SUSTAINABLE DEVELOPMENT REPORT 2021

Cathay Pacific Airways Limited



CONTENTS CONTENTS

3 Overview

- 4 Message from the CEO
- 6 About Cathay Pacific
- 7 About this report
- 8 2021 Performance highlights
- 10 Our approach
- 10 Sustainable development strategy
- 10 Stakeholder engagement and materiality assessment
- 12 United Nations SDGs

14 Governance

- 14 Our governance culture
- 15 Board statement on sustainable development
- 16 Code of conduct
- 17 Risk management
- 19 Corporate compliance

23 Safety

- 24 Our approach
- 24 Safety Policy
- 25 Operational safety
- 30 Occupational health and safety
- 31 Passenger health and safety

32 Climate change

- 32 Why climate change matters to us
- 33 Charting a course to zero
- 34 The journey travelled in 2021
- 36 Climate action governance
- 36 Climate change target
- 37 Climate risk
- 38 Fleet modernisation
- 39 Supplier engagement
- 39 Operational efficiency
- 42 Sustainable aviation fuel
- 43 Carbon offsets
- 44 New technology
- 44 Ground emissions

46 Sustainability in operations

- 46 Why responsible resources use matters to us
- 48 Our approach
- 48 Sourcing
- 49 Sustainable food option
- 50 Waste management
- 56 Resource management

60 Biodiversity

- 60 Why biodiversity matters to us
- 61 Our cargo carriage approach
- 64 Sustainable Development Cargo Carriage Policy
- 64 Embargoes
- 64 International declaration

66 Our people

- 66 Why being a good employer matters to us
- 68 Our approach
- 69 Major initiatives in 2021
- 70 Human resources management
- 71 Employee relations and engagement
- 75 Attracting and developing talent
- 78 Employee welfare
- 80 Diversity and inclusion

84 Community

- 84 Why communities matter to us
- 86 Our approach
- 87 Our response to COVID-19
- 89 Community programmes
- 91 Fundraising and donations
- 93 Volunteering

94 Our subsidiaries

- 95 2021 Performance highlights
- 97 Hong Kong Express Airways Limited
- 98 Air Hong Kong
- 99 Cathay Pacific Catering Services
- 100 Cathay Pacific Services Limited
- 101 Vogue Laundry Services Limited
- 102 Hong Kong Airport Services Limited

103 Our performance

- 103 Cathay Pacific's response to Task Force on Climate-related Financial Disclosures (TCFD)
- 110 Compliance with laws and regulations
- 117 2021 Key performance indicators
- 128 Selected awards and membership
- 129 External assurance
- 131 Global Reporting Initiative and Hong Kong Stock Exchanges ESG reporting index table



OVERVIEW



MESSAGE FROM THE CEO

This year we celebrated 75 years as Hong Kong's home airline. As we look to build a resilient and successful future, the global pandemic continues to have a huge impact on our business and the aviation industry. Recovery in international travel and demand for airfreight must be grounded in the knowledge that the outlook is still uncertain.

Against this backdrop, I am pleased to share our 2021 Sustainable Development Report, which outlines the many initiatives that we continue to take to protect the planet and our people, including the support we have given our communities during this global health crisis. It also sets out specific progress on achieving carbon neutrality and other priority sustainability issues.

Helping to vaccinate our global communities

Utilising our extensive network and years of experience carrying pharmaceutical shipments, we raced against time to develop a dedicated solution to make vaccines available to global communities. As the fifth-largest freight carrier in the world equipped with the most advanced cool-chain technology, our group managed to deliver over 165 million vaccine doses and life-saving medical supplies around the world. We are especially proud to have flown the very first vaccines for use in our home city of Hong Kong in February 2021.

We led the way in promoting vaccine uptake to protect our people and our customers. I am pleased that by summer 2021, all our operating crew have been fully vaccinated and we highly encourage all our people to get booster shots. To elevate our support for the Hong Kong SAR Government's community vaccination drive, we also conducted a lucky draw for fully vaccinated residents of Hong Kong in September last year, giving out a unique experience of a private flight as grand prize and millions of Asia Miles.



Augustus Tang Chief Executive Officer

Making progress towards carbon neutrality

As our industry makes a gradual recovery from the impact of COVID-19, the transition to low-carbon transport has reached a tipping point. We fully embrace our responsibility to lead the charge towards sustainable aviation. Having made our carbon-neutral pledge in 2020, this year we built on past progress and continued to deliver on our commitment.

In 2021, we became one of the first airlines in Asia to target 10% Sustainable Aviation Fuel (SAF) use for flights operated by Cathay Pacific by 2030. We also committed to purchasing more than 350 million gallons of SAF beginning from 2024 alongside our **one**world Alliance peers. We are also developing a Corporate SAF Programme, which would not only make SAF available for uplift from Hong Kong International Airport for the first time, but also offer corporate customers the opportunity to reduce their emissions from business travel and airfreight at source. With these initiatives, we are taking the lead in creating strong demand for and accelerating the deployment of SAF in the region.

Creating the industry-wide change that is necessary to reach our carbon-neutral goal cannot be done in isolation. We are proud to be a founding member of the Aviation Climate Taskforce, an industry platform through which we will accelerate the development of breakthrough technologies to help our industry decarbonise.

Our strength in diversity

As we prepare to build back better after COVID-19, we will ensure we maintain progress on the creation of a leading inclusive and supportive work environment for all our people. Female representation is a key area of focus. We are happy to be part of the IATA "25 by 2025" initiative aiming to increase female representation at senior levels. We have pledged to increase our female leader numbers at senior positions by 25%, reaching 30% in total, by 2025.

To cultivate greater inclusiveness, we review company policies and processes continuously to remove biases, educating and raising awareness on the matter. Going forward, we will work on developing accountability for leaders around inclusive leadership, as well as customer focused inclusive initiatives.

Despite ongoing uncertainties, we are well positioned to capitalise on the recovery expected in 2022. With our people pressing on with the delivery of service excellence to our customers and communities, I am confident that we will move beyond our current challenges and thrive in the years to come. I want to thank all our people for their dedication and commitment during a period of major disruption. Together we will continue to connect Hong Kong to the world in sustainable ways as recovery accelerates.

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Augustus Tang Chief Executive Officer



ABOUT CATHAY PACIFIC

Cathay Pacific Airways Limited ("Cathay Pacific" or the "Company"), together with its subsidiaries Hong Kong Express Airways Limited ("HK Express") and AHK Air Hong Kong Limited ("Air Hong Kong"), had 234 aircraft at the end of 2021, of which 74 were held at parking locations outside of the Hong Kong Special Administrative Region ("Hong Kong"). Immediately prior to the onset of COVID-19, our airlines directly connected Hong Kong to 119 destinations in 35 countries worldwide (255 and 54 respectively with codeshare agreements), including 26 destinations in Chinese mainland. The Group, and its subsidiaries, employ more than 21,600 people worldwide, of whom around 17,710 are employed in Hong Kong.

Its other investments include catering, laundry, groundhandling and cargo terminal companies and its corporate headquarters and cargo terminal at Hong Kong International Airport.

Cathay Pacific is listed on The Stock Exchange of Hong Kong Limited (the "Stock Exchange"), as are its substantial shareholders Swire Pacific Limited ("Swire Pacific") and Air China Limited. More information is available from www.cathaypacific.com.

ABOUT THIS REPORT

Aim of reporting

Our Sustainable Development Report sets out our approach to good governance and our most material environmental and social topics. Since 1996, we have published our report annually to:

- Disclose our sustainability performance in a transparent, accountable and clear manner,
- Engage with our stakeholders on sustainability topics that are material to our business, so we can address them effectively and appropriately
- Discuss the challenges we face and progress we make as a company in the context of sustainable development.

This Sustainability Development Report can be read in conjunction with our <u>Annual Report 2021</u> which deals with our financial and operational performance, and with our corporate governance.

In case of any discrepancy between the English version and the Chinese version, the English version shall prevail.

Reporting period

This report describes the approach and performance of the Cathay Pacific Group (as defined below) for the period from 1 January to 31 December 2021. Our previous Sustainable Development Reports can be accessed on https://sustainability.cathaypacific.com/past-reports/reports-download/.

Reporting guidelines

This report is prepared with reference to the Global Reporting Initiative (GRI) Standards, and complies with the provisions of the Environmental, Social and Governance (ESG) Reporting Guide (Appendix 27 to the Rules Governing the Listing of Securities on the Stock Exchange) issued by the Stock Exchange. We also take reference of the recommendations by the Task Force on Climate-related Financial Disclosures (TCFD) for our climate related disclosures. Report content is shaped around the issues identified as important through a process of materiality assessment and internal and external engagement. Information provided on our management and performance of these issues is verified by data owners, approved by management and the Board of Directors of the Company (the "Board"). Qualitative disclosures capture any key changes to our business, while we set our annual performance figures in the context of our performance in recent years to allow for comparability. Key data points are externally verified.

Reporting scope and data

Unless otherwise specified, the environmental, social and governance data in this report covers Cathay Pacific and its principal subsidiaries listed below (together, the "Group" or "Cathay Pacific Group") as of 31st December 2021:

SUBSIDIARIES		OWNERSHIP	
AHK Air Hong Kong Limited	(AHK)	100%	
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 Express Airways Limited	(HKE)	100%	
Vogue Laundry Service Limited	(VLS)	100%	

The economic data in this report are based on the consolidated financial statement in the Company's Annual Report 2021 which incorporates the financial statements of the Company and all its subsidiaries together with their interests in joint ventures and associates.

Contact us

We welcome comments and feedback on this report and its contents. Please send your feedback to our team at: sustainability@cathaypacific.com.

Our address:

Sustainable Development Team, Corporate Affairs Department, Cathay Pacific City, 8 Scenic Road, Hong Kong International Airport, Hong Kong

2021 PERFORMANCE HIGHLIGHTS

We endeavour to operate in a sustainable manner, embedding sustainable development principles and practices into all aspects of our business. We map our progress on sustainable development against six strategic areas of focus that guide our journey and shape our sustainable development priorities. The framework below highlights our priorities and progress. While the impact of the global pandemic on our operations may have disrupted momentum, the journey is continuous and so are our efforts at improvement.

Follow the links at the top of the page to deep dive into our approach and our progress on these areas in 2021.

STRATEGIC FOCUS

Safety

Safety is central to our success and our future. We provide a safe and healthy environment for our people, customers, and other stakeholders with the aim of achieving zero accidents and zero 'high-risk' incidents.

Carbon

We aspire to be a leading contributor to global efforts to reduce aviation's impact on climate change, and to prepare our business to be climate ready.

Sustainability in operations

We take a holistic approach to source material responsibly, to reduce consumption of natural resources, and to support development to turn waste into resources.

PROGRESS IN 2021

- Completed our bi-annual IATA operational safety audit of 250 aircraft management items.
- Developed and delivered various training courses on Safety Risk Management (SRM) and mental wellbeing.
- Senior management from across the Group held a safety and risk focused workshop.
- Refined our COVID-19 related safety precautions for our passengers and our people.
- Set a target to use 10% sustainable aviation fuel (SAF) for Cathay Pacific operating flights by 2030 and signed an agreement with **one**world airlines for the joint purchase of more than 350 million gallons of SAF.
- Joined with nine other airlines to launch the Aviation Climate Taskforce to accelerate aviation decarbonisation.
- Conducted a climate risk scenario planning workshop with a cross-functional team of business leaders to stress test our climate strategy.
- Partnered with the Hong Kong University of Science and Technology on inflight catering waste and single-use plastic reduction solutions generation.
- Conducted a benchmarking review of our Supply Chain Sustainability Code of Conduct.
- Continued our single-use plastic reduction. 43 million pieces of item were removed from our annual usage baseline.

PRIORITIES IN 2022



- Continue to focus on maintaining and updating COVID-19 related safety measures to protect customers and our people.
- Continue to provide training, information and support to help our people manage and overcome challenges, focusing on their mental health and wellbeing.
- Continue to focus on quality, compliance and operational excellence to ensure our customers and our people are as safe as possible.



- Devise short, mid and long term work plans to meet net zero carbon goals by 2050.
- Strengthen our carbon offset solutions for individual and corporate customers.
- Work with industry partners to accelerate SAF development and deployment in the region.



- Continue progress towards our target to reduce single-use plastics usage by 50% from a 2018 baseline by the end of 2022.
- Engage in innovative projects related to single-use plastics and food waste reduction.
- Continue to divert food waste for redistribution to communities in need.

STRATEGIC FOCUS

Biodiversity

We aspire to protect biodiversity in terms of what we serve and what we carry, together with our value chain.

Our people

We provide a workplace environment in which our people can realise their potential, making us a first-choice employer.

Community

We support the communities we serve. We bring about global cultural exchange, provide opportunities that support youth development, promote a diverse and inclusive culture, and enhance environmental awareness.

PROGRESS IN 2021

- Updated our Sustainable Food Policy.
 - Served over 22 tonnes of certified sustainable seafood, representing around 40% of the total volume of seafood our catering arm in Hong Kong purchased.
- Increased the number of embargoes placed on animals, wildlife and wildlife products.
- Carried out 1,455 air cargo screenings on 151 freight forwarding agents in line with our Sustainable Development Cargo Carriage Policy.
- Upgraded Work Your Way programme so that employees can manage their work schedule with greater flexibility.
- Launched several policies that respond to employee needs, such as vaccination leave and grievance policy for employees.
- Enhanced our Flexible Benefits offering for employees with improved Travel Insurance and Medical Plan.
- Introduced 'The Future Leader Series', a new training and development programme focused on preparing leaders for tomorrow, today.
- Committed to increasing female representation at senior positions* by 25%, to at least 30% by 2025.

*Senior positions refer to the job levels of General Managers and Directors at the Group

- Since the start of the pandemic, delivered over 165 million vaccine doses to Hong Kong and beyond.
- Donated over 300,000 meals to local charities to support the vulnerable.
- Over four million items donated including catering equipment, blankets, children kits, and refurbished tablet computers.
- Our employees volunteered over 1,200 hours to support initiatives in response to COVID-19.

PRIORITIES IN 2022



- Continue to work with civil society organisations to prevent illegal wildlife trades.
- Review our Sustainable Development Cargo Carriage Policy.

- Continue to focus on ensuring employee safety, health and mental wellbeing facing the pandemic.
- Adapt to the changing business circumstances during the pandemic with agility and speed.
- Continue to review and update policies to respond to employees' needs.
- Facilitate and foster innovative ways to collaborate through enhanced digital connectivity.
- Continue to strengthen our corporate culture and embed our brand values of thoughtful, progressive and can-do spirit, and our behaviours of agility, collaboration and ownership.



- Support local communities during the pandemic by facilitating food and in-kind donation.
- Encourage and arrange employee volunteering for the community.
- Work closely with governments to facilitate the transportation of vaccines.

OUR APPROACH

Sustainable development strategy

We prioritise our most material environmental and social impacts in tandem with the areas where our customers and stakeholders expect Cathay Pacific to take the lead. Our approach is guided by our <u>Sustainable Development Policy</u> which was revised in 2020 to be more reflective of the global sustainable development agenda with a strengthened focus on climate change, diversity and inclusion.

The six focus areas of the policy ensure environmental, social and economic considerations are included in our business decisions. In this way we aim to go beyond compliance in the jurisdictions where we do business, to be a respectful employer, a value-adding community member, and a service provider that exceeds our customers' expectations.

Recognising the potential impact from climate change, our revised policy sets out our commitment in achieving net zero carbon emissions by 2050, through an international approach, working with governments around the world and through the United Nations. It also includes assessing, addressing, and mitigating the climate risks we face and exploring opportunities that may arise. In line with our policy we incorporate climate change considerations in our procurement processes and encourage the use of low carbon and energy efficient products and materials.

Stakeholder engagement and materiality assessment

In developing our Sustainable Development Report, we consider key stakeholder groups based on their potential influence on our Sustainable Development Strategy and our services. We value honest, open and regular dialogue with our stakeholders.

Since 2006, we have periodically engaged our stakeholders to ascertain their primary concerns. Our channels of engagement include surveys, focus groups, interviews, publications, websites, social media and face to face meetings. All employees are engaged through an annual survey which is supplemented with quarterly surveys targeting key employee groups.

In 2021, we conducted a comprehensive materiality assessment involving broad engagement with our stakeholders. We surveyed internal and external stakeholder groups to determine the issues of vital importance which Cathay Pacific must address as a top priority and our current performance on managing each. More than 5,000 responses were received, including over 2,700 responses from our people, including management, ground employees, cabin crew and pilots and a further 2,500 responses from our customers, business partners, suppliers, investors, NGOs, regulators and peers.

TOPICS	REPORT SECTION	
Environment		
Plastic	 Sustainability in operations Climate change Cathay Pacific's response to Taskforce on Climate-related Financial Disclosures (TCFD) 	
Climate Change		
Material and waste management	Sustainability in operations	
Social		
Flight safety and security	• Safety	
Infectious disease	SafetyCommunity	
Occupational health and safety	Safety > Occupational Health and Safety	
Employee welfare	Our people > Employee welfare	
Governance		
Privacy & data protection	Governance	
Business ethics and anti-corruption	Governance	
Corporate Governance	Governance	
Disclosure & transparency	Our approachOur performance	

Materiality matrix

The results of the materiality assessment provided us with a recalibrated set of 11 material topics, which were identified from a list of 20 potentially relevant topics. Some issues that were not identified as priority by our stakeholders remain important to us and so we continue to report on them. The table below outlines our most material topics and where to find them in this report.









United Nations Sustainable Development Goals

Our long-term prospects are enhanced when we consider our impacts in the global context. We have mapped our approach to managing our material topics to the <u>United Nations Sustainable Development Agenda</u>. Six global goals align with our <u>Sustainable Development Policy</u> and help to shape our sustainable development strategy. Progress in 2021 delivered through our approach is shown on pages <u>8-9</u> of this report.

UN SUSTAINABLE DEVELOPMENT GOALS		OUR APPROACH	REPORT SECTION	
5 GENDER EQUALITY	SDG 5 Gender Equality Achieve gender equality and empower all women	• The Cathay Women's Network was established by the Diversity and Inclusion Committee to allow us to better understand and address current barriers that our female employees face, develop and retain a strong pipeline of leadership talent and create a platform for discussions.	Our people	
	and girls.	• In 2021, we committed to be part of the IATA "25 by 2025" initiative aiming to increase female representation at senior levels. By 2025, we have pledged to increase our female leader numbers at senior positions by 25%, reaching 30%.	Our people	
		• We are committed to supporting the future development of the communities we serve in tandem with the Group's long-term development through investment in children and youth development.	Community	
8 DECENT WORK AND ECONOMIC GROWTH	SDG 8	• We employ locally, with more than 8 in 10 of our employees coming from Hong Kong.	Our people	
	C CONMUC GROWTH C CONSISTENT OF CONSISTENT. FOR CONSISTENT OF CONSISTENT. FOR CONSISTENT OF CONSIST	 Our Hire-to-Retire strategy is aimed at ensuring that we support and invest in our people and reward performance with benefits and promotion. 	Our people	
		• We also champion safety in every aspect of our operations, ensuring our people are protected and able to focus on delivering excellent customer service. During the impact and stress caused by the COVID-19 pandemic we've introduced a slew of measures to protect our people and supported their physical and mental wellbeing. Our flexible work patterns help our people better balance work and home life.	Safety	
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	SDG 12 Responsible Consumption and	• We recycle or repurpose around 90% of all airplanes we retire. We are also committed to reducing our single use plastic footprint from our operations by 50% by the end of 2022 and using recycled plastics in the products we use in flight.		
GO	Production Ensure sustainable consumption and production patterns.	• We continue to work with local food banks and charities. In 2021, we donated over 113 tonnes of surplus food to our food charity partners in Hong Kong, which include over 300,000 pre-prepared meals for people who are in need of food assistance during the pandemic.	Sustainability in operations	

UN SUSTAINABLE DEVELOPMENT GOALS



SDG 13 Climate Action

Take urgent action to combat climate change and its impacts.



SDG 14

Life Below Water Conserve and sustainably use the oceans, seas and marine resources for sustainable development.



SDG 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.

	OUR APPROACH	REPORT SECTION	
	• We are committed to achieving net-zero carbon emissions by 2050.		
	 Through investment in a modern fleet, operational improvements, and the use of sustainable aviation fuel, we continue to reduce our reliance on fossil fuels and our greenhouse gas (GHG) emissions intensity. 		
	• We have committed to using Sustainable Aviation Fuel for 10% of our total fuel consumption by 2030 and actively take part in initiatives that accelerate its development.	Climate change	
	• We recognise the importance of working with different sectors to develop the kinds of radically new technologies that will be required to decarbonise airline operations. In 2021, together with a group of like-minded organisations, we formed the Aviation Climate Taskforce (ACT), a new non-profit established to accelerate the development of breakthrough technologies.		
	• We continued to enable easy and credible carbon offset solutions for our customers through our Fly Greener programme. In 2021, a total of 27,280 tonnes of carbon emission produced by our operations were offset by the programme.		
	• We have introduced embargoes on carrying shark fin since 2016. 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.	Biodiversity	
	• We established our internal Sustainable Food Policy in 2011 and further updated it in 2021 to provide guidance for our purchasing decisions. We opt out of purchasing specific unsustainable food items and ask for information with regards to where the food was originally sourced. In 2021, our catering arm served over 22 tonnes of certified sustainable seafood, representing around 40% of the total volume of seafood CPCS purchased.	Sustainability in operations	
	• We've introduced embargoes on ivory and hunting trophies amongst other items as we aim to make sure no endangered species, or its products are being transported on our flights. In 2021, We conducted an internal review of our Sustainable Development Cargo Carriage Policy in 2021 and made updates through referencing the Convention on International Trade in Endangered Species of Wildlife Fauna and Flora (CITES) laws and benchmarking our policy against the practices and policies of our peers.	Biodiversity	
	 We favour the use of waste as feedstock for producing sustainable aviation fuel, instead of other natural resources that may further burden the ecosystem. Fulcrum, a biofuel manufacturer that we have invested in, uses municipal solid waste as its biofuel feedstock. 	Climate change	



GOVERNANCE

Our governance culture

We remain committed to ensuring that our affairs are conducted in accordance with high ethical standards. This reflects our belief that, to achieve our long-term objectives, we must act with probity, transparency and accountability. Doing so we will not only maximise long-term value for our shareholders, but also benefit employees, those with whom we do business and the communities in which we operate.



GOVERNANCE

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

Our governance practices are described in detail in the Corporate Governance Report section of our 2021 Annual Report.

Board statement on sustainable development

The Board is ultimately accountable for sustainable development strategy and performance at Cathay Pacific. It is supported in its duties by three governance bodies that steer the Group's approach in sustainability matters under the leadership of the Chairman. They are the Sustainable Development Committee (SDC), Sustainable Development Steering Group (SDSG), and the Climate Actions Steering Group (CASG). In addition, the Board Risk Committee oversees assessment of environmental, social and governance risks among other risks and implementation of related board decisions. The Board Safety Review Committee oversees employee health and safety, while the Audit Committee oversees anti-corruption, fraud and whistleblowing cases.



Figure 1 Sustainable Development Governance Structure

The Board's responsibilities include reviewing the Group's material sustainability topics and approving sustainable development related strategy, targets, actions, policies and the Sustainable Development Report.



The Sustainable Development Committee (SDC)

Chaired by the Chief Executive Officer, the SDC consists of four Executive Directors and four other members of our senior management team. The SDC was established by and receives its authority from the Board to evaluate and approve sustainable development strategy, policy, target setting, and investment in major initiatives. It sets the tone for a corporate culture focused on sustainable development. Meeting regularly during the year, its duties include evaluating and prioritising the Group's material sustainable development topics. The SDC then communicates these and the materiality process to the Board in addition to providing biannual progress updates. In this way, sustainability is integrated into business planning, budgeting and risk management, and forms an integral part of the Group's business strategy.

The Sustainable Development Steering Group (SDSG) and Climate Actions Steering Group (CASG)

Both SDSG and CASG were established by and report to the SDC. Both Steering Groups are chaired by the Chief Financial Officer and comprise Department Heads that represent a wide range of functions across the company.

The SDSG covers a range of sustainable development topics including biodiversity, sustainability in operations, human trafficking, and modern slavery. The CASG has been set up to strengthen our governance in climate change mitigation. It is tasked with ensuring that the Group's approved climate change strategy, targets, and commitment are executed as planned. These Steering Groups evaluate and provide recommendations on sustainable development policy, initiatives and targets that require the SDC's approval and the Board's review.

Details of how material sustainability topics are managed within the Group are contained within this report. Further information on risk management is provided in the rest of this chapter. Our governance practices are described in detail in the Corporate Governance Report section of our <u>2021 Annual</u> <u>Report</u>.

Code of conduct

The Cathay Pacific Group strives to achieve the highest standards of corporate governance and best practices in accordance with our Code of Conduct. The Code sets out our principles for acting responsibly in the course of achieving our commercial success. The Code applies to all employees of Cathay Pacific and its subsidiaries, and includes issues related to business ethics, conflicts of interest, procurement, lobbying, bribery, intellectual property rights, environment, health and safety, and respect in the workplace. We review the Code and make any necessary updates in response to changes in our operating environment or stakeholder expectations. The Code is communicated to all employees through a training on our Learning Hub and is available on our intranet. Further information on how the standards outlined in the Code play out in our operations, is captured in the Our People chapter of this report.

Risk management

Identifying and responding to risks and opportunities that could impact our business is a key focus of the Board. From flight safety to broader ESG risks, we have in place the governance structure, processes and individuals that allow us to move forward with informed confidence towards our goals. The governance of business risks comprises two parallel structures focusing on corporate risks and operational safety.

Group risk governance has been implemented through a systematic and thorough process supported by focused risk management governance infrastructure including:



- A Board Safety Review Committee (BSRC), chaired by an Independent Safety Advisor and sitting four times per annum, has the responsibility to review all matters concerned with the safe operation, both in the air and on the ground, of any aircraft operated by the Company. The Board considers reports on incidents to ensure appropriate remedial action is being taken and recommendations are implemented. The Board also considers significant incidents concerning safety or security beyond the operation of aircraft, which are not normally reported to the board under the SMS, to ensure appropriate remedial action is being taken and recommendations are implemented.
- A Management Safety Committee Air Safety Review Committee (ASRC) meets monthly and reports to the BSRC. The ASRC ensures that appropriate companywide safety, health and security related risk management strategies, systems, policies and processes, reporting protocols and internal controls that are designed to ensure compliance with applicable laws and regulations globally, are implemented, managed, monitored and maintained at all times at Cathay Pacific. The ASRC has a monthly focus on specific sub-groups (e.g. GSORM Safety in January, Engineering Safety in May, etc.), where actions and/or recommendations from major investigations/safety risk

assessments are presented. Meetings of the Safety Action Groups (SAGS) are held monthly for specific functional operational areas e.g. FOPSAG (Flight Operations), CSAG (Cabin Operations), SECAG (Security), etc. There are a total of seven SAGs and a Fatigue Risk Management Sub-committee (FRSMC), Flight Data Analysis Review Committee (FDARC) and two Mandatory Occurrence Report (MOR) review meetings, one for the CAD (CAD MOR) and one for Engineering (ENG MOR). In addition, a Group Airline Safety Review Committee (GASRC) sits four times per annum, reviews and reports on safety issues to the BSRC a summarised view of key safety issues and safety performance of Cathay Pacific, Air Hong Kong and HK Express operations.

- A Group Safety & Operational Risk Management (GSORM) headed by the General Manager of GSORM, who reports directly to the Chief Executive Officer. The Head of Group Safety manages the airlines' Safety Management System (SMS), which provides oversight of the airlines' safety assessment and mitigation of risks associated with operations.
- Board Risk Committee (BRC) is a Board level committee which meets four times per year, with the role to advise the Board and oversee implementation of all Board decisions on all matters relating to risk, in particular focusing on risks not related to safety and security arising from the Group's flight operations. The BRC is charged with the setting and monitoring of risk appetite, overseeing the Group's risk profile, the effectiveness of the risk management framework (RMF) and the soundness of the Group's risk culture. The BRC also advises the Board on all emerging risks, and risk associated with strategic initiatives and transactions. with strategic initiatives and transactions.

- Risk Management Committee (RMC) an executive committee chaired by the Chief Executive Officer which meets four times per year, is responsible for the design, delivery and direct oversight of the RMF and, through it, the management of all corporate risks within the Group. The RMC reviews the status of all major risk categories ensuring that the Group is operating within the risk appetite, and ensures that the categorisation of risks continues to describe satisfactorily the full range of risks to which the Group is exposed, and that the population of risk registers that describe and quantify those risks are timely and thoroughly conducted. The RMC reports to the BRC of emerging or strategic risks that members believe could disrupt the Group's business plans or strategy, and has the responsibility of promoting the development of risk culture across the organisation. Risk profiles of the Group are being overseen and periodically presented to the BRC by the RMC.
- Group Corporate Risk (GCR) department headed by the Chief Risk Officer reporting to the Chief Executive Officer. This department has specific responsibility for developing, maintaining and ensuring the effectiveness of the RMF.

The Group's RMF is founded on the principle of 'three lines of defence', a commonly used model, and one that is designed to avoid conflicts of interest whereby managers review or oversee their own activities. The three lines divide as follows:

- Business or specialist functions that are directly involved in business management activities or executive decision making are classified as the 'First Line'
- Functions that oversee, advise and support the 'First Line' in managing the risks associated with those activities are considered as the 'Second Line'

• Group Internal Audit, which provides overall assurance to the Board as to the effectiveness of the Group's risk management processes and controls, is classified as the 'Third Line'

The Board maintains overall responsibility for the systems, processes and conduct of risk management while the business is responsible for managing risk. The risk management function is expected to engage fully to support them, providing ideas, expertise and advice.

In particular, GCR's role is to ensure that the First Line takes decisions objectively and in full possession of all relevant information. This is embedded into the Group's businesses through the appointment of First Line 'risk owners' who have responsibility for identifying and monitoring emerging and developing risks across one or more business areas. Risk owners are responsible for escalating any breaches or potential incidents to GCR.

An ESG risk assessment framework and taxonomy have been developed. The framework, which are linked back to the Group's sustainable development goals, provides a structured approach for the identification, assessment and mitigation of ESG risks across the business. All identified ESG risks are reported to the RMC and the BRC.

Please refer to p.48-51 of our <u>Annual Report 2021</u> for further information about our approach to risk management and our internal control systems.

Corporate compliance

An overview of the most relevant laws and regulations that have a significant impact on the Group is provided in the <u>Compliance with laws and regulations section</u> of this report.

Customer privacy compliance

The Group's commitment to ensure the privacy of its customers and employees as well as to protecting their personal information has been implemented through systematic and thorough processes managed and overseen by a dedicated Data Protection Office. We aim to ensure that our customers can make informed decisions and feel confident about providing us with their personal data when using our services.

We have introduced a robust Data Protection Management Programme (DPMP) including polices, procedure and controls to continuously meet the developing privacy laws applicable to the Group's operations including but not limited to the Hong Kong Personal Data (Privacy) Ordinance, the European Union General Data Protection Regulation, and the China Personal Information Protection Law.

The DPMP covers the following areas:

Accountability

Accountability is one of the key principles in data protection law the Group abides by setting high standards for privacy and leading by example to promote a positive attitude to data protection across the organisation.

• Leadership and oversight

The Group has established clear responsibilities for data protection-related activities at a strategic and operational level.

Policy framework

The Group's data protection policy framework stems from strategic business planning for data protection

and information governance, which the highest level of management endorses. Our policies cover areas including data handling and protection, records management and information security. The Data Protection Office has made available operational procedures, guidance and manuals readily available to support our data protection policies and provide direction to operational employees.

• Training and Awareness

Employees receive appropriate training about the Group's DPMP, including what its goals are, what it requires people to do and what responsibilities they have.

• Data Sharing

The Group has introduced a robust process to ensure that personal data is shared only with third parties that provide high standards for data protection.

Data Protection Risk Management

The Group has introduced a privacy impact assessment as a key risk management tool, and an important part of integrating 'data protection by design and by default' across the organisation. It helps the Group to identify, record and minimise the data protection risks of projects.

Ongoing Monitoring

To ensure the Group's ongoing compliance, the Data Protection Office has introduced a comprehensive compliance monitoring programme covering the key data protection compliance control processes. All of the Group's Business Units are subject to regular monitoring, the frequency of which is defined by the level of risk of the relevant personal data processing activities.

During 2021, there were no convictions for non-compliance with 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 relevant laws and regulations. This includes the Trade Descriptions Ordinance (Cap. 362 of the Laws of Hong Kong), which prohibits specified unfair trade practices such as false trade descriptions of services, misleading omissions, aggressive commercial practices, bait advertising, bait-andswitch and wrongful acceptance of payment. During 2021, there were no convictions for non-compliance with 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 acting professionally, fairly and with integrity in our business dealings and relationships wherever we operate, in compliance with the laws and regulations that govern our global business. Our people must comply with applicable anti-bribery and anticorruption laws. We have an established an Anti-Bribery Policy, which forms part of a comprehensive and robust antibribery and anti-corruption compliance programme designed to provide guidance on compliance with global anti-bribery laws.

As part of our commitment to ensure our people understand the anti-bribery rules and have awareness of our Anti-Bribery Policy and its associated Guidelines, we provide two types of online training to our people: Certification training with a knowledge assessment, and a simplified Awareness training to increase anti-bribery compliance awareness. Our people are required to take each type of online training according to an established learning matrix, taking into account the risks faced by various employee groups and training effectiveness. Anti-bribery online training in Cathay Pacific is covered by our Corporate Regulatory Compliance Learning Programme administered by our training department. All new joiners and any of our existing people whose job function or role is changing at the relevant time are enrolled for the appropriate type of online training. Built-in follow up mechanisms ensure that any instances where training has not been completed are escalated to senior management. All new joiners in our subsidiaries receive anti-bribery training arranged by the relevant subsidiary's People Department.

We continued to provide anti-bribery training for new joiners and refresher training for existing employees in 2021. Over 8,500 employees of Cathay Pacific and its subsidiaries have undertaken anti-bribery training during 2021, with an 85% completion rate.

In 2021, our refresher training was integrated into the overall Corporate Regulatory Compliance Learning Programme and relevant employees are now automatically enrolled to take the training annually. This is an assessment-based learning covering several topics including anti-bribery. Various employee groups have been enrolled to this training in phases. Similar refresher training will also be rolled out to subsidiaries gradually in 2022. We publish communications in various formats regularly to remind our people of the importance of complying with our Anti-Bribery Policy and key associated Guidelines. We are further enhancing our current due diligence framework and existing internal checks and screening mechanisms.

During 2021, there were no convictions for non-compliance with laws and regulations relating to bribery, extortion, fraud or money laundering that would have a significant impact on the Group.



8,500 employees of Cathay Pacific and its subsidiaries have undertaken anti-bribery training during 2021, with an 85% completion rate.

Whistleblower Policy

We have a Whistleblower Policy in Cathay Pacific Group to help mitigate legal, financial, operational and reputational risk. This policy 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. All complaints under the Whistleblower Policy are properly investigated and addressed to ensure that prompt remedial action is taken where appropriate. Any reporting under this policy can be done confidentially through multiple channels that allow for anonymous reporting.

The Speak Up channel, consisting of an online reporting website and telephone hotline, is available for our employees and others, including suppliers, to raise concerns. Accessible 24/7, Speak Up is administered by an independent service provider and available in multiple languages. Cases reported through Speak Up are routed to Group Compliance department for oversight.

Group Compliance department oversees all Whistleblower investigations and keeps centralised records of all Whistleblower reports.

Competition Law Compliance Policy

Cathay Pacific Group is committed to conducting itself with integrity and in compliance with the laws and regulations that govern its global business.

In order to provide guidance on compliance with the applicable global competition laws, we have a comprehensive and robust Competition Law Compliance Programme for Cathay Pacific Group, including a Competition Law Compliance Policy, further guidance such as associated guidelines and quick guides on key topics, and online and face to face tailored training and workshops. As part of continuous review of our Competition Law Compliance Programme, we issued an updated Competition Law Compliance Policy in 2021, which replaces the previous Antitrust Policy and Guidelines, and is reflective of the latest practices and changes to our business.

This year, we have continued to provide competition law training for new joiners through the Corporate Regulatory Compliance Learning Programme. In addition, we arranged refresher training for existing employees in stages, integrated within the Corporate Regulatory Compliance Learning Programme, and relevant employees are now automatically enrolled to take the training annually. Similar refresher training will be rolled out to relevant employees in our subsidiaries in 2022. We also continued to organise tailored in-person briefings with the Group's management teams to ensure they understand competition law principles and how they relate to their business practices.

In 2021, 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 <u>Annual Report 2021</u>, page 101.

Modern slavery and human rights

We adopt business practices that respect international human rights and strive to keep our global operations free from human rights abuse in any form. Our commitment to operating with respect for human rights applies to all aspects of our business operations globally and is integrated across all of our Company policies and processes. We assess, identify, monitor and manage the human rights impacts of our business activities on an on-going basis.

The Group's <u>Human Rights Policy</u> is aligned with the laws of Hong Kong and applies to our global operations. It outlines our commitments to our employees on issues such as diversity, equal opportunity and workplace security. It also defines our position on protecting human rights in our supply chains.

Our Procurement and Aircraft Trading department manages the airline's supply chain, conducting supplier due diligence and requiring suppliers to adhere to Cathay Pacific's <u>Supply</u> <u>Chain Sustainability Code of Conduct</u>, which amongst other things prohibits the use of child or forced labour. <u>Our Code of</u> <u>Conduct</u> also safeguards the Group against the use of child or forced labour in our own operations.



In 2021

of our cabin crew undertook the anti-human trafficking training. In this year, no suspected human trafficking incidents were reported.

Our Modern Slavery and Human Trafficking Policy Statement

sets out the Group's commitment to fight against human trafficking. It is accompanied by a second internal document which outlines procedures and practices including employee training, collaborating with third parties and conducting supplier due diligence. Formal training is provided to flight crew, cabin crew and airport ground employees.

Training for our cabin crew and airport teams began in early 2020 by teaching our people how to recognise and respond to potential human trafficking cases. All employees learn what signs and behaviours to look for, as well as specific questions they can ask to further assess the situation and how to safely report suspected cases. The training reinforces the importance of all our frontline teams working together as well as with the authorities. We also updated our operating manuals for the flight crew, cabin crew and airport employees for the handling and reporting of suspected cases.

In 2021, Cathay Pacific conducted a supply chain modern slavery risks mapping exercise based on risk information from external sources such the Global Slavery Index. As a result of the research, we identified a number of the products which we sourced had higher geographical or sector supply chain modern slavery risks. As a result, we asked our key suppliers to complete questionnaires to collect information in relation to their anti-modern slavery policies, practices and monitoring. The information provided would be taken into account when making procurement decisions. We also actively consult Mekong Club, an NGO with expertise in mapping and addressing modern slavery risks in the supply chain for their advice on tools and approaches to assess risks and engage suppliers for change. A similar exercise is being conducted with our subsidiaries. In 2021, we also continued to provide education by organising a company-wide awareness building activity to the employees with interactive game designed to increase the participation rate. We also plan to further enhance modern slavery risk mapping in our supply chain and would provide further updates in due course.

Tax transparency

We commit to ensure that the Cathay Pacific Group complies with international corporation tax laws and regulations, including the Inland Revenue Ordinance (Cap. 112 of the Laws of Hong Kong), and other relevant tax legislations in our operating countries. A team of taxation services managers are dedicated to tax management, our Outports are guided by the Outport Accounting and Internal Control Manual to ensure proper tax handling and responsibility. Tax authorities around the world are implementing initiatives which mean that the tax paid and the tax strategies of large companies are becoming more transparent. We prepare the Master File and Country by Country Report detailing our corporate structure, business operations, financial information and corporation tax paid and file these with the Hong Kong Inland Revenue Department. For best practice, we assess tax risk regularly and review potential exposures (when appropriate). Our Board has oversight of the Group's tax issues and tax provision status, through the Audit Committee, which oversees the Group's significant tax issues.

Customer support and complaint handling

We pride ourselves on providing an exceptional customer experience. A key part of our continual improvement is listening to those that fly with us. Whether for general feedback, to deliver a compliment or to flag that we have fallen short in any aspect of our service delivery, our online form, available on <u>www.cathaypacific.com</u> is designed to ensure customer input is captured and directed to the relevant department for prompt review.

We believe in providing a people-centric service. Every entry to the web form is assigned a case number and given to a Customer Support Executive for handling in line with any regulatory and legal requirements that apply. We respond to submissions within five days for all customers, and within three for Diamond members with our Marco Polo Club.

In 2021, we handled feedback from 13,621 customers, which included 6,002 complaints and 561 compliments. This represented approximately 1.9% of all passengers handled in the year. We also continued to collect customer feedback proactively through post-flight surveys and other channels to improve our performance.



SAFETY

Why safety matters to us

Our continued success is shaped by our ability to transport our passengers and cargo safely to their destinations. This is inherently linked with providing a safe working environment for all Group employees. As such, safety is our core value, and alongside corporate governance, is a fundamental principle of our sustainability strategy.



Our approach

At Cathay Pacific our approach to safety is founded on the principle of reducing risks to a level as low as reasonably practicable (ALARP). The foremost safety goal of our airlines is to achieve zero accidents and zero "high risk" incidents and zero harm in all areas of our operations. To succeed in this, we have developed a corporate safety culture and adopted a risk-driven approach in identifying and minimising the impact of hazards on our operations.

Safety Policy

Our Safety Policy clearly sets out our commitment to managing the safety risks of our operations. Whilst ultimate accountability for safety rests with our Chief Executive, responsibility rests with all our people. Our policy extends a duty of care to all businesses we work with and shapes a corporate culture of safety by promoting:

- An ORGANISATIONAL CULTURE where "safety comes first"
- A JUST CULTURE where "non-punitive reporting" is encouraged
- A REPORTING CULTURE where all employees are encouraged to raise safety concerns
- A LEARNING CULTURE by ensuring that we learn from our own mistakes as well as those made by others
- An INFORMED CULTURE by applying appropriate quality and risk management systems and processes as part of our decision making

Augustus Tang Chief Executive Officer Cathav Pacific



Safety and security are of paramount importance to our employees, our customers and to us as stewards of Cathay Pacific. Safety is our cornerstone and is central to our success and to our future. While the ultimate accountability for safety is ours, every individual within our airlines has a responsibility to ensure that we are continually vigilant and maintain the highest standards and practices when it comes to safety and security. Our primary safety goal remains fixed – we aim to have zero accidents and zero harm. Our established safety objectives are continually measured and reviewed to improve our safety performance and strengthen our management system. This goal requires diligence within our operations, and by our business partners, suppliers and contractors. Together, we can deliver excellence, supported by eternal vigilance, to help our customers make the most of every journey.



Operational safety

Our robust safety and risk management systems help us maintain a high level of safety performance that protects our employees and customers. We adhere to global best practice in airline safety to ensure our approach continues to be fit for purpose. Our record on safety is testimony to our efforts in achieving our aim of preventing high risk incidents.

IATA Operational Safety Audit (IOSA)

IOSA is the global standard for assessing the operational management and control systems of an airline. As an IATA member, we are IOSA registered and must remain registered to maintain IATA membership. In November 2021, our operations began undergoing the most recent audit, comprising more than 250 items and conducted remotely due to the current public health situation. Having passed this audit our registration is ensured for the subsequent 12 months.

Safety governance

The Cathay Pacific Group Safety Management System (SMS) has been developed to ensure that we proactively manage risks and have procedures in place to react appropriately should an incident occur. Safety performance indicators are actively monitored on a monthly basis by 'Safety Action Groups' (SAGs) and the Airline Safety Review Committee (ASRC), and all events and incidents are investigated thoroughly. All safety meetings are attended by subject matter experts from the respective disciplines. Cross-departmental risk assessments are conducted to review any changes to the way the airline operates, such as the commencement of a new route, the introduction of a new cabin service or changes to the organisational structure. The Group leverages the experience of an independent safety advisor to chair the Board Safety Review Committee (BSRC) and report on safety matters directly to the Main Board. The position continues to be held by former Royal Navy pilot and commercial airline pilot Capt. Tim Jenkins who has held senior safety management positions at two other major international airlines.



Figure 2: Safety Management System (SMS) governance structure

Airline Safety Review Committee (ASRC) safety focus workshop

In 2021, the Group Safety and Operational Risk Management (GSORM) held its second workshop in three years with senior management from across the Group. Individuals are selected for the committee due to their involvement in the implementation of the Safety Policy, procedures and practical safety measures within the Group's various operational areas. Outcomes and objectives from the meeting are distributed to the Safety Action Group (SAGs) for action. This year, the workshop involved a review of our current situation which encompasses:

- Safety statistics
- Safety strategy
- Safety performance including strengths and areas for improvement
- Potential strategic initiatives
- Setting actionable goals

Continuous improvement of the Safety Management System (SMS) - Safety Risk Management Portal (SRMP)

The Airline Safety Committees and the Safety Action Groups are responsible for Safety Risk Management (SRM) - a crucial process that helps everybody in our airlines to achieve their organisational and team objectives. By being predictive and proactive these bodies continually improve the Group's Safety Management System (SMS). This involves looking at compliance to processes and procedures, training and quality aspects, where the focus is very much on 'what' people did right, but also considering 'why' things usually go right the majority of the time. We recently introduced a new digital SRM Portal (SRMP) which offers the benefits of a centralised repository for risk management and assessment. In 2021, we developed and delivered various training courses aimed at equipping employees and managers with adequate knowledge to ensure they are competent to carry out relevant SRM activities. Training ranged from explaining the general principles of SRM to training which targeted specific roles. For instance, considerations that need to be included by managers when approving a risk assessment.

Safety Training Migration to the Learning Hub

Key to maintaining high levels of safety across the Group is educating our people on the hazards inherent in our industry. To assist with this, we launched our new digital Learning Hub system which delivers modules on safety among other topics key to the effective operation of an airline. Available company wide, this enhanced training platform offers enhanced training packages and better record management. Our people can access the learning modules online or offline through selfservice; ensuring it is available in all time zones, and at times convenient to every individual.



New Learning Module for new joiners 'Brushwingers'

Launched in the second half of 2021, our updated Initial Safety & Quality Introductory Training expands on the previous version which focused on safety only, to include quality and emergency response. The interactive training is mandatory for all our new joiners but is also available to all our people.

Safety training for external service providers -Engineering

Our exposure to risk is commensurate with the large number of business partners the Group interacts with and relies upon. These providers touch almost every part of our business from ground operations and dangerous goods to warehouse, catering and engineering. As an organisation with welldeveloped safety systems, we feel it prudent to expand the scope of our SMS training to these service providers. This includes:

- Targeting third parties that do not have any safety awareness training
- Providing Initial Safety Awareness Training in line with Cathay Pacific internal standards, and meeting the requirements as operator under IATA recommended standards and practices
- Introducing safety management systems, hazard awareness, risk management and reporting systems

The online module, 'Group Safety & Quality Introductory Training', launched in 2020 and has now been made available to third party engineering providers. It focuses on several key topics including the importance of compliance with regulations and company standards, company safety policies and procedures and crisis response.

Fatigue risk management

Our airline operates a complex passenger and freighter route network crossing many different time zones. Consequently, managing air crew fatigue is an important component of our SMS.

Our Fatigue Risk Management System (FRMS) was established in 2010 and 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.

During 2021, we continued to develop and refine the FRMS by developing and implementing fatigue rules, publishing online training for flight crew and all employees, and gaining insights by having a representative on the IATA Fatigue Management Technical Group.

Key initiatives this year included the identification of fatiguerelated safety risks via fatigue reporting (Air Safety Reports – Fatigue and Controlled Rest Reports) and extensive analysis using fatigue software. To mitigate these risks, changes were made to rostering practices. The Group Safety Manager for FRMS continued to serve as a subject matter expert on the IATA Fatigue Management Technical Group and the Management Committee of the International FRMS Forum.



Business resilience

The Cathay Pacific Crisis Response Centre is a wholly dedicated facility capable of supporting a global response effort. Our regularly tested corporate emergency structure includes a centralised command protocol, customised local response teams, telephone enquiry and support centres, and trained humanitarian assistance volunteers. All services can be activated by a notification system that is available at any time.

A sizeable number of our employees constitute the Care Team, whose primary focus is to assist passengers and employees and their families who have been affected during a crisis. For significant events, several thousand specially trained volunteers are available to supplement the Care Team through the airline's membership in the Family Assistance Foundation. Cathay Pacific's business continuity management programme focuses on four categories of events: Loss of Access, Loss of Supply, Loss of Systems, and Shortage of Staff. These are complemented by specific situational plans such as public health emergencies. An Incident Management protocol allows all incidents to be immediately classified and managed by a scalable Incident Management team. In 2021, all ports with scheduled service within our network participated in at least one emergency exercise to further strengthen their response capabilities.

No single event has impacted global travel like the ongoing Covid-19 pandemic. In preparation for COVID-19 infection rates abating in locations around the globe and international travel returning, we have put strict measures in place to ensure our employees and our passengers can have peace of mind when flying with us. A framework for our port restart process has been developed and policies and procedures put in place. We have used a risk-based approach to identify, assess and respond to hazards. The process has Group Safety and Operational Risk Management oversight and it facilitates coordination between our business units. Regular compliance monitoring ensures we adhere to local and industry regulations and we only open or reinstate operations at cancelled or reduced capacity ports when the implementation of the process has been signed off by our company directors.



operations.

transportation in both Hong Kong and in outports;
Ensuring workstation health and safety for office employees through training and risk assessment;
Improving indoor air quality, humidity and temperature through active monitoring rectification; and,
Ensuring health and wellbeing of employees during the pandemic through enhanced measures across our

Occupational health and safety

All operations must be carried out in a manner that safeguards the health and safety of all employees, customers, contractors,

and the wider community. The health, safety and wellbeing

expanded our occupational health and safety capability to

address a wide range of issues across our airlines including:

of our people is a key concern of the Group. Recently we

• Strengthening the safety performance of ground

Pandemic-related challenges including constantly changing quarantine situations and ways of working have placed additional burden on our employees. We have responded by conducting frequent, open dialogue with our people and introducing a range of initiatives via familiar platforms to protect their health and promote mental and physical wellbeing. Heightened health and safety measures

> Dedicated digital communication channels supported by the Hub, our intranet

Enhanced services provided by the Employee Assistance Programme (EAP)

- Provided relevant personal protective equipment (PPE)
- Temperature screening and declaration
- Enhanced cleaning and disinfection of workplaces and aircraft
- Issued health education materials
- Modified inflight service and tightened crew layover arrangements
- Introduced a new remote working policy
- Implemented social distancing and protective measures when in offices
- Provided regular COVID-19 updates
- Delivered weekly senior management communications
- Dedicated a page to mental wellbeing with resources and articles developed by our in-house psychologist
- Conducted face to face training session for managers on how to support employee mental wellbeing
- Delivered webinars and videos including on mindfulness, resilience, dealing with the stress response, financial management and budgeting
- Launched Peer Assistance Network for pilots

In 2021, mental wellbeing was recognised as a major health and safety concern due to the rapidly changing operations and environment as a result of the pandemic outbreak. Many employees were facing challenges in different aspects of their work and private lives, potentially leading to negative impact on their mental health. To help employees gain a better understand on mental wellbeing, numerous workshops and training were organised. A dedicated page containing relevant information was also developed and made available to all employees on the intranet.



Lost day rate[#]



[#] Data from 2011-2014 covered Cathay Pacific only. From 2015–2020, the data includes Cathay Dragon. From 2 020 onwards, the data includes HK Express and from 2021 onwards it includes Air Hong Kong. Cathay Dragon ceased operations in October 2020, so its data is no longer applicable after 2020.

*As pilot and cabin crew lost days are based on days not available for duty, a factor was previously used to normalise relevant data according to 250 days' work per year, equivalent to 2,000 hours per year. This factor is no longer applied to relevant data in 2019, which led to the substantial increase in LDR. Due to the significant change in the operation and to ensure data presented is an accurate reflection of relevant performance, cabin crew and pilot's actual duty hours have been used to calculate injury rates since January 2020.

During 2021, there were no convictions for non-compliance with occupational health and safety laws and regulations that would have a significant impact on the Group.

Passenger health and safety

Cathay Care is our commitment to our customers' wellbeing. We want our passengers to travel with confidence and so providing clear communication, flexibility and above all, safe passage were the core focus of our service in 2021. From booking through check-in and to potential onarrival quarantine, the excellence of service we offer in normal times was applied throughout.

Our free COVID-19 insurance, automatically applied upon booking, covers our passengers for COVID-19 testing and hospitalisation, provides a quarantine allowance, and gets passengers and their companions or children home if evacuation from a destination is required.

Visit our website to learn more about Cathay Care.

While the reduced passenger numbers in 2021 are not comparable with our figures under business-as-usual conditions, there were again no fatalities caused by operational incidents or accidents. Nor were there any convictions for non-compliance with laws and regulations relating to health and safety matters relating to products and services provided that would have a significant impact on the Group.





CLIMATE CHANGE

Why climate change matters to us

We recognise that our industry must decarbonise to contribute to global efforts to avert the worst effects of a warming planet. It is the expectation of our stakeholders that we take action. We must be proactive in adapting to the risks and opportunities posed by climate change to ensure our business can thrive as we transition to a low carbon future.



CLIMATE CHANGE

Charting a course to zero

We have set a science aligned target to show our ambition and commitment to decarbonisation. Our holistic five-pillar strategy has been developed to deliver on our 2050 net zero goal. The pillars will guide how we manage our air emissions which account for 99% of our total emissions. The pillars are:



CLICK HERE TO READ OUR Task Force on Climate Related Financial Disclosures (TCFD)

Activities in these core areas are enhanced by having a clear understanding of how future climate scenarios may impact our business. Disclosing these climate related risks is an important step in demonstrating our understanding of these risks and efforts to mitigate them. In addition to enhancing business resilience, it also enables us to take advantage of any opportunities it may offer.

Our approach to climate risk, strategy and targets is provided within this section of this report. Please refer to the Task Force on Climate Related Financial Disclosures (TCFD) section for more detailed disclosures aligned with the recommendations of TCFD.

> **Augustus Tang** Chief Executive Officer Cathay Pacific

Aircraft Continuous fleet

modernisation

New technology

Support development of radically new technology to help aviation combat climate change

Compensate for residual emissions from our operations

Operations Continuous improvements

in fuel efficiency

Carbon offsets Sustainable

aviation fuel

Drive the adoption of SAF in the industry through collaboration and leading by example

The use of Sustainable Aviation Fuel (SAF) is key to decarbonising our operations over the next few decades. Cathay Pacific already has a head start in this space with our investment and offtake agreement with Fulcrum BioEnergy. Our new commitment to have SAF comprise 10% of Cathay Pacific's total fuel consumption by 2030 and our collaborative approach to ramp up development of emerging technologies are clear signals of our determination to achieve our net-zero emissions target and to be a leader in the fight against climate change.

Cathay Pacific Airways Limited Sustainable Development Report 2021

The journey travelled in 2021

Cathay Pacific Airways took delivery of 6 new fuel-efficient aircraft this year, including one A350-900, two A350-1000 and three A321neo. HK Express took delivery of one new A320neo.

Signed an agreement with Aemetis, a renewable fuel supplier headquartered in California, together with **one**world Alliance members for the joint purchase of more than 350 million gallons of blended Sustainable Aviation Fuel.

Developed holistic strategy to guide journey to net zero.

C

by 2030.

Committed to using Sustainable

Aviation Fuel for 10% of Cathay

Pacific Airway's jet fuel consumption

Supported Hong Kong International Airport's (HKIA) long-term carbon pledge to achieve net zero by 2050, with a 55% reduction of absolute ground emissions by 2035. Joined with the Boston Consulting Group and nine other airlines to launch Aviation Climate Taskforce, which aims to accelerate breakthroughs in emerging technology to decarbonise aviation. Set up Fuel Forum Steering Committee at Air Hong Kong. This Committee has been a long establishment within Cathay Pacific. This similar setup in Air Hong Kong has become a formal channel of knowledge transfer and collaboration with our subsidiaries to help them incorporate learnings from our fuel efficiency improvement journey.

Targets and performance

- Fuel efficiency: Impacted by changes in operations due to COVID-19, including the mix of aircraft being operated and capacity reductions, fuel efficiency measured per available tonne kilometre (ATK) increased by 1% in 2021 compared with 2020, while fuel efficiency measured per revenue tonne kilometre (RTK) decreased by 7%
- Cathay Group emitted 6.06 million tonnes of CO₂ in 2021, a drop of 20% from 2020, with further impact from COVID-19.

Greenhouse gas emissions#



6.02 MILLION TONNES CO2e* All Aviation fuel, other liquid fuel and Towngas



20 1.200 18 nsity Group Scope 1 (aviation) CO₂ emissions (million tonnes) 1.000 inter 16 Group Scope 1 (aviation) carbon 14 (gramme co2 per unit) 800 12 10 600 8 400 6 4 200 2 0 ⁶ 193⁹ 200⁰ 200¹ 200² 200⁴ 200⁵ 200⁶ 200¹ 200⁵ 200⁹ 20⁰⁰ 20¹¹ 20¹² 20¹² 20¹⁴ 20¹⁵ 20¹⁶ 20¹¹ 20¹⁶ 20¹⁹ 20¹⁹ 20²⁰ 20²¹ 1998 Carbon emissions --- gCO₂/ATK --- gCO₂/RTK

Cathay Pacific Group aviation carbon emissions and fuel efficiency*

* Emissions figures reported are in aggregate for all airlines flown by the Group during the reporting period. For more detailed emissions numbers, please refer to the 2021 Key performance indicators section on p.117 of the report.

Data verified by Deloitte

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

Climate action governance

Climate change is a priority risk at Cathay Pacific and its oversight is a board-level responsibility. We are committed to managing this risk and responding to stakeholders' concerns by reducing our carbon footprint and building operational resilience.

Our cross-functional Climate Actions Steering Group oversees sustainability strategy and reports to the Sustainable Development Committee which is chaired by the Chief Executive Officer. Refer to the <u>Governance</u> section of this report for more information on these committees.

Our approach to climate change mitigation and adaption extends from managing our own operations, to working with industry bodies, investing in new technologies, and helping our customers to reduce their carbon footprint from flying.

We have also set up a Fuel Forum Steering Committee at Air Hong Kong as a formal channel of a knowledge transfer collaboration with our subsidiaries to accelerate their decarbonisation journey. It will be extended to HK Express in 2022.

To foster climate action in the aviation industry as a whole, we actively involved in committees and organisations that would shape the industry's climate action plan. We have been part of International Civil Aviation Organisation (ICAO)'s CORSIA task force under the Committee of Aviation Environmental Protection (CAEP) that leads the aviation industry's work in developing proposals for a fair, equitable and effective global agreement on emissions. We also take part in the ICAO Fuel Task Group under the same committee which specialises in the adoption of sustainable aviation fuel. In 2021, together with Boston Consulting Group and a few other airline leaders we co-founded the Aviation Climate Taskforce, details of which are shared later this chapter.

Climate change target

As a systemic issue, tackling climate change will require ambitious, rapid, and collaborative action. We are proud to commit to our net zero carbon emissions target by 2050. We are determined to achieve this target alongside our **one**world Alliance partners and to lead the aviation industry's efforts in tackling climate change.

Our commitment aligns with the aims of the Paris Agreement to limit global temperature rise to well below 2°C above preindustrial levels and pursue efforts to limit this increase to 1.5°C. It is a significant step in our sustainable development journey and coalesces our existing efforts in fuel efficiency, sustainable aviation fuel, carbon offsetting and emissions reduction around a common goal.

We have established multiple near term targets to act on our commitment and maintain our momentum. This includes:

- Use 10% SAF for Cathay Pacific operating flights by 2030
- Reduce ground emissions by 32% by 2030 and 55% by 2035, from 2018 baseline

The sections of the chapter provide detail on the initiatives that will help us to achieve these targets.

Our climate change disclosure has been awarded a score of B in 2021 by CDP, additional information can be found at its website <u>www.cdp.net</u>.


Climate risk

Our enterprise risk management process identified climate change risk as one of the top 20 risks the Group is facing. It is imperative that we assess its potential impacts on our business, explore possible responses to manage this risk and make sure Cathay continues to thrive despite the uncertain impacts of climate change on our industry.

This year, to better understand the resilience of our business to short and long-term climate risks and opportunities, Rebecca Sharpe, the Chief Financial Officer, commissioned a scenario planning and analysis in line with the TCFD recommendations. A cross-functional team made of our business leaders were convened to stress test our climate strategy. The team evaluated four scenarios; the likely external environment; implications on Cathay; and our optimal response strategy in each scenario. In each scenario two key drivers of change with most uncertainty with regards to the impact of climate change on our business were considered; societal pressures and the resulting political will to tackle climate change holistically at the global level, and the availability of new technologies to decarbonise commercial aviation operations.

Our approach involved assessing the risks and opportunities we may face in 2030 and 2050 under four scenarios, including a deep dive into two key scenarios developed by the Intergovernmental Panel on Climate Change. In the first scenario we assessed our exposure to physical climate risks such as rising temperatures and extreme weather events. Beyond physical risks, we also assessed any risks and opportunities arising from a transition to a low-carbon world aligned with the Paris Climate Agreement. Identified risks from a business-as-usual scenario include frequent disruptions, reputational damage, reduced travel and cargo demand and a financial slowdown in the long term. A successful transition to a well-below two-degree world was identified as our most favourable scenario, whereby an increased cost of carbon offsets could impact profitability and increased risk of penalties for non-compliance with new carbon-related regulations.

Although there is a lot of uncertainty associated with these scenarios, measures we currently have in place and are continuing to invest in, such as contingency planning, SAF and industry collaboration on decarbonisation technologies form the basis for business resilience in both instances.

Through this exercise the team generated a set of conclusions and recommendations which are being further refined and developed into specific actions to be included in our climate strategy and risk mitigation plans going forward.



Rebecca Sharpe Chief Financial Officer Cathay Pacific

Conducting our first climate change scenario analysis in line with TCFD recommendations helped us to better understand a range of possible impacts on our business. It also provided evidence that from fleet modernisation to sustainable aviation fuel, our track record of investing responsibly to decarbonise our airline has set us in good stead for the future.

Fleet modernisation

Our first pillar for carbon emissions reduction focuses on adding modern, more fuel-efficient aircraft to our fleet. Our current fleet of newer aircraft, and those scheduled for delivery, bring advanced technologies in aerodynamics and design. The technological advancement enables these aircraft to be up to 25% more fuel efficient compared with previous generation aircraft.

Our A350-1000s are powered by the latest fuel efficient Rolls-Royce Trent XWB engines, which help us to attain major improvements in efficiency for our long-haul routes. This results in clear benefits for the environment, with less GHG emissions coupled with a diminished noise footprint.

In 2021, the group took delivery of 9 aircraft, and have scheduled the delivery of another 53 from 2022 onwards.



New fuel-efficient aircraft joining Cathay Pacific Group

	A350-900/1000	A321NEO	BOEING 777-9
New aircraft joining fleet in 2021	3	3	0
To be delivered from 2022 onwards	5	27	21
Engine	Rolls-Royce Trent XWB	LEAP-1A-32	GE9X-105B
Fuel-efficient highlights from manufacturers	25% more fuel- efficient than its current long-range competitor	<u>20% more fuel-</u> efficient than the current model of A321	21% more fuel efficient per seat than Boeing 777-300ER

Supplier engagement

Sustainability has now become a standard agenda item in our annual meeting with key suppliers. To better understand the emissions associated with our aircraft, we engage suppliers whose products play a key role in our operations, such as our engine manufacturers. By learning about our business partners' emissions reductions strategies, we get a clearer view on the reductions we can expect to achieve and refine our strategy accordingly. Where possible, we collaborate with our suppliers to help drive the innovation in new technologies our industry needs to achieve our carbon reduction objectives.

Operational efficiency

Improving fuel efficiency is a key pillar in lowering our greenhouse gas emissions. While we are reliant on the work of governments and regulators to ensure that we are allowed to fly the most efficient routes and operate in the most efficient manner during all flight phases, we constantly work on initiatives that are within our own control to further improve on our operational efficiency and lower our carbon emissions.

Fuel Forum Steering Committee

Made up of representatives from different departments across our airlines, and chaired by our Chief Operations and Service Delivery Officer, our Fuel Forum Steering Committee (FFSC) is tasked with better managing and improving the fuel efficiency of our airlines. Since the beginning of 2020, the FFSC has been assessing our airlines, establishing fuel uptake baselines and analysing performance through its Fuel Program. An overview of key initiatives is provided below. In 2021, FFSC was set up for Air Hong Kong and we also plan to set it up at HK Express going forward.

Optimising aircraft operations and performance

In the air, Air Hong Kong (AHK) sought fuel savings by assessing and revising the height at which all engines are engaged during take-off to optimise performance, and explored the impact of idle reverse thrust, a process used to slow aircraft, both of which achieved fuel savings.

Back on the ground, Cathay Pacific continued to use the process of Reducing Engine Taxi-In (RETI) which have reduced our ground-level fuel-burn as well as our GHG emission. We practise RETI at all airports where it is possible and have increased the effort spent on improving the take up rate and duration of this procedure in all fleets. During 2021, AHK successfully trialled RETI, achieving fuel consumption reductions which for its A330 craft, significantly improved as the trial progressed.

Both airlines also conduct frequent engine core washing. This enables our aircraft to achieve higher fuel efficiency. AHK also monitored the impact of drag on the exterior of its aircraft, which can hamper fuel efficiency.



FFSC FOCUS AREAS:

- Aircraft operations
- Aircraft equipment and operational item weight
- Aircraft performance
- Airspace and route efficiency
- Auxiliary Power Unit (APU) and ground equipment usage

Aircraft equipment - digitisation and weight reduction

Our eEnabled Aircraft Programme facilitates 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 which incurs less fuel burn and results in less carbon emission.

In our cargo operation in Hong Kong and selected stations in the Americas, we have implemented our industry's first blockchain enabled Unit Load Device (ULD) Management System. Besides its success in replacing a manual, paperbased process, we continue to work on the next steps on Smart ULD related projects and data from other operation application to enhance operational efficiency, as well as improving safety in operation through early identification of ULD that are suspected to be not suitable for usage.

In addition, our electronic Flight Folder, a digitised inflight manual, has replaced as much as 75kg of paper on each flight. Accessed through tablet computers, the Flight Folder centralises Flight Deck manuals, charts, maps and pre-flight paperwork. The weight reduction can result in a decrease of more than 4,000 tonnes CO_2 emissions per year based on our pre-COVID flight level - emissions equivalent to more than 5000 flights from Hong Kong to London.

CASE STUDY

Bringing aircraft back to operations

The onset of the pandemic has led to unprecedented travel restrictions around the globe. As pandemic restrictions come and go and market demand fluctuates, we continuously assess our fleet and aircraft deployment in order to best align capacity.

As capacity requirements increase, we look to our parked aircraft and determine which to reintroduce. Provided certain key operational criteria are met, our newer more fuel-efficient aircraft are given priority, making our recovery as green as it can be.





Airspace route efficiency

Our fuel monitoring system is supported through a partnership with General Electric Aviation (GE Aviation) Event Measurement System (EMS). The system enhances our capability to process and analyse flight data including weather, navigation, flight plans and schedules to improve our ability to find data driven solutions for flight efficiency.

Programme effectiveness

To build programme effectiveness, learnings from Cathay Pacific are shared with Air Hong Kong and HK Express. Based on the effectiveness of Cathay Pacific's FFSC, HK Express is in the process of establishing its own Fuel Forum Steering Committee, and is building out a data interface which will enable better monitoring and assessment of flight information and performance – information which will be shared with Cathay Pacific to help align processes and identify best practices. AHK also contributes to monthly fuel optimisation reviews with logistics partner DHL.



Greg Hughes Chief Operations and Service Delivery Officer Cathay Pacific

We continue to invest in technologies and improved work practices where they enhance operational efficiencies and reduce carbon emissions. The successful implementation of our new automated flight planning system in 2021 helps our airlines reduce flight times and reduce fuel burn.

Sustainable aviation fuel

Compared to traditional jet fuel, sustainable aviation fuel (SAF) can reduce life cycle greenhouse gas emissions by up to 100%, depending on the technology used. As it can be used safely with existing aircraft engine and infrastructure in airport, it is the most important way to decarbonise airline operation in the near future.

To achieve this, SAF must become commercially viable for the mainstream, so we have taken a lead in its use to make this a reality.

In 2021, we pledged to use SAF for 10% of fuel consumption by Cathay Pacific operating flights by 2030. We have rolled out SAF projects with world-renowned partners. To accelerate the development of SAF, 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 sustainable aviation fuel development - Fulcrum

One of the major obstacles for widespread SAF use is supply volume and infrastructure. Since 2014, when Cathay Pacific became the first airline investor to take an equity stake in Fulcrum BioEnergy, Inc., we have focused on developing the supply side. Fulcrum is a US-based sustainable aviation fuel developer, which is a world pioneer in the development and



commercialisation of converting municipal solid waste into sustainable aviation fuel. The plant can convert 175,000 tonnes of waste into more than 11 million gallons of zerocarbon transportation fuel each year.



Fulcrum BioEnergy's Sierra BioFuels Plant in start-up operations, January 2022

Cathay Pacific's SAF flights

Our target to have SAF represent 10% of our fuel consumption by 2030 builds on our commitment to buying 1.1 million tonnes of SAF over 10 years. Our modern fleet provides an ideal platform for the use of SAF given the craft's cuttingedge technology and high fuel efficiency.

Since 2016, we have delivered 35 Airbus A350-900 and A350-1000 aircraft from Toulouse to Hong Kong with a blend of SAF made from sustainable sugar feedstock via our partners Total and Airbus. To date, 68,340 gallons of SAF have been used, avoiding approximately 521 tonnes CO₂e.

oneworld SAF joint procurement

Together with **one**world Alliance members, we also pledged to purchase more than 350 million gallons of SAF from renewable fuels company Aemetis for operations at San Francisco Airport in the United States. Delivery is expected from 2024 onwards.



* Compared to traditional jet fuel, Fulcrum BioEnergy's SAF can reduce life cycle greenhouse gas emissions by up to 80%.

Carbon offsets

The climate change imperative is that sharp, immediate reductions in global carbon emissions happen within the next decade. This presents the challenge of driving down emissions in the short term, while the technologies we require for decarbonisation are still in development. Our stop-gap solution is to carbon offset. We only go with the carbon offset schemes fulfilling the most stringent sustainability criteria, adding incremental decarbonisation effort, and is audited by reliable third party to ensure no double counting. We also work with business partners and our customers through our Fly Greener programme to enable all who fly with us to offset.

Implementing CORSIA

The Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) is a global scheme, developed by the International Civil Aviation Organisation (ICAO), aimed at capping the net CO₂ emissions from international aviation to deliver carbon neutral growth from 2020 based on 2019 emissions figures - the most recent year representative of business-as-usual conditions. It is the first global marketbased measure to address carbon emissions that applies to an industrial sector.

In 2021, the number of states voluntarily participating in CORSIA rose to 107, covering 77% of post-2020 growth in CO₂ emissions. Although China has not indicated its participation in the voluntary phase, we are nonetheless ready to fulfil all the reporting requirements and have conducted internal assessment to understand CORSIA's impact on us once China participates in the scheme from 2027.

Cathay Pacific has been involved in CORSIA since its inception in 2008 and we remain closely involved in the developments through participation in ICAO task forces focused on market based solutions and alternative fuel. We have taken steadfast

action and conducted studies to understand the various potential impacts and have acquired the professional skillsets and knowledge to prepare ourselves to meet CORSIA's requirements.

Accurate data is a key requirement. As such, we have assessed all necessary infrastructure and our flight operation system to support data collection on metrics such as fuel use.

Founding member

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



Fly Greener – our carbon offset programme

Fly Greener provides our passengers an opportunity to offset their carbon footprint from air travel. The proceeds received from the programme, the first provided by any Asian airline, go directly to running projects that have achieved Gold Standard accreditation by coupling carbon reduction climate action with sustainable development.

As part of the rigorous certification process, project developers are required to adhere to the UN's 'do no harm' principle, consult with local stakeholders, and ensure that projects not only help protect the climate by contributing to SDG 13, Climate Action, but also benefit local communities by contributing to two additional SDGs. Read more about our clean cookstove and organic food waste offset projects on our website.

In 2021, a total of 27,280 tonnes of carbon emission produced by our operations were offset by the programme, of which 3.282[®] and 16,236[®] tonnes were offset by our individual and corporate customers respectively. The Green Friday promotion returned after its successful launch in 2020 and was extended globally with attractive flight deals and complimentary carbon offset, and in some markets, double carbon offset. This year, we have offset 7,320 tonnes of carbon emissions from over 6,500 journeys purchased from our website during the Green Friday campaign in November 2021. To date, we have purchased over 300,000 tonnes of CO₂ offsets.

New technology

Aviation is a hard-to-abate sector where dramatically reducing emissions is challenging, and breakthrough innovations are required to help the sector reach net zero.

Aviation Climate Taskforce

At Cathay Pacific, we recognise the importance of working with different sectors to develop the kinds of radically new technologies that will be required to decarbonise airline operations and enable us to meet our net-zero carbon emissions goal. This year, we joined with a group of likeminded organisations as founding members of the Aviation Climate Taskforce (ACT), a new non-profit organisation established to accelerate the development of breakthrough technologies.

ACT will support the advancement of emerging technologies through two key pillars, an Innovation Network and Collaboration Forum. The Innovation Network will use proven tools to pinpoint collaboration opportunities across the ecosystem and provide grant funding as well as utilise challenge platforms to tackle critical barriers from novel angles. The Collaboration Forum will identify other ways to expedite the adoption and scale-up of next generation technologies.

The majority of ACT's focus will be on critical medium-term solutions, such as synthetic fuel and direct air capture.

It will also look at near-term solutions, such as emerging bio-based SAF pathways, and long-term solutions, such as hydrogen technologies. Through the ACT we will engage with experts, activists, policymakers, and thought leaders to help offer a clear way forward for the deployment of innovative technologies.

Ground emissions

Ground emissions stem from all non-aircraft operations. While they contribute considerably less than aircraft emissions, we work to reduce our carbon footprint from these operations by concentrating on electricity consumption, equipment efficiency, and vehicular emissions.

Our goal is to reduce ground emissions by 32% by 2030 and 55% by 2035, from a 2018 baseline. Our 2035 target formed part of our pledge signed in 2021 with the Hong Kong International Airport which underscored our commitment to net zero operations by 2050. It is in line with science based target to limit global warming to 1.5 degree compared to preindustrial level. In 2022, we will conduct energy audit exercises at various sites and develop a roadmap for our ground emissions reduction trajectory.

We are also in the process of enhancing the mapping and mitigation of our Scope 3 emissions beyond our duty travels. Progress and performance are expected to be reported next year.

Verified by Deloitte



7,320 TONNES of carbon emissions from over 6,500 journeys had been offset for our 2021



Our buildings

Located near Hong Kong International Airport, our 134,000m2 headquarters encompasses Cathay City and Cathay House, the Airline Store Building, a hotel, and the flight training centre. The two premises are certified to the 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 using sensors and chilled water system optimisation at our Airline Store Building and Cathay House, the latter offers energy efficiency improvements of up to 21%.

This year, we installed a solar energy system on the rooftop of Cathay City. The system has a peak capacity of 200 kilowatts and can help us reduce carbon emission by up to 150,000 kg each year.

Our vehicles

Our full-service ground handling subsidiary, Hong Kong Airport Services Limited (HAS), provides professional ramp and cargo services to 22 airlines at Hong Kong International Airport. Traditionally, HAS vehicles have used diesel fuel, however, as with other areas of our business, where we can invest to reduce emissions, we do so. Our Ground Services Equipment (GSE) and Vehicle Replacement Programme focuses on fleet modernisation which to date has led to the upgrade of 40% of our vehicle fleet to electric vehicles.

CASE STUDY

Reducing emissions from ground vehicles

Currently, transportation makes up around 20% of carbon emissions in Hong Kong. The government has outlined several key measures to decarbonise this sector including requiring all newly registered vehicles to be electric vehicles (EV) by 2035 and developing a comprehensive EV charging network comprising public and private charging facilities.

While we continue to replace more of our company fleet to electric vehicles, some fossil fuel-propelled vehicles are still necessary for the operation of our subsidiaries. This year, we partnered with Shell to launch a special scheme. Employees who registered for this scheme not only enjoy a fuel discount when they fuel up their own or the company's vehicles at any Shell Station in Hong Kong, but also have the carbon footprint of their fuel be fully offset through Shell's carbon offset projects. This will help our people reduce their own daily carbon footprint with every drive.





SUSTAINABILITY IN OPERATIONS

Why responsible resource use matters to us

As a leading global airline that employs thousands and carries millions of customers each year before the pandemic, the management of the environmental impacts from our operations is an imperative. We must balance requirements such as hygiene with considerations on weight to reduce fuel consumption and related emissions. The countries we fly to also implement differing waste policies which affect what we can do at different locations. At the same time, the capacity of each jurisdiction to recover the value from waste and divert it from landfill varies, therefore reduction in waste from our business activities is of prime concern.



SUSTAINABILITY IN OPERATIONS

2021 Performance highlights



Partnered with the Hong Kong University of Science and Technology on inflight catering waste reduction solutions generation



Updated Sustainable Food Policy and conducted a benchmarking review of our Supply Chain Sustainability Code of Conduct



Continued our single-use plastic reduction. 43 million pieces of item were removed from our annual usage baseline



8,449 tonnes of general waste was generated as a group, of which at least 680 tonnes was diverted from landfill through recycling and energy recovery processes



Waste diversion rate*:



137 tonnes of paper and cardboard



tonnes of metal



30 tonnes of plastic



210 tonnes of surplus food donated to charities



246 tonnes of inconsumable food waste sent to O PARK1 in Hong Kong for energy recovery



7,056 litres of food processing oil collected and turned into biodiesel

*% of non-hazardous waste diverted from landfill

Our approach

We aim to embed an environmentally responsible mind-set in our culture and sustainable practices in our operations. The three key pillars underpinning our cradle-to-cradle approach include careful consideration of the resources we use, sustainable sourcing and responsible waste management. We reduce our reliance on resources when possible and aim to capture and reuse the value in materials when they have served their primary purpose.

Sourcing

Sustainable procurement

Globally, we work with approximately 3,000 suppliers 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 way. We have identified that roughly 30 top strategic supplier groups represent 80% of our third-party spend. We require the procurement process of all our products and services to be conducted in full compliance with relevant laws, tax regimes and regulations that govern the respective transactions, and with full accountability in terms of our Anti-Bribery, Anti-Trust and Data Protection policies.

Our procurement process involves supplier vetting and the ongoing evaluation of suppliers based on our supplier scorecard. The balance-rated scorecard for procurement measures suppliers' performance in seven different areas which we refer to as CISQAS: Costs, Innovation, Satisfaction, Quality, Assurance of supply, Safety and Sustainability.

We manage risks related to supply chain through continuous collaboration with our suppliers in accordance with our Supply Chain Sustainability Code of Conduct (CoC). We have built risk analysis into the category strategy planning stage of our procurement process. We actively work with suppliers who share our standards and maintain a central risk register, updated monthly, to highlight overall risk. All suppliers are required to declare that their products and services comply with our Supply Chain Sustainability Code of Conduct (CoC). Our CoC, which includes our standards for business ethics, 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. Our category management teams develop a mitigation plan for suppliers with high-risk ratings and, if a supplier has fallen short of our requirements, we review the relationship and shortfall on a case-by-case basis and take the necessary corrective measures.

When selecting suppliers during the CISQAS evaluation process, we take into consideration environmentally preferable products and services such as increasing the use of sustainable materials, utilising regenerated waste materials and procuring recycled plastic products.

Supply Chain Sustainability Code of Conduct (CoC) Our Supply Chain Sustainability Code of Conduct

(CoC) describes our minimum environmental and social requirements including:

- Legal and regulatory compliance
- Not employing under-age workers
- 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

In 2021, we have conducted a benchmarking exercise to identify gaps, in terms of scope and application, of the Supply Chain Sustainability CoC and best practices in the market. An updated version of the Supply Chain Sustainability CoC will be released in 2022.

Working with our suppliers

The impact of COVID-19 on our flight scheduling and lounge services has been significant. The knock-on effect has been diminished purchase quantities across almost all categories of products in 2021 with significant impact on our suppliers. Our category teams maintained close communication with our strategic suppliers and co-created more supportive and collaborative ways of working to help them weather the storm, while providing continued quality of responsibly sourced goods for our customers. These measures coupled with payment deferral, capital preservation and concessions continue to be the focus areas with our suppliers and contribute to our approach to supply chain management and resilience.

Sustainable food options Seafood

According to <u>WWF Hong Kong</u>, about 90% of commercially important fisheries are either fully or over-exploited globally. While awareness about choosing sustainable seafood has increased over the years, fish stocks remain threatened, and some are on the verge of collapse. As a company that regularly serves fish to our customers and employees, we have been proactively addressing this challenge through responsible sourcing for almost a decade.

We share the same values, and source and serve certified sustainable seafood on selected routes. In 2021, Cathay Pacific Catering Services (CPCS) purchased a total of 22 tonnes of certified sustainable, traceable seafood with the aim to protect marine ecosystems for future generations.

Recognising the need to conserve certain species that are endangered due to the problem of overfishing, we updated our <u>Sustainable Food Policy</u> in 2021 to provide guidance for our purchasing decisions around food and utensils procurement. We opt out of purchasing a list of unsustainable food items for our operation and company events and ask for information with regards to where the food was originally sourced.



Plant-based dishes

Consumers are increasingly aware of the impact of a meatheavy diet on human health and the environment. Since 2018, when we introduced our first plant-based dishes as meat alternatives, we have been expanding our range for customers and employees. For three years we've been serving customers of The Pier First Class Lounge at Hong Kong International Airport Beyond Meat, a plant-based pork alternative. In 2019, we became the world's first airline to serve its passengers OmniPork, a plant-based pork alternative. In 2021, we continued to ramp up coverage of plant-based menu options after successful trials of OmniPork in our employee canteens in Hong Kong and The Impossible Burger on our long-haul flights to London, San Francisco and New York. Looking forward, we shall continue to enhance plant-based options for our customers and people.

Waste management

The Group's stakeholder engagement results in 2021 have shown that waste continues to be one of the most concerning environmental problems. 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. For this reason, our sustainable development strategy has a clear focus on product usage and waste management. From 2021 onwards, we follow Swire Pacific's Waste Separation Guideline in aligning the recycling separation practices and facilities location.



Our resource and waste management approach covers four key elements:





Inflight waste

Since 2006, we have sorted and recycled inflight waste, but increasingly our focus has been on reusing inflight products to avoid waste altogether. As regulations in many destination countries prohibit recycling waste from international flights, currently we only carry out inflight recycling on inbound flights to Hong Kong. Some countries, such as Canada and Australia, have very strict health and safety regulations on waste from international flights that require deep burial in landfill, or incineration.

Over the years, we have worked closely with suppliers and non-profit organisations to offer products that are sustainably sourced to minimise our impact on the environment while maintaining overall product quality. Providing passengers with quality, sustainably designed, inflight items reduces the environmental impact of our operations and helps to meet the growing expectation from our passengers regarding waste and resource use. Sustainability considerations are embedded in the design and sourcing of many key inflight items:



Cocktail snacks

Inflight cocktail snacks (roasted peanuts) are produced from certified sustainable palm oil, which helps minimise environmental impacts such as deforestation.



Seafood

To support protection of the marine ecosystem, we endeavour to purchase certified sustainable seafood for our inflight meals.



Napkins, stirrers and straws Our napkins have been made from 70% sugarcane and 30% wood pulp since 2016. We also use birchwood stirrers and paper straws as alternatives to single-use plastic, adding to our growing list of more sustainable inflight products.



Meal utensils

Reusable plastic cutlery from Cathay Pacific flights is sorted, washed and reused to minimise our single-use plastic waste. With our aim to further reduce plastic usage, we are trialling the replacement of plastic utensils with a lighter metal alternative.





Snack bag A newly designed paper snack bag making recycling easy.



Blankets

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



Bedding

Pillowcases and duvet covers for Business and First Class cabins are made by 100% sustainably sourced cotton and are delivered in reusable bags.





Re-usable bags

We have adopted the use of cotton bags for the packaging of duvets and blankets in our Business Class cabins, which can replace up to 5.7 million plastic wraps per year.



Carpets

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

CASE STUDY

We also extend the waste reduction efforts to our airport lounges globally by introducing and trialling different measures. For example, in the shower rooms of our Hong Kong and London lounges, we have eliminated single-use moisturising sachets, and in Hong Kong, we reduce the use of single-use condiments such as jams and butter. In all our lounges globally, we use birchwood stirrers and paper straws as alternatives to single-use plastic and, since 2019, we have reduced the number of single-use plastic water bottles by moving to filtered taps after success in our Shanghai lounge. Additionally, we have replaced reading material and publications with digital Press-readers helping to reduce our waste.

Incubating future solutions for cabin waste reduction

Innovative solutions require trial, error, and refinement. In 2021, we challenged engineering students from The Hong Kong University of Science and Technology (HKUST) to innovate and find an answer to a problem statement – we must reduce inflight waste and enhance inflight recycling to achieve our sustainability goals.

Through immersive field trips to Cathay City and our inflight catering plant, in depth discussion sessions with the designers of our cabin, food and beverage solutions, and Q&A with our cabin crew, participating students built an understanding of our current galley and workflow design. By applying their knowledge to a real, complex business situation, the students honed their skillset while developing possible solutions for our airline.

Our team worked closely with the students to improve their interim solutions and were beyond impressed by the final propositions. From reengineered meal trolleys with built in automatic waste separation functionality, to meal trays that would guide passengers to recycle intuitively, the solutions were a display of creativity, innovation and clear understanding of our operations. While the students progressed their learning, we were privileged to be given numerous original yet pragmatic ideas which we will explore for adoption as we continue our waste reduction journey.



Plastic

The use of plastics in the aviation industry has been widespread due to their light weight and low cost. Saving weight lowers our fuel consumption and reduces our carbon footprint, while lower operating costs help us control passenger fares. However, the long-life span of plastic in the natural environment is an issue with damaging effects to wildlife and the habitats. Ambitious reduction efforts are essential and our stakeholder engagement survey in 2021 again highlighted the urgency to address this issue. Reducing single-use plastics (SUP) means weighing many different factors to ensure we are not creating other sustainability issues when we do. To maintain the benefits of light weight and low cost, we are looking at a variety of eco-friendly solutions that can still meet the expectations of our passengers. Our job is made easier because many of our passengers are welcoming the changes.

At Cathay we set a target to cut our single use plastic usage by 50% of our 2018 baseline by the end of 2022. In practice this means we are removing nearly 200 million individual items, continuing to review all other single-use plastics in our operations and explore alternatives. While the levels of plastic consumption from our operations is significantly lowered amid the global health crisis, we hope that by the end of 2022 our business will be operating on a scale similar to pre-COVID-19 levels and that single-use plastic consumption will still be halved. We also keep abreast of new SUP import and consumption laws and regulations in jurisdictions we operate and actively take part in industry discussions through the IATA SUP Working Group. We work to ensure proper considerations and operational changes are made to comply with current and emerging regulations, including the European Union SUP Directive and India SUP regulations.

Partnership for product analysis

As part of our approach, we have partnered with the City University of Hong Kong (CityU) on a product lifecycle analysis (LCA) project. Commenced in 2020, multiple studies are being conducted on some of our SUP items and their potential alternatives to better understand the environmental footprint of these products and to develop a guideline for material selection of inflight equipment. In 2021, we completed the LCA on different cup alternatives, helping us to inform our future trial projects as part of our SUP reduction initiative.

The 4Rs - Our Single-use plastic strategy

RETHINK	Assess how and why we use SUP items anywhere in our operations, and incorporate sustainability thinking in the design of our inflight experience.	
REDUCE	Reduce plastic consumption in volume, waste generation or landfill-bound waste.	
REUSE	Reuse items when possible across all our operations.	
RECYCLE	Sort, segregate and process used items into new items.	



Resources management

Besides plastic, we also take care to minimise waste from other resources such as paper, wood, and food. We implement reduction and recycling initiatives targeting different items both on our flights and in our ground operations.

Food

Since 2011, Cathay Pacific has participated in the Airport Authority Hong Kong food waste recycling scheme, 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 20 international airlines in Hong Kong in 2021. Before the pandemic, the company produced over 30 million meals, representing an average of 83,000 meals per day. While we recognise that some food waste is unavoidable, we have implemented a number of measures to reduce it such as loading meals onto flights as close as possible to take off, donating quality unused produce to charities, and repurposing food and oil for secondary uses.

Reducing 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. Without sufficient procedures in place, the unneeded meals can lead to food waste and squandered energy and water from meal preparation. One way we reduce this waste is to bring the meal delivery cut-off time as close to the flight departure time as possible. By shortening the cut-off time, we can more precisely gauge how many meals are required on board, thus reducing wastage.

Digital insights to drive down food waste

Since 2020, we have incorporated our digital Choose My Meal service for First and Business class passengers, available through the Cathay Pacific app, it allows customers to select their inflight meal options up to 10 days before they board their flight. It offers the dual benefit of reducing time spent by Cabin Crew in retrieving customer orders, and importantly, insights into passenger consumption patterns and preferential meal options can be used to adjust which meals are produced or loaded onto subsequent flights which can help to reduce food waste.

Repurposing excess food in the CPCS kitchen

In the CPCS kitchens, we are working to ensure that byproducts from meal preparation are diverted from waste flows and instead are repurposed as ingredients for other dishes. One of the projects in partnership with the City University of Hong Kong involves a study on the recycling of melon peels from the kitchen of CPCS. We hope that the findings enable us to turn more waste into useful resources from our operations in the future.

Donating to food banks

The Cathay Group has worked with two local charities, Feeding Hong Kong and Food Angel for over seven years. Feeding Hong Kong recovers and redistributes packaged food collected from our inbound flights. In 2021, 110 tonnes of bakery products and cooked food have been donated to Feeding Hong Kong. Food Angel collects fresh food and ingredients and prepares meals for senior citizens in Hong Kong. Since last year, we started donating our surplus preprepared meals to Food Angel during the on-going pandemic. In 2021, we have delivered 223,274 meals to people in need through them. In total, we donated over 113 tonnes of food to both charity partners for distribution to people with food assistance need in Hong Kong in 2021.

Besides donating our food, we also donated employee time. Our team of volunteers supported Feeding Hong Kong by helping to sort, pack and deliver emergency food packages to those struggling to afford nutritious meals amid the economic downturn.

Converting waste food into energy

Some food waste from our operations cannot be consumed by humans for food safety reason, for example, cooked meals or perishable food. The remaining lower value waste is then sent to O·PARK1 - the first organic resources recovery centre in Hong Kong. In 2021, CPCS sent a total of 215 tonnes of food waste to O·PARK1's facilities to be converted into energy. CPCS also generates food processing oil each day to support food production. Since 2004, we have gone beyond treating the used product in line with local regulations by collaborating with a biodiesel company to reprocess our used cooking oil into vehicle biodiesel. In 2021, we collected 7,056 litres of food processing oil for conversion into biodiesel.

CASE STUDY

From Bread to Beer

We are constantly looking at new and innovative ways to tackle food waste and repurpose ingredients. This year, CPCS launched VHHX, its very first beer in collaboration with hEROES, one of Hong Kong's largest and renowned local breweries.

VHHX adopts the circular economy concept and turns unpresentable and surplus in-flight bread rolls into high-quality, premium craft beer. For this project, roughly 250kg of surplus bread was used to brew almost 4 thousand litres, or 12,000 cans of sustainable craft beers.

CPCS has chosen the name VHHX – the airport code for Kai Tak Airport – to resonate with the history of Hong Kong people. When consuming VHHX beer, do reflect on the sustainable concept behind the project and unleash our inner "Heroes".

To know more about the production of VHHX, watch the production video here.



Paper and wood

Our procurement policy ensures sustainable procurement for paper resources, as endorsed by the Forest Stewardship Council (FSC). 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.

- With the eEnabled system on-board our aircraft, our cabin crew can now access flight preparation information via tablets instead of printed documents.
- 70 kg of manuals and paperwork are needed in the cockpit on every flight. The launch of the Flight Folder project can help save about 13,400 tonnes of paper per year on our flights.
- The Unit Load Device (ULD) Management System used in our cargo operations also replaces many manual and paperbased processes with digital solutions.

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 expectations and to help meet our commitments to the environment. We work with aircraft manufacturers, the Aircraft Fleet Recycling Association's (AFRA) 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. In the aircraft recycling process, hazardous waste, mainly the lubrication oil, is sent to specialised waste handlers for proper disposal.

Renovation, fit-out practices and facilities management

Managing our infrastructure is a priority area of our sustainable development strategy. In line with our strategy, we encourage and implement green building practices to manage the impact of our infrastructure from conceptualisation through development to building management. We also apply the same requirements to tenants operating in our premises, such as salon and coffee shops, for their own renovation work. Initiatives, such as chiller replacement and retro-commissioning, that provide incremental efficiency improvements are actively pursued. The following documents form part of the construction or renovation contracts that we undertake with our contractors:

- Swire Pacific Swire Pacific Sustainable Building Design Policy
- 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.

CASE STUDY

Upcycling to give our treasured past a re-energised future

This year, as part of our 75th anniversary, Cathay Pacific wanted to pay homage to our rich history as well as look forward to the next stage of our sustainable long-term journey.

To celebrate we upcycled items from our past to create a series of new limited-edition merchandise that is environmentally conscious and unique. We crafted cardholders and pens from aluminium reclaimed from our retired Boeing 747-400 aircraft, and in partnership with Hong Kong lifestyle brand G.O.D., we created stylish accessories upcycled from crew and pilot uniforms that have travelled the world.



We have been certified ISO 14001:2015 on environmental management system for our property premises, including Cathay Pacific City and Cathay House. On top of compliance matters, we follow our environmental management system to ensure the most significant environmental aspects are mitigated to reduce impact and good practices are followed through.

From this year onwards, we started to follow Swire Pacific's Waste Separation Guideline in aligning the recycling separation practices and facilities in our premises. Recycling facilities for paper, metal, plastic bottles and general plastics are placed on every floor of our office buildings. Food waste and glass bottles are also collected in the catering areas. We also set up a beverage carton recycling bin at Cathay City at the end of 2021 for Tetra Pak recycling. Whilst working with vendors for renovation or other projects in our premises, we also request them to consider using recycled materials where possible, and provide a clear record of recyclable and nonrecyclable waste.

CASE STUDY

Airport lounge furniture finds a new home at Cathay City

Visitors to our world-class lounges experience inviting environs fitted with high-quality furniture. This year, when furniture was found surplus to our needs, our Property and Services (PSD) team took the opportunity to redeploy that furniture for use by our people in Cathay City.

With the dual aim of reducing waste and improving Cathay City common and breakout areas as well as our nursing rooms, chairs, sofas and tables, soft furnishings and even glass wall mural artwork were moved. Our people can now enjoy more comfortable and collaborative workspaces, and at the same time we've avoided waste.





BIODIVERSITY

Why biodiversity matters to us

Nature is declining globally at an unprecedented rate. A shift in how society consumes is imperative to stop this free fall and reduce the threat that biodiversity loss poses to human health and wellbeing and the health of our planet. Beyond society's dependence on biodiversity, its spectacular variety lures our customers to new places, offering distinct sights and flavours.

After part one of the UN's COP15 biodiversity summit in October 2021, progress has been made towards finalising the post-2020 Global Biodiversity Framework (GBF). The new framework sets out an ambitious plan to implement broadbased action to bring about a transformation in society's relationship with biodiversity.

As an airline, we can play an important role in protecting vulnerable species and ecosystems across the globe through responsible cargo management and sustainable sourcing that minimise Cathay Pacific and our customers' impact on the environment.



BIODIVERSITY

2021 Performance highlights







Served over **22** tonnes of certified sustainable seafood, representing around 40% of the total volume of seafood CPCS purchased

Carried out **1,455** air cargo screenings on 151 freight forwarding agents with reference to our Sustainable Development Cargo Carriage Policy

Enhanced existing embargoes on ivory, shark fin, racing greyhounds, hunting trophies with the addition of rhino horn and tiger pelts

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

Risk profiling

Over the past decade global e-commerce has expanded significantly. The United Nations Conference on Trade and Development (UNCTAD) estimates that although only half of the world's 7.7 billion people are connected to the internet, 1.45 billion people, or one quarter of the world's population aged 15 and older, have been making online purchases in recent years.

As a competitive cargo carrier based at the world's busiest cargo handling airport, this expansion has led to greater risks regarding the misdeclaration of goods carried on our passenger flights and freighters. In response we conduct risk profiling and assessment on our freight forwarding and logistics agents to mitigate the risks.

We have implemented a Cargo Agent Operation Programme (CAOP) to conduct risk profiling on more than 150 freight forwarding and logistics agents in Hong Kong. More frequent target screenings are imposed on the goods of high-risk agents, including those shipping select categories of e-commerce or agents using routes considered to have higher geographical risk. Risk profiling on agents is reviewed at least every two years. We have run the CAOP smoothly in Hong Kong for almost three years and successfully implemented the programme in Los Angeles, Singapore and Taipei for one year. In 2021, we have continued to extend the programme for a second year running, implementing the programme to 16 out-stations.

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 targeted screening of high-risk cargo or agents. We also encourage our agents to provide an improvement plan on cargo safety, and screening and declaration, as part of the programme managing activities before shipments are tendered into our custody. In 2021, a total of 1,455 screenings were carried out. There was a 13% decrease compared to the previous year, despite a small increase in cargo tonnage carried. The reduction in screening was mainly due to the removal of two high-risk freight agents from the target screening list because of termination of contract. We also cooperated with Hong Kong Civil Aviation Department for an enforcement for a 100% x-ray screening on export cargo in July 2021.

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 proactively update local and overseas authorities about our programme and have received good feedback about how we manage risk. Cathay Pacific has also hosted several sharing sessions about the programme to other airlines operating into Hong Kong through the HKIA Air Cargo Carrier Liaison Group.

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.



Tom Owen Director Cargo Cathay Pacific Cargo

As a large air cargo carrier with global reach, we play an active role in preventing illegal trade in endangered species. We have strengthened our own actions by undergoing the training, assessment, and validation requirements to achieve IATA's CEIV Live Animals certification, and regularly update our Embargo List.

We also welcomed a new Hong Kong law that classifies wildlife trafficking as an organised crime activity. With strong legal repercussions, heightened barriers to illegal wildlife trading, and the ongoing work of our NGO partners, Cathay Pacific Cargo will remain vigilant in preventing this awful trade from happening.

Our partnership with TRAFFIC



In Hong Kong, a transport and logistics hub accountable for more than 40% of global shark fin trade according to World Wild Fund for Nature, we work with knowledge partners to carry out due diligence on cargo, block channels for illegal wildlife trade and restrict access to markets for beneficiaries of wildlife exploitation.

For every request for the shipment of any species of shark or shark-related product, our Cargo Service Delivery Group consults a panel of internationally acknowledged experts, including representatives from TRAFFIC, a leading NGO working globally on the trade of wild animals and plants. The panel evaluates each request against a stringent set of sustainability guidelines and only upon their advice will we approve a shipment. For more information on TRAFFIC visit www.traffic.org.

The above processes help to improve the integrity of our cargo carriage operations, enable us to be more effective in identifying illegal trafficking in violation of our embargo policies, and safeguard against the transportation of goods and products that may threaten endangered species.

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

Our efforts are combined with those by organisations across Hong Kong and are yielding significant results. Over the last decade, figures from the Census and Statistic Department pointed to a 70% drop in shark fin imports.



Sustainable Development Cargo Carriage Policy

We work 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.

The Group's <u>Sustainable Development Cargo Carriage Policy</u> allows our various stakeholders to gain an understanding of where we stand in doing our part to protect the environment in the area of cargo carriage. To develop the policy, we enlisted input from a subject matter expert and referenced several international regulations.

The Society for the Prevention of Cruelty to Animals in Hong Kong was our partner in developing our Greyhounds Carriage Policy. TRAFFIC has helped us develop our Shark and Sharkrelated Carriage Policy. Regulations and initiatives referenced include:

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

We conducted an internal review of our Sustainable Development Cargo Carriage Policy in 2021 and made updates through referencing the Convention on International Trade in Endangered Species of Wildlife Fauna and Flora (CITES) laws and benchmarking our policy against the practices and policies of our peers. We ensure it continues to be reflective of the evolving illegal wildlife trade landscape and will continue to engage with our customers and agencies to ensure that this policy is understood and implemented.

Going forward we will continue to evolve the policy in response to any major changes in our environment so that it remains practicable and enforceable.

Embargoes

In recent years, we have placed embargoes on an increasing number of animals, wildlife and wildlife products to restrict opportunities for their shipment and add our support to movements aimed at stopping animal cruelty and biodiversity loss. In 2021, we have revisited and updated our Embargo List, following CITES regulations. Our <u>Embargo List</u> includes items such as hunting trophies, shark fin, rhino horn and ivory, and live species like racing greyhounds and animals intended for testing purposes. Any person or organisation wishing to transport live animals using our services must sign a Shipper's Declaration Letter certifying their compliance with Cathay Pacific's shipping requirements. Failure to comply can result in legal penalties.

International declaration United for Wildlife Declaration

The illicit trade of wild fauna and flora has gained traction on countries' political agenda, as it has become clear that wildlife crime has negative implications for the climate change, preservation of biodiversity, security and public health.

As a signatory to the United for Wildlife Transport Taskforce Buckingham Palace Declaration we are committed to neither facilitate nor tolerate the carriage of wildlife products, where trade in those products contravenes CITES.

Our commitment also includes information sharing, employee training, technological improvements and resource sharing across companies and organisations worldwide to combat this global exploitation.

CASE STUDY

Creature comforts on our cargo flights

The demand for live animal shipments is ever increasing, and Cathay Pacific Cargo maintain that their comfort and welfare is considered first. In 2021, we received IATA'S CEIV Live Animals certification, demonstrating our commitment to quality and continuous improvement to animal shipments.

As each animal has distinct characteristics and considerations, it is critical that their needs are handled in totally different ways. We have created a checklist for shippers to get as much information about the animals as possible before a booking, and to ensure that we meet the guidelines of the IATA Live Animal Regulations – plus the airline's own guidelines, as well as the national laws at origin and destination, which vary in their stringency across the globe.

But the overall aim is to maximise the safety and comfort of our animal passengers. Live animals are last to board and first off, kept at the requested temperature and we have even factored animals on board into sim training for pilots.





OUR PEOPLE

Why being a good employer matters to us

To realise our vision of becoming one of the world's greatest service brands, we must attract, develop and retain a diverse group of talented people with the right values and behaviours to support our strategy. Not only do we expect our people to be thoughtful, progressive and to have a can-do attitude, but we seek to create a culture of collaboration, agility and a strong sense of ownership.

We embody our brand promise to Move Beyond in everything we do. As our employees uphold this promise, striving for the best and working diligently in response to rising expectations from our customers, so do we as an employer with rising expectations from our people. Supporting each other, we go further together.



OUR PEOPLE

2021 Performance highlights

Throughout our 75 years of success, our people have been an integral part of building our business, delivering for our customers, our shareholders, and the Hong Kong community.



Our approach

We are committed to the realisation of our vision to become one of the world's greatest service brands. We invest heavily in our employee experience, from onboarding new 'Brushwinger' employees to saying farewell when they leave or retire, and everything in between including training & development, performance management and engagement. We strive to enable our employees to flourish during their careers with Cathay, encourage them to take pride in our culture and enjoy an employee experience that drives them to deliver their best for our business.

The past two years have been the most challenging period for our business in more than seven decades and our employees have shown great resilience and optimism over that time.

In 2021, we continued to feel the impact of the pandemic, yet our employees were relentless in showing their willingness to support each other and the business. Measures introduced to respond to that impact have now transformed into our new normal way of operating. The economic pressure of continued suspension of thousands of flights, with ongoing quarantine requirements in Hong Kong -and globally – placed great strain on our employees and the business. In the first half of the year, we asked ground employees in Hong Kong to take another round of voluntary special leave, and employees globally continued to be furloughed and contribute in kind. Flight crew have also been offered various voluntary leave and separation schemes during the year. We communicated as openly and as frequently as possible with our people during this time.

The public health situation in Hong Kong, while improved, continued to require significant focus on employee health and safety. We sought to safeguard our people, Hong Kong and our business recovery by encouraging employees to get vaccinated and eventually requiring our employees in Hong Kong to get vaccinated. Our Medical team continued to communicate with our employees, and we actively promoted our Employee Assistance Programme (EAP). Our people showed great resilience in their response and continued to deliver excellent service during abnormal circumstances. Once border restrictions ease, we hope to see a return of the levels of air travel we enjoyed before, and rebuild our business with a renewed focus on our people and a sustainable future.

This section provides an overview of our approach to human resources and our most material topics relating to our people.



Patricia Hwang Director People Cathay Pacific

Our people vision is to become one of the world's greatest employers, so that we attract, develop and retain a diverse group of talented people with the right behaviours to deliver our business strategy. We will continue to invest and focus on delivering a modern, contemporary employee experience our people can be proud of, in order to drive industry-leading advocacy and loyalty to our brand.

The past two years have been the most challenging in our history, and for our people to continue to deliver excellence amid these circumstances is testimony to their can-do spirit and their belief and confidence in Cathay Pacific. I am inspired and humbled by the great work done by our people every day and I am so grateful for their optimism and perseverance in these challenging circumstances.

Major initiatives in 2021

The workforce of the future will rely upon digital connectivity, accessible information and a workplace that offers flexibility that supports the individual needs of its people. Despite business disruptions over the past two years, we have made progress in each of these areas.

Future-focused development

We introduced the latest training and development programme titled 'The Future Leader Series', which is focused on preparing and developing leaders for tomorrow, today. This series consists of a constantly expanding collection of leadership workshops designed to inspire and connect leaders with like-minded people in Cathay Pacific, focusing on learning about emerging trends in business and the workplace, and exploring future requirements of successful leadership and ways to prepare ourselves.

Work your way

Our flexible working programme, Work Your Way, got an upgrade in 2021. Conceived and developed in recent years, COVID-19 was a catalyst for the implementation of a programme that seeks to allow employees to better achieve work-life balance, and to continue to foster the innovative and collaborative spirit we have witnessed throughout the pandemic.

As of September 2021, employees can work remotely for up to two days per week or stagger their working day around a schedule that suits their needs, but with much greater flexibility than before. We have also empowered our managers to judge the merit of applications by their direct reports, provided comprehensive guidelines and best practices, streamlined our application processes, and implemented a regular feedback mechanism to drive continuous improvement going forward.

Providing flexible benefits

Developed in 2020 for roll out in 2021, our employee benefits scheme Flexible Benefits is a valuable part of our employee experience. Flexible Benefits is designed to give flexibility and choice when it comes to selecting the benefits that suit employees and their family's needs. It provides employees access to medical plans, dental cover, preventive care, complementary therapies, insurances, retirement plans and additional annual leave purchase for ground employees. Flexible Benefits replaces the previous "RightChoice" scheme. For 2022, we have enhanced the Flexible Benefits offering for employees with improved Travel Insurance, and our Bupa Care Plus Medical Plan.





2 DAYS

Upgraded Work Your Way programme: employees can work remotely for up to two days per week with greater flexibility

Policies that respond to employee needs

We have launched several policies that recognise the needs of our employees. This includes:

- A review and enhancement of our existing flexible working policy, which has been improved based on the feedback of our employees.
- Vaccination leave policy, which provides employees with 2 days of vaccination leave following their COVID-19 vaccinations, and one additional day of vaccination leave to employees who take the COVID-19 booster vaccination.
- Acting policy, which recognises and rewards employees who are taking on a role and responsibilities in addition to their own.
- Grievance policy for ground employees, which provides a mechanism for employees to formally raise concerns relating to their work life.

Human resources management

Our human resources management aligns with our <u>Code of</u> <u>Conduct</u>, which clearly demonstrates our commitment to treat all employees fairly and equally, and to be an equal opportunity employer. We ensure all HR policies are applied consistently across the organisation and evolve policies and practices to remain a leading Hong Kong employer.

Our Code of Conduct provides our employees with guidance on how to conduct themselves in an ethical manner whilst employed by the Group. It also sets out our commitment to make ethical decisions on issues that affect our employees, customers, business associates, community neighbours and the general public. Our Code promotes the following principles:

- 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

Our <u>Human Rights Policy</u> outlines Cathay's commitment to creating a working environment where human rights are at all times protected and which focuses on ensuring the dignity, respect and well-being of individuals.

During 2021, there were no convictions for non-compliance with laws and regulations relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, or other benefits and welfare that would have a significant impact on the Group.



Employee relations and engagement An Employee Experience department

Our people are the heartbeat of our airlines. For them to deliver great experiences for our customers we equally need a complementary employee experience. In recent years, we have enhanced all aspects of the employee experience and focused on what really matters to our people. Talent acquisition and onboarding; benefits and rewards; communications and engagement, the digital employee experience and offboarding – all are taken into consideration.

Employee engagement survey

Our employee engagement surveys help management to understand employee sentiment and identify where improvements could be made to the employee experience.

In turbulent times, understanding our colleagues' perspectives takes on added emphasis. In 2021, we conducted two surveys: a pulse survey which took place in the first half of the year, and our more comprehensive annual employee engagement survey in December.

More than 7,600 colleagues were invited to participate in the pulse survey which received a response rate of 32% as compared to 38% in July 2020. The Group achieved an Employee Engagement Index score of 66%, a 11% decrease as compared to July 2020. Later in the year, more than 7,200 colleagues participated in the annual employee engagement survey, representing a response rate of 45% compared to 35% in 2020. The Group achieved an Employee Engagement Index score of 58%, a 5% decrease as compared to 63% in 2020.

The drop in the Employee Engagement Index score was largely driven by ground employees and pilots, with cabin crew engagement slightly up on the previous year. Targeted focus group will take place and action plans will be developed as well as other HR initiatives designed to address these trends. We recognise that these scores do also reflect the broader industry challenges faced.



A digitally enhanced employee experience

A new digital recruitment system was launched in March 2021 to streamline the end-to-end recruitment and on-boarding processes for all job roles, and to create a signature Cathay experience.

We commenced the progressive roll-out of our new learning and development system, The Learning Hub, in March 2021, with a second phase launch at the end of the year and further releases scheduled in 2022. The Learning Hub is designed to provide just-in-time learning and democratising career planning and development.

For employee service, a new Case Management System was launched in January 2021 that enables employees to raise and track requests. This is coupled with an employee services Chatbot to enable self-service.

We continue to refresh The Hub, our intranet, which puts connectivity and communication at the heart of the employee experience. The Hub won a prestigious award from industry leaders Nielsen Norman, being named in its 10 Best Intranet Designs of 2021.


Recognising and rewarding our people

Our recognition programme, Work Well Done, ensures our people feel valued and appreciated for the work they do. We equip our senior leaders with recognition toolkits consisting of thank you cards, lounge passes and upgrade vouchers to recognise anyone across the business, for doing something excellent or consistently displaying role model behaviour. Linked to this, our Work Well Done portal includes a series of card designs to enable colleagues to share Christmas and gratitude cards with each other.

Our corporate values, Thoughtful, Progressive and Can-do Spirit are tied to our recognition programme through our Work Well Done portal and annual awards; helping to bring these values to life. These are also supported by our corporate behaviours: Ownership, Agility and Collaboration.

Our annual Niki and Betsy Awards process took place earlier this year and our 30 winners were announced in August. Unfortunately, the ceremony could not go ahead due to social distancing measures. We did however celebrate our winners with smaller gatherings and recognition from our senior leadership team including an email to all employees from our CEO, Augustus Tang.

The awards are named after the first two aircraft that took Cathay Pacific to the skies in the 1940s. Niki award winners are recognised for their exceptional work behind the scenes and are rewarded for their exceptional efforts and behaviour. Betsy awards are presented for exceptional customer service and celebrate people who have taken customer service to the next level. We plan to resume the awards ceremony in the future when we are able to.



2021 Betsy Award winners



One of the 2021 Niki Award winners - the IT Remote Working Support Team

Our Long Service Awards

The Long Service Awards programme is a long-standing tradition at Cathay, where thousands of people are recognised each year for reaching a long service milestone starting at 10 years' service and at five-year intervals thereafter. In 2021, we recognised 2,500 people for their commitment and loyalty to our airlines. We look forward to awarding our Gold recipients at events with their family and friends after the pandemic subsides.

Engagement and events activities

During the global health crisis engagement activities went virtual with townhalls, talks, webinars and wellbeing sessions all conducted online. In 2021, we celebrated our 75th anniversary and brought a range of virtual events and some face-to-face activities to our people after the relaxation of social distancing measures.

To start the year, we ran our annual leadership conference virtually with a 4-day event delivering bite sized content to our leadership team about the priorities and plans for the year ahead with some external perspectives delivered by guest speakers.

During the summer we brought the Olympics to life in the office with mini games, live broadcasts of the events and celebrations to support our Hong Kong.

In September, we celebrated the month of our 75th anniversary across the network with a look back at our history, activities included a dress in green day, trivia game, aviation themed movie screening, stories of employees with unique Cathay Connections, department gatherings and more. It was a day filled with fun and celebration to mark our rich history.

We also gave away an amazing selection of prizes in our vaccine lucky draw for Hong Kong employees. Our leadership team announced the lucky winners during a townhall event which included Asia Miles, Hotel staycation packages and more.

We turned our attention to a topic which is extremely important, more so than ever this year, and focused on World Mental Health Day throughout October with wellbeing workshops, regular content and a yoga session at Cathay City.

To close the year with gratitude and positivity, our annual Christmas campaign saw thousands of e-cards sent to employees across our network.

Strengthening our relationship with employees

Our focus is on engaging our employees directly, by providing a number of platforms for our employees to give us feedback (e.g. Your Voice, The Hub, Yammer etc.). Our head office employees continue to develop trust and build a close relationship with Local Staff Union through regular communication. We listen closely to the voice of our people and respond to any employee support cases where required. In our operational departments, we are getting our employees directly involved on our projects and influencing business decisions. We recruit cabin crew into leadership and engagement positions, and use various pilot forums as sounding boards. We are also providing digital tools to provide better support to our employees in an agile manner and to enhance the overall employee experience.



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 are investing in talent acquisition by:

- Reviewing and streamlining our recruitment process to make us more efficient in attracting and hiring new talent
- Introducing a brand-new career website, with better user interface and user experience for job seekers
- Diversifying our recruitment methods, such as assessment via video
- Developing different customised selection and assessment tools to help us acquire the most suitable talent in the market
- Utilising various social media channels to promote our roles to our targeted audience
- Hosting on-campus interviews across a number of educational institutions in Hong Kong for the convenience of our candidates
- Working with the Hong Kong labour department on various initiatives to promote our roles, including promoting ethnic minority recruitment
- Hosting career events with sharing from existing employees
- Providing internship opportunities for students to build up current and future talent pipeline
- Over 31 hours of training per year per employee on average at Cathay Pacific across all employment levels
- Total annual spend on training at Cathay Pacific: HK\$ 131 million, which means over HK\$8,800 spent per employee



(Training data covers Cathay Pacific Airways full-time employees only)

Average hours of training per employee by category





Male employee:

Female employee:

31 hrs



HK\$131 million total investment on training, which

million total investment on training, which means over HK\$8,800 spent per employee

Role-specific career programmes

We offer a range of programmes to build employee competencies and careers in the following areas:

CAREER CHOICES	BRIEF DESCRIPTION
Management Trainee*	 A career-long rotational management programme centrally coordinated by Swire to develop the next generation of business leaders. This programme consists of classroom training, workshops, and attachments to different units of our business within and outside of Hong Kong. There is also an annual Swire Summer Internship Programme which creates a pipeline of high-calibre talent for this programme.
Graduate Engineer Programme	• A two-year developmental programme targeted specifically at graduate engineers. Participants receive classroom-based learning as well as on the job experience across different sections. An eight-week internship is also offered each year.
Cadet Pilot	• A sponsored world-class 55-week programme at a specialise facility in Australia aimed at training and qualifying participants as commercial pilots for entry into the company's pilot force.
Cabin Crew	• A comprehensive safety and service induction training programme followed by a 3-year contract as a cabin crew. Our team are safety officers, caring team players and ambassadors for Hong Kong.
Customer Services Officer	• A 12-month development programme designed to equip our customer service officers with the skills to work across the roles in an airport environment taking care of our customers both at check-in and during aircraft boarding and disembarkation.
IT Graduate Trainee Programme	• A two-year programme designed to give IT Graduate trainees an accelerated learning experience through a wide range of technical disciplines and business rotations as part of SWIRE Management Trainee Programme. More information is available from https://careers.cathaypacific.com/jobs/it-graduate-trainee-programme-2021-4323420
Operational Leadership Programme	• This five-year programme offers unique on-the-job experiences across the diverse operating divisions and departments within the Cathay Pacific Group, giving participants a wide breadth of exposure, knowledge and experience to equip them as the future leaders of Cathay.

* More information is available on https://leadership.swire.com/en/our-programmes/swire-management-programme

Supporting local employment

We recruit locally for our operations. 84% of our people are employed in Hong Kong. If the required skills are available locally, we prioritise the local labour market before searching internationally. Vacancies are first opened internally to our people, then to the local community, and finally overseas. Our commitment to supporting local employment and developing professional aviation talent in Hong Kong is demonstrated through our target of ensuring the proportion of local Hong Kong pilot cadet recruitment is at least 50% of all new pilot intake.

Virtual learning to fill tactical needs

In response to changes brought by the pandemic, The Learning Academy developed a series of virtual courses to cater for the greatly altered needs of our learners and leaders. As part of the Cathay Pacific Future Leaders Series, learners are able to enrol in modules such as The Future is Here, Vision Advantage, Strengths Advantage, Growth Mindset, Sharpen Your Tools, Lead like a Coach and Leading Hybrid Teams. Going virtual allows us to increase the reach of these learning modules beyond Hong Kong and offer timely support to overseas managers and their teams.

Online/virtual regulatory and licensing training

In the face of extended social distancing requirements and to ensure our frontline colleagues continue to be equipped with the knowledge required to fulfil regulatory or licensing requirements, The Learning Academy team responded by transforming face-to-face programmes to online learning or virtual instructor led training. The programmes focused on key aspects of our operations including disability awareness, cabin safety, and dangerous cargo.



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:

- Competitive salaries, with ranges regularly benchmarked for the role
- An annual discretionary bonus
- Flexible working policies and staggered working hours
- An industry leading employee travel benefits programme with discounted tickets, offers and travel benefits
- Flexible Benefits allowing employees to tailor plans for themselves and their eligible dependents based on individual preference:
 - o Medical and dental coverage
 - o Insurance plans
 - o Retirement schemes

Wellbeing at Cathay

The health, safety and wellbeing of our people is a key concern of the Group. The constantly changing quarantine and ways of working placed additional burden on our employees. We responded by conducting frequent, open dialogue with our people and introducing a range of initiatives via familiar platforms to protect their health and promote mental and physical wellbeing.

Heightened health and safety measures

Temperature screening and the provision of personal protective equipment (PPE) is now standard practice for all operational and customer-facing employees. While all workspaces whether office based or aircraft, undergo enhanced cleaning and disinfection, there is no safer way of protecting an individual from the novel coronavirus than by being fully vaccinated. We require that all our flights are crewed with fully vaccinated aircrew only. Aircrew are required to follow strict health and safety protocols, self-isolating in their rooms within designated hotels during any layover in places outside of Hong Kong. They are tested frequently and in 2021 alone have undertaken over 220,000 COVID-19 tests in Hong Kong, including multiple tests after every flight. We as a company appreciate the burden this places on our people, and have acted to ensure we offer multiple ways to support employee wellbeing. A vaccination leave policy is introduced, which provides employees with 2 days of vaccination leave following their COVID-19 vaccinations, and one additional day of vaccination leave to employees who take the COVID-19 booster vaccination.



98.1% of our Hong Kong employees have been fully vaccinated

Collectively, our crew have spent over

in 2021

62,000 nights in quarantine hotels

Over

11,000 nights were spent by our Hong Kong employees in quarantine facilities in Hong Kong

Cathay Pacific Airways Limited Sustainable Development Report 2021

Embedding support in our ways of working

We established and continue to support the Hong Kong Peer Assistance Network - PAN HK - an independent, confidential service using trained, volunteer pilots to support fellow flight crew members, colleagues and their families. We've also developed a dedicated page of wellbeing and mental health guidance and advice provided by our Clinical Psychologist on our intranet, The Hub.

Putting guidance at our peoples' fingertips

Our Employee Assistance Programme (EAP) provides 24/7 access to worldwide professional tele-counselling and face-to-face counselling by qualified counsellors for employees and family members, to assist in handling stress, bereavement, or relationship issues, legal and financial matters, manager consultancy and more. Our people also benefit from access to our wellness app, eCare, which includes a wellness assessment and personal health report, healthy recipes and online services such as Weekly HealthBytes. In addition, our EAP YouTube channel hosts a variety of short videos on a range of topics including mental health, financial health and general support and counselling.

Building capacity and resilience

In 2021, we trained managers to identify signs of mental issues, the role of managers in supporting their team, and appropriate professional resources both internally and externally in the community. We also delivered dedicated sessions on mental health for leadership and for women, hosted in collaboration with an external corporate wellbeing specialist and external counsellors. By partnering with The Mental Health Association of Hong Kong we conducted Mental Health First Aid (MFHA) Classes. For our employees in Hong Kong and outports we focus on mental wellbeing education. This year we launched online workshops through our EAP that focused on general mental wellbeing, but we also developed tailor made sessions for specific departments based on individual issues identified such as those faced by client facing employees and Cabin Crew.

Going forward we plan to build a culture of peer support by setting up a system of volunteers who completed and achieved MHFA certification to volunteer as Mental Health First Aiders – such that people can find peer support when struggling with mental health issues. We will also be establishing a wellbeing working group to continue to develop and expand wellbeing initiatives.



A Chair Yoga class at Cathay City for our employees

Diversity and inclusion

As a global business, we value the diversity of our people. We do not tolerate any form of harassment or discrimination on the basis of gender, gender identity, religion, race, nationality or ethnic origin, cultural background, social or economic group, sexual orientation, marital or family status, physical or cognitive ability, age or political opinion. We know how important our diverse workforce is in helping us to create great experiences for our customer base. However, diversity without inclusion is not enough. We know that our people and our customers choose us not because of our products and offerings alone, but because of our contribution to society and our treatment of people.

Our Diversity and Inclusion strategy was developed in line with the Swire Diversity and Inclusion Strategic Framework and guides our vision to be one of the world's greatest service brands. Its implementation is being driven by the Diversity and Inclusion Office together with the Employee Resource Groups, where dedicated individuals are responsible for strengthening inclusivity as a characteristic of the Cathay culture. Our formal Hire-to-Retire process review has resulted in revisions to existing policies and creation of some new policies in response to employee needs, talent acquisition and management and areas for development. There was particular focus on Gender and Sexual Orientation pillars through our employee resource groups.

In response we established a Diversity and Inclusion Steering Committee to discuss and make decisions on important issues related to inclusion, drive changes and set the direction and goals for Cathay. We also continued unconscious bias training and continued with the Male Allies programme who demonstrate support for improved gender balance by running initiatives to help promote a more inclusive culture. Knowing that the topic of Diversity and Inclusion is vast, we conducted a Diversity and Inclusion survey in October to understand our employees' views on the most important aspects and to create further change where necessary.

Augustus Tang Chief Executive Officer Cathay Pacific

As part of our efforts to build back better after COVID-19, we must continue to commit to building an inclusive and supportive work environment for all of our people. We need to work towards having a truly inclusive workplace – a workplace where people feel comfortable to share their thoughts and opinions freely. Our people's distinct experiences and diversity of thought can give us a competitive edge in understanding customers from all corners of the world - their needs, their behaviours and what drives them.

Cathay Women's Network

This year the Cathay Women's Network directed initiatives aimed at strengthening messages of gender equality and female empowerment, challenging stereotypes and highlighting the importance of work-life balance. Key events in 2021 included:

- Celebrating International Women's Day 2021 through education and awareness relating to this year's theme, Choose to Challenge. Messaging reflected the role we each play at Cathay to moving us closer to gender equality
- Celebrating International Women in Engineering Day by profiling our female engineers and their work
- Publishing articles and hosting panels with experts and discussions around the company focused on Menstruation & Menopause Awareness
- Running a corporate-wide survey to better understand how the Women's Network can better support the needs of our female colleagues

Advancing Gender Balance

Cathay Pacific is a proud supporter of IATA's 25by2025 campaign to make the aviation industry more gender balanced. As a signatory, we:

- Report annually on key diversity metrics
- In 2021, committed to increase the number of women in senior positions by 25%, to at least 30% by 2025[^]
- Increase female nominations from our airlines for IATA governance roles to a minimum of 25%

[^]At the time of the pledge in 2021, the number of women in senior positions was 23%





At board level:

6%

Female

Gender diversity in Cathay Pacific in 2021



*Senior positions refer to the job levels of General Managers and Directors at the Group

94% Male

Fly with Pride

Our LGBT+ Employee Resource Network, FlyWithPride, has, for the last three years, been focused on developing our internal framework to support, recognise and celebrate our LGBT+ employees. This year the Fly with Pride Network directed initiatives aimed at building their knowledge of LGBT+ attitudes and engagement at Cathay Pacific in order to develop targeted initiatives moving forward into 2021 and beyond.

In October, with Pride celebrations impacted by COVIDrelated restrictions, our celebrations moved online with one objective - to continue to make Cathay an even more inclusive place to work. Colleagues from across the network shared their personal stories about being LGBT, being an ally, and being new to the community. The network published thought provoking articles that challenge thinking on what it means to be inclusive. Following Pride month, an LGBTQ+ ally e-module was launched in our intranet the Hub and our Learning Hub.

Fly Pink

Launched in 2015 by QantasLink pilots and taken on by a small group of female Cathay Pacific pilots the following year, Fly Pink offers charity sales and activities to raise awareness and funds for breast cancer research, and prostate cancer. In October each year, Cathay Pacific Pilots and Cabin crew 'Fly Pink' by wearing pink epaulettes and pins. This year, Fly Pink went global as it travelled to our outports.



Creating an inclusive workplace

This year, we made several significant changes to protect diversity and ensure we operate in ways that make our colleagues feel welcomed and comfortable to be themselves including opening our first gender neutral bathrooms at Cathay City.

We revised the parental leave policy which will cover all family circumstances rather than just the traditional mother and father roles. Employees in Hong Kong can now self-declare as either the Primary or Secondary caregiver (unless the person has physically given birth to the child, in which case they are required to take 14 weeks of leave under Hong Kong Law). The leave entitlement is 14 weeks for the Primary caregiver, and five working days for the Secondary caregiver. In addition, we will be publishing guidelines around menstruation and menopause and creating a return-to-work programme for new mothers.

Language matters and as such we are now reviewing key policies and collaterals – both internal and external facing – to ensure gender neutral language and proper representation of our diversity amongst both our own people and our customers.

CASE STUDY

Room with a view to an inclusive City

Our people often have access to prayer rooms in the airports they visit when travelling with Cathay. Now, with the opening of multi-faith prayer rooms at Cathay City, worshippers have access in our place of work as well. We see it as another step towards creating a workplace culture that is open, respectful, and inclusive of the needs of all our people.





COMMUNITY

Why communities matter to us

Strong communities make for more prosperous and healthy societies. Around the globe, communities face varied and complex challenges that require collaborative responses. The ongoing pandemic has underscored this and emphasised the role that companies such as ours can play in effecting positive change and supporting those in need. We continue to seek out opportunities to elevate, amplify and contribute to communities with purpose and integrity.



COMMUNITY 2021 Performance highlights



Delivered the first COVID-19 vaccine shipment to Hong Kong and over 165 million vaccine doses to Hong Kong and beyond



Donated over 300,000 pre-prepared meals to the Hong Kong community



HK\$1.56 million raised for UNICEF through our "Change for Good" inflight fundraising programme in 2020¹



Over 4 million items donated including catering equipment, blankets, children kits, and refurbished tablet computers



Our employees volunteered over 1,200 hours to support initiatives in response to COVID-19



Conducted a lucky draw for fully vaccinated residents of Hong Kong, giving out a unique experience of a private flight as grand prize and millions of Asia Miles

¹2020 is the most recent year for which data is available due to donations provided in 2021 being audited



Ronald Lam Chief Customer and Commercial Officer Cathay Pacific

As the impacts of the pandemic continue to affect communities across the world, we have continued to assist wherever we can. As a Group, we have carried more than 165 million doses of different COVID-19 vaccines around the world since the pandemic began. At the same time, our community initiatives continues. Some 300,000 pre-prepared meals, and four million items including blankets and refurbished tablet computers have been donated to people in need. We will continue to support the most vulnerable in the community throughout this time of crisis.

Our approach

As an international airline based in Hong Kong, we see it our key role at connecting people, cultures and places. By employing a collaborative approach, we leverage our role and work with partners across different sectors and connect our business and NGO partners to bring about long-lasting benefits. Our strategy is aimed at caring for and support global causes, but with special focus on Hong Kong through community programmes and volunteering. To make greater impact with our community engagement effort, we focus our work under four pillars developed with input from our stakeholders, including our people and the communities we serve.





Promote children and youth development

Cathay Pacific is committed to supporting the future development of the communities we serve in tandem with the Group's long-term development through investment in children and youth development.



Develop environmental awareness

Rapid economic development has presented our planet with myriad challenges with both environmental and social consequences. While the issues are varied and complex, we are committed to taking an active role in mitigating negative environmental impacts that are directly related to our operations. Developing awareness around such issues is an important way for us to make a greater impact together with the communities we serve.



Facilitate global cultural exchange

As a global airline it is our function to facilitate the global exchange of people and goods. Expanding on this core function, we aim to support community engagement programmes that would facilitate cultural exchange, understanding, and acceptance across different parts of the world, especially among the countries and communities that we serve.



Encourage diversity and inclusion

Cathay Pacific is one of Hong Kong's largest employers, also one of the most diverse workforces in our home city. Cultivating a diverse and inclusive workplace benefits our business in terms of talent recruitment, retention, and enables better understanding of the needs of both our people and our customers. We stand behind this value and hope to support the community in embracing diversity and inclusion through action, advocacy and thought leadership.

Our response to COVID-19

Throughout the prolonged period of COVID-19, communities around the world have continued to feel the impact of social distancing measures to prevent further spread of the virus. While these precautions can help to contain the outbreak, they can also expose longstanding gaps in health and human services in the community.

At Cathay Pacific, we sought to resolve logistical obstacles and use our capabilities to connect resources to the locations they were needed. For us this meant finding ways to work with our NGO partners and different authorities within the HKSAR government to help our local community and beyond. We also organised our people to step up when they could, help each other and support the most vulnerable members in our community.

Distributing COVID-19 vaccines across the globe

As an airline with an extensive global network, we play a critical role in delivering much-needed COVID-19 vaccines worldwide to help tackle the global pandemic. We are proud that in February 2021, we were the first to fly a COVID-19 vaccine shipment to Hong Kong, in support of the Hong Kong SAR Government's vaccination programme and delivered one million doses of Sinovac's vaccine from Beijing.

We work in close collaboration with the Airport Authority of Hong Kong, and many of our industry partners and business associates to develop a Vaccine Solution which has proven itself to be ideally suited to fast and effective distribution. In 2021, we carried five different COVID-19 vaccine brands, which require different handling temperatures ranging from -70°C to 2-8°C, and our recertification of IATA's CEIV Pharma accreditation* offered a complete level of quality assurance at every stage of the import and transhipment journey. We deploy our new Ultra Track multidimensional tracking and data-logging system to allow us to digitally track and record vaccine shipments.

Launched in February 2021, Cathay Pacific and other leading airlines joined the UNICEF Humanitarian Airfreight Initiative to support equal access to vaccines worldwide. The initiative supports the COVAX Facility, a global solution to the pandemic that ensures low-income and lower-middle-income countries have access to quality-assured vaccines, and acts a global logistics preparedness mechanism for other crises in the future. In 2021, Cathay Pacific has carried over 165 million COVID-19 vaccines as a group.

*The internationally recognised quality-assurance scheme for pharmaceutical shipments





over 165 million vaccine doses to Hong Kong and around the world.

Supporting the most vulnerable in the community

Throughout this difficult period, our commitment to supporting the local community continues to grow stronger. In 2021, we donated over 300,000pre-prepared meals to the needy in Hong Kong through our charity partner Food Angel. We have also raised over HKD\$428,000 for Food Angel from our Marco Polo Club Members. Employee volunteers also lent a hand to pack and prepare food parcels with Feeding Hong Kong and distributed them to community members. Our support extends beyond COVID-19, as these initiatives align with our longstanding collaboration with both charities to donate surplus food and eliminate food waste.

We also provided household necessities to underprivileged in Hong Kong and, through the initiative Project Home Works launched by Habitat for Humanity, we helped to bring better homes through house repairing services. In 2021, our employee volunteered to pack toys for children in low-income families and we partnered with a local NGO to arrange online storytelling sessions to foster student's interest in reading while staying home.



Community programmes

Our programmes help to address pressing contemporary issues associated with our community pillars. While a number of the programmes were affected by COVID-19, we intend to bring them back when appropriate.

I Can Fly

Launched in January 2003 in Hong Kong, the I Can Fly programme actively recruits students who show a passion for aviation and a commitment to community service. Thousands of students have graduated from the programme since its launch.

Cathay Pacific pilots and employee volunteers lead the I Can Fly members through a series of aviation and social service activities during the programme period. The young members are given the chance to visit various aviation facilities, go through aviation-related training, participate in team-building activities, and design and implement their own social service programmes for community groups.

At the end of the programme, selected members get the opportunity to take part in an overseas trip to further explore different aspects of aviation and interact with people from various cultures. A number of former I Can Fly participants have since taken up careers within the Hong Kong aviation industry.

The programme has been adopted by many of the airline's local teams, however activities were put on hold in 2021 due to the global health crisis.

Cathay Pacific City visits

For more than 70 years Cathay Pacific has been a part of the fabric of Hong Kong, offering jobs to its people and flights to its travellers. Our Cathay Pacific City visits are aimed at strengthening local understanding of how we do this through employee-led tours that provide visitors access to our people's knowledge and a behind-the-scenes view of the airline's operations. Through the tours, participants are shown around our training and operation facilities.

The programme was temporarily suspended in 2021 in view of the pandemic.

Asia Miles Good Deeds quick facts 2021:

Total miles support	Equivalent to HK\$ 2.69 million
Number of charity partners participated	33
Types of 'Good Deeds' packages available for redemption	92
Most popular 'Good Deeds' packages	 UNICEF - 10 Sachets Of Therapeutic Milk To Malnourished Children Taiwan SPCA - Help Fostering One Dog/Cat For One Day UNICEF - Novel Coronavirus (COVID-2019) Global Response

Turn miles into good deeds

In 2021, Cathay Pacific continued its long-standing support for three of Hong Kong's leading fundraising events. The 100km Oxfam Trailwalker is aimed at alleviating poverty and support emergency relief projects in Asia and Africa, Orbis Virtual Moonwalker, and the UNICEF HK "Discover, for every child" Virtual Run which supports Reimagine Education initiative.

Asia Miles members can share rewards with those in need of support. These charity packages start from 360 Miles, so members can easily turn miles into a positive force for change. Apart from redeeming packages, members can also support charities' important initiatives by donating Miles.

CASE STUDY

Cathay Hackathon

Our signature event, the Cathay Hackathon, returned in November 2021 after a two-year pause. As the only aviation-related hackathon event in Hong Kong, it brings together young innovators who are passionate about aviation and technology.

The world was a very different place two years ago and we accepted the challenge to re-invent the programme while preserving its unique values. It was of upmost importance to maintain a safe environment for all participants whilst creating an engaging and interactive experience. We received 700 applications from university students and handpicked 75 teams with a total of 335 young talents.

Prior to the virtual hackathon, we invited participants to attend "Power Sessions" to explore behind-the-scenes of our operations and to gain insight from our Subject Matter Experts (SMEs).

In the end, the top six teams presented their pitch at Cathay City to our judges and live stream audiences. It was a tough decision for our judging panel consisting of industry leaders from Cathay, The Airport Authority, Hong Kong Science Park, AWS, Microsoft and Google, as all participants came up with ground-breaking ideas. Team Starry, proposing the creation of a platform to further integrate the use of Asia Miles into our everyday lives, was crowned the champion.



Fundraising and donations

Our long-running initiatives seek to leverage the goodwill of our employees, customers and business partners to affect positive change in Hong Kong and across the globe.

UNICEF

Change for Good (CFG) is an inflight fundraising programme operated by Cathay Pacific and the Hong Kong Committee for UNICEF. Since its launch in 1991, the programme has successfully converted spare change from Cathay Pacific passengers into supplies and services to improve the lives of vulnerable children worldwide.

Change for Good has raised funds in support of UNICEF's lifesaving programmes, helping deprived children and women across 190 countries and territories worldwide. In 2020, the programme raised a total of HK\$1.56 million. Over the years, our people have taken field trips to underprivileged communities that are supported by the programme, so they can experience its positive impact first-hand.

In 2020, Cathay Pacific designated one third of the total donation to support UNICEF's Schools for Asia programme. The thematic programme, which aligns with one of the airline's key community engagement endeavours of promoting youth development, aims to provide quality and sustainable learning for disadvantaged children.

CASE STUDY

Life Buddies Mentoring Programme

At Cathay Pacific we are passionate about setting children up for success especially during this turbulent period. We have developed our Life Buddies Mentoring Programme to provide local students with valuable insight into different life experiences and to give them life tools. The programme launched in December and will connect 20 Cathay Pacific volunteers as mentors with students for a six-month period in 2022. We hope to inspire the younger generation towards a positive life trajectory.



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 is donated to the Wheelchair Bank.

Donations

In 2021, the Company and its subsidiaries made charitable donations amounting to HK\$2.5 million in direct payments and a further HK\$0.2 million in the form of discounts on airline travel. We also made in-kind donations of over 4 million pieces of items, including toys, amenity kits, uniforms and refurbished tablet computers.



4 million items donated, including toys, amenity kits, uniforms and refurbished tablet computers.



CASE STUDY

Sunnyside Club donates a new school bus to special needs school

One of the most valuable things our people learned during difficult times is that kindness matters, especially when things are hard, showing support and care is always the right thing to do.

The Sunnyside Club was founded in the early 1980s by a group of Cathay Pacific pilots who began making a small monthly donation to Sunnyside School for mentally and physically challenged children. Backed entirely by donations and volunteering activities from our people for nearly four decades, the Club, as a registered charity in Hong Kong, continued to change children's lives through funding medical services, offering volunteering work, and the provision of various learning facilities and resources.

In December 2021, Sunnyside Club purchased a new school bus, entirely out of members' funds, for the special needs students at Po Leung Kuk Mr and Mrs Chan Pak Keung Tsing Yi School, which serves students ranging from age 6 to 20 who suffered from severe deficiency in physical, intellectual and social development. The bus will be taking students living in Shatin and Kwai Chung to and from school in Tsing Yi, benefiting them and their families.

Despite all the challenges and uncertainties we have been facing in the past two years, the Sunnyside Club never ceased to deliver acts of kindness. This is not the first school bus or resources the Club donated, and certainly will not be the last.



Volunteering

Cathay Pacific's volunteers support the Hong Kong community from tackling environmental issues to helping those in need. In 2021, our volunteering work focused on alleviating impact of COVID-19 on different vulnerable groups in the community as detailed in the previous section. Over 300 colleagues took part for over 1,200 hours of volunteer work for COVID-related volunteering work alone.





OUR SUBSIDIARIES

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



OUR SUBSIDIARIES 2021 PERFORMANCE HIGHLIGHTS

Cathay Pacific Catering Services provides flight catering services to 20 international airlines operating out of the Hong Kong International Airport.

Inflight meal donation: By collaborating with non-profit organisations and social enterprise, such as Food Angel, Foodlink Foundation and Dignity Kitchen, we delivered over 300,000 meals to those in need of food assistance in Hong Kong.

Sustainable sourcing: 40% of our seafood is certified as sustainably sourced.

Bread to beer: We launched the VHHX Beer project, turning surplus bread into sustainable craft beer.





Waste reduction at source: To reduce the consumption of singleuse plastic items, combined packing for multiple garment items is implemented across our shops.

Supporting our community: To support some of the most vulnerable in Hong Kong that have been affected by the pandemic, Vogue Laundry worked with Hong Kong Family Welfare Society (HKFWS) to run an Pandemic Care Pack donation scheme which delivered 250 care packs to those in need.



Cathay Pacific Airways Limited Sustainable Development Report 2021

Cathay Pacific Services Limited operates the latest air cargo facility in Hong Kong – Cathay Pacific Cargo Terminal ('CPCT'), serving airlines operating at Hong Kong International Airport.

Energy Conservation: Achieved a 663 MWh reduction in electricity consumption, representing an emissions reduction of 245 tonnes CO₂e.

Promoting Occupational Health, Safety and Wellness with initiatives such as "Health & Wellness Week", with special events to promote healthy lifestyles, diets and fitness in everyday life.

Fighting the virus: Shipped an estimated 45 million doses of vaccine to various destinations in Asia, including Philippines,

scheduled services in Asia.

Malaysia and Indonesia.

Strong team: 87% of our pilots and employees report that they are proud to work for Air Hong Kong.

Decarbonisation: Set up a Fuel Forum Steering Committee and implemented various fuel efficiency initiatives. Over 1,340 tonnes of carbon emissions were avoided in 2021 as a result.

HK Express is Hong Kong's only low-cost carrier, offering scheduled services within Asia.

Younger and greener fleet: Fleet modernisation through the addition of a fuel efficient A320-neo aircraft and the retirement of three aging A320-ceo aircraft.

Supporting the community whilst reducing waste: Donated surplus frozen food, drinks and snacks to non-profit organisations including Food Angel, and Food for Good, to divert food waste and support people in need.

Hong Kong Airport Services Limited provides ground

new Enviro200 single deck buses. In 2021, we reduced

Reducing ground carbon emissions: We invested in four

handling services to airline customers.

around 660 tonnes of carbon emissions.









НКехргез

Hong Kong Express Airways Limited

Hong Kong Express Airways Limited (HK Express) is Hong Kong's only low-cost carrier. Our fleet of 27 aircraft including a mix of Airbus A320, A320neo and A321 provides scheduled air services to 29 destinations in Asia.

COVID-19 has brought on unprecedented challenges and significantly impacted the travel and tourism industry. To ensure our crew and passengers' health and safety, we have put a series of preventative measures in place and have conducted digital health passport trials twice at Hong Kong International Airport with our crew members and passengers involved to test the effectiveness of pre-departure experience as a preparation for our operations recovery.

Our approach to sustainability

At HK Express, we put our people first. Our 956 employees, made up of 391 cabin crew, 236 pilots and 329 office employees, are integral to delivering our customer-centric service. This year, we continued to contribute to sustainable travel and footprint reduction in order to demonstrate our commitment to achieve net-zero carbon emission by 2050.

Going forward, our approaches to sustainability in 2022 will include:

- Low-cost carrier business model remains focusing on short-haul services with high load factor, which means we carry more passengers and cargo with the same amount of fuel
- Deployment of young aircraft to improve environmental performance and lower carbon intensity
- IATA CORSIA tracking to prepare for 2050 net zero emissions
- Support our people and communities by providing equal opportunities and taking care of our employees, and assisting people in need

Material topics

Greener operations	Carbon is a key concern of HK Express. We focus on fleet modernisation and carbon offsetting to reduce carbon emissions from our operations currently.	 This year: We brought in an additional A320-neo; an aircraft which is more fuel efficient and has a lower noise footprint compared to older models. We also retired three A320-ceo that aged from fifteen to seventeen years old to their lessor. Along with the addition of newer craft this brings the average fleet age to under five years old. To reduce carbon footprint from our Flycation flights, we fully offset the carbon emissions through Cathay Pacific's Fly Greener programme. In total, 280 tonnes of CO₂ have been offset. 	
Waste management	At normal times, we serve millions of passengers hygienically and in a manner that meets quality and weight requirements. At the special period of pandemic, we donate surplus supplies to help people in need and reduce waste.	 This year: We donated surplus frozen food, drinks and snacks to non-profit organisations including Food Angel, and Food for Good, to promote food waste reduction through redistribution and recycling. We donated used furniture to Tung Chung Safe & Healthy City to advocate recycling in the aviation industry. We launched a sale of our inflight equipment, such as our service trolleys, to give our pre-used and upcycled carts a second life as conversation pieces for the homes of aviation enthusiasts. 	
Our people and community	Along with Cathay Pacific, we have a keen focus on our employee experience and engagement. We proactively promote our company culture within the organisation and externally through supporting our local community.	 This year: Believing that vaccinations are our way out of the pandemic and a collective responsibility to safeguard our working environment, we launched "Stronger Together" campaign - a series of initiatives to provide better understanding and support on getting vaccinated in order to boost local vaccination rates. Recognising the importance of cultural bonding, we ran Lunch & Learn sessions for colleagues to further gain insights on the company's core values and what leaders' initiatives and views on our values are. The UO Wellness Programme was launched to promote wellness within the organisation, commencing on offering healthier dining options, mental wellness workshop and regular tips on taking care of our people and for them to take care of themselves. To boost vaccinations in Hong Kong, HK Express ran the COVID-19 vaccination free air tickets lucky draw campaign sponsored by the Airport Authority Hong Kong. The luck draw gave away 25,000 round-trip tickets from Hong Kong to Japan, South Korea and Thailand. HK Express participated in the online SKH Lantau Island mock DSE result release day. During the event, we conducted mock job interviews with a Q&A session for the students to help them prepare for life after secondary school. 	

香港華民航空 air Hongkong

Air Hong Kong

Air Hong Kong (AHK) is the longest serving dedicated freighter airline based in Hong Kong. We operate express cargo services for DHL Express and Cathay Pacific Airways Ltd, utilising a fleet of Airbus A300F and A330F, serving 13 scheduled destinations in Asia and several ad-hoc charters in Asia.

Our approach to sustainability

As an airline, after receiving the HKIA Carbon Reduction Award for the Carbon Reduction effort AHK Management did not remain idle. AHK's mos important sustainability topics are reflective of Cathay Pacific's and the airline remains fully engaged in the IATA's CORSIA tracking to prepare for 2050 net zero emissions Moreover, the core of our DNA is operating in an environmentally frien focusing in the areas of safe, climate change and our people in a sustainable and compliant manne Our Safety Management Systems Manual sets of the policies and procedures pertaining to Safety Management System (SMS) activity within AHK. Furthermore, the Quality Management System Manual ensures compliance with the relevant regulations and company policies. We aim to create an inclusive workplace for our employees, and we constantly monitor our environmental performan

Material topics

press t of d rs in orts, ost are e of endly, nd ner out cy reate we ance.	Health and safety	We operate as a key logistics company in the second busiest airport for freight handling in the world. At a time when the world is closing borders, our duty is to keep goods moving while people cannot. Doing so safely is pivotal.	 This year: We addressed 100% of the IATA Health Safety Standards for Airline Operators to assess and strengthen the protection of our operations and our people when faced with public health event. We conducted surveys on AHK Safety Management System (SMS) and Safety Culture, which reflected a high safety culture and engagement; Over 80% of the safety-critical employees agree that the senior management is involved in and committed to the AHK SMS/Safety Policy. Over 90% of the pilot respondents agreed that we put flight safety first, have high standards of service delivery and feel comfortable to report concerns or safety hazards. We reviewed and updated our Business Continuity Plan, dedicated to operating in the midst of a pandemic. We supported in the delivery of equipment to fight the virus along with vaccine shipments to Asia-Pacific region. We introduced a new Fatigue Risk Management System (FRMS) which is an enhanced way to manage fatigue of all AHK employees. A 100% vaccination rate has been achieved among AHK operating aircrew members and office employees.
	Climate change	We maximise the cargo-carrying capacity on our journeys and replace older aircraft with newer, more fuel-efficient models to improve fuel efficiency and reduce carbon emissions on our flights. We are also set for carbon neutral growth based on 2019 levels in line with CORSIA and achieving net zero carbon emissions by 2050 in line with Cathay Group target	 This year: We introduced two new A330 aircraft into our fleet to replace retired 747-400 aircraft. We submitted our audited CORSIA Emissions Report and Verification Report for the year of 2020. We collaborated with relevant stakeholders to identify new opportunities to improve our fuel efficiency. We set up a Fuel Forum Steering Committee and implemented various fuel efficiency initiatives. Over 1,340 tonnes of carbon emissions were avoided in 2021 as a result.
	Our people	Our business relies on the skill, experience and professionalism of our people. We therefore engage our people regularly to ensure we are delivering for them as they are for our customers.	 This year: We achieved over 80% response rate for our pilot engagement survey reflecting a highly engaged culture. Results showed an above average satisfaction rate. Over 87% of the respondents agreed or strongly agreed that they are proud to work for AHK.

CATHAY PACIFIC CATERING SERVICES

Cathay Pacific Catering Services

As one of the largest flight kitchens in the world, Cathay Pacific Catering Services (CPCS) provide flight catering services to 20 international airlines operating out of the Hong Kong International Airport (HKIA).

In 2021, CPCS supplied around 1.7 million meals and handled around 14,000 flights to more than 20 global carriers, representing an average of 4,701 meals and 39 flights a day. CPCS is supported by 1,100 employees and its resident contractors.

Our approach to sustainability

Lead by the Chief Operating Officer, sustainability at CPSL is governed by the Sustainable Development Steering Committee ("SD Steering Committee") that involves department heads from various functions. The Committee meets on a regular basis to formulate sustainability strategy and review area of improvement.

Our primary focus is the safety and quality of our food. Our Quality Assurance Department oversees the manufacturing and distribution of our consumables. Our operations meet aviation and international standards including HACCP^{*}, ISO 9001:2015 and IATA's Inflight Catering Quality Assurance Programme. Company-wide systems and procedures are also aimed at reducing the impacts of our business on the environment and supporting our people and the local community. Our progress on key material topics is described below.

AHazard Analysis and Critical Control Point (HACCP)

Material topics

Waste

management

Responsible

procurement

Through collaboration and innovation, we reduce waste from production, as well as inflight waste. Efforts are made to minimise waste generation in procurement, production and operational planning. We reuse and recycle materials; and enhance stakeholders' awareness on waste management.

We strive to increase the proportion of sustainable products in our portfolio and encourage our supply chain to become more sustainable. We fully support the Swire Pacific Sustainable Food Policy. Where possible we avoid unsustainable food items and advocate the sustainable consumption practices to our customers.

Our people

our success. We manage our people by attracting and nurturing talent, equipping them with the relevant skills to ensure they grow as professionals during their CPCS career.

Investing in human capital is critical to

This year:

- We collaborated with non-profit organisations and social enterprise, such as Food Angel, Foodlink Foundation and Dignity Kitchen, to donate 300,000 meals to those in need in Hong Kong.
- We provided Feeding Hong Kong with around 110 tonnes of bakery products and beverages in 2021. There is a decrease of 50% compared with 2020 due to reduction of business volume.
- Launched the VHHX beer, which transformed 250 kg of surplus bread to 12,000 cans, or almost 4 million litres of craft beer.
- We recycled a total of 215 tonnes of waste at O·PARK1's waste to energy facilities.

This year:

- We purchased 22 tonnes sustainable seafood, representing 40% of the total volume of seafood purchased.
- We achieved 100% use of eco-friendly products in hygienerelated paper products and stationery paper products.

This year:

- We maximised opportunities in people development during the pandemic by strengthening our supervisory development architecture with a series of new training workshops to equip our supervisors with essential skills to succeed in current and future roles, topics include:
 - o Basic Supervisory Training
 - o WFMS Workforce Management System
 - o Design thinking
 - o Change awareness
 - o HR knowledge



Cathay Pacific Services Limited

Cathay Pacific Services Limited (CPSL) operates the Cathay Pacific Cargo Terminal ('CPCT'). Serving airlines operating out of at Hong Kong International Airport, we are equipped to handle 2.6 million tonnes of cargo annually. During the reporting period, CPSL handled 1.4 million tonnes of throughput cargo.

Our vision is to be the world's best air cargo terminal in terms of innovation and customer service and to enhance Hong Kong's reputation as the logistics hub of choice in Asia.

Our approach to sustainability

Lead by the Chief Operating Officer, sustainability at CPSL is governed by the Sustainable Development Steering Committee ("SD Steering Committee") that involves department heads from various functions. The Committee meets on a regular basis to formulate sustainability strategy and review area of improvement.

We believe sustainability is a key element in operating a cargo terminal. Through building a strong corporate culture and integrating sustainability concepts into decision making, our strategy strives to mitigate the social and environmental impacts of our daily cargo terminal operation.

Material topics

Carbon emissions	We commit to minimising the impact to our environment and explore continually the innovation and technology for more efficient energy consumption in the terminal. Proper waste recycle & reuse is another key focus in our environmental management.	 This year: We achieved a 663 MWh reduction in electricity consumption, representing an emissions reduction of 245 tonnes CO₂e.
Materials	We actively monitor the consumption of single-use plastic (SUP) items in our operation, seeking for eco-friendly alternatives to divert materials from landfill where possible.	This year:We adopted PVC plastic sheets with 30% recycled content to reduce the use of virgin SUP.
Health and safety	 We uphold a rigid standard of occupational health and safety to oversee and govern our health and safety performance and to prevent unnecessary injuries. Our 3E safety strategy involves Engineering, Education and Enforcement and includes: Ensuring effective leadership and direction at all operational levels Establishing a robust health and safety management system Conducting effective training to ensure employees are equipped with the necessary skills and competencies Engaging employees in safety activities 	 This year: We received the HKIA Safety Excellence Award (Sliver) in the Airport Safety Recognition Scheme and the Safety Management System Award of the Hong Kong Occupational Safety & Health Award organised by the Occupational Safety and Health Council. We encouraged employees to adopt health & safety behaviours and habits in order to enhance safety culture. We promoted mental wellbeing by participating in the "Mental Health Workplace Charter" as a Mental Health Friendly Organisation. We organised "Health & Wellness Week 2021" with special events to promote healthy lifestyles, diets and fitness in everyday life.



Vogue Laundry Services Limited

Vogue Laundry started as a dry cleaner in 1964 and has grown to be one of the major leading commercial laundry companies in Hong Kong. We employ more than 350 people and serve over 20 airlines and 35 hotels. On average we deal with 91,000 items a day, equivalent to 37.9 tonnes of laundry.

Our approach to sustainability

We strive to make sustainability part of our business, focusing on quality, health and safety, and contributing to environmental protection with our waste reduction efforts.

The safety of our employees is our priority. We have achieved the ISO 45001:2018 occupational health and safety standard and our OHS management system is effective in mitigating risk and occurrence of injuries and occupational illnesses.

The nature of our business relies upon considerable quantities of water, electricity. As such we pay particular attention to managing our environmental impacts. We are certified as a Hong Kong Green Organisation and our plant, the biggest most automated laundry in East Asia, is a BEAM Plus Gold standard building furnished with energy saving equipment and water recycling facilities. We also seek ways to drive down our greenhouse gas emissions and proactively explore and implement plastic reduction initiatives. We reuse hangers and recycle paper, plastic and aluminium packing material when used. Our suppliers are expected to employ similar recycle programmes in line with our <u>Supply Chain Sustainability Code</u> <u>of Conduct</u>.

Material topics

Health and safety	Safety is our number-one priority at Vogue Laundry, we adopt ISO45001 as an integral part of our business performance. We are committed to driving an occupational health and safety (OH&S) culture by developing and applying an effective OH&S system with standards and practices appropriate to the risks and opportunities associated with our business activities.	This year: • Increased the Management Walk program from quarterly to weekly to enhance the workplace safety and safety awareness of the workers. Moreover, safety campaign will be held on each month for different safety topic to enhance the safety culture and awareness of the workers.
Waste management	We strive to minimise our single-use plastic (SUP) waste generation in our production progress.	 This year: We implemented the combined packing for garment items across the shops. Grouping multiple garment items into one bag to minimise SUP usage since January 2021. We reused over 1 million hangers in 2021 to reduce material consumption
Quality	We thrive for quality and continuous improvement. Processes Optimisation is one of our core values. We apply LEAN manufacturing and encourage cross-function collaboration to improve performance by systematically removing waste and reducing variation.	 This year: We further improved our performance by comprehensively applying LEAN management across our operations and achieving the corporate wide 5S standard.
Social responsibility	Caring for the community is a core value at VLS. We are committed to maintain strong community relationships by engaging in various community projects with our services and time.	 This year: We collaborated with the HK Family Welfare Society to provide free laundry service to the underprivileged and elderly in need. We supported HKFWS by donating 250 pandemic care pack to the needy in the community. We continued to build on our "15 years+ Caring Company" and joined various fund raising events from the Community Chest of HK.



Hong Kong Airport Services Limited

Hong Kong Airport Services Limited (HAS) was established in 1995 to provide professional ramp and cargo services to airlines at Hong Kong International Airport. These include loading and unloading of aircraft, baggage handling, cargo and mail delivery, ramp coordination, aircraft load control, aerobridge and passenger steps operation, Unit Load Device storage and crew transportation. We serve 22 airlines at HKIA with a fleet of 2,884 Ground Support Equipment (GSE) and vehicles and a staff of over 1,800 employees.

Our approach to sustainability

Our vision is to excel as a regional, full service ground handling agent by putting safety first, creating value for our stakeholders, recognising the contribution of our employees and committing to sustainable development. Our Sustainable Development Committee is responsible for governing the implementation of our <u>Sustainable Development Policy</u>, developed by Swire Pacific. Chaired by the Chief Operating Officer (COO) and supported by department heads or functional managers it drives improvement on our key focus areas. The application of the policy helps us to operate with excellence, quality, efficiency and transparency.

Material topics

Our people

Environmental management management

Fuel consumed by our fleet accounts for over 86% of our greenhouse gas emissions. We continue to implement our GSE and Vehicle Replacement Programme to modernise our fleet with more fuel-efficient vehicles. We monitor and review resource use and waste and seek to reduce the impact of our operations on the environment.

This year:

- Our total GSE fuel consumption fell by 14% when compared to 2020 due to reduced aircraft movement during the pandemic.
- We decreased the amount of waste produced by 6% and diverted 23 tonnes from landfill, representing a 47% waste diversion rate.

This year:

- We provided 42,488 hours of training to employees at all levels of the company; an average of 23.4 hours per employee.
- We emphasised on health and safety and received several safety related awards including:
- o 2020/21 Airport Safety Recognition Scheme -- Bronze Award,
- o The Best Safety Performance Award 2020 (Ramp Handling Operation Group)
- We received recognition as a "15 years+ Caring Company" and for human resources management as part of the "ERB Manpower Developer Award Scheme".

attract talents, retain skilled employees, and develop their potential. We invest in employee training and development and recognise employees for their contribution to our success in areas including customer service excellence.

Being a good employer enables us to

OUR PERFORMANCE

Cathay Pacific's response to Taskforce on Climate-related Financial Disclosures (TCFD)

1. GOVERNANCE

1.1 Board's oversight of climate-related risks and opportunities.

The Board is ultimately accountable for the Group's sustainable development strategy and performance. It is supported in its duties by three governance bodies that steer the Group's approach in sustainability matters under the leadership of the Chairman. They are the Sustainable Development Committee (SDC), Sustainable Development Steering Group (SDSG), and the Climate Actions Steering Group (CASG). In addition, the Board Risk Committee oversees the assessment of sustainability and other risks, as well as the implementation of related board decisions. The Board's responsibilities include reviewing the Group's material sustainability topics and approving sustainable development-related strategies, targets, actions and policies. The Board also reviews and signs-off on the annual Sustainable Development Report.

RISK MANAGEMENT

The Group's commitment to Operational Safety has been implemented through a systematic and thorough process supported by focused risk management governance infrastructure including:

- The Board Safety Review Committee chaired by an Independent Safety Advisor
- The Management Safety Committee Air Safety Review Committee (ASRC) that reports to the Chief Executive Officer.
- The Group Safety & Operational Risk Management department headed by the General Manager GSORM who reports directly to the Chief Executive Officer.

In 2019, the Board determined that the Group should introduce similar governance to enhance and provide a parallel focus on the management of all other corporate risks in the Group. Accordingly, the following entities were established:

Board Risk Committee (BRC) - a Board-level committee whose membership is exclusively Non-Executive Directors. The Committee's role is to advise the Board and oversee implementation of all Board decisions on all matters relating to risk. This includes the setting and monitoring of risk appetite, the effectiveness of the risk management framework (RMF) and the soundness of the Group's risk culture.

Risk Management Committee (RMC) – an executive committee chaired by the Chief Executive Officer responsible for the design, delivery and direct oversight of the RMF and, through it, the management of all corporate risks within the Group.

Group Corporate Risk (GCR) department headed by a Chief Risk Officer reporting to the Chief Executive Officer. This department has specific responsibility for developing, maintaining and ensuring the effectiveness of the RMF.

Climate change has been identified as one of the top 15 risks faced by the group. Climate risk, alongside all top risks, are reviewed by the committees on a quarterly basis.

Regarding the financial impact climate change may have on the Company, the Treasury team provides updates to the Finance Committee on a monthly basis regarding our position and upcoming obligation under the European Union Emissions Trading Scheme (EU ETS) and Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) under the International Civil Aviation Organisation (ICAO).

1. GOVERNANCE

2. Management's role in assessing and managing climate-related risks and opportunities.

The Sustainable Development Committee (SDC)

Chaired by the Chief Executive Officer, the SDC consists of four Executive Directors and four other members of our senior management team. The SDC was established by and receives its authority from the Board to evaluate and approve sustainable development strategy, policy, target setting, and investment in major initiatives. It sets the tone for a corporate culture focused on sustainable development. Meeting regularly during the year, its duties include evaluating and prioritising the Group's material sustainable development topics. The SDC communicates these and the materiality process to the Board in addition to providing biannual progress updates. In this way, sustainability is integrated into business planning, budgeting and risk management, and forms an integral part of the Group's business strategy.

Climate change is a standing agenda item in SDC meetings, where the latest progress updates are reviewed, and the strategic direction and target setting is discussed and decided upon.

Specific responsibilities with regards to climate-related impact are handled by different teams and committees as detailed below, with updates provided to the SDC. Our committees and working groups have been established to ensure all areas within the Company are managed in a responsible and accountable manner aimed at informing and operationalising the sustainable development strategy. This sustainable development governance structure emphasises shared responsibility and enables the SDC to manage sustainability risks through appropriate policies, standards and systems whilst simultaneously identifying and pursuing potential sustainability opportunities.

Climate Actions Steering Group (CASG)

The CASG was established by and reports to the SDC. It is chaired by the Chief Financial Officer and comprises Department Heads that represent a wide range of functions across the Company.

The CASG has been set up to strengthen our governance in climate change mitigation. It is tasked with ensuring that the Group's approved climate change strategy, targets, and commitment are executed as planned. The CASG evaluates and provides recommendations on climate change policy, initiatives and targets that require SDC approval and Board review.

Reporting to the CASG are various taskforces, including:

- The CORSIA taskforce, focusing on fulfilling the requirements of and understanding the impact from CORSIA, a mandatory carbon-offset scheme for international aviation;
- The Sustainable Aviation Fuel (SAF) taskforce, focusing on the development and adoption of SAF within the airline;
- The Fly Greener taskforce, focusing on further developing Fly Greener, our voluntary carbonoffset programme.

These taskforces are led by the Climate Change & Sustainable Aviation Fuel Manager, who is responsible for bringing in relevant business units to carry out the agreed plan.

a) Climate Risk

The GCR department along with the GSORM department are responsible for the Group Risk Management Policy, ensuring it is reviewed and approved by the management team, and updating the Corporate Risk Register. The RMC is chaired by the Chief Executive Officer and is responsible for the design, delivery and direct oversight of the RMF and, through it, the management of all corporate risks within the Company. The responsibility for managing risks sits with the management team.

Detailed action plans have been developed to mitigate the Company's impact on climate change. The risk details and mitigation plans are presented to the BRC and RMC for their review and approval.

b) Fleet planning

The high-cost environmental impact from fuel consumption, as well as the fleet planning and strategy development – including the purchase of fuel-efficient aircraft that are part of the business strategy – are discussed at Board meetings.

c) Fuel Forum Steering Committee (FFSC)

The FFSC is chaired by the Chief Operations and Service Delivery Officer. The Forum aims to identify ways to improve our operational efficiency and to evaluate investment in emissions-reducing technologies with an aim to increasing fuel efficiency and thus reducing the carbon emissions from our operation. The FFSC meets bi-monthly and is attended by representatives from our Procurement and Aircraft Trading, Customer Experience and Design, Engineering and Flight Operations departments.

2. STRATEGY

2.1 The climate-related risks and opportunities the organisation has identified over the short, medium, and long term.

We assess all climate-related risks annually and assess risks with an impact in the short term (present – 3 years ahead) more frequently. We also include medium-term (3-10 years) and long term (10-30 years) time horizons in our assessments. Three key risks and one opportunity that have been identified are described below:

Risk 1: Vilification of aviation and reduced demand for air travel in response to a perceived lack of action to counteract the industry's significant environmental impact on climate change. This has been identified as one of the biggest transition risks climate change could have on the aviation industry in the medium to long term.

There is increasing interest around the world in reducing and managing the aviation sector's greenhouse gas (GHG) emissions. With the expectation among the global community, stakeholders and customers that companies within the aviation industry will decouple GHG emissions growth from growing business activities, there is a potential risk to customer retention and attraction as preferences shift to greener forms of passenger and cargo services in the future.

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Risk 3: Acute physical risk to our direct operations as a result of an increase in the strength and/ or frequency of extreme weather events (e.g. typhoons and floods) that could reduce our operating capacity by impacting transport networks and supply chains. While the major impact will manifest itself in the long term with increased frequency and intensity, ad-hoc weather events would bring about short-term impact as and when they happen, similar to the super-typhoon cases that took place a few years ago.

According to Hong Kong Observatory, the mean sea level in Hong Kong and its adjacent waters is expected to rise by 1.07m by the end of the 21st century under the high greenhouse gas concentration scenario. The threat of storm surges brought about by tropical cyclones will correspondingly increase. The global mean tropical cyclone intensity is also likely to increase. Increased typhoons and associated unpredictable weather and flooding could lead to severe flight disruptions such as delays and cancelled flights. This would in turn affect our on-time performance, passenger experience, and would have a knock-on effect on subsequent flights. The increase in strength and frequency of turbulence also needs to be closely monitored for potential risk to the safety of our passengers and aircrew.

Cathay Pacific has committed to use 10% SAF by 2030 and reaching net zero by 2050. But to reach these goals would rely on other parties working together, such as supportive policy for the development of SAF supply chain and its usage, the energy sector to invest in SAF supply chain, and for corporates clients to work with airlines to boost SAF purchase agreements. If these other parts of the bigger SAF ecosystem is not moving at the same speed, there is risk that we may not be able to deliver our climate target, thus further increasing the vilification risk.

Risk 2: Increased operating costs resulting from the transition associated with policy and regulation is a key risk in the short to medium term. The Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) is expected to be the only climate regulation for international aviation from 2021 to 2035.

In view of the impact of COVID-19, CORSIA now sets a cap at 2019 emission levels and any emissions beyond this level will need to be offset. Most projections suggest that international aviation would only recover to pre-COVID-19 levels in 2024 and beyond.

In addition to CORSIA, there are many domestic/regional climate regulations that are in place or will be introduced in the future. Currently, the EU Emissions Trading Scheme (ETS) is one such scheme that applies to Cathay Pacific and that we have been in compliance with since 2012.

On the other hand, SAF is currently 3-5 times more expensive than fossil jet fuel. Depending on how soon the price gap can be closed with fossil jet fuel, it could add additional financial burden to the company as SAF is a major pillar in our decarbonisation journey.

Opportunity 1:

Cathay Pacific is one of the leading airlines in its climate change response. There is an opportunity for the airline to emphasise its solid performance in this aspect as a competitive advantage to attract customers and business partners who are climate conscious, from general consumers, corporate clients and travel agents, to freight forwarders and shippers.

Demonstrating the airline's history and on-going commitment in mitigating its climate change impact:

- 1. Cathay Pacific has announced its commitment to achieving net-zero carbon emissions by 2050. The goal covers our Scope 1 and 2 carbon emissions, and aligns with the aims of the Paris Agreement to limit global temperature rise to well below 2°C above pre-industrial levels and pursue efforts to limit this increase to 1.5°C.
- 2. The airline started tracking its carbon emissions back in the 1990s. Over the years, fuel efficiency, measured by CO_2 per available tonne kilometre (ATK) has improved by 28%.
- 3. Cathay Pacific was the first airline investor in Sustainable Aviation Fuel (SAF) manufacturer Fulcrum BioEnergy back in 2014. Cathay Pacific has also committed to buying 1.1 million tonnes of SAF over a 10-year period, enough to cover 2% of our operations. The use of SAF can reduce life cycle carbon emissions by up to 80%. In 2021, we committed to using SAF for 10% of Cathay Pacific's jet fuel consumption by 2030. We also signed an agreement with Aemetis, a renewable fuel supplier headquartered in the United States, together with **one**world Alliance members for the joint purchase of more than 350 million gallons of blended SAF.

2. STRATEGY

Opportunity 1:

- 4. Cathay Pacific constantly renews its fleet as each new-generation aircraft can improve fuel efficiency by up to 25%. From 2017 to 2021, Cathay Pacific has taken delivery of 43 brand new Airbus A350 aircraft. The Group has ordered 53 new aircraft for delivery in the coming years.
- 5. Cathay Pacific was the first Asian carrier to introduce a voluntary carbon-offset programme. In 2021, a total of 27,280 tonnes of carbon emission produced by our operations were offset by the programme. To date, we have purchased over 300,000 tonnes of CO_2 offsets.
- 6. Cathay Pacific has also committed to reducing our ground emissions as a Group by 32% by 2030 and 55% by 2035, from the 2018 baseline. Our 2035 target formed part of our pledge signed in 2021 with Hong Kong International Airport, which underscored our commitment to net-

zero operations by 2050. This is in line with the science-based target to limit global warming to 1.5°C compared to pre-industrial levels.

For each risk identified, an impact assessment is performed across six dimensions: financial, disruption, strategic, reputation, regulatory, and human. Pre-defined criteria have been established to determine the materiality of the impact. This criterion is used to prioritise top risks and to highlight risks that have the biggest material impact to the Company for the Board's attention.

2.2 The impact of climate-related risks and opportunities the organisation has identified over the short, medium, and long term.

Risk 1 & Opportunity 1: The impact from Risk 1 on operating revenue is expected to be minimal in the short term. The impact on demand reduction is relatively small (less than 5%), limited to specific regions (mainly in Europe), and mainly for domestic travel. This is not a market Cathay Pacific operates in as we carry long-haul, international passengers from Europe to Asia and the Southwest Pacific.

In the medium term, if the reduction in demand remains at the 5% level and affecting only our European market, the impact to Cathay Pacific is expected to be 1% of our annual passenger revenue (according to 2019 ASK share).

In the long term, if the trend becomes global and the impact on passenger demand doubles, it could have an impact of up to 10% of our operating revenue.

Some of the impact could be mitigated by the opportunity identified, i.e. with Cathay Pacific's strong performance in climate response, some business loss could be reduced and recovered by shifting passengers' choice to us over other less sustainably managed airlines.

Risk 2: Cathay Pacific emitted around 18 million tonnes of CO₂ in 2019.

With CORSIA's baseline set at the 2019 emission level, we do not expect financial obligation for carbon offsets in the short term as traffic levels have decreased significantly because of COVID-19. Industry projections have international aviation gradually return to pre COVID-19 levels from 2024 onwards.

Cathay Pacific may need to buy in the order of US\$600 million in total offsets throughout the CORSIA programme up to year 2035 based on the following assumptions:

- The country participation list to CORSIA as of July 2020, indicating China will participate in the offsetting phase from 2027 onwards.
- Carbon pricing to be US\$20 per tonne, which is uncertain and highly variable.
- Anticipated business growth for all of the Group's airlines, and recovery trajectory in light of COVID-19.
- Excluding the impact from any additional mitigation measures other than ongoing fleet renewal efficiency gains (e.g. the use of Sustainable Aviation Fuel).

Risk 3: Flight delays and diversions due to typhoons, unpredictable weather and flooding would lead to flight cancellations or delays, which involve claims or compensation to customers, as well as potential damage to the fleet and other assets.

2. STRATEGY

2.3 The resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

In 2021, our Chief Financial Officer commissioned a scenario planning and analysis in line with the TCFD recommendations. A cross-functional team, which consists of senior business leaders from functions including Flight Operations, Engineering, Group Safety and Operational Risk Management, Planning, Financial Services, People, Corporate Affairs, Revenue Management, Sales & Distribution, Brand Insights & Marketing, Customer Experience & Design, Group Risk Management, Group Legal and Compliance, and our subsidiaries, was convened to stress test our climate strategy.

The team evaluated four scenarios, including the likely external environment, implications on Cathay Pacific, and our optimal response strategy. In each scenario, two key drivers of change with the most uncertainty with regards to the impact of climate change on our business were considered: societal pressures and the resulting political will to tackle climate change holistically at the global level; and the availability of new technologies to decarbonise commercial aviation operations.

Our approach involved assessing the risks and opportunities we may face in 2030 and 2050 under four scenarios, including a deep dive into two key scenarios developed by the Intergovernmental Panel on Climate Change. In the first scenario we assessed our exposure to physical climate risks such as rising temperatures and extreme weather events. Beyond physical risks, we also assessed any risks and opportunities arising from a transition to a low-carbon world aligned with the Paris Climate Agreement.

Identified risks from a business-as-usual scenario include frequent disruptions, reputational damage, reduced travel and cargo demand and a financial slowdown in the long term. A successful transition to a well-below two-degree world was identified as our most favourable scenario, whereby an increased cost of carbon and offsets could impact profitability and increased risk of penalties for non-compliance with new carbon-related regulations. Although there is a lot of uncertainty associated with these scenarios, measures we currently have in place and are continuing to invest in, such as contingency planning, SAF and industry collaboration on decarbonisation technologies form the basis for business resilience in both instances.

We would conduct the scenario planning assessment every two to three years.

3. RISK

3.1 The organisation's processes for identifying and assessing climate-related risks.

The identification and assessment of Climate risks and their related impact is covered in the Group's Environmental Social and Governance ('ESG') Risk Assessment approach. This approach is based on a risk taxonomy specifically developed to identify and manage ESG risks across the business.

The identification of ESG risks is performed using two approaches:

Top Down Risk Assessment: a series of cross-functional workshops with middle and senior management facilitated by Group Corporate Risk annually to identify risks that are emerging across the business and its subsidiaries. These include risks relating to the three ESG pillars that are considered significant in the execution of the core business strategy and vision.

Bottom Up Risk Assessment: each Business Unit ('BU'), i.e. Cathay Pacific's departments, outports and subsidiaries, maintains a risk register that is refreshed annually and is independently reviewed by Group Corporate Risk. ESG risks from each of the registers are identified and aggregated at a Group-wide level. To ensure completeness of the assessment, risks are assessed in each of the 9 categories and mitigation plans are developed where appropriate. The assessment covers the entire Group, including subsidiaries.

The identified risks are prioritised and reported to the RMC and BRC.

Our five-step process involved research into drivers of change, identification of critical uncertainties and development of four plausible scenarios. A workshop was conducted with a senior group of cross-functional business leaders to evaluate each scenario, the likely external environment, implications on Cathay Pacific, and our optimal response strategy in that scenario.

$3.2\,Describe$ the organisation's processes for managing climate-related risks.

Climate risk to the Group is identified and assessed through a dimensioning process, in which cross-functional stakeholders conduct a deep-dive evaluation on what the risk means to the business and corresponding mitigations. These mitigations are owned by respective departments, which are responsible for their implementation and execution.

A climate risk impact assessment has been performed across six dimensions: financial, disruption, strategic, reputation, regulatory, and human. A pre-defined criteria has been established to determine the materiality of the impact. This criteria is used to prioritise top risks and to highlight risks that have the biggest material impact to the company for the Board's attention.

As mentioned above, a scenario planning and analysis exercise was conducted in 2021. Through this exercise, we generated a set of conclusions and recommendations that are being further refined and developed into specific actions to be included in our climate strategy and risk mitigation plans going forward.

3.3 How processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.

Compliance with carbon regulations like CORSIA is monitored closely and is the responsibility of various departments. Corporate Affairs is responsible for the policy and compliance aspects, Flight Operations is responsible for the flight data and information required, and Financial Services is responsible for managing the financial exposures.

In addition, the identification and management of climate-related risks are fully integrated into the risk taxonomy that is being applied to all top risks, which contains a specific category for environmental risks that we face as a business. As such, climate change risk is featured as one of the top 15 risks.
4. METRICS AND TARGETS

4.1 The metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.

We continuously measure a number of metrics relating to climate change and risks. The main ones are total quantities of:

- Carbon emissions (tonnes of CO₂e)
- Sustainable Aviation Fuel usage (tonnes)
- Carbon offset (tonnes of CO₂)

- In terms of efficiency performance, we measure fuel efficiency on a capacity and traffic carried level. This allows us to monitor the incremental improvements in aircraft/fleet renewal and ongoing operational improvements. Flight Operations is tasked with investigating and implementing the relevant operational improvement measures, and is accountable to the Fuel Forum Steering Committee (FFSC), chaired by Chief Operations and Service Delivery Officer.
- Fuel efficiency is measured in CO₂ from fuel use in grammes per ATK (available tonne kilometres) and grammes per RTK (revenue tonne kilometres).

4.2 Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.

We report on Scope 1 and Scope 2 greenhouse gas emissions annually in accordance with the listing rules of the Stock Exchange of Hong Kong. Please refer to the performance tables in this report for past performance.

We are also in the process of enhancing the mapping and mitigation of our Scope 3 emissions beyond our duty travels. Progress and performance are expected to be reported next year.

The GHG emissions are calculated directly from jet fuel consumption that we track on a flightby-flight basis. Our flight fuel and GHG emissions are audited yearly to ensure its accuracy.

4.3 The targets used by the organisation to manage climate-related risks and opportunities and performance against targets.

Our long-term goal is to achieve net-zero carbon emissions by 2050. We have set a target for 10% of our total jet fuel consumption to be Sustainable Aviation Fuel by 2030 and we are developing the specific targets on carbon efficiency and carbon offsets.

COMPLIANCE WITH LAWS AND REGULATIONS

Laws and regulations that have a significant impact on the Group, details of our management approach and compliance with these laws, including the potential impact of non-compliance, are set out in the tables that follow.

EMISSIONS			
Significant laws and regulations	Location	Potential impact	Management approach and compliance status
 Waste Disposal Ordinance (Cap. 354 of the Laws of Hong Kong) and relevant subsidiary legislation. This Ordinance regulates the production, storage, collection and disposal including the treatment, reprocessing and recycling of waste. Water Pollution Control Ordinance (Cap. 358 of the Laws of Hong Kong). This Ordinance regulates / controls the pollution of the waters of Hong Kong. Air Pollution Control Ordinance (Cap. 311 of the Laws of Hong Kong) and relevant subsidiary legislation. This Ordinance regulates, prohibits and/or controls the pollution of the atmosphere. 	Hong Kong	A breach of this Ordinance can give rise to civil and/or criminal liability including fines and imprisonment.	The Group has in place an Environmental Management System to ensure ongoing compliance and is subject to internal and external audit. During 2021, there were no convictions for non-compliance with laws and regulations relating to air and greenhouse gas emissions, discharges into water and land, generation of hazardous and non-hazardous waste or other environmental issues that would have a significant impact on the Group.
EMPLOYMENT			
Employment Ordinance (Cap. 57 of the Laws of Hong Kong). This is the main piece of employment legislation in Hong Kong which applies to all Hong Kong employers.	Hong Kong	A breach of this Ordinance can result in civil and/or criminal ramifications and significant impact on the Group's relationship with its workforce.	The Group has implemented a number of employee-related policies such as annual leave, maternity and paternity leave and sick leave policies to ensure that their employees are provided with rights and benefits which are no less favourable than those provided under the Employment Ordinance. During 2021, there were no convictions for non-compliance with laws and regulations relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti- discrimination, or other benefits and welfare that would have a significant impact on the Group.

HEALTH AND SAFETY			
Significant laws and regulations	Location	Potential impact	Management approach and compliance status
Employees' Compensation Ordinance (Cap. 282 of the Laws of Hong Kong). This Ordinance regulates the payment of compensation in respect of injuries sustained by employees as a result of an accident arising out of and in the course of employment or in respect of specified occupational diseases.		Non-compliance with this Ordinance can result in civil and/ or criminal ramifications and significant impact on the Group's relationship with its workforce.	The Group has implemented a number of occupational health and safety
Factories and Industrial Undertakings Ordinance (Cap. 59 of the Laws of Hong Kong). This Ordinance provides for the safety and health protection of workers in the industrial sector including catering establishments and cargo and container handling undertakings.	Hong Kong	A breach of this Ordinance can give rise to criminal liability including	 policies and manuals such as Occupational Health and Safety Policy, Alcohol and Other Drugs policy and Health and Safety Handbook to protect the safety of employees and other persons at the workplace. Relevant insurance policies have also been taken out to cover potential liability under the Ordinance. During 2021, there were no convictions for non-compliance with occupational health and safety laws and regulations that would have a significant impact on the Group.
Occupational Safety and Health Ordinance (Cap. 509 of the Laws of Hong Kong). This Ordinance regulates health and safety at work in all economic activities in both industrial and non-industrial establishments.		fines and imprisonment.	

LABOUR STANDARDS			
Significant laws and regulations	Location	Potential impact	Management approach and compliance status
 UK Modern Slavery Act 2015 (UK MSA). The MSA requires an organisation wherever incorporated which (i) supplies goods or services in the UK; and (ii has an annual turnover of £36 million or more, to produce a transparency statement to disclose steps taken to ensure slavery and human trafficking are not taking place within the organisation and its supply chain. 	UK	The UK Secretary of State may seek an injunction against organisations which fail to comply with the UK MSA.	The Board has approved the UK Modern Slavery Act Transparency Statement which is available to view <u>here</u> . During 2021, there were no convictions for non-compliance with laws and regulations relating to child and forced labour that would have a significant impact on the Group.
Australia Modern Slavery Act 2018 (Australia MSA). The Australia MSA requires an organisation, wherever incorporated, that has a consolidated revenue of at least AUD\$100 million for the reporting period and carries on business in Australia at any time in that reporting period to report on the risks of modern slavery in their operations and supply chains and actions to address those risks.	Australia	The Australian Minister may request an explanation from an entity about the entity's failure to comply with a requirement in relation to modern slavery statements and may also request that the entity undertake remedial action in relation to that requirement. If the entity fails to comply with the request, the Minister may publish information about the failure to comply on the register or elsewhere, including the identity of the entity.	The Board has approved the Australia Modern Slavery Act Transparency Statement which is available to view <u>here</u> . During 2021, there were no convictions for non-compliance with laws and regulations relating to child and forced labour that would have a significant impact on the Group.

PRODUCT RESPONSIBILITY			
Significant laws and regulations	Location	Potential impact	Management approach and compliance status
Health and safety			
Air Navigation (Hong Kong) Order 1995 (Cap. 448C of the Laws of Hong Kong). This order regulates aircraft crew and licensing and safety aspects relating to the operation of aircraft.	Hong Kong	A breach of this order can give rise to civil and/or criminal liability including fines and imprisonment.	It is the policy of Cathay Pacific to ensure continuous compliance with the Air Navigation (Hong Kong) Order 1995 and all relevant publications issued by the Civil Aviation Department (CAD), including but not limited to CAD 360 Air Operator's Certificates Requirements, CAD 712 Safety Management Systems (SMS) for Air Operators, CAD 371 The Avoidance of Fatigue in Aircrews and HKAR-145 Approved Maintenance Organisations. In 2021, Cathay Pacific carried 717 thousand passengers. There were no fatalities caused by operational incidents or accidents. Nor were there any convictions for non-compliance with laws and regulations relating to health and safety matters relating to products and services provided that would have a significant impact on the Group.
Prevention and Control of Disease Regulation (Cap. 599A of the Laws of Hong Kong). This regulation requires immediate notification to a health officer if an operator of a cross-boundary aircraft has reason to suspect that there exists on board the aircraft (a) a case or source of a specified infectious disease; or (b) a case or source of contamination.	Hong Kong	A breach of this regulation can give rise to civil and/or criminal liability including fines and imprisonment.	 Cathay Pacific have implemented procedures and guidelines for frontline employees including cabin crew, customer service officers and flight crew on how to identify and manage any suspected cases of infectious disease involving passengers or crew. This includes (but is not limited to): Supplying personal protective equipment inflight for cabin crew to use when providing care to individuals with suspected infectious disease. Medical advice provided by MedLink for cabin crew and ground employees for gate clearances as well as managing inflight medical emergencies. Procedures following notification from Health Authorities of passengers or crew members who travelled whilst infectious. In 2021, there were no convictions for non-compliance with laws and regulations relating to health and safety matters relating to products and services provided that would have a significant impact on the Group.

PRODUCT RESPONSIBILITY			
Significant laws and regulations	Location	Potential impact	Management approach and compliance status
Health and safety			
Public Health and Municipal Services Ordinance (Cap. 132 of the Laws of Hong Kong). This Ordinance provides for the general protection for food purchasers, offences in connection with sale of unfit food and adulterated food, composition and labelling of food, food hygiene and the seizure and destruction of unfit food.	Hong Kong	A breach of this Ordinance can give rise to criminal liability including fine and imprisonment.	CPCS has adopted ISO 9001 and HACCP management system with quality policy to comply with all applicable food health and safety regulations. In 2021, there were no convictions for non-compliance with laws and regulations relating to health and safety matters relating to products and services provided that would have a significant impact on the Group.
Dangerous Goods (Consignment by Air) (Safety) Ordinance (Cap. 384 of the Laws of Hong Kong). This Ordinance controls, in the interests of safety, the preparation, packing, marking, labelling and offering of dangerous goods for carriage by air.	Hong Kong	A breach of this Ordinance can give rise to civil and/or criminal liability including fines and imprisonment.	Dangerous Goods Regulations and Dangerous Goods Awareness training is provided to employees. In 2021, there were no convictions for non-compliance with laws and regulations relating to health and safety matters relating to products and services provided that would have a significant impact on the Group.
Advertising and labelling			
Trade Descriptions Ordinance (Cap. 362 of the Laws of Hong Kong). This Ordinance prohibits false trade descriptions, false, misleading or incomplete information and to prohibit certain unfair trade practices.	Hong Kong	A breach of this Ordinance can give rise to civil and/or criminal liability including fines and imprisonment.	It is the policy of the Group to comply with all applicable advertising and labelling laws and regulations. During 2021, there were no convictions for non-compliance with laws and regulations relating to advertising and labelling practices that would have a significant impact on the Group

PRODUCT RESPONSIBILITY			
Significant laws and regulations	Location	Potential impact	Management approach and compliance status
Privacy			
Personal Data (Privacy) Ordinance (Cap. 486 of the Laws of Hong Kong) (PDPO), which is aimed at protecting the privacy of individuals in relation to personal data.	Hong Kong	The PDPO is likely to have a significant impact on companies who collect, hold, process or use data, for instance, customer and employee personal data. The Commissioner may serve an enforcement notice to direct the company to remedy contravention and/or instigate prosecution action. Contravention of an enforcement notice is an offence which could result in a maximum fine of HK\$50,000 and imprisonment for 2 years. Breaches of the PDPO can cause reputational impact to the Company.	
EU General Data Protection Regulation (GDPR) has come into force on 25 May 2018. The GDPR involves new provisions and enhanced rights, aimed to harmonise the framework for the digital single market, put individuals in control of their data and formulate a modern data protection governance.	EU	The GDPR is likely to have a significant impact on the Company because of offering goods or services to individuals who are located in the EU. European data protection authorities have the power to enforce the GDPR by levying fines of up to 4% of an organisation's global revenue or €20 million, whichever is the greater. Individuals affected by a contravention of the GDPR may also take legal action to recover compensation.	Cathay Pacific has established a Personal Data (Privacy) Policy and associated guidelines to ensure compliance with the Personal Data (Privacy) Ordinance. Subsidiaries have implemented their respective Personal Data Privacy Policies to ensure compliance. During 2021, there were no convictions for non-compliance with laws and regulations relating to customer privacy that would have a significant impact on the Group.
Personal Information Protection Law (PIPL), the first major piece of legislation in Chinese Mainland dedicated to the protection of personal information, was effective from 1 November 2021.	Chinese Mainland	The PIPL is likely to have a significant impact on the Company because the law contains provisions on extraterritorial application. Foreign organisations which process personal information of individuals in Chinese Mainland for the purpose of offering products or services to them, or analysing and assessing their behaviours, shall be subject to this law. A processor of personal information which contravenes the requirements under the law is liable to a maximum fine of RMB 50 million or 5% of its annual turnover of the preceding year.	

ANTI-CORRUPTION			
Significant laws and regulations	Location	Potential impact	Management approach and compliance status
Prevention of Bribery Ordinance (Cap. 201 of the Laws of Hong Kong) (POBO)		Under the POBO, it is an offence to offer to an agent, or for an agent (e.g. an employee), to solicit or accept	
POBO aims to prohibit bribery in both the public and private sectors. For the latter, the POBO prohibits an agent's corrupt behaviour and fraudulent practices in relation to his principal's affairs.	Hong Kong	an advantage when conducting the principal's affairs without the principal's permission. The maximum penalty for an offence is 10 years' imprisonment and a fine of HK\$1 million.	
UK Bribery Act 2010 (Bribery Act) The Bribery Act makes it a criminal offence to bribe, or to offer or authorise a bribe to, another person (including a foreign official) or to be the recipient of a bribe.	UK	The Bribery Act is likely to have a significant impact on the Company because of having a presence in the UK. The Bribery Act has extra-territorial reach both for UK companies operating abroad and for overseas companies with a presence in the UK. All offences under the Bribery Act are punishable by unlimited fines for companies and individuals and, for individuals, up to 10 years' imprisonment. When a company is convicted of giving or receiving a bribe, the directors and other senior managers of the company can also be held accountable.	The Group has an established Anti-Bribery Policy, which forms part of a comprehensive and robust anti-bribery and anti-corruption compliance programme designed to provide guidance on compliance with global anti-bribery laws. During 2021, there were no convictions for non-compliance with laws and regulations relating to bribery, extortion, fraud or money laundering that would have a significant impact on the Group.
US Foreign Corrupt Practices Act (FCPA) The FCPA makes it unlawful for certain classes of persons and entities to make payments to foreign government officials to assist in obtaining or retaining business. The anti-bribery provisions of the FCPA applies to all US persons and certain foreign issuers of securities. These also apply to foreign firms and persons who cause, directly or through agents, an act in furtherance of such a corrupt payment to take place with the territory of the US.	USA	The FCPA has extra-territorial effect and is likely to have a significant impact on the Company, for instance, for dealing with government officials in respect of licensing matters. Criminal penalties for violation can be severe, including fines and imprisonment for up to 5 years (for violating anti-bribery provisions) and 20 years (for violating accounting provisions).	

2021 KEY PERFORMANCE INDICATORS

Economic indicators table

INDICATOR	2021 HK\$M	2020 HK\$M	2019 HK\$M
Direct economic value generated*			
Revenue	45,587	46,934	106,973
Finance income	75	149	337
Share of profits of associates	(1,985)	(1,282)	1,643
Economic value distributed			
Operating Expenses	46,037	58,639	103,646
Staff Expenses	11,298	15,786	20,125
Payment to providers of capital	2,704	3,044	4,772
- Finance charge	2,704	3,044	3,276
- Dividend paid - to the shareholders of Cathay Pacific	-	-	1,495
- Dividend paid - to non-controlling interests	-	-	1
Payments to government (Taxation)	(531)	(674)	454
Community investments including charitable donation			
- Direct payment	3	4	3
- In the form of discounts on airline travel	0.2	1	7
Economic value retained			
Profit/(loss) attributable to the shareholders of Cathay Pacific	(5,527)	(21,648)	1,691

*More financial data can be found in our <u>Annual Report 2021</u> p.3

Environmental indicators tables

Emissions – Overall carbon emissions

INDICATOR	Unit	2021	2020	2019
Cathay Pacific Airways and 100% owned Hong Kong based subsidiaries				
Scope 1	tCO ₂ e	6,020,691	7,534,910	18,429,615
Scope 2	tCO ₂ e	38,887	53,807	69,602

Emissions - Aircraft operations

INDICATOR	Unit	2021*+#@	2020 *+#@	2019*+	2018*+	2017*+	2016*+	2015*+	1998
Available tonne kilometres (ATK)	million	12,308	15,587	33,077	32,387	31,439	30,462	30,048	10,857
Revenue tonne kilometres (RTK)	million	9,311	10,876	24,090	24,543	23,679	22,418	22,220	7,213
Revenue passenger kilometres (RPK)	million	4,126	21,136	134,397	130,630	126,663	123,478	122,330	40,679
Fuel Consumption	thousand tonnes	1,904	2,386	5,837	5,713	5,625	5,467	5,425	2,343
	grammes / ATK	155	153	173	176	179	179	181	216
Fuel Efficiency	improvement since 1998 %	28.3%	29.2%	19.9%	18.3%	17.1%	16.8%	16.3%	0.0%
	grammes / RTK	204	219	238	233	238	244	244	325
	thousand tonnes in CO ₂ e	5,997	7,513	18,025~	17,997	17,716	17,222	17,087	7,380
	% change from previous year	20.2%	58.3%~	0.1%~	1.6%	2.9%	0.8%	4.4%	-
	grammes / ATK	487	482	545	556	564	565	569	680
CO ₂ emissions	improvement since 1998 %	28.3%	29.1%	19.9%	18.3%	17.1%	16.8%	16.3%	0.0%
	grammes / RTK	644	691	748	733	748	768	769	1,023
	improvement since 1998 %	37.0%	32.5%	26.9%	28.3%	26.9%	24.9%	24.8%	0.0%

* Includes Cathay Dragon

@ Includes HK Express

⁺ Fuel consumption includes testing, training, and wet-lease flights

~ The number reported in Sustainable Development Report 2020 included Air Hong Kong emissions. It is now restated to exclude Air Hong Kong

[#] Includes Air Hong Kong

INDICATOR	Unit	2021@#	2020@#*	2019#*
NOx emissions				
Total NOx emissions	tonnes	2,349	2,857	7,616
Average NOx emissions per landing and take-off cycle (LTO)	kg/LTO	45	42	40
% of fleet meeting <u>CAEP</u> ^ 6 requirements	%	90%	81%	88%
% of fleet meeting <u>CAEP</u> ^ 8 requirements	%	65%	57%	60%

* Includes Cathay Dragon

Includes Air Hong Kong

@ Includes HK Express

CAEP is the environmental committee of the International Civil Aviation Organisation (ICAO). CAEP has been able to create, and periodically review, minimum stan dards for cleaner and quieter aircraft. The long-term target is to reduce NOx emissions by 60% below CAEP6 by 2026.

Remarks:

(1) GWP of CO₂ is 1; assumes that all other GHG gases are negligible as these impacts still uncertain.
(2) Fuel consumption for our passenger flights includes the carriage of baggage and belly space cargo
(3) Conversion Factor: 1 tonne of fuel= 3.15 tonne of CO₂e

Resources use - Aircraft and ground operations[^]

(Cathay Pacific Airways and principal subsidiaries)

INDICATOR	Unit	2021	2020	2019
Aviation energy use				
Aviation jet fuel	tonnes	1,903,710	2,385,605	5,837,127
Sustainable aviation fuel	tonnes	3	1	6
Ground energy use				
Electricity	mWh	98,657	102,975	130,677
Mobile combustion- diesel	litres	2,476,926	2,617,977	5,129,972
Mobile combustion - unleaded petrol	litres	142,281	161,204	292,090

^ 2019 and 2020 data now includes data of Headland Hotel, which is fully owned by Airport Property Limited, a wholly-owned subsidiary of Cathay Pacific Airways Limited.

INDICATOR	Unit	2021	2020	2019
Ground energy use				
Stationary combustion- diesel	litres	5,709	2,789	103,498
Towngas	units	3,996,750	3,837,299	5,185,403
Total energy used	GJ	84,271,045	105,454,255	257,444,071
Energy intensity per employee	GJ	3,895	4,118	7,515
Water use	, i construction de la construction			
Seawater use for cooling	m ³	10,037,800	10,849,600	9,823,700
Municipal water use	m ³	502,615	505,503	919,413
Maintenance water use	m ³	14,517	23,239	62,136
Recycled water	m ³	9,984	2,334	-
Resources use				
Paper consumed in operations	tonnes	61	76	67 [@]
Certified sustainable seafood procured	tonnes	22	58	412
Recycling				
Metal	tonnes	7	8	41
Plastic	tonnes	30	140	290
Glass	tonnes	28	77	492
Paper	tonnes	137	298	1,552
Food processing oil	tonnes	6	6	15
Tires	tonnes	16	12	18
Food donated	tonnes	210	276	563
Inconsumable food waste sent for recycling & energy recovery	tonnes	246	378	1,237
Hangers reused at Vogue Laundry	pieces	1,335,302	1,202,701	1,760,745

@ Only paper consumption from Cathay Pacific Airways offices was included as the record for other operations were not traceable.

INDICATOR	Unit	2021	2020	2019
Waste				
Landfilled non-hazardous waste (commercial & industrial waste, food waste and grease trap)	tonnes	7,769	9,386	21,945
Hazardous waste (battery)	tonnes	1	23	-
Hazardous waste (chemical solid waste)	tonnes	2	3	-
Hazardous waste (chemical liquid waste)	litres	17,200	17,700	-
Landfilled non-hazardous waste intensity per revenue (million HKD)	tonnes/ HK\$M	0.17	0.20	0.21

Social indicators table

Employment data

INDICATOR	Unit	2021	2020	2019
WORKFORCE OF THE CATHAY PACIFIC GROUP				
Total employees	no.	21,635	25,610	34,258
Total employees - key business operations and subsidiaries*	no.	20,708	23,992	29,720
By gender				
Male	%	50	50	45
Female	%	50	50	55
By employment contract				
Employees on permanent terms	%	92	86	84
Employees on fixed term and temporary contract	%	8	14	16
By employment type				
Permanent employees - Full-time	%	99	99	98
Permanent employees - Part time	%	1	1	2
By region				
Hong Kong & Macau	%	84	85	80
Chinese Mainland	%	2	1	3
Taiwan	%	2	2	2
USA	%	1	1	3
Others	%	10	11	12
By employment role				
Cathay Pacific flight crew	%	13	13	12
Cathay Pacific cabin crew	%	32	33	39
Cathay Pacific ground employees	%	32	29	26
Employees of subsidiaries	%	23	25	23

* Refers to Cathay Pacific Airways, AHK, CPCS, CPSL, HAS, HKE and VLS. This is the scope of the empioyment daye reported in this section, unless otherwise specified.

	Unit	2021	2020	2019
VOLUNTARY TURNOVER RATE OF PERMANENT EMPLOYEES		·		
By age group				
Under 30 years old	%	40	21	10
30 to 50 years old	%	17	7	5
Over 50 years old	%	11	8	3
By gender				
Male	%	17	9	5
Female	%	22	10	5
By region				
Hong Kong & Macau	%	17	9	5
Chinese Mainland	%	1	3	6
Taiwan	%	1	10	5
USA	%	2	15	9
Others	%	2	3	7
Total Voluntary Turnover Rate of Permanent Employees (%)	%	17	9	5
NEW HIRES RATE	Unit	2021	2020	2019
By age group				
Under 30 years old	%	28	10	34
30 to 50 years old	%	8	4	5
Over 50 years old	%	2	3	7
By gender				
Male	%	9	5	12
Female	%	8	4	12

By region	Unit	2021	2020	2019
Hong Kong & Macau	%	8	5	13
Chinese Mainland	%	0	6	9
Taiwan	%	3	0	7
USA	%	1	1	10
Others	%	1	6	13
Total New Hires Rate (%)	%	8	5	13

Training and education data

TRAINING AND EDUCATION	Unit	2021	2020	2019
Average hours of training				
Total training hours	hours	589,453	761,219	1,671,963
Average training hours	hours	31	37*	49
Average hours of training by employee category				
Individual Contributor	hours	32	33	-
Team Leader	hours	31	43	-
Operational Leader	hours	66	46	-
Strategic Leader	hours	7	9	-
Average hours of training by gender				
Male	hours	37	39	-
Female	hours	31	33	-
Percentage of employees trained by employee category				
Individual Contributor	%	99	75	-
Team Leader	%	93	89	-
Operational Leader	%	86	78	-
Strategic Leader	%	88	83	-
Percentage of employees trained by gender				
Male	%	94	87	_
Female	%	98	79	_

+ This number is restated, as the data provided last year was an average number per Cathay Pacific Group company instead of per number of employees.

Performance review and engagement data

PERFORMANCE REVIEW AND ENGAGEMENT	Unit	2021	2020	2019
Performance review				
Percentage of employees receiving performance review	%	97	97	100
Annual employee engagement index score				
Percentage of respondents rating strongly agree or agree on the five key statements of employee engagement	%	58	63	62

Employee diversity data

DIVERSITY OF CATHAY PACIFIC GROUP BOARD OF DIRECTORS	Unit	2021	2020	2019	
By gender					
Male	%	94	87	94	
Female	%	6	13	6	
By age group					
39-47 years old	%	6	13	18	
48-56 years old	%	53	50	41	
57-65 years old	%	41	37	41	
By ethnicity					
American	%	6	6	6	
Australian	%	6	6	6	
British	%	41	38	29	
Chinese	%	47	50	59	
Years of service as Director					
1-5 years	%	65	63	65	
6-10 years	%	23	31	29	
Over 10 years	%	12	6	6	
Skills, expertise and experience					
Company executive	%	82	75	76	
Accounting, banking and finance	%	18	25	24	

DIVERSITY OF SENIOR POSITIONS (GENERAL MANAGERS AND DIRECTORS) AT CATHAY PACIFIC AND SUBSIDIARIES	Unit	2021	2020	2019
By gender				
Male	%	72	69	-
Female	%	28	31	-

Health and safety data

HEALTH AND SAFETY	Scope	Unit	2021 ⁺	2020 [@]	2019 [^]
No. of accidents*	Cathay Pacific Group Airlines	No.	0	0	0
No. of high-risk incidents	Cathay Pacific Group Airlines	No.	0	0	0
No. of work-related fatalities	Cathay Pacific Group Airlines	No.	0	0	0
Lost Time Injury Rate	Cathay Pacific Group Airlines	No.	0.79	2.20	5.33
Lost Day Rate	Cathay Pacific Group Airlines	No.	20.33*	68.83*	103.86 [#]
No. of incidents of non-compliance with regulations and/or voluntary code concerning health and safety impacts of our products and services	Cathay Pacific Group Airlines	No.	0	0	0

^ Includes Cathay Pacific and Cathay Dragon.

@ Includes Cathay Pacific, Cathay Dragon and Hong Kong Express.

+ Includes Cathay Pacific, Hong Kong Express and Air Hong Kong.

* An event that resulted in serious injury and/or fatality.

As pilot and cabin crew lost days are based on days not available for duty, a factor was previously used to normalise relevant data according to 250 days' work per year, equivalent to 2000 hours per year.
 This factor is no longer applied to relevant data in 2019, which led to the substantial increase in LDR. Due to the significant change in the operation and to ensure data presented is an accurate reflection of relevant performance, cabin crew and pilot's actual duty hours have been used to calculate injury rates since January 2020.

SUPPLIER DISTRIBUTION[#]

Number of Tier 1 suppliers in 2021: 24* Share of total procurement spent: 75% Active suppliers in 2021: approximately 3,000 Active supplier geographical distribution in 2021:



ACTIVE SUPPLIERS BY LOCATION

* Excluding authorities, banks and intercompany entries which are considered as non-procurement related. #Cathay Pacific Airways data only.

Selected Awards And Memberships

Awards*/Recognition

Name of awards/ recognitions	Organisers
A constituent of Hang Seng Corporate Sustainability Benchmark Index	Hang Seng Corporate Sustainability Index
A constituent of FTSE4Good Index	FTSE4Good Index
Caring Company Award 15+ Years	Hong Kong Council of Social Service
Best in Future of Connectedness	IDC Future Enterprise Awards
Best Air Cargo Carrier – Asia Award	Asia Cargo News
COVID-19 Airline Excellence Award	Skytrax 2021 World Airline Awards
Top 10 of the World's Top 100 Airlines 2021	Skytrax 2021 World Airline Awards

Membership and signatory

Name of awards/ recognitions	Organisers		
Aviation Climate Taskforce	Founding member		
International Civil Aviation Organisation (ICAO) Fuel Task Force specialised in the adoption of sustainable aviation fuel			
International Air Transport Association (IATA) Sustainability and Environment Advisory Committee (SEAC)			
IATA SEAC Single-use Plastic Working Group			
Association of Asia Pacific Airlines (AAPA) Environmental Working Group			
Science Based Targets Initiatives – Aviation Sector target setting, Technical Working Group	Member		
World Economic Forum Clean Skies for Tomorrow Coalition - Community	Member		
oneworld Environmental and Sustainability Board Working Group			
Sustainable Aviation Fuel User Group			
Roundtable on Sustainable Biomaterials (RSB)			
Commercial Aviation Alternative Fuels Initiative (CAAFI)			
United for Wildlife Transport Taskforce Buckingham Palace Declaration			
Racial Diversity & Inclusion Charter for Employers	Signatory		
Drink Without Waste Pledge	Signatory		
Wild Aid- Global Shark Pledge			

* Other awards can be found in the Cathay Pacific Annual Report 2021 on p.11

External assurance

We have engaged independent assurance provider Deloitte to provide an independent assurance on our greenhouse gas emissions and carbon offset 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:

Deloitte.

23 March 2022

INDEPENDENT PRACTITIONER'S LIMITED ASSURANCE REPORT

To the Board of Directors of Cathay Pacific Airways Limited

We have been engaged by the Directors of Cathay Pacific Airways Limited ("Cathay Pacific") to perform a limited assumation of engagement in relation to cartian sustainable development data (the "Data Points") included in its Sustainable Development ("SD") Report 2021 for the year ended 31 December 2021 (the "Reporting Period") and selected by Cathay Pacific,

Data Points

The Data Points are as follows:

 Total greenhouse gas ("GHG") emissions (Scope 1); and
 Amount of offsets contributed by individual customers and corporate clients under the Fly Greener Programme in 2021.

The Data Points are presented in the Data Point table set out in Appendix I to this report.

Reporting Criteria

The Data Points are presented in accordance with the criteria set out in Appendix II to the report (the "Reporting Criteria").

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 of Accountants founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

Our firm applies International Standard on Quality Control 1, "Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance and Related Services Engagements", and accordingly, maintains a comprehensive system of quality control, including documented policies and procedures regarding compliance with ethical requirements, professional standards as well as applicable leaal and requilatory requirements.

Responsibilities

Deloitte Touche Tohmatsu

It is our responsibility to express a limited assurance conclusion on the Data Points, based on our work performed, and to report our conclusion solely to you, as a body, in accordance with our agreed terms of engagement and for no other purpose. We do not assume responsibility or accept liability to any other person for the contents of this report.

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Cathay Pacific Airways Limited

The Directors of Cathay Pacific are responsible for the preparation and presentiation of the Data Points in accordance with the Reporting Criteria. This responsibility includes designing, implementing and maintaining internal controls relevant to the preparation and presentation of the Data Points, applying an appropriate basis of preparation, making estimates that are reasonable in the circumstances and ensuring the accuracy and completeness of the Data Points.

Reporting Framework

We conducted our work in accordance with the International Standard on Assurance Engagements 3000 (Revised), "Assurance Engagements other than Audits or Reviews of Historical Financial Information", and the International Standard on Assurance Engagements 3410, "Assurance Engagements and Greenhouse Gas Statements", issued by the International Auditing and Assurance Standards Board (together, the "Standards").

The Standards require that we comply with ethical requirements, and plan and perform the engagement to obtain limited assurance as to whether any matters that come to our attention cause us to believe that the Data Points do not comply, in any material respects, with the Reporting Criteria,

Objective

The overall objective of our procedures was to assess whether the Data Points were prepared, in all material respects, in accordance with the Reporting Criteria.

Procedures Performed

Our work comprised the following limited procedures:

- Interviews with relevant management and personnel involved in providing information relating to the Data Points, for inclusion in Cathay Pacific's Sustainable Development Report 2021;
- Sample testing of documentary evidence on Cathay Pacific's corporate and site levels;
- Analytical procedures; and
- Recalculation.

We have not performed any procedures relating to other data included in Cathay Pacific's Sustainable Development Report 2021. In addition, our work performed is not for the purposes of expressing an opinion on the effectiveness of Cathay Pacific's internal controls.

The procedures performed in a limited assurance engagement vary in nature and timing from those associated with, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement bestantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

Inherent Limitations

Non-financial performance information, including the Data Points, is subject to more inherent limitations than financial information, given both its nature and the methods used for determining, calculating, sampling and estimating such information. This could have a material impact on comparability. Ouglitative interpretations of relevance, materiality and the accuracy of such information are subject to individual assumptions and judgements.

2

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 Data Points have not been prepared, in all material respects, in accordance with the Reporting Criteria.

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Deloitte Touche Tohmatsu Certified Public Accountants Hong Kong 23 March 2022

External assurance

Appendix 1 - Data Point Table

The sustainable development data selected by Cathay Pacific for the year-ended 31 December 2021:

Data Point	Unit	Amount
Total GHG emissions (Scope 1)	tonne carbon	6,020,691
	dioxide equivalent	
Amount of offset contributed by individual customers	tonne carbon	3,282
under the Fly Greener Programme in 2021	dioxide equivalent	
Amount of offset contributed by corporate clients under	tonne carbon	16,236
the Fly Greener Programme in 2021	dioxide equivalent	

Appendix 2 – Reporting Criteria

GHG emissions accounting and reporting policies

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

Organisational boundaries

Cathay Pacific reported the GHG emissions of each of its subsidiaries shown below in proportion to their ownership percentage. The organizational boundaries for the reporting of GHG emissions include Cathay Pacific and the following 100%-owned Hong Kong-based companies (the "subsidiaries"):

- Cathay Pacific Catering Services (H.K.) Limited
 - Cathay Pacific Services Limited
 - Hong Kong Airport Services Limited
 - Vogue Laundry Service Limited
 - Air Hong Kong Limited
 - Hong Kong Express Airways Limited
 - Ainline Property Limited

Operational boundaries

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

 Scope 1 – Direct GHG emissions, including global CO₂ emissions from flights, fuel used for ground vehicles (including biodiesel), refrigerant use and Towngas combustion
 Scope 2 – Electricity and Towngas (production) for indirect GHG emissions

The reporting period for the GHG data is 1 January to 31 December 2021.

Scope 1 emissions

Scope 1 emissions include fuel, refrigerant and Towngas usage from ground-based activities (including biodiese) in Hong Kong covering Cathay Pacific and the Subsidiaries. Canteens operated by third parties within Cathay Pacific's buildings are excluded.

In Hong Kong, the CO₂ emissions factors follow the guidelines published by the Environmental Protection Department of the Hong Kong Special Administrative Region Government in February 2010¹. The emissions factor for biodiesel follows guidance from the UK's Department for Business, Energy & Industrial Strategy (Greenhouse gas reporting: conversion factors 2021)².

In respect of Cathay Pacific's GHG emissions from aircraft fuel consumption, the scope includes all flight activities, including testing, training flights, dry lease and wet lease. As fuel density varies according to a number of factors, Cathay Pacific uses the Joint Inspection Groups⁵ a recommended specific gravity of 0.80 kg/L to calculate the weight of fuel, Cathay Pacific uses an emissions factor of 3.15⁴ to determine Co₂ emissions from the combustion of aircraft fuel.

Lis Concentrated Protection Interfaces (2011) Feature), Guidelines To Accurate for Ada (paper 4) Generations and Remarkable for Adapting Integrations, Interfaces (2011) (Second Concentration (2011)) (Second Concen

Fly Greener offsets

Fly Greener offsets are calculated as the tonnes of CO_2 purchased by all employee duty travel, corporate dients and individual customers who used either cash or Asia Miles as a method of payment. The price per tonne of CO_2 is determined by the retail price of the credits purchased. The latest price is HK\$19.28 per tonne of CO_2 , or 475 Asia Miles per tonne of CO_2 . The total tonnage was computed based on the amount paid by customers during the year.

Global Reporting Initiative (GRI) and Hong Kong Stock Exchange (HKEX) Environmental, Social and Governance Reporting Guide (ESG Guide) reporting index table

GRI Standard	Disclosure		Relevant section(s) and/or URL((s)	Remark (e.g. omission)	HKEX ESG Reporting Guide
GRI 102 General	Disclosures					
	Organisat	ional profile				
	102-1	Name of the organisation	About Cathay Pacific	p.6		
	102-2	Activities, brands, products, and services	About Cathay Pacific	p.6		
			Our subsidiaries	p.97-102		
			Annual Report	p.2		
	102-3	Location of headquarters	About Cathay Pacific	p.6		
	102-4	Location of operations	About Cathay Pacific	p.6		
			Annual Report	p.2		
	102-5	Ownership and legal form	About Cathay Pacific	p.6		
			Annual Report	p.2		
	102-6	Markets served	About Cathay Pacific	p.6		
			Annual Report	p.2		
	102-7	Scale of the organisation	About Cathay Pacific	p.6		
			Economic indicators table	p.117		
			Social indicators table	p.122		
			Annual Report	p.2-3		
	102-8	Information on employees and other workers	Our people	p.67		Aspect B1:
			Social indicators table	p.122		Employment: KPI B1.1
	102-9	Supply Chain	Sustainability in operations – Sustainable procurement	p.48		Aspect B5: Supply Chain
			Social indicators table	p.127		Management: KPI B5.1; KPI B5.2; KPI B5.3
	102-10	Significant changes to the	Message from the CEO	p.4-5		
		organisation and its supply chain	Safety	p.24-31		
			Sustainability in operations	p.48		
			Our people	p.68-83		
			Annual Report	p.4-6		

GRI Standard	Disclosure		Relevant section(s) and/or URL(s)	Remark (e.g. omission)	HKEX ESG Reporting Guide
GRI 102 General I	Disclosures				
	102-11	Precautionary principle or approach	Our approach	p.10-11	
			Annual Report	p.29-31	
	102-12	External initiatives	Selected awards and membership	p.128	
	102-13	Membership of associations	Selected awards and membership	p.128	
	Strategy				
	102-14	Statement from senior decision-maker	Message from the CEO	p.4-5	Mandatory
			Governance – Board statement on sustainable development	p.15	Disclosure Requirements: Governance Structure
	Ethics and	integrity			
	102-16	Values, principles, standards, and norms of behaviour	Governance <u>Code of Conduct</u> Supply Chain Sustainability Code of	p.14-22	Aspect B6: Product Responsibility:
			Supply Chain Sustainability Code of Conduct		KPI B6.3
			Sustainable Development Policy		
			<u>Swire Pacific Corporate Code of</u> <u>Conduct</u>		
	Governanc	e			
	102-18	Governance structure	Governance	p.15-18	
			Annual Report	p.32-56	
	Stakeholde	er engagement			
	102-40	List of stakeholder groups	Stakeholder engagement and materiality assessment	p.10	Mandatory Disclosure Requirements: Reporting Principles
	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. Where our employees are represented by a legally recognised union, we are committed to establishing a constructive dialogue with union representatives.	

GRI Standard	Disclosure		Relevant section(s) and/or URL(s)	Remark (e.g. omission	HKEX ESG Reporting Guide
GRI 102 General	Disclosures				
	102-42	Identifying and selecting stakeholders	Stakeholder engagement and materiality assessment	p.10	Mandatory Disclosure Requirements: Reporting Principles
	102-43	Approach to stakeholder engagement	Stakeholder engagement and materiality assessment	p.10	Mandatory Disclosure
			Governance – Customer support and complaint handling	p.22	Requirements: Reporting Principles Aspect B6: Product Responsibility: KPI B6.2
	102-44	Key topics and concerns raised	Stakeholder engagement and materiality assessment	p.10-11	Mandatory Disclosure Requirements: Reporting Principles
	Reporting	practice			
	102-45	Entities included in the consolidated financial statements	Annual Report	p.19-22	Mandatory Disclosure
	102-46	Defining report content and topic boundaries	About this report	p.7	Requirements:
			Stakeholder engagement and materiality assessment	p.10-11	Governance Structure
	102-47	List of material topics	Stakeholder engagement and materiality assessment	p.10-11	Mandatory Disclosure Requirements: Reporting Principles
	102-48	Restatements of information	Environmental indicators table	p.118-121	Mandatory
	102-49	Changes in reporting	About this report	p.7	Disclosure Requirements: Reporting Principles; Reporting Boundary

GRI Standard	Disclosure		Relevant section(s) and/or URL(s)		Remark (e.g. omission)	HKEX ESG Reporting Guide
GRI 102 General	Disclosures					
	102-50	Reporting period	About this report	p.7		
	102-51	Date of most recent report	-			
	102-52	Reporting cycle				
	102-53	Contact point for questions regarding the report				
	102-54	Claims of reporting in accordance with the GRI Standards				
	102-55	GRI content index	GRI and HKEX ESG Guide reporting index table	p.131-143		
	102-56	External assurance	External assurance	p.129-130		
GRI 200 ECONO	MIC STANDARE	DS SERIES				
GRI 201: Econom	nic performanc	e 2016				
	103-1	Explanation of the material topic and its Boundary	Stakeholder Engagement and Materiality Assessment	p.10-11		
	103-2	The management approach and its components	- Annual Report	p.7-22		
	103-3	Evaluation of the management approach	-			
	201-1	Direct economic value generated and	Economic indicators table	p.117		
		distributed	Annual Report	p.62-65		
	201-2	Financial implications and other risks and	Climate change	p.37		Aspect A4:
		opportunities due to climate change	Our performance – Cathay Pacific's response to TCFD	p.103-109		Climate Change: General Disclosure KPI A4.1
	201-3	Defined benefit plan obligations and other	Our people	p.67-83		
		retirement plans	Annual Report	p.83-87		

GRI Standard	Disclosure	,	Relevant section(s) and/or URL(s)		Remark (e.g. omission)	HKEX ESG Reporting Guide
GRI 200 ECONO	MIC STANDARI	DS SERIES				
GRI 204: Procure	ement practice	es 2016				
	103-1	Explanation of the material topic and its Boundary	Stakeholder Engagement and p Materiality Assessment	p.10-11		Aspect B5: Supply Chain
	103-2	The management approach and its components	Sustainability in operations – Sustainable procurement <u>Supply Chain Sustainability</u>	p.48-49		Management: General Disclosure KPI B5.1;
	103-3	Evaluation of the management approach	Code of Conduct Sustainable Food Policy			KPI B5.4
	204-1	Proportion of spending on local suppliers	Social indicators table	p.127		
GRI 205: Anti-co	rruption 2016					
	103-1	Explanation of the material topic and its Boundary	Stakeholder Engagement and Materiality Assessment	p.10-11		Aspect B7: Anti-corruption:
			Governance – Code of conduct	p.16		General Disclosure KPI B7.2
			Governance – Anti-Bribery Policy	p.20		NFI D7.2
	103-2	The management approach and its components	Governance – Whistleblower Policy Code of Conduct	p.21		
	103-3	Evaluation of the management approach				
	205-2	Communication and training on anti-corruption policies and procedures	Governance – Anti-Bribery Policy	p.20		KPI B7.3
	205-3	Confirmed incidents of corruption and actions taken	Compliance with laws and regulations	p.116		KPI B7.1
GRI 206: Anti-co	mpetitive beha	aviour 2016				
	103-1	Explanation of the material topic and its Boundary	Stakeholder Engagement and Materiality Assessment	p.10-11		
	103-2	The management approach and its components	Governance – Code of conduct	p.16		
	103-3	Evaluation of the management approach	Governance – Competition Law Compliance Policy <u>Code of Conduct</u>	p.21		
	206-1	Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	Governance – Competition Law Compliance Policy	p.21		

GRI Standard	Disclosure		Relevant section(s) and/or URL(s)	Remark (e.g. omission)	HKEX ESG Reporting Guide
GRI 207: Tax 2019					
	207-1	Approach to tax	Governance – Tax transparency	p.22	
	207-2	Tax governance, control, and risk management	Annual Report	p.60	
	207-3	Stakeholder engagement and management of concerns related to tax			
	207-4	Country-by-country reporting	Annual Report	p.69-70	
GRI 300 ENVIRON	IMENTAL STAN	DARDS SERIES			
GRI 301: Materials	s 2016				
	103-1	Explanation of the material topic and its Boundary	Stakeholder Engagement and Materiality Assessment	p.10-11	Aspect A2: Use of Resources:
			Sustainability in operations – Waste	p.47	General Disclosure
	103-2	The management approach and its components	management Our subsidiaries Sustainable Development Policy	p.97, 99-102	
	103-3	Evaluation of the management approach	Sustainable Development rolley		
	301-1	Materials used by weight or volume	Sustainability in operations – Waste management	p.47	KPI A2.5
			Environmental indicators table	p.120-121	
GRI 302: Energy 2	016				
	103-1	Explanation of the material topic and its Boundary	Stakeholder Engagement and Materiality Assessment	p.10-11	Aspect A2: Use of Resources:
	103-2	The management approach and its components	Climate change Our subsidiaries	p.33 p.97-98, 100, 102	General Disclosure
	103-3	Evaluation of the management approach	Sustainable Development Policy		
	302-1	Energy consumption within the organisation	Environmental indicators table	p.119-120	KPI A2.1
	302-3	Energy intensity			
	302-4	Reduction of energy consumption	Climate change – Fleet modernisation	p.38	KPI A2.3
			Climate change – Operational efficiency	p.39	
	302-5	Reductions in energy requirements of products and services	Climate change – Sustainable aviation fuel	p.42	
			Climate change – Ground emissions	p.44	

GRI Standard	Disclosure		Relevant section(s) and/or URL(s)	Remark (e.g. omission)	HKEX ESG Reporting Guide
GRI 303: Water a	nd Effluents 20	18			
	303-1	Interactions with water as a shared resource	Climate Change - Our buildings	p.45	Aspect A2:
	303-2	Management of water discharge-related impacts	Our subsidiaries Sustainable Development Policy	p.101	Use of Resources: General Disclosure; KPI A2.4
	303-3	Water withdrawal	Environmental indicators table	p.120	KPI A2.2
GRI 304: Biodive	rsity 2016				
	103-1	Explanation of the material topic and its	Stakeholder Engagement and	p.10-11	Aspect A3:
		Boundary	Materiality Assessment Biodiversity <u>Sustainable Food Policy</u> Sustainable Development Cargo	p.60-65	The Environment and Natural Resources General
	103-2	The management approach and its components	Carriage Policy Sustainable Development Policy		Disclosure KPI A3.1
	103-3	Evaluation of the management approach	-		
	304-2	Significant impacts of activities, products, and services on biodiversity	Biodiversity	p.60-65	
GRI 305: Emissio	ons 2016				
	103-1	Explanation of the material topic and its Boundary	Stakeholder Engagement and Materiality Assessment	p.10-11	Aspect A1: Emission:
	103-2	The management approach and its components	Climate change Our subsidiaries	p.33 p.97-98, 100, 102	General Disclosure
	103-3	Evaluation of the management approach	Our performance – Cathay Pacific's response to TCFD <u>Sustainable Development Policy</u>	p.103-109	
	305-1	Direct (Scope 1) GHG emissions	Climate change	p.35	KPI A1.2
	305-2	Energy indirect (Scope 2) GHG emissions	Our subsidiaries	p.97-98, 100, 102	
	305-4	GHG emissions intensity	Environmental indicators table	p.118-119	
	305-5	Reduction of GHG emissions	-		KPI A1.5
	305-7	Nitrogen oxides (NOX), sulphur oxides (SOX) and other significant air emissions	-		KPI A1.1

GRI Standard	Disclosure		Relevant section(s) and/or URL(s)	Remark (e.g. omission)	HKEX ESG Reporting Guide
GRI 306: Waste 2	2020				
	306-1	Waste generation and significant waste-related impacts	Sustainability in operations – Waste management	p.50	Aspect A1: Emission:
	306-2	Management of significant waste-related impacts	Our subsidiaries Sustainable Development Policy	p.97, 99-102	General Disclosure KPI A1.3;
	306-3	Waste generated	Environmental indicators table	p.120-121	KPI A1.4; KPI A1.6
	306-4	Waste diverted from disposal			ΚΡΙΑΙ.Ο
	306-5	Waste directed to disposal			
GRI 307: Environ	nmental complia	nce 2016			
	103-1	Explanation of the material topic and its Boundary	Stakeholder Engagement and Materiality Assessment	p.10-11	Aspect A1: Emission:
	103-2	The management approach and its components	Climate change Sustainability in operations Biodiversity	p.32-45 p.46-59 p.60-65	General Disclosure
	103-3	Evaluation of the management approach	Sustainable Development Policy		
	307-1	Non-compliance with environmental laws and regulations	Compliance with laws and regulations	p.110	
GRI 308: Supplie	er environmenta	l assessment 2016			
	103-1	Explanation of the material topic and its Boundary	Stakeholder Engagement and Materiality Assessment	p.10-11	Aspect B5: Supply Chain
	103-2	The management approach and its components	Sustainability in operations – Sustainable procurement	p.48	Management: General Disclosure
	103-3	Evaluation of the management approach	Supply Chain Sustainability Code of Conduct Procurement approach Sustainable Development Policy		KPI B5.2; KPI B5.3 KPI B5.4
	308-1	New suppliers that were screened using environmental criteria		All new suppliers were scre using environmental criteria our procurement process ir	athrough
GRI 400 SOCIAL	STANDARDS SE	ERIES			
GRI 401: Employ	ment 2016				
	103-1	Explanation of the material topic and its Boundary	Stakeholder Engagement and Materiality Assessment	p.10-11	Aspect B1: Employment:
	103-2	The management approach and its components	Our people Our subsidiaries	p.68, 70 p.97, 99-102	General Disclosure
	103-3	Evaluation of the management approach	Recruitment Policy Sustainable Development Policy		

GRI Standard	Disclosure		Relevant section(s) and/or URL(s)		Remark (e.g. omission)	HKEX ESG Reporting Guide
GRI 401: Employr	ment 2016					
	401-1	New employee hires and employee turnover	Social indicators table	p.123-124		KPI B1.1; KPI B1.2
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Our people – Employee welfare	p.78-79		
GRI 402: Labour/	Management re	lations 2016				
	103-1	Explanation of the material topic and its Boundary	Stakeholder Engagement and Materiality Assessment	p.10-11	The implementation of any significant	
	103-2	The management approach and its components	Our people – Employee relations and engagement	p.71-74	operational changes is governed by the	
	103-3	Evaluation of the management approach	-		Employment Ordinance of Hong Kong.	
	402-1	Minimum notice periods regarding operational changes			We provided notice of operational changes to our employees as soon as they occur and maintained open and constant communication with affected employees.	

GRI 403: Occupati	ional health a	nd safety 2018			
	403-1	Occupational health and safety management system	Safety – Our approach Safety – Safety policy	p.24-30	Aspect B2: Health and Safety:
	403-2	Hazard identification, risk assessment, and incident investigation	Safety – Operational safety Safety – Occupational health and safety		General Disclosure KPI B2.1;
	403-3	Occupational health services	 safety Our subsidiaries 		KPI B2.2; KPI B2.3
	403-4	Worker participation, consultation, and communication on occupational health and safety	Sustainable Development Policy	p.97-102	111102.0
	403-5	Worker training on occupational health and safety			
	403-6	Promotion of worker health			
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	_		
	403-8	Workers covered by an occupational health and safety management system			

GRI Standard	Disclosure		Relevant section(s) and/or URL(s)		Remark (e.g. omission)	HKEX ESG Reporting Guide
GRI 403: Occupat	tional health and	d safety 2018				
	403-9	Work-related injuries	Safety – Occupational health and safety	p.31		
			Social indicators table	p.126		
GRI 404: Training	and education 2	2016				
	103-1	Explanation of the material topic and its Boundary	Stakeholder Engagement and Materiality Assessment	p.10-11		Aspect B3: Development
	103-2	The management approach and its components	Our people – Attracting and developing talent	p.75-77		and Training: General Disclosure
	103-3	Evaluation of the management approach	Sustainable Development Policy			KPI B3.1;
	404-1	Average hours of training per year per employee	Social indicators table	p.124		KPI B3.2
	404-2	Programs for upgrading employee skills and transition assistance programs	Our people – Attracting and devel- oping talent	p.75-77	_	
	404-3	Percentage of employees receiving regular performance and career development reviews	Social indicators table	p.125		
GRI 405: Diversit	y and equal opp	ortunity 2016				
	103-1	Explanation of the material topic and its Boundary	Stakeholder Engagement and Materiality Assessment	p.10-11		Aspect B1: Employment:
			Our people – Diversity and inclusion	p.80-83		General Disclosure
			Human Rights Policy			
	103-2	The management approach and its components	Diversity and Inclusion Policy			
	103-3	Evaluation of the management approach	Board Diversity Policy Sustainable Development Policy			
	405-1	Diversity of governance bodies and employees	Our people – Diversity and inclusion Social indicators table	p.81 p.125-126		
GRI 406: Non-dis	crimination 201	6				
	103-1	Explanation of the material topic and its Boundary	Stakeholder Engagement and Materiality Assessment	p.10-11		Aspect B1: Employment:
	103-2	The management approach and its components	Our people – Diversity and inclusion	p.80-83		General Disclosure
	103-3	Evaluation of the management approach	<u>Human Rights Policy</u> <u>Non-discrimination Policy</u> <u>Sustainable Development Policy</u>			
	406-1	Incidents of discrimination and corrective actions taken	Compliance with laws and regulations	p.110		-

GRI Standard	Disclosure		Relevant section(s) and/or URL(s)		Remark (e.g. omission)	HKEX ESG Reporting Guide
GRI 408: Child la	bour 2016					
	103-1	Explanation of the material topic and its Boundary	Materiality Assessment Governance – Modern slavery and p human rights Our people – Human resources p management Sustainability in operations – p Sustainable procurement	p.10-11		Aspect B4: Labour Standards:
	103-2	The management approach and its components		p.21-22		General Disclosure KPI B4.1; KPI B4.2
	103-3	Evaluation of the management approach		p.70		
	408-1	Operations and suppliers at significant risk for incidents of child labour		p.48		
				p.97-102		
GRI 409: Forced	or compulsory la	abour 2016				
	103-1	Explanation of the material topic and its Boundary	Stakeholder Engagement and Materiality Assessment	p.10-11		Aspect B4: Labour Standards:
	103-2	The management approach and its components	Governance – Modern slavery and human rights	p.21-22		General Disclosures KPI B4.1; KPI B4.2
	103-3	Evaluation of the management approach	Our people – Human resources management	p.70		
	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labour	Sustainability in operations – Sustainable procurement	p.48		
			Our subsidiaries <u>Code of Conduct</u> <u>Human Rights Policy</u> <u>Modern Slavery and Human</u> <u>Trafficking Policy Statement</u> <u>Supply Chain Sustainability Code of</u> <u>Conduct</u>	p.97-102		
GRI 413: Local co	ommunities 2016	3				
	103-1	Explanation of the material topic and its Boundary	Stakeholder Engagement and Materiality Assessment	p.10-11		Aspect B8: Community
	103-2	The management approach and its components	Community – Our approachp.86Our subsidiariesp.97, 101Sustainable Development Policy		Investment: General Disclosure	
	103-3	Evaluation of the management approach				KPI B8.1; KPI B8.2

GRI Standard	Disclosure		Relevant section(s) and/or URL(s)		Remark (e.g. omission)	HKEX ESG Reporting Guide
GRI 413: Local co	ommunities 2016					
	413-1	Operations with local community engagement, impact assessments, and development	Community – Our response to COVID-19	p.87-88		Aspect B8: Community
		program	Community – Community programmes	p.89-90		Investment: General Disclosure
			Community – Fundraising and donations	p.91-93		KPI B8.1; KPI B8.2
			Community – Volunteering	p.93		
GRI 414: Supplier	r social assessme	ent 2016				
	103-1	Explanation of the material topic and its Boundary	Stakeholder Engagement and Materiality Assessment	p.10-11		Aspect B5: Supply Chain Management: General Disclosure KPI B5.2; KPI B5.3
	103-2	The management approach and its components	Sustainability in operations – Sustainable procurement	p.48		
	103-3	Evaluation of the management approach	Supply Chain Sustainability Code of Conduct Procurement approach Sustainable Development Policy			
	414-1	New suppliers that were screened using social criteria			All new suppliers were screened using social cri- teria through our procure- ment process in 2021.	
GRI 416: Custom	er health and saf	ety 2016				
	103-1	Explanation of the material topic and its Boundary	Stakeholder Engagement and Materiality Assessment	p.10-11		Aspect B6: Product
	103-2	The management approach and its components	Safety – Our approach Safety – Safety policy	p.24 p.24		Responsibility: General Disclosure KPI B6.1; KPI B6.4
	103-3	Evaluation of the management approach	Safety – Operational safety Safety – Passenger health and safety <u>Sustainable Development Policy</u>	p.25-29 p.31		
			Governance – Customer support and complaint handling	p.22		
	416-2	Incidents of non-compliance concerning the	Social indicators table	p.126		
		health and safety impacts of products and services	Compliance with laws and regulations	p.113-114		

GRI Standard	Disclosure		Relevant section(s) and/or URL(s)		Remark (e.g. omission)	HKEX ESG Reporting Guide
GRI 417: Marketi	ng and labelling	2016				
	103-1	Explanation of the material topic and its Boundary	Materiality Assessment Governance – Advertising and labelling practice	p.10-11 p.20		Aspect B6: Produc Responsibility:
	103-2	The management approach and its components				General Disclosure
	103-3	Evaluation of the management approach				_
	417-2	Incidents of non-compliance concerning product and service information and labelling	Compliance with laws and regulations	p.114		
	417-3	Incidents of non-compliance concerning marketing communications	Compliance with laws and regulations	p.114		
GRI 418: Custom	er privacy 2016					
	103-1	Explanation of the material topic and its Boundary	Stakeholder Engagement and p.10-11 Materiality Assessment Governance – Customer privacy p.19 compliance		Aspect B6: Product	
	103-2	The management approach and its components		p.19		Responsibility: General Disclosure KPI B6.5
	103-3	Evaluation of the management approach				
	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Compliance with laws and regulations	p.115		_
GRI 419: Socioed	conomic complia	ance 2016				
	103-1	Explanation of the material topic and its Boundary	Stakeholder Engagement and Materiality Assessment	p.10-11		Aspect B1: Employment:
	103-2	The management approach and its	Governance – Corporate compliance	p.19-22		General Disclosure
		components	Safety – Sustainability in operations	p.23-31 p.48-49		Aspect B2: Health and Safety: General Disclosure
	103-3	Evaluation of the management approach	Our people	p.48 45 p.68, 70		
			Sustainable Development Policy	, , -		Aspect B4: Labour
	419-1	Non-compliance with laws and regulations in the social and economic area	Compliance with laws and regulations	p.110-116		 Standard: General Disclosure
				-		Aspect B6: Product Responsibility: General Disclosur
						Aspect B7: Anti-corruption: General Disclosur