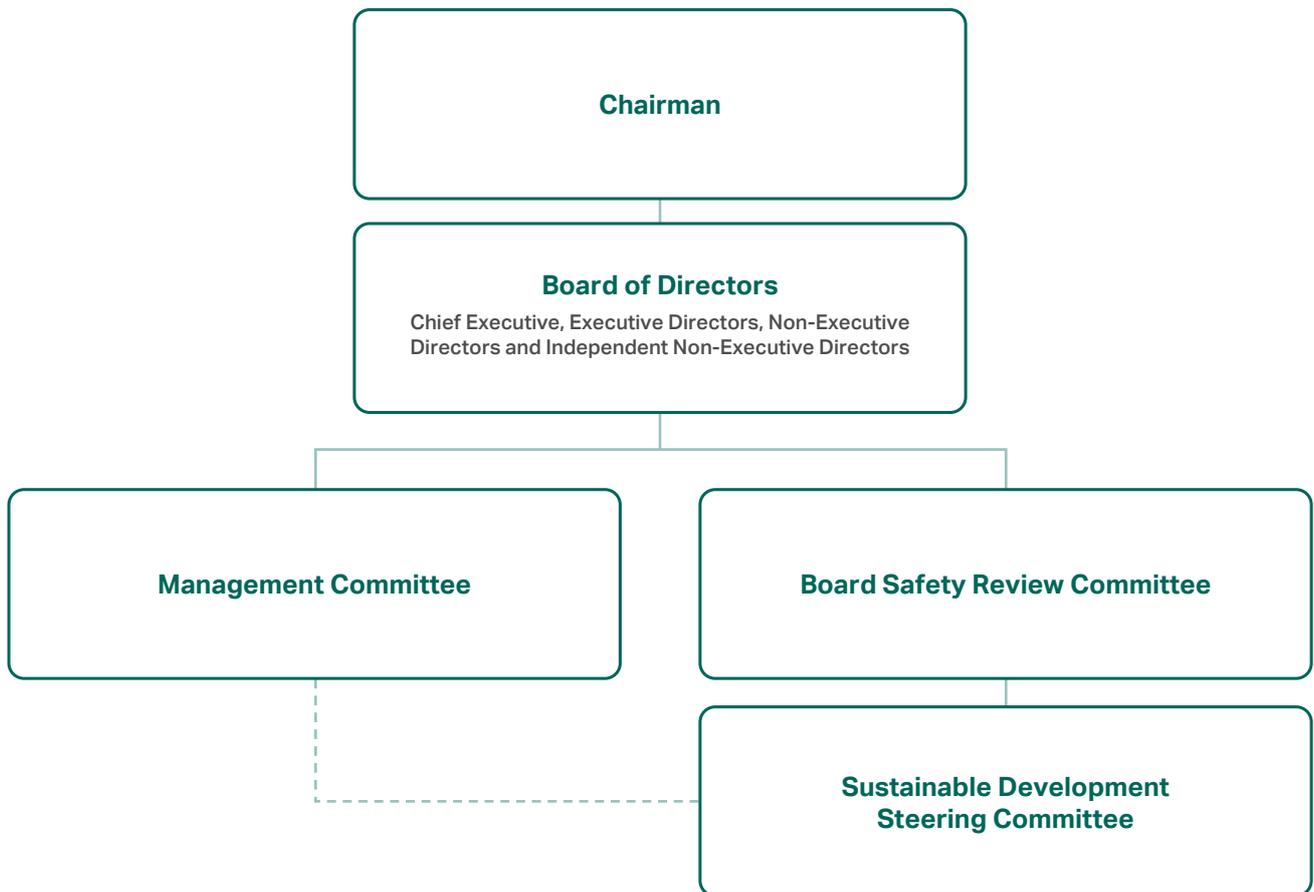
- shareholders receive satisfactory and sustainable returns
- the interests of those who deal with the Company are safeguarded
- overall business risk is understood and managed appropriately
- high-quality products and services are delivered to the satisfaction of customers
- high standards of ethics are maintained

Cathay Pacific supports the principles-based approach of the Corporate Governance Code published by The Stock Exchange of Hong Kong Limited and the flexibility this provides for the adoption of corporate policies and procedures which recognise the individuality of companies. Corporate governance does not stand still at the Group; it evolves with each business and operating environment.

For details of our corporate governance, please refer to our Annual Report 2017, p.34-56.

Governance of sustainable development

The Chairman leads the governance of sustainable development at the Cathay Pacific Group, while the Chief Executive is accountable for the sustainable development strategy. A key component of this strategy is to encourage our employees to make better decisions with the intention of minimising the social and environmental impacts of their daily routines. This enables us to make our business more sustainable and help deliver economic value – i.e. profits for shareholders.



Risk management

Our Group Safety and Operational Risk Management (GSORM) and Internal Audit are responsible for the Group Risk Management Policy. They coordinate management's review and update the Corporate Risk Register, which is reviewed three times a year, both at the Risk Assessment Meeting (chaired by the CEO and attended by the Management Committee) and by the Audit Committee. The Register outlines specific risks, ratings and mitigation plans. GSORM concentrates on airline safety and security risks while Internal Audit looks after all remaining categories of risk.

Our strategies toward specific types of risk are reviewed by the following committees:

- Legal and Compliance Steering Committee – legal and compliance risks
- Sustainable Development Steering Committee – sustainable development related risks especially around environmental and societal impact
- Airline Safety Review Committee – airline operational safety risks
- Audit Committee – overall effectiveness of the Group's risk management and internal control systems

Corporate Code of Conduct

The Cathay Pacific Group enforces the highest standards of corporate governance and best practices in accordance with our Corporate Code of Conduct (the "Code"). The Code sets out our principles for acting responsibly in the course of achieving our commercial success. The Code applies to all the employees under Cathay Pacific and its subsidiaries, and includes issues related to business ethics, conflicts of interest, procurement, insider trading, lobbying, bribery, environment, health and safety, and respect in the workplace.

Corporate compliance

Customer privacy protection

We ensure our policies and systems comply with the Personal Data (Privacy) Ordinance (Cap. 486) of the Hong Kong SAR government and other relevant laws in countries or territories where we operate.

We have established a Customer Privacy Policy to protect our customers' privacy. We aim to ensure that our customers can make informed decisions and feel confident about supplying us with their personal data when using our website, mobile and other services.

In addition, the General Data Protection Regulation comes into force in the European Union in 2018. We commenced a global data privacy review in 2017 to ensure compliance with the data protection regimes for the countries/territories where we conduct business.

During 2017, there were no convictions for non-compliance of laws and regulations relating to customer privacy that would have a significant impact on the Group.

Advertising and labelling practices

We strive to ensure that our advertising and labelling practices comply with the relevant law and regulations, such as the Trade Descriptions Ordinance (Cap. 362) of the Hong Kong SAR government, which prohibits specified unfair trade practices such as false trade descriptions of services, misleading omissions, aggressive commercial practices, bait advertising, bait-and-switch and wrongful acceptance of payment.

During 2017, there were no convictions for non-compliance of laws and regulations relating to advertising and labelling practices that would have a significant impact on the Group.

Anti-Bribery Policy

The Cathay Pacific Group takes a zero-tolerance approach to bribery and corruption and is committed to doing business with integrity and in compliance with the laws and regulations that govern its global business. The Group has an established Anti-Bribery Policy to reaffirm its commitment as part of a comprehensive and robust anti-corruption and anti-bribery compliance programme to provide guidance to all relevant parties about compliance with global anti-bribery laws.

During 2017, there were no convictions for non-compliance of laws and regulations relating to bribery and corruption that would have a significant impact on the Group.

Whistleblower Policy

We have an established Whistleblower Policy to help mitigate legal, financial, operational and reputational risk to the company. This policy also aims to encourage our people to come forward and report suspected wrongdoing and to provide necessary guidance and assurance to anyone who reports suspected wrongdoing. Any suspected wrongdoing is properly investigated and addressed to ensure that prompt remedial action is taken. Any reporting under this policy can be done confidentially through multiple channels that allow for anonymous reporting.

Antitrust Policy

Cathay Pacific Group has an established Antitrust Policy, and always aims to operate in full compliance with relevant competition laws. We will continue to participate in collaborative competitor activities when such arrangements are clearly mandated or permitted by the applicable regulations. The Group Compliance and/or Internal Audit Department may conduct audits to review documents and conduct interviews with any personnel. Full cooperation is required of all personnel.

In 2017, Cathay Pacific remained the subject of antitrust proceedings in various jurisdictions. The proceedings were focused on issues relating to pricing and competition. For details, please refer to our Annual Report 2017, p.92.

Feedback mechanism

We place great value on feedback and suggestions from our customers. If any complaints or issues arise regarding the above issues, customers can contact us via web portals, email, dedicated phone lines and direct mail. All feedback is taken seriously by relevant teams.

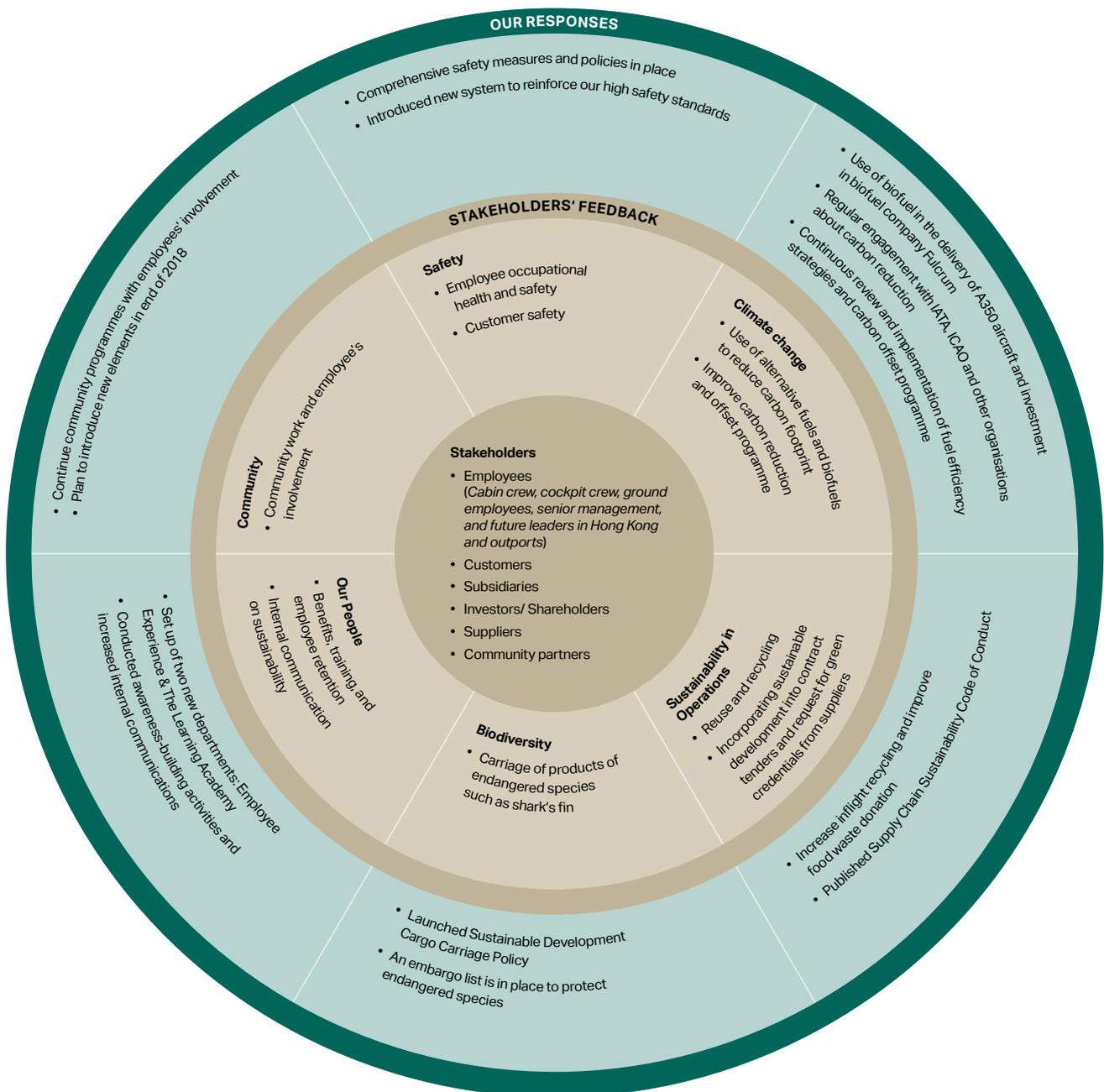
Stakeholder engagement

We value honest, open and regular dialogue with our stakeholders. Since 2006, we have periodically carried out stakeholder engagement to ascertain our stakeholders' primary concerns. We also make use of various communication channels to connect with our stakeholders, such as employee engagement surveys, publications, websites, and social media.

In developing this report, we have identified stakeholders based on their potential influence on our sustainable development

strategies and direction. They reviewed and commented on our sustainability performance and material aspects. An independent third party oversaw the stakeholder engagement exercise through focus groups, interviews and surveys. The results of the stakeholder engagement have helped us develop the report content and the material topics for disclosure.

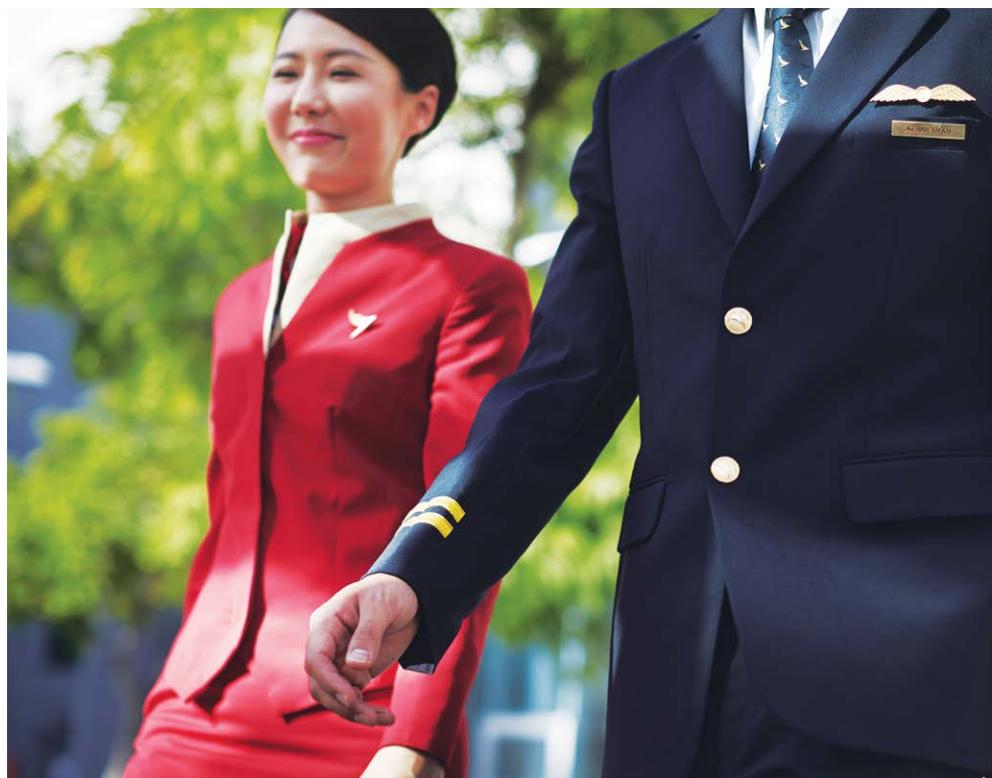
A summary of key topics and concerns of various stakeholder groups and our responses is set out below:







Safety



Why safety matters

Safety is our first priority, and we are fully committed to providing a safe operational and work environment for all our customers and employees. In order to pursue and maintain our commercial activities in a sustainable manner, we manage the safety risks in respect to our aviation operations, customers and employees by adhering to the As Low As Reasonably Practicable (ALARP) guideline.

Our Safety Policy clearly sets out our commitment to managing the safety risks of our operations, while our robust safety and risk management systems have helped us maintain a high level of safety performance. We continuously strive to improve and build on what we have already achieved.

Safety policy

The Cathay Pacific Group Safety Policy, representing the commitment made, is prominently displayed around the 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.

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.

Rupert Hogg

Chief Executive Officer, Cathay Pacific

Algernon Yau

Chief Executive Officer, Cathay Dragon

Operational safety

At Cathay Pacific Group, we strive to maintain the highest levels of safety. We are committed to providing a safe and healthy work environment for all employees, and we achieve this by adopting a risk-driven approach in identifying and eliminating hazardous conditions. The foremost safety goal of our airlines, Cathay Pacific and Cathay Dragon, is to achieve zero accidents and zero "high risk" incidents.

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 adverse findings. IOSA is a global safety standard, and the enhanced audit ensures conformity via ongoing biennial audits. In 2017, Cathay Dragon successfully renewed its IOSA accreditation. Cathay Pacific's renewal audit takes place in 2018.



Organisational design change

In 2017, as part of our three-year transformation programme, the Group Safety and Group Security departments merged with the Group Quality and Business Resilience teams to form the Group Safety and Operational Risk Management (GSORM) team. This restructure allowed the Group to take advantage of common systems and processes, enabling a more coherent and effective approach to safety and risk management.

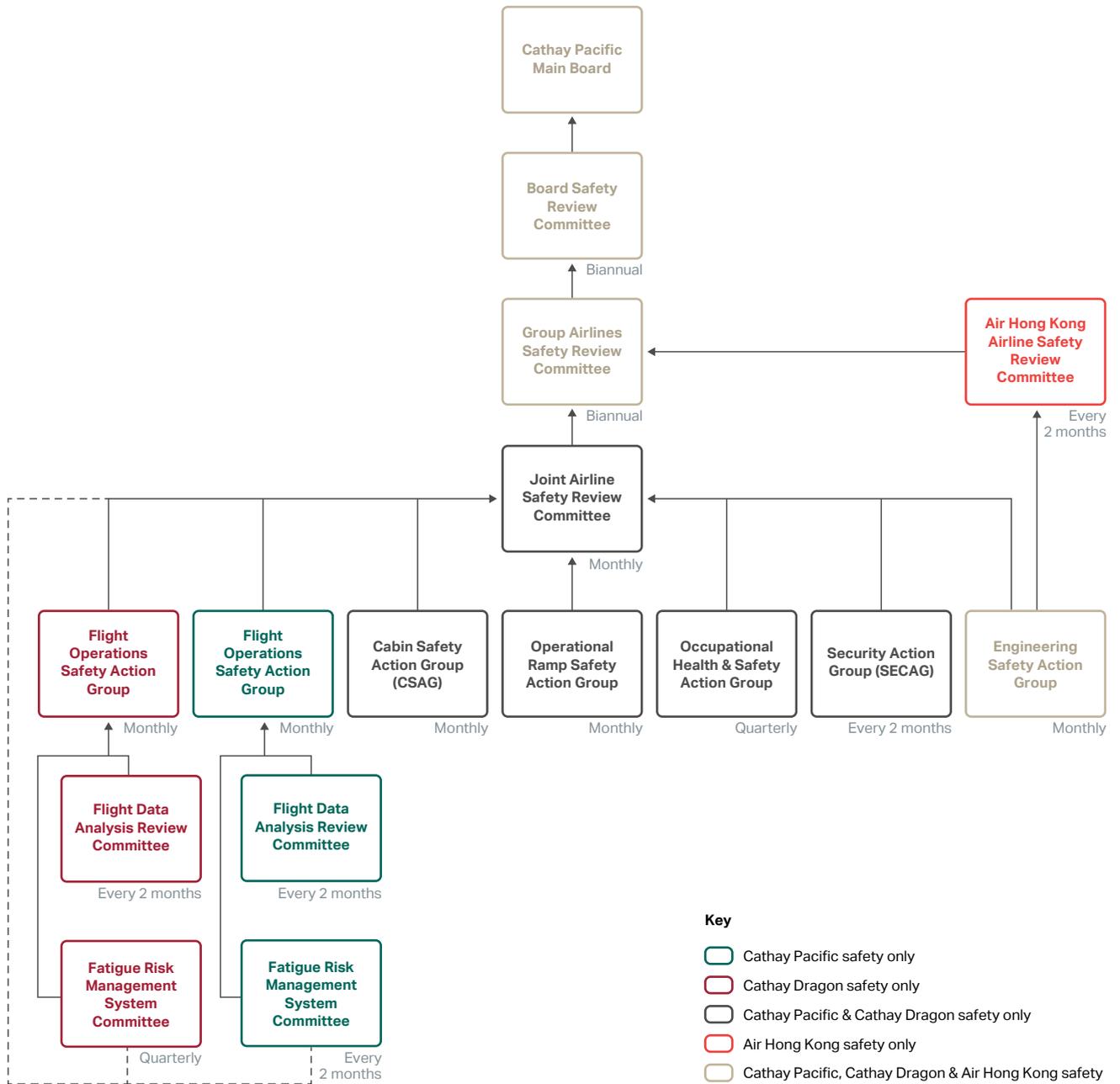
The wider organisation also changed during 2017 when Cathay Pacific and Cathay Dragon merged some back office operational functions. While these changes made operations more efficient, they were independently risk assessed for any possibility of unintended consequences. Changes that affected regulatory approvals were shared with and accepted by the Hong Kong Civil Aviation Department (HKCAD).

Safety risk management

The Cathay Pacific Group Safety Management System (SMS) ensures that we manage safety risks both reactively and proactively. Events and incidents are investigated thoroughly and safety performance indicators are actively monitored on a monthly basis by Safety Action Groups and the Airline Safety Review Committee (ASRC). As part of the organisational change, the ASRCs of Cathay Pacific and Cathay Dragon merged to become the Joint ASRC. This enabled a more consistent and effective approach to safety management across the airlines.

All safety meetings are attended by 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. In addition, independent safety expert Dr. David King chairs the Group Airline Safety Review Committee and the Board Safety Review Committee (BSRC), which meet 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.

Safety Management System (SMS) governance structure



Initiatives under Safety Management System (SMS) in 2017

Mobile eReporting

Group Safety and Operational Risk Management (GSORM) introduced a brand new system for employees to report safety-related incidents.

The Aviation Quality Database (AQD) Mobile eReport app, accessible via a company-issued tablet, allows users to capture safety events or hazards and submit a safety report anytime, anywhere.

The app can be used without an internet connection, allowing users to compile a report inflight. They simply save the draft on the tablet and submit the report once they have a connection. The tablet's built-in camera allows users to attach photos as supporting evidence.

The AQD Web Portal (via a web browser) is another reporting option. The portal facilitates report submission as well as retrieval of historical reports.



This function was introduced to Cathay Dragon cabin crew in early 2017, and to Cathay Pacific and Cathay Dragon cockpit crew in early 2018. It will be progressively rolled out to ground employees in 2018 and Cathay Pacific cabin crew in 2019.

New flight data recording technology

All Cathay Pacific and Cathay Dragon aircraft carry Quick Access Recorders (QAR) to capture the flight operations safety data from each flight. Currently, just over half of the fleet uses a 2.5G cellular phone technology to wirelessly transmit the QAR data to our ground system for analysis.

The rest of the fleet uses legacy equipment, such as disks or cards to record the data, which must be manually removed and downloaded at Head Office.

To overcome these challenges associated with the current QAR system, the engineering team has started a programme to replace all QARs on our A320, A321, A330, B747 and B777-300ER aircraft with a new system manufactured by Avionics. This technology uses 4G cellular network to wirelessly transmit flight safety data. The benefits of using 4G technology include being able to retrieve data faster directly from overseas airports via data roaming, and reducing disposal of plastic disks and metal cards.



Normal Ground Operations Monitoring (NGOM)

Normal Ground Operations Monitoring (NGOM) is a new program designed during 2017, due to be implemented in late-2018. NGOM adopts the principles from similar programs in flight operations and air traffic control for observing and gathering intelligence. This means that safety issues can be identified proactively, instead of reactively after an incident occurs.

NGOM focuses on airport ground operation teams who work in the ramp environment, where aircraft are serviced from point of gate arrival until their departure for the next flight. NGOM will enable us to collect objective data on how ground employees manage threats and errors in everyday work, and help managers to understand any differences between theory and practice.

Safety promotion

Cathay Pacific and Cathay Dragon continue to promote safety and a wider understanding of the SMS. In 2017, we launched a new Safety magazine, PROACTIVE, which aims to keep employees abreast of safety activities and issues in the Group.

All employees in safety-critical roles are required to complete training in SMS to a level commensurate with their role in safety management. All new-joining pilots receive a comprehensive tailored SMS briefing as do newly promoted Inflight Service Managers (ISM) and Captains.

Fatigue risk management

Cathay Pacific and Cathay Dragon operate a complex passenger and freighter route network with pilots based all over the world and living in different time zones. Consequently, managing pilot fatigue risk is an important component of the SMS. During 2017, we continued to develop and refine the Fatigue Risk Management System (FRMS), which was established in 2011.

The FRMS far exceeds current Hong Kong Civil Aviation Department (HKCAD) regulations pertaining to the management of pilot fatigue, and complements the Approved Flight Time Limitations Scheme (AFTLS). The FRMS augments the AFTLS by introducing an evidence-based, data-driven system to continuously monitor and control fatigue-related safety risk to an As Low As Reasonably Practicable (ALARP) level.

Fatigue Risk Management Initiatives in 2017

In 2017, we continued to evolve the Fatigue Risk Management System (FRMS) by conducting studies to answer specific operational questions, deploying FRMS training for flight crew, increasing company-wide internal communication and sending representatives to serve on international fatigue forums and taskforces.

The initiatives included:

- Fatigue-related safety risks were identified via fatigue reporting (Air Safety Reports – Fatigue) and extensive analysis using fatigue software. To mitigate these risks, changes were made to rostering practices for both Cathay Pacific and Cathay Dragon.
- The FRMS committee conducted studies to answer specific operational questions. For example, a flight pattern was trialled and studied in early 2017, and discontinued at the recommendation of the FRMS Committee.
- Several flight crew training programmes were published on our internal eLearning platform Learners' World, including FRMS for Flight Crew which was completed by our pilots in 2017.
- The Group Safety Manager – FRMS continued to serve on the Management Committee of the International FRMS Forum and on the IATA FRMS Taskforce.

Emergency response system

The Cathay Pacific Crisis Response Centre is a wholly dedicated facility capable of managing 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.

More than 1,000 airline employees constitute the Care Team, whose prime focus is to assist passengers and employees and their families who have been affected 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.

Every port with our operation participated in at least one emergency exercise simulation in 2017 to test their response capabilities.

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

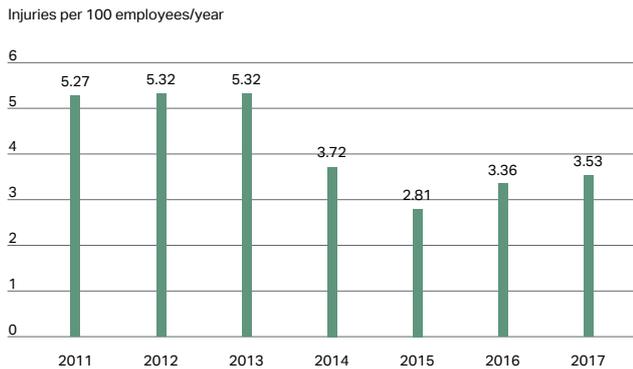
Occupational health and safety

All our operations must be carried out in a manner that safeguards the health and safety of all employees, customers, contractors, and the wider community. In 2017, we continued to build our occupational health and safety capability and address a wide range of issues across our airlines.

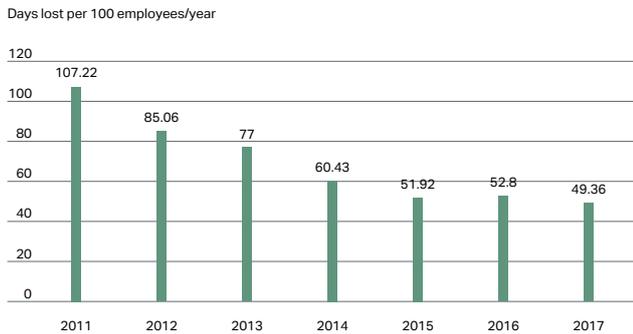
While we strive to excel in protecting our employees' health and safety through preventative measures, in February 2017 an unfortunate accident resulted in a fatality at Cathay Pacific Services Ltd (CPSL). The employee was unloading a cargo aircraft when the incident occurred. We were fined for two charges under Cap 59 F&IU Ordinance, Sections 6A – General duties of a proprietor. We were also fined for a charge in 2017 under Cap 59 F&IU Ordinance, Sections 6A – General duties of a proprietor, & Section 13 – Liability of proprietor, for a case that happened in June 2016 involving a subcontractor working at CPSL's terminal.

We have since revisited our safety risk assessment in consultation with the Hong Kong Labour Department. As a result of the review, a number of additional safety measures have been put in place, including enhanced operational procedures and daily briefings to reinforce employees' safety knowledge.

Lost time injury rate



Lost day rate



Alcohol & other drugs policy

Our Alcohol and Other Drugs Policy and Programme seeks to educate our people on issues related to alcohol and other drugs use, as well as to promote and maintain operational and workplace safety. The programme 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. It is important for our employees to pay attention to signs of substance abuse among co-workers as this can affect the employee's health, overall safety of the workplace, and may result in an accident or incident, or significantly affect work performance and damage the company's reputation.

Indoor air quality

As a participant in the Hong Kong Clean Air Charter Certification Scheme, we conduct yearly indoor air quality monitoring of our headquarter buildings Cathay Pacific City and Cathay Dragon House. We have received a 'Good Class' rating since 2008.

Passenger health and safety

In 2017, Cathay Pacific and Cathay Dragon carried 34.8 million passengers. There were no fatalities caused by operational incidents or accidents.

Inflight medical support

All crew on all Cathay Pacific and Cathay Dragon flights can call for aero-medical advisory assistance 24/7 via the inflight phone system, or the data transmission system. This system ensures general 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 cardio-pulmonary resuscitation. All crew are also trained to use automated external defibrillators, which are carried on all our passenger aircraft.

Food safety

Cathay Pacific and Cathay Dragon strive to serve meals that meet the highest levels of food safety and hygiene. Caterers are charged to create well-balanced meals, avoiding trans-fats as far as possible and shunning 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 strict food safety requirements, which are measured and monitored through Cathay Pacific Group's robust audit programme.



Climate change



2017 performance highlights



Improved fuel efficiency

by 24.8 % in traffic carried* and by 17.1% in capacity† since 1998.



More new aircraft

We took delivery of 12 Airbus A350-900 in 2017 and placed order for 32 Airbus A321neo for delivery from 2020 onwards. Fuel efficiency can improve up to 25%.



Using biofuel

We used 159 tonnes of biofuel in 2017 for flying our new A350-900 aircraft home for their delivery flights.



Ready for CORSIA

We are on track for implementing CORSIA, the global carbon offset scheme for international aviation.



* Revenue tonnes kilometre, RTK
† Available tonnes kilometre, ATK



Fly Greener

This voluntary carbon offset programme has offset over 150,700 tonnes CO₂ since 2007. In 2017 we offset 13,697 tonnes CO₂.



CO₂ emissions

Cathay Pacific and Cathay Dragon emitted 17.72 million tonnes^{◇▲} of CO₂e in 2017.

Greenhouse gas emissions

Scope 1^{◇▲}

18 million tonnes CO₂e

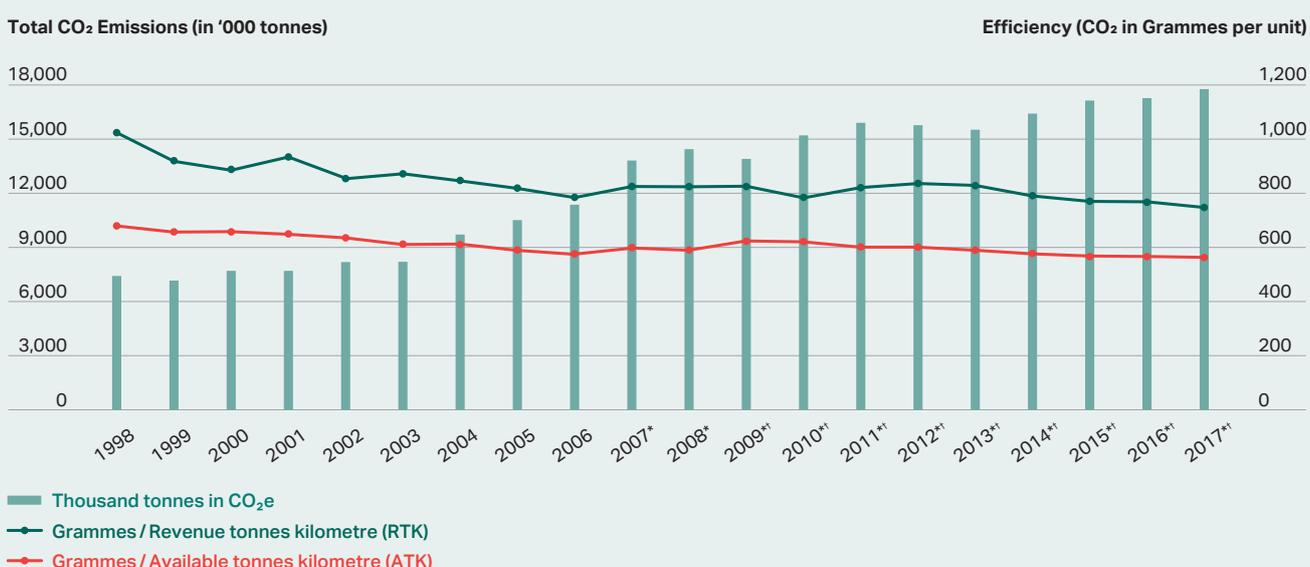
All Aviation fuel and Towngas

Scope 2[◇]

0.08 million tonnes CO₂e

Electricity and Towngas

CO₂ Emissions and Fuel Efficiency Improvement: Cathay Pacific and Cathay Dragon fleet



* Includes Cathay Dragon since 2007

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

◇ Data verified by PricewaterhouseCoopers

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

Why climate change matters

According to the most recent figures from the Intergovernmental Panel on Climate Change, civil aviation currently accounts for about 2% of global CO₂ emissions from human activity.

By 2040, international aviation fuel consumption is estimated to grow between 2.8 and 3.9 times compared with 2010 levels.

As a major international airline company, the Group is committed to reducing our carbon footprint and mitigating our impacts on climate change. Not only is climate change a pivotal concern for our stakeholders, it also gives rise to business risk that we must take seriously. Over the years, we have endeavoured to continuously improve and implemented innovative solutions by operating our fleet as efficiently as possible in order to combat climate change.

During 2017, there were no convictions for non-compliance of laws and regulations relating to air and greenhouse gas emissions or other environmental issues that would have a significant impact on the Group.

Climate change strategy

As part of our commitment to combat climate change, our Climate Change Strategy covers five key areas:

- Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)
- Alternative jet fuel
- Carbon offset programme
- Aircraft emissions
- Ground emissions



We are aware of the potentially high implications of CORSIA to our business and we therefore strive to stay ahead in this space. Our strategy considers carbon offset, biofuel and fuel efficiency holistically to ensure we have an optimal response to CORSIA.

Yee Chow

Biofuel & Emissions Trading Manager, Cathay Pacific

Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)

The Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) is a global scheme aimed at capping the net CO₂ emissions from international aviation at 2020 levels, delivering carbon neutral growth from 2020. This scheme was developed by the International Civil Aviation Organisation (ICAO). In 2016, this scheme was adopted by 191 member states of ICAO and in 2017, 72 states, representing about 88% of international aviation activity, agreed to voluntarily participate in CORSIA from its outset.

Cathay Pacific has been involved in CORSIA since its inception in 2008 and we remain closely involved in the developments through participation in the ICAO Global Market-based Measure Technical Task Force (GMTF). We have taken steadfast action and conducted studies to understand the various potential impacts, and have acquired the professional skill-set and knowledge to prepare ourselves to meet CORSIA's requirements.

We have assessed the necessary infrastructure and flight operation system in order to collect the required data, such as fuel use. We expect to have our infrastructure and system in place by the end of 2018 so that we can collect full data in 2019.

We expect more details about how CORSIA will be implemented to be announced in the near future. We maintain regular dialogue with the Hong Kong Civil Aviation Department, our regulator, to ensure we are fully ready when such information comes along.

CORSIA: Key timeline



Founding Member

2008
Cathay Pacific as a **founding member** of the Aviation Global Deal Group which advocated for a global solution to regulating carbon emissions.



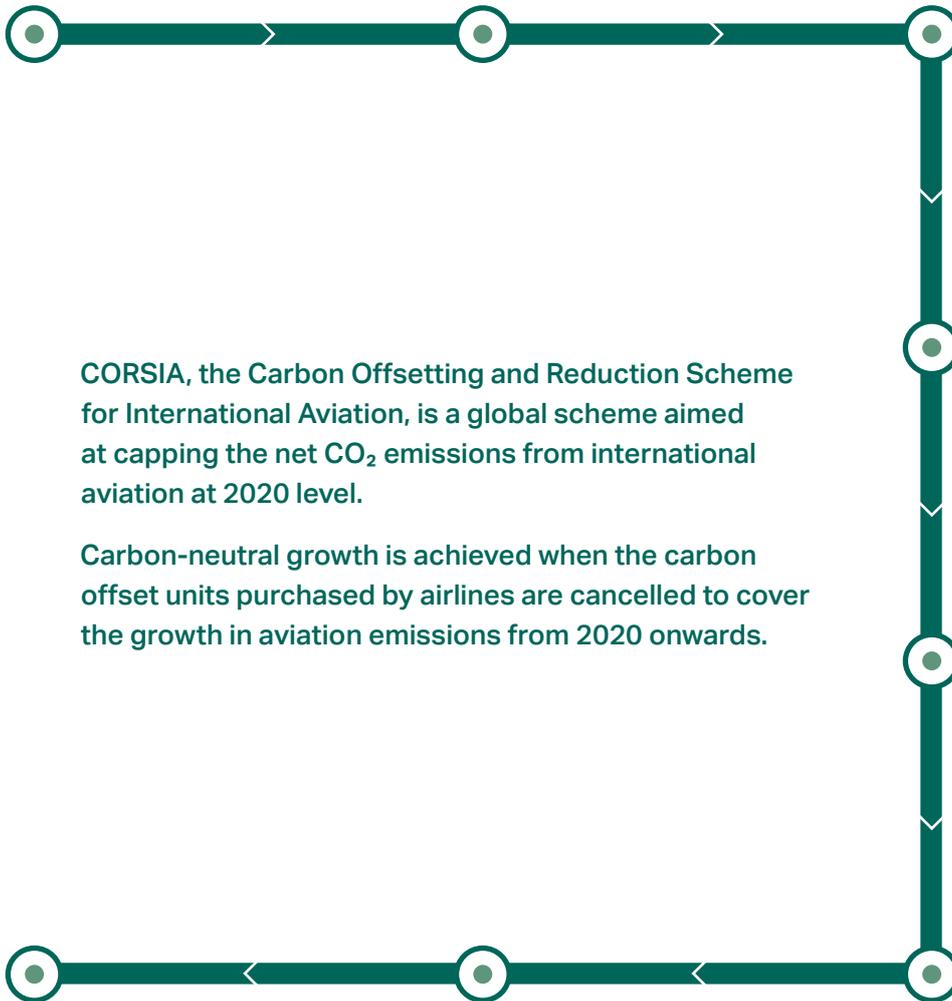
CORSIA adopted

2016
The framework of **CORSIA** was **adopted** by International Civil Aviation Organisation (ICAO).



Agreed to participate

2017
72 states representing 88% of international aviation activity agreed to voluntarily **participate** in CORSIA from 2021.



CORSIA, the Carbon Offsetting and Reduction Scheme for International Aviation, is a global scheme aimed at capping the net CO₂ emissions from international aviation at 2020 level.

Carbon-neutral growth is achieved when the carbon offset units purchased by airlines are cancelled to cover the growth in aviation emissions from 2020 onwards.



System ready

2018
Airlines need to have their Emissions Monitoring Plan and data collection **system ready** for meeting CORSIA requirements.



Monitor

2019-2020
Airlines are required to **monitor** fuel use and submit the data. This will be used for calculating how many offset credits airlines need to purchase.



Individual approach

2030 onward
Offsetting obligations will gradually transit from sectoral to **individual approach**. Airlines with faster growth rate will need to offset more for its carbon emissions.



Mandatory phase

2027
Mandatory for airlines to offset based on average CO₂ growth of the sector.



Voluntary phase

2021
Start of **voluntary phase** where airlines from participating states will offset emissions by purchasing carbon offset units based on the average CO₂ growth of the aviation sector.

Alternative jet fuel

As an alternative technology, biofuel plays an important role in tackling climate change. Compared to traditional jet fuel, biofuel can reduce life cycle greenhouse gas emissions by up to 80%. Unlike fossil fuel, biofuel can be produced more sustainably, and there is little difference in terms of performance between fossil-based fuels and biofuel.

We have taken a leading stance in the use of biofuel in the hope that it will become commercially viable for the mainstream. We have rolled out biofuel projects with world-renowned partners.

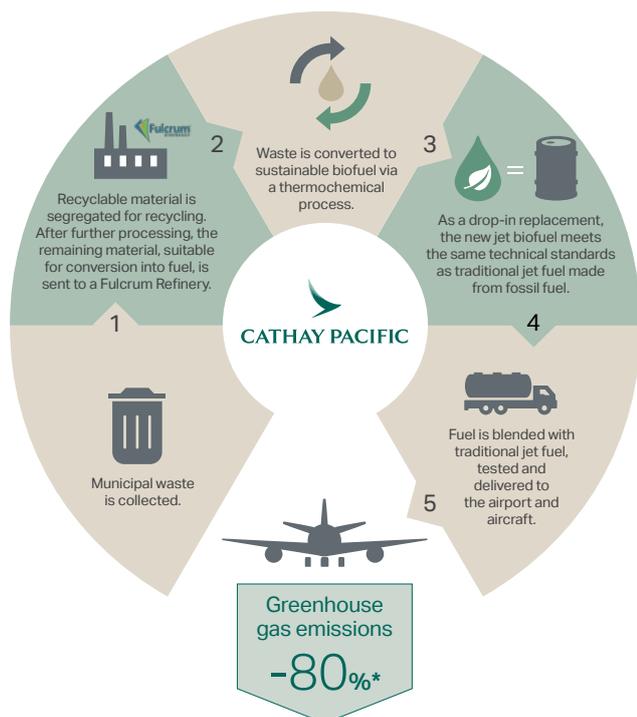
To accelerate the development of biofuels, we also contribute to the following industry groups:

- Sustainable Aviation Fuel Users Group
- FAA Centre of Excellence for Alternative Jet Fuels
- Commercial Alternative Aviation Fuels Initiative

A pioneer in biofuel development – Fulcrum

In 2014, Cathay Pacific, as the first airline investor, took an equity stake in Fulcrum BioEnergy, Inc. Fulcrum is a US-based sustainable biofuel developer, which is a world pioneer in the development and commercialisation of converting municipal solid waste into sustainable aviation fuel.

Fulcrum is due to break ground on its commercial-scale plant utilise biofuel in 2018. When the plant begins operations in 2020, it will produce over 10 million gallons of fuel each year.



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

From Waste to Wing

Cathay Pacific’s biofuel flights

The A350 aircraft provides an ideal platform for the use of biofuel given its cutting-edge technology and high fuel efficiency. Since 2016, we have delivered all our 22 new Airbus A350-900 aircraft from Toulouse to Hong Kong with a 10% blend of biofuels made from sustainable sugars feedstock via our partners – Total, Amyris and Airbus. 159 tonnes of third-party certified biofuel were consumed in 2017.

Supporting Fly Green Day at Chicago airport

On 8 November 2017, Cathay Pacific participated at the Fly Green Day to help boost the commercialisation of biofuel. This was an initiative organised by advanced renewable fuels company Gevo, Inc. and Air BP, in collaboration with Chicago O’Hare International Airport. Cathay Pacific uplifted 285 tonnes of blended biojet fuel on the day. This initiative marked the first time biofuel was delivered via an existing fuelling infrastructure to customers at one of the world’s busiest airports.

FLY Greener – our carbon offset programme

Launched in 2007, FLY Greener is a voluntary carbon offset programme aimed at offering our passengers an opportunity to offset their carbon footprint from air travel. This programme was the first provided by any Asian airline. All proceeds received from the programme go directly to running projects that are certified under the Gold Standard to reduce CO₂ emissions. Cathay Pacific does not profit from this transaction.

Cathay Pacific is committed to the programme by offsetting all CO₂ emissions generated by our employees on business travel on our flights.

In 2017, 8,315 tonnes plus 5,382 tonnes[◊] of CO₂ (for a total of 13,697 tonnes) were offset by our employees and our passengers respectively.

Gold Standard programmes supported in 2017 included:

- Converting animal waste into clean energy via biogas digesters.
- Encouraging efficient cooking methods, which leads to more jobs, healthier people and fewer emissions.

For more details about FLY Greener, please visit our website: www.cathaypacific.com/flygreener

◊ Data verified by PricewaterhouseCoopers

Aircraft emissions

We continue to explore and implement comprehensive solutions to address our environmental impact. These solutions include improving our operational fuel efficiency, introducing a new fuel-efficient fleet, and the use of alternative jet fuel.

Fuel efficiency strategy

Improving fuel efficiency is a key pillar in lowering our carbon emissions. To optimise our fuel efficiency, we have setup a fuel monitoring system and implemented frequent engine core washing. This has enabled us to achieve higher efficiency and build resilience in the face of adverse business conditions, such as additional carbon charges and rising fuel prices.

Our fuel efficiency strategies focus on two key aspects:

- Technology
- Operations and Infrastructure

Technology

Technology presents the best prospects for reducing aircraft emissions. As part of our continual efforts to improve fuel efficiency, we keep abreast of the latest aircraft technologies and regularly review the performance of our existing fleet. We introduce fuel-efficient aircraft to stay competitive and lower our carbon footprint.



Operating our aircraft more fuel efficiently is a key objective of our operations teams and another way in which Cathay Pacific aims to be a more sustainable and competitive business. Activities aimed at reducing aircraft weight, flying more efficiently, and using digital means to provide the insights needed to optimise our operational activities are prominent examples of our efforts to continuously improve operational performance and operational safety.

Greg Hughes

Chief Operations and Service Delivery Officer, Cathay Pacific

Introducing the fuel-efficient A350 aircraft family

In line with our efforts to add more fuel-efficient aircraft to our fleet, 20 Airbus A350-1000s are due for delivery by 2020, which follows the introduction of 22 Airbus A350-900s into service between 2016 and 2017.

The Airbus A350-1000 brings advanced technologies in aerodynamics and design. Built with carbon-fibre reinforced plastic, the aircraft is lighter and more cost-efficient with reduced maintenance requirements. The combined technological advancement enables it to be 25% more fuel-efficient compared with previous generation competitor aircraft.

Powered by higher-thrust Rolls-Royce Trent XWB engines, the A350-1000 has attained marked levels of efficiency to support long-haul routes. This results in clear benefits for the environment, with less CO₂ and NO_x emissions coupled with a diminished noise footprint.

Acquisition of fuel-efficient A321neo aircraft and LEAP-1A engine

In 2017, we signed a deal with Airbus for 32 new A321neo single-aisle aircraft. These aircraft will join the Cathay Dragon fleet from 2020 to support our continued expansion in the Asia-Pacific region.

The aircraft will be equipped with an advanced LEAP-1A engine from CFM International. The LEAP provides a 15% improvement in fuel consumption and CO₂ emissions compared to today's best CFM56 engine, along with dramatic reductions in engine noise.

New aircraft joining

Cathay Pacific & Cathay Dragon fleet	2016	2017	2018 onward
Airbus A350-900	10	12	6
Airbus A350-1000	–	–	20
Airbus A321neo	–	–	32
Boeing 777-9X	–	–	21

Operations and Infrastructure

The Flight Efficiency Working Group, established in 2014, is made up of representatives from different departments across our airlines, to better manage and improve fuel efficiency. This group focuses on:

- Aircraft operations
- Aircraft weight
- Aircraft performance
- Airspace efficiency
- Auxiliary Power Unit (APU) usage

Discretionary fuel optimisation project

Since early 2017, our Flight Operations team has been working on a discretionary fuel optimisation project. This project aims to encourage the carrying an optimal level of fuel, as any extra weight on the aircraft results in extra fuel burn and as a result, additional carbon emissions.

Using detailed analysis of past flight data, an optimal level of fuel uplift is calculated for each route and for each aircraft type. Such information is shared with our pilots.

Together with other performance-compliance programmes that we have adopted, this initiative has yielded very good results.

The fuel efficiency metrics improved from around 70% to around 95% in 2017.

In 2017 alone, the project saved about 11,000 tonnes of fuel, compared with our 2013 baseline – the equivalent of reducing 34,650 tonnes of CO₂ emissions.

Reducing engine operation during taxiing in

Conventional procedure requires aircraft to run all engines during taxiing to and from the runway. However, by reducing the engine operation while taxiing in, our aircraft have reduced our ground-level fuel-burn as well as our carbon emission.

We will continue to explore the feasibility of reducing engine operation during taxiing out in applicable airports.

Utilising data analytics

We have been collecting different inflight data across the Cathay Pacific and Cathay Dragon fleet through our collaboration with many partners. This data allows us to identify the areas where we can improve our operational efficiency.

In light of meeting CORSIA's requirements, we will continue to develop and advance our data collection system for better planning of our fuel efficiency strategies.

Digitisation – eEnabled system

We have rolled out the eEnabled Aircraft Programme to facilitate seamless global aircraft connectivity and data sharing across our airlines. We have switched to electronic documents on eEnabled aircraft and used lighter materials for inflight equipment.

For example, we digitised our cabin crew inflight manual, replacing the 13kg paper version. Charts used by our pilots will also be put in digital format from 2018 onwards.

Any weight reduction will translate into carbon emissions reduction as it incurs less fuel burn.

Ground emissions

Ground emissions cover all our non-aircraft operations. While ground emissions contribute considerably less than aircraft emissions, we have worked to reduce our carbon footprint in this segment, concentrating on electricity consumption, equipment efficiency, and vehicular emissions.

Since 2010, we have supported the Airport Authority Hong Kong's emission reduction initiatives together with over 40 other airport-related companies. All participants pledged to reduce airport-wide carbon emissions by 10% per workload unit by 2020, based on 2015 levels.

Our buildings

Located near Hong Kong International Airport, our 134,000m² headquarters encompasses Cathay Pacific City and Cathay Dragon House, airline stores, a hotel, and the flight training centre. The two premises are certified to ISO 14001:2015 standard for environmental management systems.

To reduce our carbon footprint, we invest in energy-saving measures such as low-impact lighting devices. Other reduction methods include sensors and chilled water system optimisation.

Environmental initiatives in 2017 include:

- Replacing curtain walls with appropriate energy efficient U-value and double-glazing in Cathay Pacific City, so as to reduce the use of air-conditioning while maintaining a stable indoor temperature.
- Reusing metal partitions to minimise waste.
- Installing 20 electric vehicle chargers in Cathay Pacific City.

Our subsidiaries

As a leading airline that values sustainability, our subsidiaries are also required to develop sustainable policies and practices in their operations across their business lines.

Our subsidiaries' sustainable efforts are best evidenced by the projects they are engaged in.



To make real progress in sustainable development, organisations cannot work alone but must collaborate with others up and down the supply chain. We make sure operations in our subsidiaries follow the same high standard and commitment as us in developing win-win solutions in enhancing sustainability for our business and the environment.

Algernon Yau

Director Service Delivery, Cathay Pacific

Cathay Pacific Catering Services (CPCS)



Cathay Pacific Catering Services (HK) Limited (CPCS) provides flight catering services to 50 international airlines operating out of the Hong Kong International Airport. The company produced over 30 million meals and handled 74,000 flights in 2017, representing an average of 83,000 meals and 203 flights a day.

In 2017, CPCS set a new milestone by establishing its Corporate Sustainability Targets 2020. Against the 2015 baseline year, CPCS aims to reduce carbon intensity by 10%, water intensity consumption of 5%, and waste disposal intensity reduction by 5% or increase in recycling rate by 5%.

CPCS has been publishing its own corporate sustainability report since 2010. Find out more from here: http://www.cpcs.com.hk/eng/environmental_e.html

Vogue Laundry Services Limited



Vogue Laundry Services employs more than 550 people, serves over 27 airlines and 33 hotels, and on average deals with 267,000 items a day, equivalent to 85 tonnes of laundry. Vogue is certified to 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 via active carbon absorption in its dry cleaning machines and from perchloroethylene, a volatile organic compound (VOC) consumed in the dry cleaning process. Consumption of this solvent fell 15% in 2017. Vogue also switched from a diesel boiler to a dual-fuel boiler which utilises Towngas and ultra-low sulphur diesel at a 82:18 ratio which has helped reduce CO₂ emissions.

Vogue runs a fleet of 24 vehicles. In 2017, two Euro III trucks were replaced by four Euro V trucks. In 2018, four new Euro V trucks will be added to the fleet and three Euro III trucks will be retired. Since March 2016, B5 biodiesel has been utilised on one of the delivery routes.

Cathay Pacific Services Limited (CPSL)



Cathay Pacific Services Limited (CPSL) serves 14 airlines at Hong Kong International Airport (HKIA) and is the largest cargo terminal in the world. Our annual throughput of cargo increased 15% from 1.82 million tonnes to 2.08 million tonnes in 2017. On 23 September 2017, CPSL handled over 7,400 tonnes of cargo, breaking our record of single-day cargo handled.

CPSL annual CO₂ emissions in 2017 fell by 232,972kg due to the implementation of green initiatives, including installing large pendant fans to improve ventilation, switching off 100 low bay lights in no-man zones via circuitry rezoning, circuitry modification of warehouse zone lighting with photovoltaic cells, and replacing T5 twin fluorescent lighting fixtures with LED tubes.

Hong Kong Airport Services Limited (HAS)



Hong Kong Airport Services Limited (HAS) serves 21 airlines at Hong Kong International Airport (HKIA) and operates the largest Ground Support Equipment (GSE) and vehicle fleet in the Group. HAS is committed to reducing carbon emissions and has implemented its GSE Replacement Programme since 2011. In 2017, HAS replaced three lower deck loaders, 17 diesel tractors and three light buses which were less fuel-efficient.

Total GSE fuel consumption in 2017 was 3.35 million litres, representing a 3.62% year-on-year increase in carbon intensity. It was driven by increased cargo freight handling and ramp operations at the new Midfield Concourse.

In 2017, HAS completed the installed GPS across its whole fleet of GSE and vehicles. The GPS tracking system also covers the driver management system and locates idle GSE for deployment. By better matching available resources and the locations where services are required, further fuel efficiency gain is anticipated.



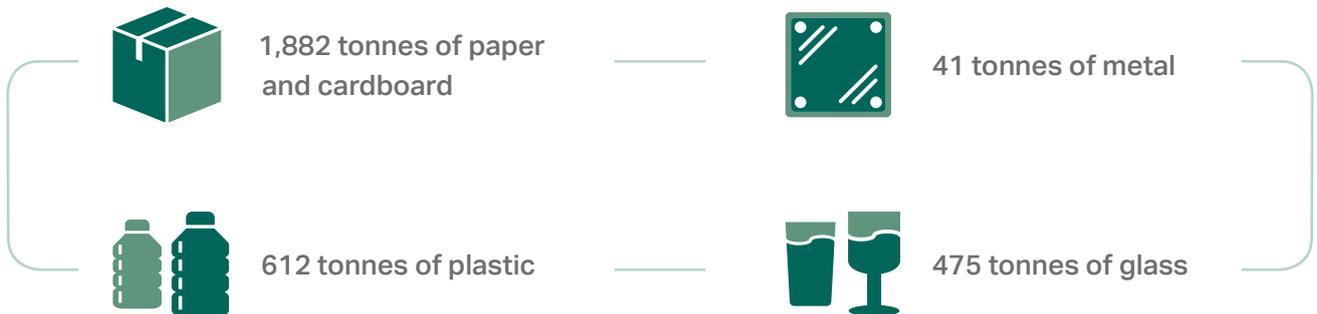
Sustainability in operations



2017 performance highlights



Overall recycling performance



Total weight of waste recycled

3,010 tonnes



15x A350-900 aircraft

Total food processing oil recycled

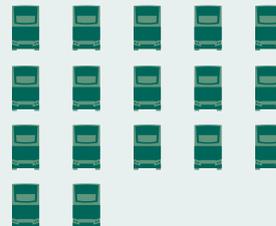
31,964 litres



1x nearly fill up a 20-foot shipping container

Surplus food donated to charities

260.72 tonnes



17x double-decker buses (E500 model)



We conducted a waste audit for Cathay Pacific City

Our approach

Sustainable sourcing and waste management are the two pillars underpinning our effort in embedding a sustainability mindset and practices in our operations. From procuring to ultimate disposal, this end-to-end approach allows us to tackle sustainability challenges in our operations a more systemic way.

Why sustainable sourcing matters

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

Sustainable procurement and system

Over the years, we have developed our Supply Chain Sustainability Code of Conduct which includes our standards for business ethics. We have collaborated closely with our suppliers on sourcing matters, such as increasing the use of sustainable materials, utilising regenerated waste materials and procuring recycled plastic products.

We require the procurement process of all our goods is conducted in full compliance with relevant laws, tax regimes and regulations that govern the respective transactions, and with full account in terms of our Anti-Bribery, Anti-Trust and Data Protection policies.

Supply Chain Sustainability Code of Conduct (CoC)

Our Supply Chain Sustainability CoC describes our minimum requirements for:

- Legal and regulatory compliance
- Not employing under-age workers/child labour
- Not employing forced labour
- Health and safety in the workplace
- Protection for the environment
- Provision of proper compensation and appropriate working hours for employees
- Respect for employee rights and not discriminating against employees
- Sharing standards with sub-contractors
- Maintaining high ethical standards
- Communicating openly and effectively with employees

This CoC is available internally to our global offices and shared with our suppliers, both locally in Hong Kong and to those based in the rest of the world. We actively work with suppliers who share our standards. We manage our risks related to supply chain through continuous collaboration with our suppliers in accordance to this CoC.

Supplier scorecard

We have developed a balance-rated scorecard for procurement comprising key elements, namely:

1. Costs
2. Innovation
3. Satisfaction
4. Assurance of supply
5. Quality
6. Sustainability

Our procurement process involves supplier vetting. Suppliers are required to declare that their products and services comply with our Supply Chain Sustainability Code of Conduct.

Supplier Ethical Data Exchange (SEDEX) sustainable supply chain platform

SEDEX provides a collaborative platform for sharing responsible sourcing data on supply chains. Suppliers are required to declare their sourcing data. Since 2015, SEDEX has been implemented in the **oneworld** alliance, of which Cathay Pacific was a founding member.

We intend to conduct an assessment on the SEDEX platform and determine whether we will continue to use it or leverage our in-house technology and networks for assessing our suppliers.

Sustainable food policy

We recognise it is our responsibility to carry out food procurement in a sustainable manner. One effective way to conserve our biodiversity is to refuse to purchase unsustainable food items.

Since 2011, we have adopted our internal Sustainable Food Policy, which states that shark's fin should not be served inflight, at Cathay Pacific City, Cathay Dragon House or at any corporate events or meals that are organised or subsidised by the Group.

Sustainable seafood

According to World Wide Fund (WWF) Hong Kong, about 90% of commercially important fisheries are either fully or over-exploited globally. Awareness on choosing sustainable seafood to adopt responsible and sustainable practices has increased over the years.

Since 2010, the food served to our Economy Class passengers on our flights from European ports has come from sustainable sources, such as those certified by the Marine Stewardship Council (MSC).

In 2017, Cathay Pacific Catering Services (CPCS) purchased a total of 370 tonnes of certified sustainable seafood to protect the marine ecosystem.

Renovation and fit-out practices

To encourage and implement green building practices, the following documents form part of the construction or renovation contracts that we undertake with our contractors:

- Cathay Pacific Airways Limited – Sustainable Development Policy
- Cathay Pacific Airways Limited – Supply Chain Sustainability Code of Conduct
- Swire Form of Contract – Schedule 14 – Environmental Waste Management Plan
- Practical notes and guidelines issued by professional institutions such as The Hong Kong Institute of Architects, The Hong Kong Institute of Surveyors, The Hong Kong Institution of Engineers, and applicable codes, guidelines, and regulations as applicable in different jurisdictions.

The same requirements apply to tenants operating in our premises, such as salon and coffee shops, for their own renovation work.

Inflight sustainable products

Over the years, we have worked closely with suppliers and NGOs to offer products that are sustainably sourced to minimise our impact on the environment while maintaining overall product quality.

We have chosen sustainable packaging materials for selected inflight products. We are also exploring different ways to reduce our consumption of packaging materials as well as other inflight products throughout our operations.

Inflight sustainable products – an illustration



Meal utensils

Reusable plastic cutlery from Cathay Pacific flights is sorted, washed and reused to minimise our single-use plastic waste.



Meals seafood

To support protection of the marine ecosystem, we purchased 379 tonnes of certified sustainable seafood for our inflight meals in 2017.



Meals vegetable

In 2017, we used over 38 tonnes of hydroponic vegetables locally grown in Hong Kong.



Cocktail snacks

Inflight cocktail snacks (roasted peanuts) are produced from certified palm oil, which helps minimise environmental impacts such as deforestation while protecting the rights of indigenous people.



Napkins

Napkins are made from 70% sugarcane and 30% wood pulp since 2016.



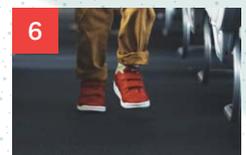
Blankets

We have introduced blankets made entirely from recycled plastic bottles for our Economy Class passengers. Each year over 450,000 pieces are used. Unopened blankets are reused on subsequent flights.



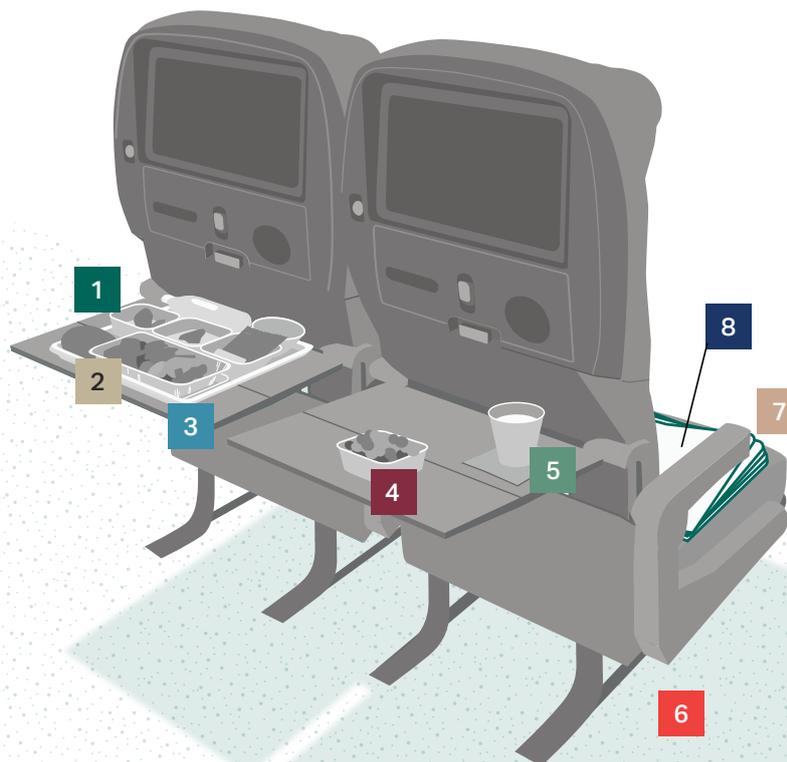
Plastic sheets

Since 2011, we have used biodegradable plastic for the packaging of blankets, inflight magazines, and headphones.



Carpets

Introduced in 2012, carpets in our aircraft are made from regenerated nylon waste materials such as discarded fishing nets, fabric and carpets.



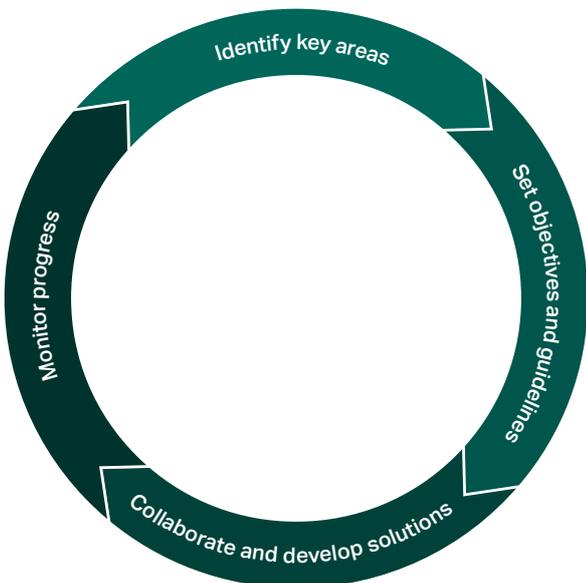
Why waste management matters

Waste is one of the most concerning environmental problems based on the Group’s stakeholder engagement results. Recent environmental issues, such as the shortage of landfill sites and the implementation of the municipal solid waste charging scheme in Hong Kong, have made waste reduction a more pressing issue for our stakeholders and local communities.

Our stakeholders – especially our employees – have expressed concerns about how much we have done about waste reduction. This has highlighted the importance of enhancing communications and training on waste reduction and recycling programmes, continuously reviewing our operations, and using digitisation to improve our management.

Our resource and waste management approach covers four key elements:

1	Identify key areas	Identify resource use and waste generated at different operational points.
2	Set objectives and guidelines	Develop guidelines and policy on resource use and formulate simple comparative tools to help departments decide which materials to choose.
3	Collaborate and develop solutions	Work with different departments on the impact of the items we purchase and develop solutions with our suppliers to minimise our waste.
4	Monitor progress	Monitor waste generation and reduction with our sustainability management system.

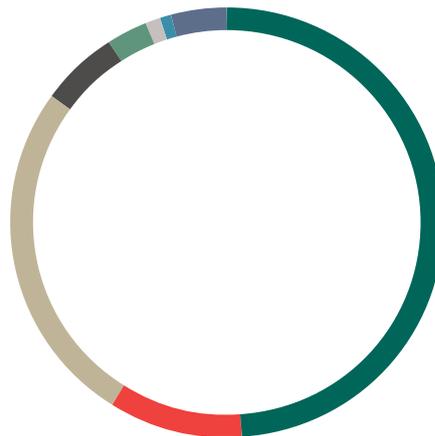


Inflight waste

Since 2006, we have sorted, reused and recycled inflight waste. Currently inflight recycling is only carried out on inbound flights to Hong Kong. We are not allowed to carry the waste on return flights for hygiene and storage reasons, and regulations in many destination countries prohibit recycling waste from international flights. Some countries, such as those in North America and Australia, have very strict health and safety regulations on international waste, including waste from international flights which requires deep burial in landfill, or incineration.

Waste audit

In 2017, we commissioned an independent waste management company to conduct a waste audit for Cathay Pacific City* in Hong Kong. The data helped us better identify, quantify and analyse both recyclable and non-recyclable waste, and allowed us to develop better waste management strategies to prepare for the implementation of the municipal solid waste charging scheme in Hong Kong.



Waste profile

- 49% Non-recyclable waste
- 10% Paper waste
- 26% Food waste
- 6% Plastic
- 3% Metal
- 1% Glass
- 1% Textile
- 4% Recyclable waste
- 0% Wood
- 0% E-waste

* The premises include the Headquarters and Flight Training Centre in Cathay Pacific City.

Different resource types and waste streams

Every day, we use resources such as paper, wood, plastic and food, inevitably generating waste. To minimise waste, we have implemented reduction and recycling initiatives targeting different items both on our flights and in our ground operations.

Paper and wood products

Our procurement policy ensures sustainable procurement for paper resources, as endorsed by the Forest Stewardship Council. All marketing collaterals and office paper from Hong Kong are from sustainable and certified sources. We are working on implementing this policy across our global operations.

By leveraging technology and digitisation, we strive to reduce our consumption of paper and wood products.

- With the eEnabled system on-board our aircraft, our cabin crew can now access flight preparation information via tablets instead of printing them out.
- Digitising the inflight manual used by our cabin crew has helped reduced paper consumption, as each manual weighs 13kg.
- Introducing Follow-Me-Print authentication printing solutions for employees in Hong Kong aimed at reducing consumption of paper and energy.

PressReader

In 2017, we partnered with PressReader to grant our customers complimentary access to thousands of the world's most popular newspapers and magazines. Customers can browse the PressReader library and download the issues using their mobile devices. We are exploring ways to reduce the number of paper publications carried inflight which will result in less fuel burn and carbon emission.

App-based paperless reporting platform

Since 2016, Cathay Dragon cabin crew have used an app-based paperless platform for report submission. The benefits of such digitisation include reduced paper consumption and less weight aboard the aircraft – the latter contributes to a reduction in carbon emission.

Plastic

Plastics are versatile, cost-effective and lighter than most materials, so we use them throughout our operations. However, plastics take a long time to degrade and are clearly harmful to the environment if treated irresponsibly.

Wherever possible, we make use of recycled plastics. Since 2012, the carpets in our aircraft are made from regenerated nylon waste materials such as discarded fishing nets, fabric and carpets. Our Economy Class blankets are made from recycled plastic bottles. Introduced in 2016, more than 450,000 blankets are used every year.

Over the years, our efforts have concentrated on reducing single-use disposable plastics and improving our recycling efforts. In 2017, more than 550 tonnes of plastic wrap was collected for recycling from the Cathay Pacific Cargo Terminal. More than 19,000 kg of plastic bottles and 11,000 kg of plastic cups were also collected via our inflight recycling initiatives.

Since March 2018, plastic covers have not been provided for staff uniforms dry-cleaned by Vogue Laundry, our wholly-owned subsidiary operating in Hong Kong. This is one of the ways we continue to reduce single-use plastic in our operations. A comprehensive review on how we intend to improve in this area will be carried out in 2018.

Highlights of our plastic reduction journey:

Since 2016	Replacing duty-free purchases plastic bags with paper bags.
Since 2014	The redesigned 9oz plastic cup used in Economy Class is 33% lighter than the previous cup and is more pliable and recyclable. It can be recycled together with the First and Business Class plastic covers for plates and bowls.
Since 2014	Collection of plastic stretch wrap for recycling at the Cathay Pacific Cargo Terminal.
2013	200,000 Economy Class plastic cups which were phased out from our operations were sent to a recycler to be made into other plastic items.
Since 2013	Replacing styrofoam boxes with reusable cooler bags for inflight ice cream storage, thereby reducing their usage by 44%.
Since 2012	Biodegradable plastic bags are used for blankets, cutlery, duty-free purchases (since 2011) and inflight magazines.

Since 2011	Toothbrush and shoe horn included in the First and Business Class amenity kits are switched to a corn-starch and cellulose material.
Since 2007	Plastic cups and bottles are collected inflight for recycling.
2002	Rebate programme for returning plastic hangers to Vogue Laundry, a wholly-owned subsidiary of Cathay Pacific.
Since 2001	Plastic cutlery used in Economy Class are washed and re-used multiple times.

Food

We have participated each year in the Airport Authority Hong Kong food waste recycling scheme since 2011, collecting and sorting food waste from our office canteens, restaurants, crew hotel and airport lounges.

Cathay Pacific Catering Services (CPCS) provides flight catering services to 50 international airlines in Hong Kong. The company produced over 30 million meals and handled 74,000 flights in 2017, representing an average of 83,000 meals and 203 flights a day. While we recognise some food waste is unavoidable, we have implemented a number of measures to reduce it.

Reduce wastage by uploading the right number of meals for each flight

The number of passengers booked on any particular flight changes frequently, due to last-minute additions or cancellations, or passengers missing their flights. One way we strive to reduce food waste is to bring the meal delivery cut-off time as close to flight departure time as possible. By shortening the cut-off time, we can gauge precisely how many meals are required on board, thus reducing wastage.

In 2017, our Catering and the Airport teams worked closely to analyse data on passengers' check-in and transit time and generated insights for our inflight meal uplift operation. This initiative successfully reduced the cut-off time significantly.

We plan to shorten the meal delivery cut-off time to 60 minutes or less before flight departure.

Turning cooking oil into biodiesel

CPCS generates food processing oil each day to support food production. As a responsible corporate, we treat our used food processing oil properly in compliance with regulations.

Since 2004, we have collaborated with a biodiesel company to reprocess our used cooking oil into vehicle biodiesel. In 2017, 31,964 litres of food processing oil were collected and turned into biodiesel.

Donation to food bank

Since 2014, Cathay Pacific has worked with a local charity, Feeding Hong Kong, to redistribute surplus food collected from our inbound flights. In 2017, over 254 tonnes of food was donated.

We have also partnered with Food Angel, another charity, since 2013. Food Angel collects fresh food and ingredients, and prepares meals for senior citizens in Hong Kong. In 2017, we donated over 6.12 tonnes of bread and food to Food Angel.

Retired aircraft

To stay competitive, we bring in new aircraft to make our fleet more fuel-efficient and technologically advanced to better meet our customers' rising expectation. 12 new A350-900 aircraft were delivered while nine older models were retired in 2017.

We work with aircraft manufacturers, the Aircraft Fleet Recycling Association's accredited companies, and other companies specialising in end-of-life solutions in order to salvage spare parts, and recycle or reuse aircraft parts and materials. A large proportion of the components can be re-certified and reused or sold to other users.

We began working with a company specialising in end-of-life solutions to recycle these aircraft in 2015. Under the Airbus' Process for Advanced Management of End-of-Life Aircraft (PAMELA) initiative, our retired aircraft were systematically recycled with up to 90% of their components reused or recovered.

In the aircraft recycling process, hazardous waste, mainly the lubrication oil, is sent to specialised waste handlers for proper disposal.



Biodiversity



2017 performance highlights



LAUNCHED

Sustainable Development Cargo Carriage Policy



CONDUCTED

profiling on 150 freight forwarding agents to ensure shipment integrity



SIGNED

United for Wildlife Transport Taskforce
Buckingham Palace Declaration to end wildlife trafficking since 2016



SERVED

certified sustainable seafood since 2010.
Purchased over 370 tonnes in 2017



PLACED embargos on:



ivory since 2016



shark fin since 2016



racing greyhounds since 2015



hunting trophy since 2015

Why biodiversity matters

Many animals and plants are increasingly threatened because of international trade in rare or endangered wildlife and associated products. We realise that airlines play an important role in combating this threat to biodiversity through responsible cargo management. In response, we have developed our cargo policy to prevent the carriage of illegal or endangered species. Our stakeholders also support our recent embargos on various endangered species or products, such as ivory, shark's fin and racing greyhounds.

Sustainable development cargo carriage policy

Over the years, we have worked closely with industry associations, conservation organisations, academia, and various stakeholder groups and experts to develop guidelines for our carriage practices so that we will not knowingly facilitate the trade of any flora or fauna or their produce that may threaten the sustainability of any species.

In 2017, we published the Sustainable Development Cargo Carriage Policy which allows our various stakeholders to gain a holistic understanding of where we stand in doing our part to protect the environment in the area of cargo carriage.

The cargo carriage policy was developed with reference to international regulations and initiatives including:

- Convention on International Trade in Endangered Species of Wild Fauna and Flora
- IATA's Live Animal Regulations
- IATA's Perishable Cargo Regulations
- IATA's Wildlife Task Force initiatives
- United for Wildlife Transport Taskforce initiatives

The Society for the Prevention of Cruelty to Animals in Hong Kong was our partner in developing our Greyhounds Carriage Policy. TRAFFIC, the wildlife trade monitoring network, has helped us develop our Shark and Shark-related Carriage Policy.

We will continue to develop the policy to ensure it is practicable and enforceable in response to any major changes in our environment. We will continue to engage with our customers and agencies to ensure that this policy is understood and implemented.

Our cargo carriage approach

Our cargo carriage operation is constantly reviewed and assessed in our different destinations. We have developed a systematic approach to manage the risks and quality in our operation, focusing on enhancing our cargo carriage operation in four key areas:

- Risk profiling
- Screening of goods
- Infrastructure improvement
- Collaboration and partnership



When I look at sustainability, I see three key elements – engagement, education and empowerment. We engage in international environmental taskforces and other NGO initiatives in driving sustainable changes in our cargo business. We educate our colleagues how sustainability has impacted our business from operational to policy levels, and empower them to put sustainability into practice in their everyday work.

Frosti Lau

General Manager, Cargo Services Delivery, Cathay Pacific

Risk profiling

Over the past decade, global e-commerce has expanded rapidly. This expansion has led to greater risks regarding the misdeclaration of goods carried on our passenger flights and freighters. We have conducted risk profiling and assessment on our freight forwarding and logistics agents periodically to mitigate the risks.

Since 2017, we have implemented the Cargo Agent Operation Programme to conduct risk profiling on about 150 freight forwarding and logistics agents in Hong Kong. More frequent target screenings will be imposed on the goods of high-risk agents. Risk profiling on agents is reviewed every two years, or more frequently as the case requires.

Screening of goods

To manage the risks arising from misdeclaration of cargo, a comprehensive approach to cargo screening has been put in place, ranging from random screening for mitigating the overall risks, to target screening on high-risk cargo.

Depending on the risk profile of the agents, we may impose additional screenings or issue an embargo on the goods where necessary. We also encourage our agents to provide an improvement plan on cargo safety, screening and declaration, as part of the programme managing activities before shipment tendered into our custody.

Collaboration and partnership

We have involved our freight forwarding and logistics agents and Hong Kong Civil Aviation Department in the discussion of misdeclaration and screening requirements from time to time to improve the overall cargo operation in the industry.

We have communicated with international customs authorities in driving the enhancement of the harmonised code for classifying goods to ensure the consignors have lodged their declarations correctly. The code system can give higher transparency and improve our control on the goods that our freighters carry.

International declaration and embargo

United for Wildlife Declaration

In 2016, Cathay Pacific signed the United for Wildlife Transport Taskforce Buckingham Palace Declaration. As a signatory to the declaration, we are committed to neither facilitate nor tolerate the carriage of wildlife products, where trade in those products contravenes the Convention on International Trade in Endangered Species of Wildlife Fauna and Flora (CITES).

Our commitment also includes information sharing, employee training, technological improvements and resource sharing across companies and organisations worldwide.





Our people



2017 performance highlights



Over 32,700 employees globally



78% employed locally in Hong Kong

GENDER MIX



61% female

OVERALL



39% male



17% female

GENERAL MANAGER AND ABOVE



83% male

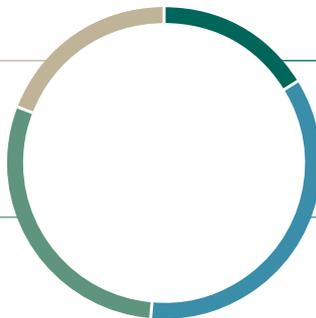
BY EMPLOYMENT ROLE

Subsidiary employee

20%

Ground employee

31%



Flight crew

11%

Cabin crew

37%



1,195,000

Total training hours over 1,195,000
On average over 35 hours per staff



43%

Conducted the first round of annual employee engagement survey, with 43% response rate



TRANSFORM

Rolled out people strategy for the three-year corporate transformation programme



D&I

Established Diversity & Inclusion Committee

Why people matter

Our people are the key drivers in helping us fulfill our brand promise, to create a Life Well Travelled for our customers. In light of the corporate transformation programme, our people continue to strive for the best – to be much more customer-centric and work more productively in response to rising expectations from our customers.

We also empower our people to better serve local communities through community outreach programmes. All our efforts enable us to make a difference in the lives of our employees, customers and the communities that we serve.



Our people are our greatest asset. Only if we have a motivated, engaged and high performing workforce can we deliver on our brand promise of a Life Well Travelled to our customers. It is therefore a top priority to provide a positive employee experience in the workplace, so our people feel supported and empowered to give their best.

Tom Owen

Director People, Cathay Pacific

People strategies for the three-year corporate transformation programme

In January 2017, we launched a three-year corporate transformation programme designed to build on our 70-year success by making our business more productive, customer-centric and maximising opportunities offered through a data-driven approach with new technology.

Six hundred colleagues left us in the year as we restructured our organisation to make our airlines more competitive by improving the speed and quality of decision making and maximising opportunities provided through new digital technologies. The restructuring was in compliance with the requirements stipulated in the Employment Ordinance of Hong Kong. We made sure

departing colleagues were taken care of and treated with dignity. Affected employees received a generous severance package including up to 12 months' salary, extended medical benefits on top of additional and extended travel benefits. In addition, these employees received their pension entitlements in full including Cathay Pacific's employer contribution. Additional support, including assistance with job search and application, interview training and counselling services, was also provided.

The strategy underpinning the transformation is defined by four key pillars that guide where we focus our energy:

Customer-centric

Delivering service from one central team

All the customer-facing teams at Cathay Pacific and Cathay Dragon are now under one Service Delivery function. Inflight and airport passenger services, call centres, cargo and ramp, our catering and shared subsidiary services all work much more closely to deliver a consistent customer experience at all touchpoints. The Service Delivery function works closely with the new Customer function to deliver on customer insights to make our customers' journey positive, consistent and personalised. With both the new central Service Delivery and Customer functions under this new structure, we make faster and more insightful decisions, and be better equipped to satisfy the needs of those who fly with us.

Operational efficiency

New leadership structure

During the restructuring, the senior leadership team was reduced to 10 Directors. The new streamlined structure is more focused and it also helps us better deploy our resources, make better decisions, improve work efficiencies, and ultimately better serve our customers.

Centres of Excellence in People Department

To achieve operational excellence, we established two Centres of Excellence (COE) in the People Department. The centres are tasked with developing our global people strategies and building consistency for our talent acquisition, development and retention.

The first COE is Employee Experience. It covers four areas: Digital Employee Experience; Recruitment; Internal Communications and Engagement; and Reward and Performance.

The second COE is a consolidated central Learning Academy, which covers all training for customer-facing employees.

The COEs incorporate all elements of the employee journey from hire to retire, and consolidate all the knowledge and tools in one place.

Productivity and value focused

Digitisation of employee experience

Digitisation enables our people to work more productively and gives us the edge to stay ahead in the market. In 2017, we started upgrading our core IT platform (PeopleCX), replacing legacy systems, introducing Learning and Talent Management technology and designing an employee portal (MyCompass). We have been using insights from our existing platform PeopleCX to help us improve the employee experience and engagement, ultimately driving business performance.

High performance culture

Lean Academy

Lean management helps companies streamline processes by optimising the entire organisational system for value delivery. In 2017, we established the Lean Academy which has provided a structured development programme for our people to learn and apply Lean thinking on real-life projects at work. Since launch, a number of open days and workshops were hosted to improve our people's work flows and efficiency.

A new employee experience department

Our people are the heartbeat of our airlines, and to deliver a great experience for our customers we equally need a complementary employee experience. A new function was established in 2017 to look at the entire employee lifecycle – from onboarding to retirement. This function ensures that the employee journey – including talent acquisition and onboarding, benefits and rewards, communications and engagement, the digital employee experience and offboarding – is taken into consideration.

With our targeted people strategies in place, we are determined to achieve success through this transformation programme.

Human resources management

Our human resources management aligns with our Corporate Code of Conduct, which clearly demonstrates our commitment to treating all employees fairly and equally, and to being an equal opportunity employer.

We do not tolerate any form of harassment or discrimination in our workplaces on the basis of gender, religion, race, nationality or ethnic origin, cultural background, social group, disability, sexual orientation, marital status and family status, age or political opinion. We have also adopted formal mechanisms through which our people can lodge a complaint regarding any discrimination or harassment. Our Code promotes the following principles at the workplace:

- Upholding all applicable legal and corporate occupational health and safety standards.
- Forbidding any breach of employment law or the use of child or forced labour.
- Reporting unacceptable conduct to line management or the business unit head.
- Rejecting bullying and harassment.
- Complying with any applicable legal requirements concerning the collection, holding, processing, disclosure and use of personal data.
- Respecting intellectual property rights, including copyright.

During 2017, there were no convictions for non-compliance of laws and regulations relating to employment, child and forced labour that would have a significant impact on the Group.

Employee relations and engagement

Our relationship with our people is strengthened by digitised communications platforms. It is more efficient and more convenient for our people to interact via different channels, such as intranet, engagement surveys, and social media.

Initiatives for engaging our people

Employee engagement survey

In September 2017, we launched an annual online employee engagement survey to understand what employees think, and highlight where improvements could be made to their experience at work. The findings are essential for the management team to develop targeted people strategies. More than 11,000 employees completed the employee engagement survey, accounting for 43% of the company. Shorter, quarterly pulse surveys will also be run to keep up with our people's sentiments in 2018.

Internal communication channels

We have enhanced our internal communication channel mix and engagement opportunities with our people through new, more digitally focused channels, such as e-newsletters, video, and employee tools like MyCompass, as well as social media sites like Yammer.

In 2017, we launched The Journey, a magazine with a new style of communication for and about our people. The magazine represents the journey of our airlines, and our people moving towards a better future.

Recognition and engagement

We also expanded our recognition programme, Work Well Done, to create a culture of recognition across our airlines. Ensuring our people feel valued and appreciated for their work is essential to the employee experience.

In addition to Work Well Done, we launched the Niki Awards, as part of the Niki and Betsy Awards programme. Our Niki award winners put in exceptional work behind the scenes and are rewarded for their exceptional efforts and behaviour. Our Betsy awards are presented for exceptional customer service and celebrate people who have taken customer service to the next level, delivering Service Straight from the Heart. In 2017, 20 employees won Niki and Betsy awards.

We engaged our employees via various channels such as Yammer. By the end of 2017, 16,631 of our people, including 15,483 active users, had signed up.

Strengthening our relationship with unions

We uphold freedom of association for our people. Industrial relations continue to be an important issue, and we are actively working with trade unions such as Cathay Pacific Airways Flight Attendants Union, Hong Kong Aircrew Officers Association and Local Staff Union to enhance communication and consultation, to ensure that views are heard and acted upon appropriately. We will continue to build more constructive and productive relations with the unions.

Attracting and developing talent

We continue to improve our people strategies to attract the best talent in the market. We also provide competitive remuneration packages to attract and retain talent, and offer timely and relevant development opportunities for our people throughout their career with us.

Initiatives for attracting talent

To stay competitive as a major international airline, we invest in different ways to acquire the best talent in the market by:

- Centralising and streamlining our recruitment process for Cathay Pacific and Cathy Dragon since 2017, making us more efficient in attracting and hiring new talent.
- Introducing a brand new recruitment website, with better user interface and user experience for job seekers.
- Diversifying our recruitment methods, such as accepting job applications in video format from job seekers.
- Developing different customised selection and assessment tools to help us acquire the most suitable talent in the market.

Initiatives for developing our people

We continue to nurture and develop our people by providing learning and development opportunities throughout their career journey. Our initiatives include:

- Running the Brushwingers orientation programme for all new joiners to better understand the company, its values and culture.
- Developing a competency framework to allow our employees to understand the competencies needed at different levels and roles in the company.
- Launching leading high performance teams workshops for our ground employees in Hong Kong and in outposts.
- Hosting an online training platform that offers both personal development opportunities and work-related training to our people.

Role-specific career programmes

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

Career choices	Brief description
Management Trainee*	<ul style="list-style-type: none"> Aims to nurture our next generation of business leaders, this three-year development programme consists of classroom training, workshops, and attachments to different units of our business within and outside of Hong Kong There is annual summer internship leading into this programme
Engineering Trainee Programme	<ul style="list-style-type: none"> This is a 30-month development programme with classroom-based aircraft training alongside practical experience in different engineering sections There are also eight-week engineering internships with two intakes during summer and winter
Cadet Pilot	<ul style="list-style-type: none"> A 60-week development programme to train a commercial pilot in the format of residential course at a specialised facility in Australia
Cabin Crew	<ul style="list-style-type: none"> A three-year contract to train as a safety officer, caring team player and ambassador for Hong Kong
Customer Services Officer	<ul style="list-style-type: none"> A 9-to-12-month development programme on customer service skills within airside duty, and technical check-in procedures training on landside
IT Graduate Trainee Programme	<ul style="list-style-type: none"> In this two-year program, IT Graduate trainees experience an accelerated learning experience via a wide range of technical disciplines and business rotations. Trainees will continue to grow and develop their professional career in Cathay Pacific, supported by performance and development management processes and one-to-one mentorship
Operational Leadership Programme	<ul style="list-style-type: none"> This eight-year programme offers on-the-job experience provided within different operating divisions and departments in the Cathay Pacific Group Opportunities to be supported and coached to develop management and leadership skills

* As part of Swire Management Trainee Programme, more information is available from <https://mt.swire.com/en/>

Supporting local employment

Over 78% of our people are employed locally, that is, in Hong Kong. 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 prioritise the local labour market before searching internationally. This demonstrates our commitment to supporting local employment in Hong Kong.

Vacancies are first opened internally to our people, then to the local community, and finally overseas.

Employee welfare

We place great focus on the wellbeing of our people and value their contribution. We provide a comprehensive and flexible package of employee benefits including:

- Medical and dental coverage
- Insurance plans
- Retirement schemes
- A dedicated Benefits Services Centre for all Hong Kong-based employees, while our overseas employees can approach their local People Departments for benefits-related queries
- Staggered working hours that encourage section heads and employees to work out an arrangement that can be of mutual benefit without adversely affecting the work of the team
- An Employee Assistance Programme (EAP) that provides professional (including financial and legal) information and counselling on personal and work-related concerns for our employees and their dependents

Workforce diversity and inclusion

As one of Hong Kong's largest employers, we are proud to have a diverse workforce in terms of gender, nationality and culture, to name just some of the aspects. In 2017, we employed pilots from more than 48 different countries. Our cabin crew represents 30 different nationalities, and our local employees operate in more than 50 countries.

Diversity and Inclusion allows us to better understand the needs of our people and our customers, making a Life Well Travelled even better for them. Our employee travel policy and other employee benefits, for example, medical and insurance plans, have been expanded to also apply to same sex spouses with support of a valid marriage certificate.

The Board Diversity Policy aims to achieve a diversity of perspectives. It is the policy to consider a number of factors, such as age, gender, and ethnicity, when deciding on appointments to the Board and the continuation of those appointments.

In 2017, we developed a Diversity and Inclusion (D&I) committee to champion and set the D&I agenda, create change to policies and practices, raise awareness of the Women's Network and the LGBT+ Network, and agree on activities and events that we support. Further developments in this area will take place in 2018 following an official launch to our people.





Community



Our approach

We support and invest in the Hong Kong community, which we have been part of for the past 72 years. Our people are also actively involved in community initiatives globally. Our strategy is to leverage and align the resources of our company (including our people and passengers) with the needs of the communities we serve. The Group also donates to a broad spectrum of charities, providing cash, flight tickets, other in-kind donations and professional advice.

Community programmes

Cathay Pacific 24-hour Hackathon 2017

According to the World Economic Forum, creativity is set to become one of the top three skills that workers will require from 2020. We understand its importance – and in order to develop young peoples' creative and innovative potential, we encourage them to think and act more imaginatively in what is becoming an increasingly technology driven society.

Following the success of our inaugural Cathay Pacific 24-hour Hackathon in 2016 – an intensive software and application development competition for tertiary students – it was the right decision to organise a 2017 edition.

Prior to the event, we collaborated with a number of technology partners to provide contestants with a range of resources to help bring their ideas to life. Assisted by briefings, physical/online helpdesks and employee mentors, participants were able to access a wide array of the latest and most exciting technologies to create workable initiatives that improve the customer experience.

This competition clearly resonates with our corporate transformation programme, which focuses on building our technological and digital capabilities to enhance our customers' journeys.

Community flight 2017

2017 heralded our 8th annual Community Flight which coincided with the 20th anniversary celebrations of the establishment of the Hong Kong Special Administrative Region.

On 21 May 2017, 230 Hong Kong residents took to the air for the first time aboard the Community Flight. The passengers included about 100 children, who flew together with their families accompanied by our guests and volunteers. Mr. Paul Chan, Financial Secretary of the HK SAR, was the Guest of Honour, and joined Cathay Pacific Chief Executive Officer Rupert Hogg on the 90-minute flight aboard a Boeing 777-300.

With the Community Flight theme of Inspiring Strength through Togetherness, we encouraged the participants to strive to achieve their goals and follow their dreams.

Our 60 volunteers, including cockpit and cabin crew, acted as Community Flight ambassadors, providing assistance and sharing their aviation knowledge and fun facts with the other passengers.

Cathay Pacific City visits

In 2017, we welcomed over 13,000 members of the Hong Kong public to Cathay Pacific City our headquarters. Ranging from primary school children to seniors in their 70s, they were shown around our training and operation facilities. The tours were conducted by our own employees, so as to give visitors a better understanding and a behind-the-scenes view of the airline's operations.

Visitors were treated with a new point-of-interest in 2017: our rooftop organic farm organised and tended by our own people.

Asia Miles' social goods – Turn miles into good deeds

Asia Miles Limited (Asia Miles), a wholly owned subsidiary of Cathay Pacific Airways Limited, is committed to supporting underprivileged communities around the world.

Asia Miles members can use their miles to donate goods for people and services such as elderly home maintenance service, cataract surgery, and children learning set. By redeeming social goods, members can help local communities, support better trading conditions, and promote environmental sustainability. The beneficiaries that provide social goods include UNICEF Hong Kong, Oxfam, Orbis and St. James Settlement.

For more details, please visit the website of Asia Miles: <https://www.asiamiles.com/en/redeem-awards/charity.html>

Well-Travelled Lai See

In 2017, we collaborated with Redress – an environmental charity that advocates sustainable clothing and textile waste reduction. We supported Redress's annual EcoChic Design Award competition where finalists were tasked to design a sustainable product using our retired uniforms.

Following the competition, we also worked with former EcoChic Design winner Angus Tsui to create an innovative multi-purpose 'lai see' packet using our retired uniform.

We engaged retired textile workers and disabled people at the St. James' Settlement Upcycling Centre to produce 3,000 packets, which were then sold via various customer and employee sales channels.

The profits were donated to Feeding Hong Kong, one of our charity partners.

This single initiative achieved three goals: reducing waste, providing work opportunities to local communities, and raising funds for our charity partner.

Cathay Dragon Aviation Certificate Program

Launched in 2005, the Cathay Dragon Aviation Certificate Programme is a pilot mentorship programme jointly organised by the Hong Kong Air Cadet Corps and the Scout Association of Hong Kong. The nine-month programme aims to inspire a new generation of aviators in Hong Kong. In 2017, 28 students graduated. Since its inception, over 200 participants have graduated from the programme, with nearly half of them going on to an aviation-related career.

The participants explore the world of aviation via lectures, training sessions, briefings and a tour of our aviation facilities. Each participant is also mentored by a Cathay Dragon pilot.

Charitable donations

UNICEF Change for Good

Cathay Pacific's partnership with UNICEF dates back to 1991. Change for Good (CFG) is an inflight fundraising programme operated by Cathay Pacific and the Hong Kong Committee for UNICEF. Passengers on Cathay Pacific flights have been encouraged to donate spare change of any currency to UNICEF.

Since its inception, the programme has raised more than HK\$176 million in support of UNICEF's life-saving programmes, helping deprived children and women across 190 countries and territories worldwide.

In 2016, the programme raised over HK\$13.2 million to support UNICEF's programmes. 2017 figures are being audited.

Over the years, our people have taken field trips to deprived communities supported by the programme, so they can experience the programme's positive impact first-hand.

Cathay Pacific Wheelchair Bank

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

An average of one month's proceeds each year from Cathay Pacific's Change For Good inflight fundraising programme was donated to Wheelchair Bank.

It continues to contribute to the aid of nearly 500 children today.

Hong Kong Breast Cancer Foundation – Pink Walk for Breast Health

2017 marked the sixth year of Cathay Pacific joining the "Pink Walk for Breast Health", an annual fundraising event held by The Hong Kong Breast Cancer Foundation. Since its inception, we have raised funds for the foundation to promote breast health awareness. In October 2017, over 80 volunteers dressed up in a variety of costumes to join the walk along the Peak Circle Trail in Hong Kong for this worthy cause.

Change for Conservation

Since 2004, Cathay Dragon has participated in the Change for Conservation inflight fundraising campaign to raise awareness of the importance of nature conservation.

Since its inception, the campaign has raised over HK\$9.8 million for conservation 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 local people, as well as promoting the use of alternative energy and protecting endangered species.

Oxfam Trailwalker

Asia Miles has been a long-standing sponsor of the Oxfam Trailwalker, the largest hiking fundraising event in Hong Kong.

Since 2003, funds raised have been used for poverty alleviation and emergency relief in Africa and Asia, including in Hong Kong, Macau and Mainland China. Since 2016, the partnership has offered Oxfam Trailwalkers the opportunity to redeem an Asia Miles package of social goods and donate to underprivileged people in remote villages.





2017 key performance indicators



Economic indicators table

	2017 HK\$M	2016 HK\$M	% Change
Direct economic value generated			
Revenue	97,284	92,751	4.9%
Finance income	462	260	77.7%
Share of profits of associated companies	2,630	2,049	28.4%
Economic value distributed			
Operating expenses	99,563	93,276	6.7%
Employee wages and benefits	19,962	19,770	1.0%
Payment to providers of capital*	2,676	3,008	-11.0%
Finance charge	2,223	1,561	42.4%
Dividend paid – to the shareholders of Cathay Pacific	–	1,259	–
Dividend paid – to non-controlling interests	453	188	141.0%
Payments to government	308	497	-38.0%
Community investments including charitable donation			
Direct payment	9	12	-25.0%
In the form of discounts on airline travel	9	8	12.5%
Economic value retained			
Profit/(Loss) attributable to the shareholders of Cathay Pacific	(1,259)	(575)	119.0%

Note:

The consolidated financial statements incorporate the financial statements of the Cathay Pacific Airways Limited and its subsidiaries together with the Group's interests in joint ventures and associates. Please refer our Annual Report 2017 for details of our principal subsidiaries and associates.

* Payment to providers of capital includes finance charge, dividend paid to the shareholders of Cathay Pacific and to non-controlling interests.
(Restatement: Please note the formula for calculating this item has been adjusted compared to the 2016 Sustainable Development Report)

Environmental indicators table – aircraft operations

	Units	2017*†	2016*†	2015*†	2014*†	2013*†	1998
ATK	million	31,439	30,462	30,048	28,440	26,259	10,857
RTK	million	23,679	22,418	22,220	20,722	18,696	7,213
RPK	million	126,663	123,478	122,330	112,257	104,571	40,679
All flights							
Fuel consumption	thousand tonnes	5,625	5,467	5,425	5,198	4,912	2,343
Fuel efficiency	grammes/ATK	179	179	181	183	187	216
	improvement since 1998 %	17.1%	16.8%	16.3%	15.3%	13.3%	–
	grammes/RTK	244	244	244	251	263	325
	improvement since 1998 %	24.8%	24.9%	24.8%	22.8%	19.1%	–
Global CO ₂ emissions [▲]	thousand tonnes in CO ₂ e	17,716 [◆]	17,222	17,087	16,374	15,472	7,380
	% change from previous year	2.87%	0.79%	4.35%	5.83%	-1.69%	–
	grammes/ATK	564	565	569	576	589	680
	improvement since 1998 %	17.1%	16.8%	16.3%	15.3%	13.3%	–
	grammes/RTK	748	768	769	790	828	1,023
	improvement since 1998 %	26.9%	24.9%	24.8%	22.8%	19.1%	–
Global NO _x emissions [#]	tonnes	90,784	94,697	94,106	80,946	82,255	40,294
	grammes/ATK	3	3	3	3	3	4
	improvement since 1998 %	22%	16.2%	15.6%	23.3	15.6%	–
	grammes/RTK	4	4	4	4	4	6
	improvement since 1998 %	31%	24.4%	24.2%	30.1%	21.2%	–
Global CO emissions [#]	tonnes	13,230	14,005	14,059	12,186	13,620	13,982
Global HC emissions [#]	tonnes	1,524	1,597	1,578	1,429	1,455	5,736
Passenger flights only							
Fuel consumption	thousand tonnes	4,678	4,571	4,496	4,313	4,112	2,007
	share of total fuel consumption %	83.2%	83.6%	82.9%	83.0%	83.7%	85.7%
Fuel efficiency	grammes/RPK	37	37	37	38	39	49
	Improvement since 1998 %	25.1%	25.0%	25.5%	22.1%	20.3%	–

* Incorporate with Cathay Dragon Airways

† Fuel consumption include testing, and wet-lease flights

Airbus was unable to provide emission calculations for the A350-900 during 2017. Therefore the aircraft's emission data has been excluded.

◆ Data verified by PricewaterhouseCoopers

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

Environmental indicators table

	Unit	2017	2016
Power/Fuel			
Electricity consumption	mWh	140,587	130,135
Ground based activities fuel consumption	litre		
Mobile combustion – Diesel		5,301,570	5,020,803
Mobile combustion – Unleaded petrol		382,169	386,844
Stationary combustion – Diesel		1,161,837	2,281,306
Purchased town gas	unit	6,501,296	4,967,623
Fuel dumped due to operational reqs	tonnes	368	306
Total energy used	GJ	253,235,501	N/A
Energy intensity (per total no. of employees)	GJ	8,066	N/A
Water			
Seawater consumption	m ³	8,105,000	8,859,600
Potable water consumption	m ³	950,363	916,786
Maintenance water consumption	m ³	81,229	118,314
Paper & cardboard			
Paper consumed in offices	tonnes	181	197
Paper & cardboard recycled	tonnes	1,882	2,011
Recycled/Reused materials			
Metal recycled	kg	41,331	42,661
Plastic recycled	kg	612,207	672,458
Glass recycled	kg	475,962	520,135
Food processing oil	litre	31,964	42,679
Hangers used	no.	1,205,241	2,414,141
Disposed materials			
Non-Hazardous waste	tonnes	14,066	13,793

The above environmental data cover the operations of Cathay Pacific and the principal subsidiaries stated in "About this report".

Social indicators table

	Unit	2017	2016
Workforce of the Cathay Pacific Group			
Total employees	no.	32,789	32,253
By gender			
Male	%	45%	45%
Female	%	55%	55%
By employment contract			
Employees on permanent terms	%	89%	97%
Employees on fixed term and temporary contract	%	11%	3%
By employment type			
Permanent employees – Full-time	%	98%	98%
Permanent employees – Part time	%	2%	2%
By region			
Hong Kong & Macau	%	80.95%	80.63%
Mainland China	%	2.57%	2.69%
Taiwan	%	1.98%	1.99%
USA	%	2.45%	1.47%
Others	%	12.05%	13.22%
By employment role			
Flight crew	%	11%	11%
Cabin crew	%	37%	35%
Ground employee	%	31%	26%
Subsidiary employee	%	20%	28%
Voluntary turnover rate of permanent employees (%)			
By age group			
Under 30 years old	%	18.82%	14.79%
30 to 50 years old	%	6.23%	4.98%
Over 50 years old	%	9.33%	6.35%
By gender			
Male	%	9.83%	8.71%
Female	%	9.67%	7.10%
By region			
Hong Kong & Macau	%	10.31%	7.96%
Mainland China	%	8.13%	11.17%
Taiwan	%	4.46%	4.45%
USA	%	3.57%	9.80%
Others	%	8.26%	6.30%
Total voluntary turnover rate of permanent employees (%)	%	9.46%	7.81%

Social indicators table

	Unit	2017	2016
New hires rate (%)			
By age group			
Under 30 years old	%	22.53%	19.75%
30 to 50 years old	%	4.67%	5.04%
Over 50 years old	%	5.09%	5.34%
By gender			
Male	%	10.39%	11.00%
Female	%	6.72%	7.31%
By region			
Hong Kong & Macau	%	8.83%	9.54%
Mainland China	%	4.87%	1.07%
Taiwan	%	2.10%	0.94%
USA	%	8.91%	3.79%
Others	%	7.44%	9.29%
Total new hires rate (%)	%	7.90%	8.95%
Training and education			
Total training hours	hours	1,195,286	N/A
Average training hours	hours	36.5	N/A
No. of employees receiving performance review	%	100%	100%
Board diversity			
By gender			
Male	%	88.2%	93.8%
Female	%	11.8%	6.3%
By age group			
Under 30 years old	%	–	–
30 to 50 years old	%	23.5%	25.0%
Over 50 years old	%	76.5%	75.0%
Group health and safety			
No. of accidents	no.	1	0
No. of high-risk incidents (Operational safety)	no.	1	0
No. of work-related fatalities	no.	1	0
Lost time injury rate *	rate	3.53	3.36
Lost day rate *	rate	49.36	52.80
No. of legal charges relating to health and safety	no.	3	N/A

* Cathay Pacific and Cathay Dragon



About Cathay Pacific



Cathay Pacific Airways Limited (the "Company" or "Cathay Pacific") is an international airline registered and based in Hong Kong, offering scheduled passenger and cargo services to over 200 destinations in 52 countries and territories, operating a fleet of 149 aircraft in total as at 31 December 2017.

Cathay Pacific and its subsidiaries (collectively referred to as the "Cathay Pacific Group" or the "Group") operated 208 aircraft as at 31 December 2017. Its other investments include catering and ground-handling companies and its corporate headquarters and cargo terminal at Hong Kong International Airport.

The airline was founded in Hong Kong in 1946. It has been deeply committed to its home base over the past seven decades – a commitment set to remain going forward – making substantial investments to develop Hong Kong as one of the world's leading international aviation centres.

Hong Kong Dragon Airlines Limited ("Cathay Dragon"), a regional airline registered and based in Hong Kong, is a wholly owned subsidiary of Cathay Pacific operating 47 aircraft on scheduled services to over 50 destinations in Mainland China and elsewhere in Asia.

Cathay Pacific and its subsidiaries employ more than 32,700 people worldwide, of whom about 25,600 are employed in Hong Kong. Cathay Pacific is listed on The Stock Exchange of Hong Kong Limited, as are its substantial shareholders Swire Pacific Limited ("Swire Pacific") and Air China.

Facts about Cathay Pacific Group in 2017

- Over 200 destinations in 52 countries and territories
- More than 32,700 employees in the Group, with about 25,600 people employed in Hong Kong
- Established 70 years ago
- Operated 208 aircraft in 2017 and 79 new aircraft on firm order due for delivery up to 2024
- HK\$97,284 million in revenue was generated, with attributable loss of HK\$1,259 million
- 34.8 million passengers flew with Cathay Pacific and Cathay Dragon in 2017, an increase of 1.4% compared with 2016

More information is available from www.cathaypacific.com

Vision and mission

Our vision is to be the world's best airline. Being the best means that we always strive to excel in everything we do. Our dynamic team provides the highest quality service so that our customers are happy they chose Cathay Pacific.

- We put safety first
- We grow a winning team
- We provide outstanding products and services
- We consistently deliver Service Straight From The Heart
- We produce superior financial returns
- We support Hong Kong
- We are a socially and environmentally responsible company

Selected awards and memberships

Awards*/Recognition

Awards/Recognition	Organiser
A constituent of the FTSE4Good Index Series for the 7 th consecutive year	FTSE Group
A constituent of the CDP Climate Change since 2007	CDP
A constituent of the Hang Seng Corporate Sustainability Index since index inauguration	Hang Seng Indexes Company Limited
Caring Company Award 10+ years (Cathay Dragon)	The Hong Kong Council of Social Service
Caring Company Award 15+ years (Cathay Pacific)	The Hong Kong Council of Social Service

Membership/Signatory

Organisation	Position
Airport Authority Hong Kong – Carbon Pledge	Pledge
Association of Asia Pacific Airlines Environmental Working Group	Member
Environmental Protection Department, HKSAR Government – Food Wise Charter	Signatory
Sustainable Aviation Fuel User Group	Member
Roundtable on Sustainable Biomaterials (RSB)	Member
Commercial Aviation Alternative Fuels Initiative (CAAFI)	Member
ICAO Global Market-Based Measure Technical Task Force (GMTF)	Member
oneworld global alliance	Founding member
Supplier Ethical Data Exchange (SEDEX)	Member
United for Wildlife Transport Taskforce Buckingham Palace Declaration	Signatory
World Wildlife Fund – Hong Kong	Corporate member (Pearl)

* Other awards can be found in the Cathay Pacific Annual Report 2017 on p.11 and p.30





About this report



Aim of reporting

As our long-term commitment to sustainable development, our reporting has continued to evolve since the first year we launched our Environmental Report in 1996.

We publish our Sustainable Development Report annually 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
- 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 approach them in our governance, environmental and societal practices

This Sustainability Development Report is to be read in conjunction with the Annual Report 2017 of Cathay Pacific Airways Limited. In case of any discrepancy between the English version and the Chinese version, the English version shall prevail.

Reporting period

This report describes the sustainable development activities and approach of Cathay Pacific and its principal subsidiaries (collectively the "Group") for the period from 1 January to 31 December 2017. This report is prepared on an annual basis.

Our previous sustainable development reports can be downloaded from www.cathaypacific.com

Reporting guidelines

The report is prepared with reference to the Global Reporting Initiative (GRI) Standards: Core Option, and complies with the provisions of the Environmental, Social and Governance (ESG) Reporting Guide issued by Hong Kong Exchanges and Clearing Limited (HKEX).

Reporting scope

The scope of the Sustainable Development Report covers primarily Cathay Pacific Airways Limited, and its principal subsidiaries shown as follows.

- 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)

The Environmental, Social and Governance data in this report are, unless specified otherwise, based on the Cathay Pacific Airways Limited and its subsidiaries shown above.

The economic data in this report are based on the consolidated financial statement of the Annual Report 2017, which incorporates the financial statements of the Cathay Pacific Airways Limited and its subsidiaries together with the Group's interests in joint ventures and associates.

External assurance

We have engaged independent assurance provider PricewaterhouseCoopers to provide an independent assurance on our greenhouse gas emissions data for the aforesaid reporting period. The scope and statement of assurance are provided as follows. The verified data with external assurance is marked with "♦" throughout the report.

The assurance report is as follows:



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 2017 ("the Sustainable Development Report 2017") (the "Identified Sustainability Information").

Identified Sustainability Information

The Identified Sustainability Information for the year ended 31 December 2017 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**
- Outcome of the Fly greener programme in 2017:
 - (i) the total number of offsets bought by passengers.

Our assurance was with respect to the year ended 31 December 2017 information only and we have not performed any procedures with respect to earlier periods or any other elements included in the Sustainable Development Report 2017 and, therefore, do not express any conclusion thereon.

Criteria

The criteria used by the Company to prepare the Identified Sustainability Information is set out in the section "About this Report" of the Sustainable Development Report 2017 at https://www.cathaypacific.com/cx/en_HK.html (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

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



羅兵咸永道

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.

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 the 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 31 December 2017 is not prepared, in all material respects, in accordance with the Criteria.



羅兵咸永道

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.

PricewaterhouseCoopers
Certified Public Accountants

A handwritten signature in grey ink that reads "PricewaterhouseCoopers". The signature is written in a cursive, flowing style.

Hong Kong, 8 June 2018

Contact us

If you have any comments or feedback on this report or its contents, please contact our team at: sustainability@cathaypacific.com

Our address:

Corporate Affairs Department (Sustainable Development)
Cathay Pacific City
8 Scenic Road
Hong Kong International Airport
Lantau
Hong Kong

Greenhouse gas emissions accounting and reporting policies

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"):

Subsidiaries	Ownership
Cathay Holidays Limited (CHL)	100%
Cathay Pacific Catering Services (H.K.) Limited (CPCS)	100%
Cathay Pacific Services Limited (CPSL)	100%
Hong Kong Airport Services Limited (HAS)	100%
Hong Kong Dragon Airlines Limited (KA)	100%
Vogue Laundry Service Limited (VLS)	100%
AHK Air Hong Kong Limited (AHK) (60% owned)	60%

Other principal subsidiaries and associates that are not included within the scope of this report, as outlined on p.103-104 of the Cathay Pacific Group Annual Report 2017, will be considered for inclusion in the future.

Appendix: Global Reporting Initiative (GRI) and Hong Kong Stock Exchange and Clearing Limited (HKEX) Environmental, Social and Governance (ESG) Content Index Table

GRI Standard	Disclosure	Relevant section(s) and/or URL(s)	Remark (e.g. omission)	HKEX ESG Reporting Guide
Organizational profile				
GRI 102: General Disclosures	102-1	Name of the organisation	About Cathay Pacific Annual Report p.2-3	
	102-2	Activities, brands, products, and services	About Cathay Pacific Annual Report p.2-3; 10-15; 103-104	
	102-3	Location of headquarters	About Cathay Pacific Annual Report p.2-3	
	102-4	Location of operations	About Cathay Pacific Annual Report p.2-3; 10-15; 18-22	
	102-5	Ownership and legal form	About Cathay Pacific Annual Report p.2-3; 10-15	
	102-6	Markets served	About Cathay Pacific Annual Report p.2-3; 18-22	
	102-7	Scale of the organization	About Cathay Pacific Economic indicators table Social indicators table Annual Report p.2-3; 6; 18-22; 23-28	
	102-8	Information on employees and other workers	Our people Social indicators table	
	102-9	Supply chain	Sustainability in operations – Sustainable sourcing	
	102-10	Significant changes to the organization and its supply chain	Message from the CEO Safety Sustainability in operations – Sustainable sourcing Our people Annual Report p.10-15	
	102-11	Precautionary Principle or approach	Our approach Annual Report p.29-31	
	102-12	External initiatives	About Cathay Pacific – Selected awards and membership Our approach – United Nations Sustainable Development Goals	
	102-13	Membership of associations	About Cathay Pacific – Selected awards and membership	

GRI Standard	Disclosure	Relevant section(s) and/or URL(s)	Remark (e.g. omission)	HKEX ESG Reporting Guide
GRI 102: General Disclosures	Strategy			
	102-14	Statement from senior decision-maker	Message from the CEO	
	Ethics and integrity			
	102-16	Values, principles, standards, and norms of behavior	About Cathay Pacific Corporate Code of Conduct Supply Chain Sustainability Code of Conduct Board Diversity Policy Swire Pacific Corporate Code of Conduct	
	Governance			
	102-18	Governance structure	Our approach – Corporate governance Annual Report p.34–56	
	Stakeholder engagement			
	102-40	List of stakeholder groups	Our approach – Stakeholder engagement	
	102-41	Collective bargaining agreements	– Not applicable – The majority of our employees are in Hong Kong, where there is no legal framework for collective bargaining arrangements with trade unions.	
	102-42	Identifying and selecting stakeholders	Our approach – Stakeholder engagement	
	102-43	Approach to stakeholder engagement	Our approach – Stakeholder engagement	
	102-44	Key topics and concerns raised	Our approach – Stakeholder engagement	
	Reporting practice			
	102-45	Entities included in the consolidated financial statements	Annual Report p.57; 62-109	
	102-46	Defining report content and topic Boundaries	Our approach – Stakeholder engagement About this report	
	102-47	List of material topics	Our approach – Stakeholder engagement	

GRI Standard	Disclosure	Relevant section(s) and/or URL(s)	Remark (e.g. omission)	HKEX ESG Reporting Guide
GRI 102: General Disclosures				
Reporting practice				
	102-48	Restatements of information	The formula for calculating the "Payment to providers of capital" in the Economic indicators table has been adjusted in this report, which is different from previous report.	
	102-49	Changes in reporting	There are no significant change in material topics and boundaries.	
	102-50	Reporting period	About this report	
	102-51	Date of most recent report	About this report	
	102-52	Reporting cycle	About this report	
	102-53	Contact point for questions regarding the report	About this report	
	102-54	Claims of reporting in accordance with the GRI Standards	About this report	
	102-55	GRI content index	Global Reporting Initiative Content Index and Hong Kong Stock Exchange Environmental, Social and Governance (ESG) Content Index	
	102-56	External assurance	About this report	
MATERIAL TOPICS				
GRI 200 ECONOMIC STANDARDS SERIES				
Economic performance				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Message from the CEO Annual Report p.8-15; 93-100	
	103-2	The management approach and its components		
	103-3	Evaluation of the management approach		
GRI 201: Economic Performance	201-1	Direct economic value generated and distributed	Economic indicators table Annual Report p.62-65	
	201-2	Financial implications and other risks and opportunities due to climate change	Climate change	
	201-3	Defined benefit plan obligations and other retirement plans	Our people Annual Report p.77-81	

GRI Standard	Disclosure	Relevant section(s) and/or URL(s)	Remark (e.g. omission)	HKEX ESG Reporting Guide
Procurement practices				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Our approach – Stakeholder engagement	
	103-2	The management approach and its components	Sustainability in operations – Sustainable sourcing	
	103-3	Evaluation of the management approach		
GRI 204: Procurement Practices	204-1	Proportion of spending on local suppliers	–	Quantitative data unavailable. Most of the procurement budgets were spent on aircraft and oil which are from non-local suppliers.
Anti-corruption				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Our approach – Corporate governance	Aspect B7: Anti-corruption: General Disclosure KPI B7.1 KPI B7.2
	103-2	The management approach and its components	Corporate Code of Conduct Anti-Bribery Policy Whistleblower Policy Annual Report p.34-56	
	103-3	Evaluation of the management approach		
GRI 205: Anti-corruption	205-3	Confirmed incidents of corruption and actions taken	Our approach – Corporate compliance	
Anti-competitive behavior				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Our approach – Corporate governance	
	103-2	The management approach and its components	Corporate Code of Conduct Antitrust Policy	
	103-3	Evaluation of the management approach		
GRI 206: Anti-competitive Behaviour	206-1	Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	Our approach – Corporate compliance Annual Report p.92	
GRI 300 ENVIRONMENTAL STANDARDS SERIES				
Materials				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Sustainability in operations – Sustainable sourcing	Aspect A2: Use of Resources: General Disclosure KPI A2.5
	103-2	The management approach and its components		
	103-3	Evaluation of the management approach		
GRI 301: Materials	301-1	Materials used by weight or volume	Sustainability in operations – Sustainable sourcing Environmental indicators table	

GRI Standard	Disclosure	Relevant section(s) and/or URL(s)	Remark (e.g. omission)	HKEX ESG Reporting Guide
Energy				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Our approach – Stakeholder engagement Climate change	Aspect A2: Use of Resources: General Disclosure KPI A2.1; KPI A2.3
	103-2	The management approach and its components		
	103-3	Evaluation of the management approach		
GRI 302: Energy	302-1	Energy consumption within the organization	Environmental indicators table	
	302-3	Energy intensity	Environmental indicators table	
	302-4	Reduction of energy consumption	Climate change – Aircraft emissions Climate change – Ground emissions	
Water				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Water is not considered a material aspect in our stakeholder engagement.	Aspect A2: Use of Resources: General Disclosure KPI A2.2; KPI A2.4
	103-2	The management approach and its components		
	103-3	Evaluation of the management approach		
GRI 303: Water	303-1	Water withdrawal by source	Environmental indicators table	
Biodiversity				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Our approach – Stakeholder engagement Biodiversity	Aspect A3: The Environment and Natural Resources General Disclosure KPI A3.1
	103-2	The management approach and its components		
	103-3	Evaluation of the management approach		
GRI 304: Biodiversity	304-2	Significant impacts of activities, products, and services on biodiversity	Biodiversity	

GRI Standard	Disclosure	Relevant section(s) and/or URL(s)	Remark (e.g. omission)	HKEX ESG Reporting Guide
Emissions				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Our approach – Stakeholder engagement Climate change	Aspect A1: Emission: General Disclosure KPI A1.1; KPI A1.2; KPI A1.5
	103-2	The management approach and its components		
	103-3	Evaluation of the management approach		
	305-1	Direct (Scope 1) GHG emissions	Climate change Environmental indicators table	
	305-2	Energy indirect (Scope 2) GHG emissions	Climate change Environmental indicators table	
	305-4	GHG emissions intensity	Climate change Environmental indicators table	
	305-5	Reduction of GHG emissions	Climate change Environmental indicators table	
305-7	Nitrogen oxides (NO _x), sulphur oxides (SO _x) and other significant air emissions	Environmental indicators table		
Effluents and waste				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Our approach – Stakeholder engagement Sustainability in operations – Waste management	Aspect A1: Emission: General Disclosure KPI A1.3; KPI A1.4; KPI A1.6
	103-2	The management approach and its components		
	103-3	Evaluation of the management approach		
GRI 306: Effluents and waste	306-2	Waste by type and disposal	Sustainability in operations – Waste management Sustainability in operations – Waste management – Retired aircraft Environmental indicators table	Hazardous waste is not considered a material aspect in the stakeholder engagement. Quantitative data unavailable.
	Environmental compliance			
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Our approach – Stakeholder engagement Climate change Sustainable sourcing – Supply Chain Sustainability Code of Conduct	Aspect A1: Emission: General Disclosure
	103-2	The management approach and its components		
	103-3	Evaluation of the management approach		
GRI 307: Environmental compliance	307-1	Non-compliance with environmental laws and regulations	Climate change – Climate change strategy	

GRI Standard	Disclosure	Relevant section(s) and/or URL(s)	Remark (e.g. omission)	HKEX ESG Reporting Guide
Supplier environmental assessment				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Our approach – Stakeholder engagement	Aspect B5: Supply Chain Management
	103-2	The management approach and its components	Sustainability in operations – Sustainable sourcing	
	103-3	Evaluation of the management approach		
GRI 308: Supplier Environmental Assessment	308-1	New suppliers that were screened using environmental criteria	Sustainability in operations – Sustainable sourcing – Supplier scorecard Sustainability in operations – Sustainable sourcing – SEDEX sustainable supply chain platform All new suppliers were screened using environmental criteria through our procurement process in 2017.	
GRI 400 SOCIAL STANDARDS SERIES				
Employment				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Our approach – Stakeholder engagement	Aspect B1: Employment: General Disclosure KPI B1.1; KPI B1.2
	103-2	The management approach and its components	Our people	
	103-3	Evaluation of the management approach		
GRI 401 Employment	401-1	New employee hires and employee turnover	Social indicators table	
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Our people – Employee welfare	
Labour/Management relations				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Our people	The implementation of any significant operational changes is governed by the Employment Ordinance of Hong Kong. We will endeavour to provide notice of operational changes to our employees as soon as they occur. During the reorganisation in 2017, most impacted employees left the company over a period ranging from three weeks to three months.
	103-2	The management approach and its components		
	103-3	Evaluation of the management approach		
GRI 402: Labour/Management Relations	402-1	Minimum notice periods regarding operational changes	–	

GRI Standard	Disclosure	Relevant section(s) and/or URL(s)	Remark (e.g. omission)	HKEX ESG Reporting Guide
Occupational health and safety				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Our approach – Stakeholder engagement	Aspect B2: Health and Safety; General Disclosure KPI B2.1; KPI B2.2; KPI B2.3
	103-2	The management approach and its components	Safety	
	103-3	Evaluation of the management approach	Safety – Occupational health and safety Social indicators table	
GRI 403: Occupational Health and Safety	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	Safety – Occupational health and safety Social indicators table	
	Training and education			
	GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Our approach – Stakeholder engagement
103-2		The management approach and its components	Our people	
103-3		Evaluation of the management approach	Our people Social indicators table	
GRI 404: Training and Education	404-1	Average hours of training per year per employee	Our people Social indicators table	
	404-2	Programs for upgrading employee skills and transition assistance programs	Our people – Attracting and developing talent	
	404-3	Percentage of employees receiving regular performance and career development reviews	Social indicators table	
Diversity and equal opportunity				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Our people Board Diversity Policy	Aspect B1: Employment; General Disclosure
	103-2	The management approach and its components	Our people	
	103-3	Evaluation of the management approach	Our people Social indicators table	
GRI 405: Diversity and Equal Opportunity	405-1	Diversity of governance bodies and employees	Our people Social indicators table	
	Child labour			
	GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Our people Sustainability in operations – Sustainable sourcing – Supply Chain Sustainability Code of Conduct Corporate Code of Conduct
103-2		The management approach and its components	Sustainable sourcing – Supply Chain Sustainability Code of Conduct Corporate Code of Conduct	
103-3		Evaluation of the management approach	Our people – Human resources management Sustainability in operations – Sustainable sourcing – Supply Chain Sustainability Code of Conduct Corporate Code of Conduct	
GRI 408: Child labour	408-1	Operations and suppliers at significant risk for incidents of child labour	Our people – Human resources management Sustainability in operations – Sustainable sourcing – Supply Chain Sustainability Code of Conduct Corporate Code of Conduct	

GRI Standard	Disclosure	Relevant section(s) and/or URL(s)	Remark (e.g. omission)	HKEX ESG Reporting Guide
Forced or compulsory labour				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Our people	Aspect B4: Labour Standards KPI B4.1
	103-2	The management approach and its components	Sustainability in operations – Sustainable sourcing – Supply Chain Sustainability Code of Conduct Corporate Code of Conduct	
	103-3	Evaluation of the management approach		
GRI 409: Forced or Compulsory Labour	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labour	Our people – Human resources management Sustainability in operations – Sustainable sourcing – Supply Chain Sustainability Code of Conduct	
Local communities				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Our approach – Stakeholder engagement Community	Aspect B8: Community Investment: General Disclosure KPI B8.1; KPI B8.2
	103-2	The management approach and its components		
	103-3	Evaluation of the management approach		
GRI 413: Local Communities	413-1	Operations with local community engagement, impact assessments, and development program	Community	
Supplier social assessment				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Our approach – Stakeholder engagement	Aspect B5: Supply Chain Management
	103-2	The management approach and its components	Sustainability in operations – Sustainable sourcing	
	103-3	Evaluation of the management approach		
GRI 414: Supplier Social Assessment	414-1	New suppliers that were screened using social criteria	Sustainability in operations – Sustainable sourcing – Supplier scorecard Sustainability in operations – Sustainable sourcing – SEDEX sustainable supply chain platform	All new suppliers were screened using social criteria through our procurement process in 2017.
Customer health and safety				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Our approach – Stakeholder engagement Safety	Aspect B6: Product Responsibility: General Disclosure
	103-2	The management approach and its components		
	103-3	Evaluation of the management approach		
GRI 416: Customer Health and Safety	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	Social indicators table Safety – Passenger health and safety	

GRI Standard	Disclosure	Relevant section(s) and/or URL(s)	Remark (e.g. omission)	HKEX ESG Reporting Guide
Marketing and labelling				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Our approach – Corporate governance	Aspect B6: Product Responsibility: General Disclosure
	103-2	The management approach and its components		
	103-3	Evaluation of the management approach		
GRI 417: Marketing and Labelling	417-2	Incidents of non-compliance concerning product and service information and labelling	Our approach – Corporate compliance	
	417-3	Incidents of non-compliance concerning marketing communications		
Customer privacy				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Our approach – Corporate governance	Aspect B6: Product Responsibility: General Disclosure KPI B6.5
	103-2	The management approach and its components	Personal Data (Privacy) Policy	
	103-3	Evaluation of the management approach		
GRI 418: Customer Privacy	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Our approach – Corporate compliance	
Socioeconomic compliance				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Our approach – Corporate governance	Aspect B6: Product Responsibility: General Disclosure
	103-2	The management approach and its components	Antitrust Policy Anti-Bribery Policy Whistleblower Policy	
	103-3	Evaluation of the management approach	Personal Data (Privacy) Policy	
GRI 419: Socioeconomic Compliance	419-1	Non-compliance with laws and regulations in the social and economic area	Our approach – Corporate compliance Annual report p.92	Aspect B7: Anti-corruption: General Disclosure